



**THE EFFECT OF A PEER EDUCATION PROGRAMME ON PEER EDUCATORS OF THE  
HIV/AIDS UNIT OF THE CAPE PENINSULA UNIVERSITY OF TECHNOLOGY (CPUT)**

**By**

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## **DECLARATION**

I, Moto Jean Bosco Kalunga, declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology (CPUT)

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# ABSTRACT

Currently, the world faces many challenges such as a food shortages, fossil fuel depletion, floods, earthquakes, recession, wars, and climate change. It also faces diseases such as Human Immune Deficiency Virus /Acquired Immune Deficiency Syndrome /Sexually Transmitted Infections and Tuberculosis (HIV/AIDS /STI and TB). This study focused on HIV/AIDS/STI and TB, and the impact of changes in sexual behaviours of student peer educators as a result of peer education programmes offered by the HIV/AIDS Unit at the Cape Peninsula University of Technology (CPUT). Although young people today have a better understanding of risky sexual behaviours, HIV remains a health problem among the youth in South Africa. HIV/AIDS is a disease that affects all sectors of the population- rich and poor, young and adult, educated and uneducated.

Tertiary institutions are places where many young female and male students live independently, unsupervised by their parents or guardians, in either private accommodation or student residences. Under these circumstances it may be expected that some students will explore and experience intimacy in their relationships. Hence, universities could play a vital role in shaping students' attitudes and behaviours towards relationships, safer practices, and respect for others.

Given the current absence of a cure or vaccine for HIV/AIDS, peer education should appear as an important tool in HIV prevention strategy. It draws on several well-known behavioural theories and many researchers view peer education as an effective behavioural change strategy.

A formal structured Peer Education Programme was initiated and implemented at the HIV/AIDS Unit at Cape Peninsula University of Technology (CPUT) since 2004. This initiative was in line with one of the twelve strategic objectives of the HIV/AIDS Unit at the CPUT.

This study therefore, aimed to assess the reflexive effect that the Peer Education Programme had on student peer educators who volunteer their services at the HIV/AIDS Unit at CPUT. It further attempted to assess the effect of the Peer Education Programme on changes in sexual behaviours that could occur amongst student peer educators. The purpose of this programme was to explore peer educators who were based in the HIV/AIDS Unit applying their acquired knowledge and skills; so that they may become role models for their peers by practising what they taught, and not taught what they proposed to practice. The study furthermore, forms on

how effective the Peer Education Programme of CPUT's HIV/AIDS Unit is in changing sexual behaviours of the student peer educators.

To this end, quantitative and qualitative research strategies were employed in this study. Multiple data collection instruments such as questionnaire (both closed-ended and open-ended); observation and portfolio assessment were utilised to obtain a full picture of what took place amongst student peer educators at the HIV/AIDS Unit in order to validate the study.

The findings in this study revealed that the Peer Education Programme of the HIV/AIDS Unit at CPUT was largely successful in achieving most of its objectives. A positive change in HIV/AIDS/STI and TB knowledge, attitudes, practices and beliefs amongst the student peer educators was notable. However, while the results showed increased knowledge and improvement in attitudes, practices and beliefs of student- peer educators at the Unit in the context of HIV prevention, there was no change in the practices of student peer educators between, before and after becoming peer educators. However, a majority of respondents acknowledged behavioural changes owing to various training and workshops organised by the HIV/AIDS Unit at CPUT and other organisations nationally.

An investigation by HEAIDS, (2004:46) indicated that there are currently a number of Peer Education Programmes that operated on higher education campuses, which vary considerably with regard to the way that they were established, are offered, and evaluated. The HEAIDS study found that no single higher education institution has, as yet, provided a model approach or "best practice" to HIV Peer Education Training Programmes for others to follow.

The study was initiated because to date there is no study that was done before to assess the effectiveness of the Peer Education Programme of the HIV/AIDS Unit at CPUT.

Key words: HIV/AIDS prevention, HIV/AIDS Unit, peer education programme, peer educators, CPUT.

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# ACRONYMS

<b>ADEA</b>	Association for the Development of Education in Africa
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>ANC</b>	African National Congress
<b>ART</b>	Anti-Retroviral Therapy
<b>ARV</b>	Anti-Retro-Viral
<b>CADRE</b>	Centre for AIDS Development, Research and Evaluation
<b>CPUT</b>	Cape Peninsula University of Technology
<b>CSA</b>	Centre for the Study of AIDS
<b>CTP</b>	Committee of Technikon Principals
<b>CV</b>	Curriculum Vitae
<b>DoE</b>	Department of Education
<b>EU</b>	European Union
<b>HEAIDS</b>	Higher Education HIV and AIDS Programme
<b>HEI(S)</b>	Higher Education Institution(s)
<b>HESA</b>	Higher Education South Africa
<b>HIV</b>	Human Immunodeficiency Virus
<b>HoD</b>	Head of Department
<b>HBM</b>	Health Belief Model
<b>HCT</b>	HIV Counselling and Testing
<b>HP</b>	Health Promoter
<b>MAP</b>	Men as partner
<b>MCT</b>	Mother-to-Child Transmission
<b>NACOSA</b>	National AIDS Coordinating Committee of South Africa

<b>NGO</b>	Non- Governmental Organisation
<b>NSP</b>	National Strategy Plan
<b>PE(s)</b>	Peer Educator(s)
<b>PEO</b>	Peer Education Officer
<b>SAUVCA</b>	South African University Vice-Chancellors' Association
<b>SPSS</b>	Statistics Software for the Social Sciences
<b>STI</b>	Sexually Transmitted Infections
<b>SRC</b>	Students' Representative Council
<b>TB</b>	Tuberculosis
<b>UNDP</b>	United Nations Department Programme
<b>UNICEF</b>	United Nations Children's Fund
<b>UNFPA</b>	United Nation Population Fund
<b>UWC</b>	University of Western Cape
<b>USAID</b>	United States Agency for International Development
<b>WHO</b>	World Health Organisation
<b>WGHE</b>	Working Group on Higher Education



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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

Currently, the world faces many challenges such as food shortages, fossil fuel depletion, floods, earthquakes, recession, wars, climate change, and diseases such as HIV/AIDS/STI and TB. According to the United Nations, AIDS had by 2010 been attributed for the death of 1.8 million people in the world. Many more continue to become infected with HIV every day (2.6 million). Moreover, to date there is no cure for HIV/AIDS (UNAIDS, 2010:18-21).

HIV/AIDS have effected significantly upon education sector, labour and productivity and the wider economy in Sub- Saharan Africa (Haacker, 2002).

Although young people do have an understanding of risky sexual behaviours, HIV remains a major health problem among young South Africans. The youth have insufficient knowledge of susceptibility and unprotected sex is practiced (Campbell & MacPhail, 2002: 331-345).

HIV/AIDS is a disease that affects all sectors of the population —rich and poor, young and adult, and educated and uneducated; almost everyone is vulnerable to AIDS, unless he knows how to protect himself (www.factiv.org, 2010).

Despite evidence that young people practice sexual intercourse at an earlier age, teaching them sexual abstinence until marriage can play a key role in sex education. Unfortunately, many young people remain uninformed of how to protect themselves from becoming infected with sexually transmitted diseases, because abstinence campaigns do not educate people about contraception and safer sex techniques (Boler & Archer, 2008). The young people do not learn the difference between safe, safer, and safest sex practices.

The expansion and improvement of HIV/AIDS education around the world is critical to prevent the spread of HIV. Effective HIV/AIDS education not only helps to reduce infections by providing people with information about HIV and the transmission mode , and also its to equip individuals with knowledge, skills and expertise to protect themselves from becoming infected with the virus

(UNAIDS 2010). However, for prevention campaigns to be effective, the youth should be motivated to apply knowledge and skills consistently and correctly to prevent HIV infection. Youths who are equipped with education and skills in HIV/AIDS are more likely to know how to prevent HIV infection, to delay sexual activity, and to know various measures to protect themselves. Education precipitates behaviour change among young people, and also makes them more open to preventive messages (UNFPA, 2004:2).

Around the world there continues to be a great deal of fear and stigmatisation of people who live with HIV/AIDS. This has been fuelled by misinterpretation, ignorance and misrepresentation. This not only has a negative impact on people who live with HIV/AIDS, but may also fuel the spread of HIV/AIDS by discouraging people from seeking to be tested and treated. Education thus plays a vital role in reducing the HIV/AIDS stigma and discrimination (UNDP, 2008).

## **1.2 Peer education programmes in higher education institutions**

### **1.2.1 Introduction**

The impact of HIV/AIDS is still on the increase and is seen in every community and in every nation worldwide (Crewe & Nzioka, 2006). In response to this situation, a number of governments around the world have adopted strategies to mitigate the impact of this disease. Kelly (2001) has shown that African higher education institutions (Universities, Polytechnics and Colleges of Education) were intensifying their efforts to create awareness about the impact of the HIV/AIDS pandemic on their institutions amongst both staff and students. Universities have taken a leadership role in developing institution-specific HIV/AIDS policies, integrating HIV/AIDS into curricula, establishing resource centres to support teaching and learning, forming partnerships to conduct counselling and testing (HCT), and carrying out behavioural change research to engage communities and stakeholders (Kelly, 2001).

The Higher Education HIV/AIDS Programme (HEAIDS) is a nationally coordinated effort to establish and strengthen the ability of South Africa's higher education sector to provide comprehensive answer to the challenges which are posed by the HIV/AIDS pandemic, and to assume leadership role in the South African HIV/AIDS response. The Department of Education, on behalf of Higher Education South Africa (HESA), introduces HEAIDS, which regroups the vice-chancellors of all 23 public higher education institutions (HESA, 2001). The European Union founded HEAIDS under the European Programme for Reconstruction and Development

in terms of a partnership settlement with the Department. The purpose of the programme was to invest in institutions of higher education to debate HIV/AIDS in line with following mandate:

- Start advanced teaching and to prepare graduates for accountable roles in the accomplish research, share knowledge and offer intellectual leadership; and
- Improve campus communities as encouragement and rational environments for students and staff.

Restricted financial assistance was distributed to institutions of higher education by HEAIDS, to help them promote or improve their HIV/AIDS programmes (HEAIDS, 2009). At the beginning of April 2012, programmes for the prevention of new AIDS-related deaths and new HIV infections, (which were debated at the centre of the new National Strategic Plan (NSP) meeting on HIV/AIDS, TB and STIs) were implemented in Cape Town.

The national response to HIV, STIs and TB for the next 5 years was planned by the NSP. The strategy of NSP was to speak to the drivers of the HIV and TB epidemics, and to build on the achievements of the previous NSP to accomplish its goals. The NSP has four strategic objectives:

1. Address social and structural barriers to HIV, STIs and TB prevention, care and impact;
2. Prevent new HIV, STI and TB infections;
3. Sustain health and wellness; and
4. Increase protection of human rights and improve access to justice (Bodide, 2012).

Not only do tertiary institutions have a responsibility to create and sustain strategy responses to HIV/AIDS, but also to demonstrate how current HIV/AIDS challenges could be communicated and explained effectively. The basic part of HIV/AIDS strategies in higher education institutions was to generate, collect, transmit and expand AIDS- relevant knowledge, wisdom, understanding, and practice. This was to be done as part of institutionalised and mainstreamed responses to the epidemic, which saturates institutional structures, while also operating in harmony with national policies (Van Wyk & Pieterse, 2006:4-8). For the institutional response to HIV/AIDS to be successful, it demands for the whole institution to recognise the threat of HIV/AIDS and the possibilities for a transformed institution and society, and to respond appropriately. This involves evaluating the essence, culture and the institution, while the institution's relationship and interaction with its society is also scrutinised (Crewe & Nzioka, 2006:5-6).

## **1.2.2 Peer education as a strategic response to HIV prevention**

In the absence of a cure or vaccine for HIV/AIDS, peer education had appeared as an important tool in HIV/AIDS prevention, and as an intervention for the development of HIV awareness at tertiary institutions. To date, many researchers have viewed peer education as an effective behavioural change strategy, and it draws on several well-known behavioural theories — Social Learning Theory, Theory of Reasoned Action, Diffusion of Innovation Theory, the Theory of Participatory Education, Role Theory, Social Comparison Theory, Cognitive Dissonance Theory, and the Health Belief Model (Turner & Shepherd, 1999: 6-18).

In the South African higher education sector there were many ways to initiate and negotiate the peer education programme. The HEAIDS programme initiated the approach to report HIV/AIDS in higher education in an all-inclusive and united manner. The worry of the higher education sector was not only to reduce the menace of HIV/AIDS, but also to reach beyond completely preventive ambitions (HEAIDS, 2009). The HEAIDS Peer Education Working Group has worked to ensure that peer education became more standardised in South African higher education institutions by supporting the development of the Rutanang documents. The aim of the Rutanang process was to provide standards of practice and to develop peer education so that it was not a random and *ad hoc* intervention, but a process that was well-understood by everybody and had recognised guidelines. The series had five books, but the book that interested the research the most, is, Book Four — the Peer Education Implementation Guide for Higher Education in South Africa (Deutsch & Swartz, 2003:4).

## **1.3 CPUT HIV/AIDS PEER EDUCATION PROGRAMME HISTORY**

### **1.3.1 Introduction**

The Peer Education Programme fell under the HIV/AIDS Unit of Student Affairs at CPUT. It was in line with the 12 strategic objectives of the HIV/AIDS Unit, namely:



1. Curricular Integration of HIV/AIDS/STI & TB awareness education;
2. Student and staff training;
3. Awareness campaigns;
4. Men As Partners (MAP) Peer Education;
5. Community outreach;
6. Workplace programme;
7. HIV counselling and testing (HCT);
8. HCT campus drives;
9. Care & support, appropriately targeted to HIV negative & HIV positive people;
10. Wellness Mobile for screening and referrals;
11. Local & International Internship and Volunteer Programmes; and
12. Research, including monitoring and evaluation.

The HIV/AIDS Unit at CPUT conducted the Peer Education Programme based on the Rutanang process and MAP programme. The Peer Education Programme involved the recruitment, training (education), selection, and placement of CPUT students as HIV/AIDS Unit Peer Educators. The students were then required to participate in most, if not all, of the activities of the HIV/AIDS Unit —HCT, awareness campaigns, workshops, and community outreach. The CPUT's Peer Education Programme aimed to prevent, control, and manage HIV/AIDS/STI & TB among the students and staff at CPUT and the community (Cape Peninsula University of Technology, 2008). The following were the strategic goals of the HIV/AIDS Unit of CPUT:

- Prevent: HIV/AIDS/STI & TB;
- Empower: knowledge and skills;
- Influence: attitudes and behaviour;
- Educate: safer sex practices;
- Sustain: holistic lifestyle; and
- Research: postgraduate research, monitoring and evaluation.

### **1.3.2 Evolution of HIV/AIDS Unit at CPUT**

Before February 2004, HIV/AIDS programmes were not centralised and were conducted on an *ad hoc* basis at both the Cape and Peninsula Technikons. On 2 February 2004 Prof Ashraf Mohammed was seconded from the Applied Sciences Faculty to establish the HIV/AIDS Unit. The HIV/AIDS Unit thus opened on 2 February 2004 at the former Cape Technikon. The official

launch of the HIV/AIDS office took place on 16 April 2004 to coincide with the commemoration of the first decade of democracy in South Africa (CPUT, 2008).

On the 1<sup>st</sup> of January 2005, the HIV/AIDS Unit was granted official status, and in 2005 the Cape Technikon and Peninsula Technikon merged to form the Cape Peninsula University of Technology (CPUT). Between 2005-2006, the process of harmonising the HIV/AIDS programmes commenced, resulting in the appointment of Prof Ashraf Mohammed as the Head of Department (HoD) of the CPUT HIV/AIDS Unit on 1 July 2007. Early in November of 2007 CPUT received confirmation of European Union (EU) funding in excess of R2 million. Consequently, 17 March 2008 saw the official opening ceremony of the newly refurbished HIV/AIDS Unit offices on the Cape Town campus (CPUT, 2008).

### **1.3.3 Recruitment of peer educator**

The student Peer Education Programme was widely advertised on campus for all students, residence managers and relevant stakeholders. This includes advertisements on the electronic broadcast mail. Stakeholders were also requested to suggest potential peer educators. All students who indicated that they were willing to participate in one or more of the HIV/AIDS programmes or related courses/workshops were encouraged to attend the following two-day courses/workshops:

- HIV/AIDS /STI and TB: Modules 1 and 2;
- Men as Partners ( MAP) Peer Education;
- Basic Communication and Listening Skills;
- Portfolio management and
- Men who have sex with men.

Selection criteria of new peer educators were based on completion of the above three courses. Submission of an application form, attached with the following documents, should be handed in to the HIV/AIDS Unit office:

- Academic record;
- CV;
- Letter of reference;
- Motivation letter;
- Completed Application of Peer Education Form; and
- Applicant's response at the panel interview conducted by the HIV/AIDS Unit.

### **1.3.4 CPUT Peer Education Programme (Ten Plus Ten)**

#### **1.3.4.1 Introduction**

Young females are particularly vulnerable to HIV infection because of gender bias and insecurity, resulting in gender based violence (CPUT, 2008). Since most men responded negatively to HIV/AIDS campaigns, urgency remains to reduce gender violence, to concentrate on the involvement of men as equal partners, and to promote a holistic health and wellness strategy in the fight against the HIV/AIDS/STI & TB pandemic. The programme is called Ten plus Ten and it is the Peer Education Programme of the CPUT HIV/AIDS Unit. The aims of the Peer Education Programme at CPUT are to train, empower, supervise, and evaluate CPUT students on issues around HIV/AIDS/STI & TB, provide intervention programmes on the campuses, residences, and the broader communities with a special focus on men as equal partners in the prevention, control, and management of the HIV/AIDS epidemic.

#### **1.3.4.2 Objectives of the Peer Education Programme.**

These objectives are:

- To recruit and train students in the context of HIV/AIDS/STI & TB;
- To promote positive peer pressure among students of the institution;
- To equip students with positive attitudes, skills, behaviour, and sexual practices in order to comprehend and efficiently deal with issues related to gender based violence;
- To recruit and train male students as equal partners in the promotion of health and wellness in a holistic context of HIV/AIDS/STI & TB, and for them to become a catalyst for the reduction of gender based violence; and
- To renew youth to become agents of change within their respective communities, especially student residences.
- The code of conduct for the HIV/AIDS Unit Ten Plus Ten programme aims to instill a culture of discipline among members so that the image of the HIV/AIDS Unit and the Ten Plus Ten programme itself can be defended, and thus decently serve to portray the CPUT HIV/AIDS Unit as the safest haven for everyone. This can be achieved only if the conduct of the programme will always be beyond reproach.

#### **1.3.4.3 Composition of the Ten plus Ten programme**

The Ten plus Ten programme comprises the following staff members:

- **Head of the Department (HoD)**

- **Projects Officer (PO)**
- **Peer Education Officer (PEO)**  
**Peer Facilitators** (five); would have served at least 1 year as a Peer Educator/Peer Assistant, and have shown outstanding characteristics of leadership. They are recommended by the Peer Educators to the **Projects Officer and Peer Education Officer** , and should be available to serve for the entire year as a facilitator **Peer Educators** (ten); would have served 1 year as a Peer Assistant, and should be available to serve for the entire year as a Peer Educator, and
- **Peer Assistants** (ten); must be a first year student, recommended by the Peer Educators to the Peer Education Officer. Available to serve for the entire academic year as a Peer Assistant.

#### 1.3.4.4 Scope of operation of Peer Education Programme

Student Peer Educators work in five different activities on campuses and in residences:

**Condom distribution:** Peer Educators will make sure that there are sufficient condom dispensers available on campuses and in residences, and monitor usage on a monthly basis.

**Weekly discussion groups:** Peer Educators organise and arrange discussion groups on campuses on a weekly basis to discuss current topics related to HIV/AIDS amongst students.

**Ongoing HCT:** Over and above the HCTs run by the HIV/AIDS Unit in a year, Peer Educators will propose methods to encourage regular HIV Counselling and Testing amongst students and staff.

**Awareness Campaigns:** Peer Educators will embark on awareness programmes such as during Orientation Week, Condom Week, Wellness Week, World TB Day, candlelight memorials, CPUT Open Days, and World AIDS Day on campuses and residence for students and staff.

**Community Outreach Projects:** Each Peer Facilitator will be required to co-ordinate at least one Peer Education community outreach project on a public holiday such as Freedom Day, Youth Day, National Woman's Day , Mandela Day, Condoms Week, and Heritage Day. These projects will have to be extended to the greater community outside of the perimeters of CPUT.

## **1.4 Background of the research**

The impact of HIV/AIDS, the absence of a permanent cure, and the absence of an effective vaccine for HIV have not prevented researchers from developing other strategies to combat the challenges of HIV/AIDS in the world.

### **1.4 .1 Higher Education HIV/AIDS Programme (HEAIDS)**

To enable all higher education institutions to reduce, mitigate and manage the HIV/AIDS pandemic, various considerations for policies, procedures and programmes on HIV/AIDS were suggested by the South African University Vice-Chancellors Association's (SAUVCA). In December of 2000, SAUVCA published an analysis institutionalising the response to HIV/AIDS in the South African University sector (Chetty, 2001:2). It consisted of an appraisal of initiatives that was conducted at universities, an overview of literature relating to HIV/AIDS in higher education, both nationally and internationally, as well as a clear set of recommendations on the way forward. It emerged that the situation in South Africa was shared by all of those who were involved in HIV/AIDS work within the African context. As Kelly (2001:9) notes, the following conditions prevailed across all higher education institutions:

- National awareness, but lack of concrete action from universities;
- Lack of information and hard data;
- Silence at institutional and individual level;
- Stigma and discrimination;
- HIV/AIDS is not being mainstreamed into the management of the institution;
- Little is being done to replenish society's AIDS-depleted skills;
- HIV/AIDS is being treated as a health problem;
- Imperfect knowledge of the disease and its impact;
- Little sign of behaviour change in individuals and in institutions; and
- Focus on prevention rather than on pro-active control.

Out of these shared concerns, the recommendations highlighted the need to develop a sector-wide intervention programme to establish and build capacity at national and institutional levels. In order to work towards the formation of a strategic proposal that would monitor the sector's answer to HIV/AIDS, they cooperated carefully with DoE and CTP (Chetty, 2001:23). Teams were formed at DoE in 2000, and offices were created to manage the programme, to provide support to the institutions, and to deliver nationally organised capacity building activities (Kelly,

2001). Activities such as training, workshops, and research fields such as peer education, voluntary counselling and testing, curriculum development, and HIV/AIDS in work places as well as provision of a platform for a higher education forum were suggested (Kelly, 2001:19).

The necessity to effect a co-ordinated, comprehensive and integrated response to HIV/AIDS was acknowledged by the Ministry of Education and the leadership of the public HE sector designated by Higher Education South Africa (HESA, 2001). Higher Education Institutions (HEIs) were able to amply achieve its objectives after they had agreed on significant work to improve and reinforce the ability, organisations, and structures to accomplish and alleviate the roots, tests, and concerns of HIV/AIDS in the sector. The strength that allows the sector and institutions to energetically achieve, displays and assesses HIV/AIDS-related objectives is a promise to an important and suitable policy agenda (HESA, 2001:6).

## **1.5 Clarification of basic terms and concepts**

Terms applied in this study are explained below for a better understanding of the topic.

### **1.5.1 Peer education**

Peer education was a concept that suggests a communication network, a methodology, a philosophy, and an approach. Peer education was education which was provided by somebody who was either directly part of the group receiving the information, or who was from a similar social background (UNAIDS, 1999). Peers used to be noblemen, aristocrats, lords, titled men, and patricians during times of ancient kings and queens in England. Peer in the past denoted *'one that is alike with another; one belonging to the similar societal assembly, especially founded on age, rank or status'* (Mead, n.d). In modern times peer has come to mean a fellow, equal, like, co-equal, or match. Today the term is employed in reference to education and training (Mead, n.d). In this study peer education was considered as a method of educating others, and a strategy of sexual behaviour change. Peer education drew on numerous recognised behavioural theories -Social Learning Theory, Theory of Reasoned Action, and Diffusion of Innovation Theory -and is currently regarded as an effective behavioural change approach (Mead, n.d).

### **1.5.1.1 Peer education for young people in the context of HIV/AIDS**

The primary objective of peer education was to prepare young people with crucial awareness about their sexual health. Young people easily asked questions on “forbidden” matters such as sex and men who required sex with men (MSM). They were able to debate without the fear of being judged and categorised (Pambazuka News, 2003). It will be via joint sharing of experience, knowledge, and information that young people will be able to discuss sensitive matters and obtain a better understanding of HIV/AIDS. According to Dalrymple & Durden (2006:1), “peer education was about harnessing young people’s creativity and credibility to promote healthy life-style choices”.

### **1.5.2. Peer educators**

Peer educators were selected students, trained and equipped with skills, knowledge and expertise to educate their peers. The peer educator’s character was to help the group of associates describe their worries, and together seek solutions through sharing information and skills. Peer educators who “practiced what they teach to others” -such as avoiding gender bias- were considered as role models and reliable people to disseminate new information and Knowledge to peers (Mead.n.d). Considering that the peer educator is from the same group as his/her peers, he/she can empathise and understand the emotions, thoughts, feelings, and language of the participants, and therefore, connect better. Peer educators were supposed to facilitate HIV/AIDS awareness in order to promote the reduction of the dangers of HIV/AIDS in the organisation. Peer educators described behaviours that can affect norms in a community. They were more suitable to influence and encourage their peers to adopt health-seeking behaviours, because they were capable of sharing common weaknesses, strengths and experiences (Mead, n.d).

A peer educator should be a good listener and a good communicator, possess good interpersonal skills, be sensitive and open minded. A peer educator was required not only to be non-judgemental, but should also develop leadership, management and motivation skills (Stakic, Zielony, Bodiroza & Kimzeke, and 2003:4).

## **1.6 Statement of the research problem**

The increase of HIV amongst young people was alarming, and demonstrated that many of them, educated and uneducated, lack knowledge about the disease and its consequences

(UNAIDS/WHO, 2007). Furthermore many of those who do have knowledge and skills do not apply them to prevent HIV infection.

At tertiary institutions, young female and male students often live independently, unsupervised by parents or guardians, in private accommodation or in student residences. Under these circumstances it may be expected that some students will explore and experience intimacy in their relationships. Hence, universities could play a vital role in shaping student attitudes and behaviours towards relationships and safer practices. A formal structured Peer Education Programme was established and has been in operation at the HIV/AIDS Unit of CPUT since 2004. For student peer educators to change the behaviours of their peers, they themselves needed to change their sexual behaviours and applied what they learnt as peer educators in the context of HIV/AIDS/STI & TB. Munro (2007) assessed an HIV Peer Education Training Programme at Stellenbosch University. The main objective of her study was to promote HIV awareness and knowledge, and encourage safer sexual behaviour among students by enabling and empowering them to educate their peers. This study therefore, seeks to determine the Peer Education Programme's effectiveness in changing sexual behaviour of the student Peer Educators of the HIV/AIDS Unit at CPUT. The study was initiated because to date there is no study that was done to assess the effectiveness of the Peer Education Programme of the HIV/AIDS Unit at CPUT since its implementation in 2004.

## **1.7 Research questions**

The following three questions were asked in order to answer the research problem:

- What were the sexual behaviours of the student peer educators before joining the Peer Education Programme of the HIV/AIDS Unit at CPUT?
- To what extent does the Peer Education Programme have a positive effect on the change of sexual behaviours (knowledge, attitude, practice and belief) that could occur on student peer educators of the HIV/AIDS Unit at CPUT in the context of HIV prevention?



- Does the current training programme equip student peer educators with knowledge and skills to face the challenges of sexual behaviours amongst their peers on the campuses and residences?

## **1.8 Aim of the study**

This study intended to assess the effectiveness of the Peer Education Programme on changes of sexual behaviours that could occur amongst student peer educators. The purpose of this programme was to see peer educators who were based in the HIV/AIDS Unit applying their acquired knowledge and skills; so that they may become role models for their peers by practising what they taught and not taught what they proposed to practice.

## **1.9 Objectives**

**The research objectives are:**

- 1.9.1.** To determine whether the Peer Education Programme has had a positive effect on changes of sexual behaviours (knowledge, attitude, practice and belief) that could occur on student peer educators who are based in the HIV/AIDS Unit in terms of prevention of HIV infection.
- 1.9.2.** To determine if there are differences in knowledge between male and female student peer educators before and after being exposed to the Peer Education Programme.
- 1.9.3.** To identify student peer educators' needs and challenges in terms of capacity building in the context of HIV/AIDS/STI & TB prevention in the Peer Education Programme.

## **1.10 Significance of the study**

To date HIV/AIDS still is major cause of deaths worldwide, and in the absence of a cure and vaccine many researchers continue to view peer education programme as an effective behaviour change strategy. This research study will add to the theoretical base and improve human resource knowledge, attitudes, practices and beliefs of the deadly disease. The result of this study will be presented to the funders (HEAIDS & EU), so that they may know the needs of the peer education programme and of the peer educators for the further researches. The result of this study will be employed in planning, changing and improving future peer education programme. The study will contribute also in a way that those who will conduct research in the same field, will benefit and learn from our findings.

## **1.11 Chapter outline of the study**

Chapter One presents a general introduction and background of the study;

Chapter Two reviews literature on HIV/AIDS /STI &TB prevention globally and in South Africa;

Chapter Three explores the methodology and design used to achieve the objectives of the study;

Chapter Four presents the results that were obtained from the study;

Chapter Five discusses the findings and results of the quantitative and qualitative data analysis; and,

Chapter Six presents the conclusion and recommendations from the research.

This chapter presented an introduction and a background to the research. It also clarified the terms and concepts which are utilised in this study. Chapter Two which follows will review the literature on HIV/AIDS /STI &TB prevention globally and in South Africa. It will also discuss theories that underlie peer education.

## CHAPTER TWO

### LITERATURE REVIEW ON HIV/AIDS/STI & TB PREVENTION

#### 2.1 Introduction

This literature review is divided into three parts. The first part reviews the literature on HIV/AIDS/STI & TB prevention in South Africa; the second part describes the literature on peer education and several acknowledged behavioural theories of peer education; and the third part presents literature of Peer Education Programmes in different sectors, globally and in South Africa. Worldwide, HIV/AIDS emerged as the major cause of mortality (UNAIDS 2008). Every country in the world now acknowledges the impact of HIV/AIDS on its population. The most prevalent mode of human immunodeficiency virus (HIV) transmission is unprotected sex, and can also be transmitted by the exchange of body fluids as well as through mother-to-child transmission (MCT). Despite adequate knowledge of various HIV transmissions modes, the epidemic is unabatedly on the increase globally. Whether effective and efficient interventions by various governments have been implemented remains a question. Reduction in the spread of HIV could have been achieved whilst mitigating the impact of this epidemic. Instead, there were contradictory, divided and inadequate responses globally, especially in responses from developing countries to the HIV/AIDS epidemic (UNAIDS, 2008).

Achieving the right stability and harmony between treatment efforts and prevention of HIV/AIDS /STI &TB was difficult for policy makers. Firstly there was great neglect in care and support for those who were infected in developing countries. The situation was further exacerbated by the rapid extension of HIV infection and roll out of ARVs. Lately, there is more of an expansion of antiretroviral treatment without focusing equally on prevention investments at the same pace, especially by those outside of the health sector (UNAIDS/WHO, 2007).

However, such responses have addressed sensitive social factors which surround HIV prevention such as sexual behaviour, drug use, and gender equality. It has also countered stigma and discrimination, and mobilised infected communities; but such responses have been few and far between. An immediate and restored global movement for HIV prevention is needed

that ropes in a mixture of behavioural, structural, and biomedical methods, and is founded on scientifically derived indication and the understanding and ownership of communities (Merson, O'Malley, Serwadda & Apisuk, 2008:7-8).

## **2.2 Consequences of AIDS denialism in South Africa**

In late 1999, according to Cameron (2005:103-122), the largest group of people living with HIV/AIDS in the world -4 to 5 million, or 10 percent of the infected global population were living in South Africa. The majority of those infected with HIV eventually reached the advanced stage of AIDS, and were dying. The effect of the epidemic was seen daily. It is a fatal disease and had impacted on almost every family, workplace, township, farm, suburb, church, and organisation. By 2010 the number of people living with HIV in South Africa was estimated at 5.6 million (UNAIDS, 2010). At that time, the country also entered a three-year nightmare period that further exacerbated HIV/AIDS/STI & TB in South Africa. This period saw a highly heated debate involving government, health professionals, and policy makers. The debate was further fuelled in academic circles, in scholarly journals, and in university seminar rooms. The source of this unhealthy debate originated from the South African government of the day, which rendered an ineffective response to HIV/AIDS. This set prevention efforts back by years, and hence, prevention and treatment programmes became ineffective.

The denialists maintained that the claim that AIDS is caused by a sexually transmitted virus is merely a '*hypothesis*'. Not only did they profess that the claim is unverified, but that it is also unreliable. The statement that there is a microbial epidemic in Africa was simply an '*opinion*' for the denialists. What was perceived as a viral epidemic was really only the effect of '*non-contagious risk factors that are limited to certain sub-sets of the African population*'. According to the denialists, the millions of deaths blamed on AIDS, were considered as '*a smaller part of the conventional principle under a new name*' (Cameron, 2005).

The theories of '*the discordants*' on HIV/AIDS, and the backing of President Mbeki had larger implications for South Africa and South Africans than some are ready to accept, and are responsible for the ongoing political and scientific outburst. The effect of public health messages that Mbeki's government had put in place was weakened by the ongoing disputes. People who devoted themselves to the mitigation and suppression of this epidemic were weakened by the messages of Mbeki's government, and it is still having a harmful influence on the confidence of

affected patients and families. AIDS denialism has had considerable political consequences in South Africa under Thabo Mbeki's reign.

Scientists and physicians pressed the panic button in response to the human expense of AIDS denialism, which confused HIV-positive people into refraining from applying the established treatments. South African and Harvard University researchers in Public Health have independently analysed the consequences of AIDS denialism. They concluded that 330 000 to 340 000 AIDS related deaths, along with 171 000 other HIV infections, plus 35 000 infant HIV infections were attributable to the South African government's former embrace of AIDS denialism (Boseley, 2008).

The high rate of HIV infections and AIDS deaths today has its roots in the AIDS policies of the former South African president Thabo Mbeki's government. History will judge Mbeki's government as being inadequate, inappropriate, and unacceptable in terms of implementation of HIV campaigns, especially its failure to support the use of available ARVs to prevent and treat HIV/AIDS at the time. This policy of the South Africa government did not only negatively impact on HIV/AIDS prevention and programmes, but also set back successful programmes that were introduced by NGOs and health professionals (Heywood & Cornell, 2004).

### **2.3 HIV/AIDS stigma and discrimination in South Africa**

The HIV/AIDS stigma and discrimination continue to be a major obstacle to adequately combating the most devastating epidemic humanity has ever known. Stigma persists to perpetuate discrimination and remains a key contributor to the spread of HIV/AIDS globally (Wambayi, 2010). Globally, the HIV/AIDS stigma and discrimination exist, but their manifestations are different across continents, countries, communities, religions or cultural groups, and individuals. The HIV stigma and discrimination manifest alongside other forms of stigma and discrimination such as racism, homophobia, Islamophobia, and so on.

Such behaviour is usually directed at those who are involved in socially improper activities such as prostitution, drug addiction, homosexuality, or promiscuity ([www.avert.org](http://www.avert.org), n.d). Socioeconomic conditions, as well as cultural habits that are inherent in most African communities, are considered to contribute towards stigma and discrimination. Stigma continues

to be '*a seriously neglected issue*', particularly in sub-Saharan countries, including South Africa, regardless of the fact that it has damaging effects on public health and human rights (UNAIDS, 2007).

Historically, marginalisation is a characteristic of most African communities in the world, and as a consequence stigma has a major impact on this population. Stigmatisation leads to social differences and inequalities of class, race, gender, and sexuality. Many people who live with HIV/AIDS are exposed to stigma, and live in isolation and fear. They are thus denied services that are rightfully due to those associated with the disease. Stigma impacts on services such as HIV counselling and testing because it strengthens existing bad expectations, beliefs and animosity for people who live with HIV (Consultancy Africa Intelligence, 2010).

The following are some factors that contribute to HIV/AIDS/STI & TB-related stigma (UNAIDS 2008):

- HIV/AIDS is a life-threatening disease, and therefore people respond to it in violent ways.
- HIV infection is associated with behaviours (such as homosexuality, drug abuse, and prostitution) that are already stigmatised in many societies.
- Most people become infected with HIV through unprotected sex which often brings about a guilty conscience.
- Incorrect information and perceptions about how HIV is transmitted create irrational behaviour and misconceptions of personal risk.
- HIV infection is often seen as a result of personal irresponsibility.
- Religious or moral beliefs lead some people to believe that being infected with HIV is the result of a moral offence (such as promiscuity or deviant sex) that deserves to be punished.

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. Stigma hinders the fight against HIV/AIDS. It generates doubt about disclosure, and therefore develops secrecy, which potentially encourages transmission. It drives the epidemic underground. Health seeking is diminished and preventive measures are left unemployed (Consultancy Africa Intelligence, 2010).

To understand the sources of stigma and discrimination, one should first comprehend how the HIV/AIDS-related stigma and discrimination relate to pre-existing stigma and discrimination

which is affiliated to sexuality, gender, race and class, before comprehending how the HIV/AIDS-related stigma and discrimination appear and the contexts in which they develop in our society (Parker & Aggleton, 2002).

### **2.3.1 Sexuality**

The HIV/AIDS-related stigma and discrimination are most closely related to sexual stigma. This is because the main mode of HIV transmission is unprotected sex, and in most areas of the world the epidemic primarily affected populations whose sexual practices or personalities were different from the norm. Previous sexual stigma related to sexually transmitted diseases, homosexuality, promiscuity, prostitution, and sexual '*deviance*', has been strengthened and supported by the HIV/AIDS-related stigma and discrimination.

### **2.3.2 Gender**

The HIV/AIDS-related stigma and discrimination are also linked to gender-related stigma. The effect of HIV/AIDS-related stigma and discrimination on women increases previous economic, educational, cultural, and social disadvantages and inadequate access to evidence and facilities. Female sexual behaviour is often related to the spread of HIV infection.

### **2.3.3 Race and ethnicity**

Racial and ethnic stigma and discrimination contribute to the marginalisation of minority population groups, which increases their vulnerability to HIV/AIDS, and this in turn exacerbates stigma and discrimination.

### **2.3.4 Class**

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 with 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 (Parker & Aggleton, 2002).

Education can play a vital role in reducing stigma and discrimination to counteract the rise of HIV/AIDS. Ignorance is always a barrier to advancing any knowledge. Question has been asked

why the epidemic is on the rise, despite all efforts by stakeholders to overcome the barrier of stigma and discrimination. Are stakeholders receiving the right information? Are all the stakeholders willing to defeat stigma? Education is a key to solving this problem. People who receive the right information through the right education will be more willing to get tested, to seek treatment, and to change their behaviours (Kalichman & Simbayi, 2003).

In October 1998, the then Deputy President Thabo Mbeki made the declaration of partnership against AIDS, in which he called for an end to judgment of people who are HIV-positive. However, it was impossible for this objective to be achieved in South Africa. Less than two months after the declaration by Mbeki, Gugu Dlamini, an AIDS activist in Durban, was killed by her neighbours on World AIDS Day in 1998 when she stated that she was HIV-positive.

In 2000 Justice Edwin Cameron of the South African Constitutional Court announced in a speech that he was HIV-positive. The public's response to this declaration was largely supportive. However, a person who lives with HIV and who makes a public declaration can, in many cases, experience negative effects on employment and housing opportunities, as well as social relationships (Cameron, 2005).

## **2.4 HIV prevention in South Africa**

The issue of AIDS appeared on the national agenda in the late eighties and early nineties. However, in the tumultuous political climate, many groups associated reports about the spread of HIV among blacks with conspiracy theories of whites wanting to eliminate black people (Vliet, 2004). It was during this period that we saw the first steps of a more rational and coherent response to the epidemic. The Maputo Statement on HIV and AIDS in Southern Africa was issued following the 1990 Fourth International Conference on Health in Southern Africa. This event brought together ANC representatives, other anti-Apartheid figures and health workers, as well as those involved in tackling the epidemic in other countries. The document described the necessary ingredients for tackling the epidemic, including a focus on prevention and the rights of infected individuals (Heywood & Cornell, 2004).

The creation of the National AIDS Coordinating Committee of South Africa (NACOSA) in 1992 brought together a wide range of actors, including political parties, trade unions, academics,



business organisations, and civic groups to foster a response to the burgeoning epidemic (Vliet, 2004).

With the involvement of a number of government departments, NACOSA's National AIDS strategies conceived a large approach to blocking HIV with action on all fronts, including prevention, research, human rights, counselling and welfare. South Africa's National AIDS Plan was approved within months of the democratic election in 1994, and there was an expectation that an epidemic on the scale experienced by other African countries at the time could be averted (Heywood & Cornell, 2004).

#### **2.4.1 HIV prevention campaigns in South Africa**

The concerns around HIV prevention in South Africa have generated more controversy and debate than other aspects of the country's response to AIDS. Nationally, some efforts have been recognised, and these are presented below.

##### **2.4.1.1 The Soul City:**

The Soul City project promoted public awareness around health issues, including HIV/AIDS, via television and radio dramas. It was broadcast in 1994, the year of South Africa's transition to democracy, and each series dealt with three or four key health or social issues. HIV/AIDS had been discussed in each series since it began. Soul City attempted to create a natural and comfortable ways, in order to influence viewers to make healthy choices, both for individuals and for communities, over its multi-media and backing approaches ([www.avert.org.n.d](http://www.avert.org.n.d)).

##### **2.4.1.2 Beyond Awareness:**

The Beyond Awareness Campaign (1998-2000) focused on young people through a multi-media campaign that disseminated key messages around the HIV/AIDS epidemic. The AIDS toll free helpline phone number and the red ribbon logo were advertised by the Beyond Awareness Campaign. It also provided leaflets, posters, booklets, and other 'tools for action' that supported the struggles of governmental, non-governmental, and community-based associations to engage with the epidemic. The campaign operated on an annual budget of around R13-million ([www.avert.org.n.d](http://www.avert.org.n.d)).

##### **2.4.1.3 Khomanani - Caring Together:**

The South African government's HIV/AIDS communication campaign, 'Khomanani - Caring Together', planned to '*stir the nation to accomplish by notifying, stimulating and investing individuals, civil society, business and government, through the active and proficient use of media*'. Youth prevention, support for vulnerable children, living positively with HIV, effective STI

treatment, TB control, and supporting health workers, were the focuses of their campaigns ([www.avert.org.n.d](http://www.avert.org.n.d)).

#### **2.4.1.4 Love Life:**

The Love Life campaign was launched in 1999. It was intended to 'brand' safe sexual behaviour as part of popular youth culture, and to diminish the HIV-infection rate among young South Africans. Love Life attempts to promote communication about sex, and to encourage informed decision-making. The programme includes nationwide media strategies, including a prominent billboard campaign aimed at promoting sexual responsibility. Youth centres and public clinics were offered services and support programmes by Love Life. The effectiveness of the campaigns was also observed and assessed by Love Life. The campaign's major funders are the Henry J.Kaiser Family Foundation and the Bill and Melinda Gates Foundation.

##### **2.4.1.4.1 Criticism of Love Life**

Some NGOs, religious groups, and media have criticised Love Life because of the way that they manage their huge budget, and the way that they portray sexual images on television. The effectiveness of the Love Life campaigns in South Africa was questioned in 2002 by the Centre for AIDS Development, Research, and Evaluation (Cadre). Other critics have argued the following:

- Love Life operates in an indiscriminating relationship with the South African media which cares only about commercial;
- Their message was obscure, inappropriate, laden with sexual imagery, and incompetently developed;
- The treatment of the 12-17 year old age-group as a single entity (12-14 year old young people are emotionally, intellectually, and sexually very different to 15-17 year olds); and
- The way Love Life introduces its research attests to the ineffectiveness of its campaign.

The Global Fund Secretariat instructed Global Fund to stop funding Love Life after two years because of the weaknesses shown in the implementation of its programme. Global Fund spokesperson, Jon Liden, alluded to other shortcomings. According to Liden, Love Life's programme could not help to halt HIV infection among young people.

Love Life CEO, David Harrison, argued that abstinence-only Christian fundamentalists in Washington conspired against Love Life's more progressive programme: "Love Life is a victim of international politics squeezed between the ideological right and progressives". In 2003, Chris

Barron challenged the effectiveness of the Love Life campaign and claimed that advertising contracts obstructed criticism of the campaign by some media groups ([www.avert.org.n.d](http://www.avert.org.n.d)).

## **2.5 Origin of peer education**

Many areas of public health, including nutrition education, family planning, substance abuse, and violence avoidance have been using peer education. The number of cases of the practice in recent international public health literature supported the use of peer education in the area of HIV/AIDS. Because of this popularity, global efforts have developed to further comprehend and ameliorate the process and impact of Peer Education in the area of HIV/AIDS prevention, care, and support. Peer education typically includes using members of a specified group to influence change among other fellows of the same group. Peer education is frequently utilised to influence change at an individual level by attempting to modify a person's knowledge, attitudes, beliefs, or behaviours. However, peer education can also create change at a group or societal level by adjusting norms, and by encouraging collective action that leads to changes in programmes and policies (Mead, n.d).

Peer education's history can be tracked back as far as Aristotle (Wagner, 1982). Many peer education initiatives appeared in a variety of contexts, and in a number of different settings and situations. Joseph Lancaster implemented the 'monitorial' system in London in the early 1800s, whereby teachers taught 'monitors' who then passed on what they had learned to other children (Gerber & Kauffman, 1981). More currently peer education has been employed in health projects to reduce the incidence of smoking among young people. There have also been peer education initiatives in the field of substance abuse (Rhodes, 1994). To date peer education seems to be gaining popularity in relation to HIV prevention and sexual health promotion. In 1991 the WHO commissioned a global review of peer education HIV prevention initiatives (Perry & Sieving, 1993).

Peer education was applied in a range of diverse locations. These have involved universities, schools, colleges, youth centres, community settings, and casual networks. For them to communicate with young people, universities, schools, colleges and youth centres were chosen, while particular community settings have also been preferred in order to be in touch with certain groups at risk. With groups living in the area where there is no access, some form of outreach contact should be chosen, so that peers can work through informal networks and access people in places where they tend to congregate (Turner & Shepherd, 1999:235-247).

The methods applied to peer education vary considerably. Some forms of peer education apply methods similar to formal tutoring such as whole class teaching in schools, or group discussions in youth centres. Other methods include informal tutoring in unstructured settings, one-on-one discussions, and counselling. Peer educators employed in some contexts in theatres, stalls and exhibitions. The methods approved depend to some extent on the determined results of the project, whether it is passing on information, behaviour changes, skills development, or community development. The context or culture of the target group sometimes influenced the methods chosen (Turner & Shepherd, 1999: 235-247).

### **2.5.1 Rationale of peer education**

When talking about peer education, the general objective is to improve a suggested behaviour or to transform risky behaviour in a target individual. Many examples have been defined in the literature to explain the use of peer founded involvements. Turner & Shepherd (1999:236-247) present 10 motivations for the practice of peer education:

1. It is more cost effective than other methods;
2. Peers are considered as a reliable source of information;
3. Peer education is an investment for those involved;
4. It applies an already recognised means of sharing information and counsel;
5. Peers are more effective than professionals in transferring information because people identify with their peers;
6. Peer educators perform as confident role models;
7. Peer education is beneficial for those involved;
8. Education presented by peers is more accepted than other means.
9. Peer education can be used to instruct those who are inflexible and difficult to influence through conservative methods; and
10. Peers can strengthen learning through on-going interaction.

## **2.5.2 Theories underlying peer education**

The theoretical foundation of peer education is established within psychological literature. Early peer education was constructed more on intuition and observation than on sound theoretical principles (Turner & Shepherd, 1999). However; many social psychological theories described the impact that peer education may have on young people's attitudes and behaviour. To impact or transform young people's knowledge, attitudes or behaviour, was the main goal of the peer education drive. Behaviour change can be affected by a number of factors associated with the individual (e.g. pre-existing knowledge, attitudes, and beliefs), the social environment (e.g. group and cultural norms, peer influence, family influence) and cognitive factors. A better understanding of the circumstances most likely to impact on behaviour change is crucial to the success of Peer Education initiatives.

This study now presents brief descriptions of well-established psychological theories of behaviour change and their implications for the development of effective peer education ambitions (Turner & Shepherd, 1999).

### **2.5.2.1 Social Learning Theory**

In the context of peer education, Social Learning Theory assumes to be appropriate in terms of credibility, empowerment, role models, and reinforcement. Peer educators should be credible to their peers in order to be influential whilst acting as role models. According to the tenets of the theory, peers would need to be able to observe peer educators as role models practising healthy behaviour (Turner & Shepherd, 1999).

### **2.5.2.2 Theory of Reasoned Action**

The above theory describes the factors and inputs that result in any particular behaviour. This theory has its origins in the field of social psychology, where social psychologists demonstrate how and why attitudes impact the human behaviour. In this theory, a person's attitude toward behaviour contains of a belief that that particular behaviour leads to a certain outcome and of an assessment of the outcome of that behaviour (Fishbein & Ajzen, 1980).

### **2.5.2.3 Diffusion Innovation Theory**

Diffusion Innovation Theory recognises the use of informal approaches to peer education that depend on ongoing contact and cultural change. Peer educators can be regarded as early adopters (leaders) by their peers. After going through training and workshops, peer educators

can also disseminate newly learned information and command newly formed behaviours, which increase the observability of desired behaviours (Rogers, 1983).

#### **2.5.2.4 Theory of Participatory Education**

This theory, developed by Paulo Freire, surfaced as a theory for intervention, development and change within communities and groups. The Theory of Participatory Education joined the United Nations Programme on HIV/AIDS by reason of its empowerment component, and has also been influential in the development of peer education. Empowerment in the Freirian sense results through full participation of people who are affected by a given problem or health condition. Thus Freire's theory proposed a human-centred approach that valued the importance of interpersonal channels of communication in decision-making processes at a community level (Freire, 1970). Empowerment and full participation of young people who are affected by sexual health issues are keys to effecting behavioural changes in young people. If young people are given an opportunity to work together, to determine a course of action for themselves, they are much more likely to adopt the behaviours that they campaign for. This is why many defenders of peer education believe that the process of peers talking among themselves and determining a course of action is key to the success of a peer education approach (Everts, 2003).

#### **2.5.2.5 Role Theory**

Thomas & Biddle (1966:3-19) suggest that Role Theory is concerned with the roles that individuals perform in their societal positions. The role performance is influenced by several factors, including societal rules, norms, and demands; other individual's role performances; the reaction and observation of others; and one's own personality and capabilities. Role Theory states that peer educators will adopt the role of a group facilitator and disseminator of new information and will behave as a role model. Peer educators can, after adopting the role of facilitator, develop a commitment to peer education, and the relevance of the health topic. Peer educators can be more effective in promoting behaviour change if they have experience and culture alike.

#### **2.5.2.6 Social Comparison Theory**

Peer education based on Social Comparison Theory states that a young person tries to fit in with other peers and realises that he uses many characteristics that he has in common with other young people during his adolescence. A young person is more likely to look to others of their age for social comparison rather than adults, particularly when considering youth cultural

attitudes. Young people who resemble the target group may positively manipulate norms within the target group and potentially inspire them to endorse safer attitudes and behaviours (Ransom, 1992).

### **2.5.2.7 Cognitive Dissonance Theory**

Cognitive Dissonance Theory is the unease / stress experienced by someone who simultaneously harbours two or more contradictory views or beliefs.

Cognitive Dissonance Theory describes the importance of accommodating peer education initiatives in relation to the beliefs and involvements of the target group. It also provides some ways and strategies for the acceptability of peer education programmes (Festiner, 1957).

### **2.5.2.8 Health Belief Model**

The Health Belief Model suggests that peer education should not only focus on identifying effective behaviours to reduce risks and harms, but should also provide young people with accurate information, skills and support, which is necessary to overcome potential barriers to performing such behaviours. The conclusion suggesting that perceived susceptibility has a larger influence on behaviour than perceived severity, the theory also suggests that the effectiveness of peer education may be improved if less severe, but more widespread (Mc Donald, 1999).

### **2.5.2.9 Summary**

The theories that underlie peer education illustrate how it has grown in popularity and practice in relation to HIV prevention and sexual health promotion. It also shows its development in social psychological theories concerning mechanisms of change in attitudes, beliefs and behaviours. We can understand from this literature that a person's behaviour results from a complex mix of social and individual factors. Some theories describe the mechanisms which underlie the crucial influence of peer educators on young people. Others indicate the importance of carefully selecting peer educators that are perceived to be members of young people's in-groups from perceptive young people themselves. Establishing in-group membership allows peer educators to tap into the powerful sources of social influence associated with group membership, and is also likely to increase their effectiveness as role models and disseminators of accurate information and knowledge. The theories and models of behaviour change are crucial to the success of peer education programmes. Moreover, the inclusion of these theories and models in peer education provides ways to evaluate and measure the accomplishments and downfalls

of programmes. Therefore, the success of peer education depends on the successful application of the theories and models of behaviour change by peer educators.

## **2.6 Peer Education in South Africa and worldwide**

These are summaries of some peer education programmes implemented in secondary schools and at work places in South Africa, and in higher education institutions in South Africa and worldwide.

### **2.6.1 Peer education at Stellenbosch University**

Munro (2007:3-5) speaks about the evaluation of the Peer Education Training Programme at the University of Stellenbosch. The main objective of the training programme was to promote HIV awareness and knowledge, and to encourage safer sexual behaviour amongst students of the University by enabling and empowering students to educate their peers. As a secondary goal, this programme also aimed to develop the necessary skills in students, as future professionals, to enable them to manage HIV prevention and care in the work place environment. The Stellenbosch University's HIV Peer Education Training Programme was the first of its kind to be hosted at that university and was only in its pilot phase. An investigation by HEAIDS, (2004:46) indicated that there are currently a number of Peer Education Programmes that operate on higher education campuses, which vary considerably with regard to the way that they were established, are offered, and evaluated. The HEAIDS study found that no single higher education institution has, as yet, provided a model approach or "best practice" to HIV Peer Education Training Programmes for others to follow. The Stellenbosch University's Peer Education Training Programme was not based on "best practices" from other HEIs, but was rather based on principles that were adapted to the university's own institutional context, culture, and circumstances. Hence Munro (2007:3-5) explains that it is important to investigate the peer education training programmes, to find out if the programme has accomplished its objectives on the participants.

### **2.6.2 Peer education at University of Pretoria**

The Centre for the Study of AIDS (CSA) at the University of Pretoria was established in 1999. Its work is primarily amongst staff and students at the university, as well as the communities from which they come. The vision of the centre is Imagined Futures -how we handle the futures of young people, their families and the country against the backdrop of one of the most serious HIV/AIDS epidemics that any society has had to live through, and emerge a better, stronger,



and more compassionate society (Centre for the Study of AIDS, 1999). Not only does the CSA support HIV/AIDS research on campuses, but it also assists the integration of HIV/AIDS courses and organisation of all the University's faculties. The strategic plan for the impact of HIV/AIDS on students and staff is highly prevalent in the country; hence the CSA was developed at this University. Not only does the CSA participate in counselling, treatment, and support services for students, but it also disseminates media and information resources at the University, hosts a monthly AIDS Forum on topical issues, and conducts regular seminars, workshops, and symposiums for staff, students, and the public (Centre for the Study of AIDS, 1999).

### **2.6.3 Peer education at the University of the Western Cape (UWC)**

The UWC HIV/AIDS Programme was implemented in 2001 in appreciation of the significant influence that the HIV/AIDS epidemic has on the University's student and staff population. The HIV/AIDS Peer Education Programme at UWC tries to offer new ways to manage an epidemic in a high-danger age group which is tired of conservative approaches to HIV/AIDS education and awareness. Not only does the Peer Education Programme at UWC focus on HIV prevention that includes condom distribution, STI management, counselling, and advocacy, but it also concentrates on mutual and original research. Lively, creative methods such as storytelling, interaction drama, computer simulation games, group discussions, slides, and videos form the basis of intervention (HIV/AIDS Programme, University of the Western Cape, n.d).

### **2.6.4 Rutanang**

The HEAIDS Peer Education Working Group has attempted to ensure that peer education becomes more standardised in South African Higher Education institutions by supporting the development of the Rutanang documents. The aim of the Rutanang process is to provide standards of practice, and, to develop peer education so that it is not a random and ad hoc intervention, but a process that is well understood by everybody and that has recognised guidelines. There are five books in the Rutanang series, which are presented below:

- Book One is about standards of practice for peer education in South Africa;
- Book Two is a peer education implementation guide for NGOs in SA;
- Book Three is a peer education implementation guide for schools in SA;
- Book Four is a peer education implementation guide for higher education in SA; and
- Book Five contains lesson plans for peer education programmes (Deutsch & Swartz, 2003:4).

### **2.6.5 Peer education at workplaces**

Dickinson (2006:50) reported on workplace HIV/AIDS peer educators in South African companies and also addressed a number of critical issues for workplace-based peer education. He conducted the research in 5 large South African companies. These companies have 120 000 permanent and non-permanent employees, and 1 780 active peer educators (a ratio of one peer educator to 69 employees).

Although all the companies that were researched had HIV/AIDS programmes and peer educators formed a part of this, realities on the ground did not always reflect company policies on the need to respond to HIV/AIDS. This was all the more apparent in pressurised areas of the company, and underground in the mining company. Here pressures for production were intense and peer educators often found it difficult to conduct peer education work, especially that which involved formal presentation. Nevertheless, within general pressurised environments certain jobs did provide space for peer education -typically those involving positions in which the individual was expected to move around and talk to different employees.

A number of companies regarded their peer education programmes as an opportunity to empower workers to take responsibility for their actions. The integration of empowerment within peer education training is in line with ensuring that local environments do not defeat the broader company's HIV/AIDS programme. However, the complexities of local environments should be considered within this. In drawing these findings, the purpose is to strengthen companies' peer education programmes, and help contribute to an effective response to HIV/AIDS in South Africa (Dickinson, 2006:50).

### **2.6.6 Peer education in secondary schools**

Visser (2007:678) conducted research in 13 secondary schools in Tshwane. The programme aimed to offer precise information about HIV/AIDS, debate and reassess peer group rules, and create support for learners. The results of her research suggest that peer education can contribute to a delay in the onset of sexual activity amongst secondary school learners. Peer education and support groups can be regarded as an appropriate strategy to deal with HIV prevention, especially for young people, since they discuss personal issues, have informal relationships, and speak a common language. Peer education can contribute towards changing

peer group norms by using age and culturally accepted ways. In this way a process of change among peer group can start from within the peer group (Capra, in Visser, 2007:693). However, peer education can function effectively amidst other interventions and needs resources from various levels of the community to function optimally (Visser, 2007: 678,693).

Gallant & Tyndale (2004:1337) explain that the high percentage of HIV infection among the youth in Africa has drawn worldwide attention. Education and prevention programmes are seen as a primary way of decreasing this rate. They piloted their research on HIV prevention programmes at 11 schools in Africa. The outcomes of their research propose that knowledge and attitudes can change easily, but behaviours are much more perplexing (Gallant & Tyndale, 2004: 1337).

Vusi (2007) tried to determine if HIV/AIDS peer education programmes are effective in changing students' behavioural practices towards condom use at the University of Zululand's main campus. He carried an experimentation using 40 students (20 females and 20 males) before and after implementing the Peer Education Programme. Based on the findings of his research, he concluded that the HIV/AIDS Peer Education Programme is effective in changing participants' behavioural patterns towards safer sexual practices. He also acknowledged in his study that sexual behaviour and sexual decision making is influenced by many factors such as socioeconomic and sociocultural.

Huang, Bova, Fennie, Rogers & Williams, 2005 conducted research among 1326 Chinese students in Hunan on knowledge, attitudes, behaviours and perceptions of risk related to HIV/AIDS. They concluded that Chinese students had misunderstandings about HIV transmission by unintended interaction and needle sharing, as well as stigmatising attitudes about injection drug habit, homosexuality and HIV-positive women who bear children. They indicated that 14% of Chinese students at University were sexually active and that risk behaviours tended to increase with age. A total of 24% of the students considered themselves to be at moderate to very high risk of contracting HIV, while 40% of the sexually active students never used condoms. Therefore, there is a need to design new HIV prevention strategies that will target university students in China.

Sabone, Ntsayagae, Brown, Seboni, Mogabe & Sebege, 2007 conducted a study at the University of Botswana to evaluate students' perceptions of the effectiveness of two HIV/AIDS

initiatives. These were established and aimed to change the students' knowledge, attitudes and behaviour. The researcher reported various problems that were hindering the success of the programmes: the difficulties to use the ABC model; intolerance on campus environment; non-existence of entertainment; and students' opinions around HIV/AIDS and their particular vulnerability. They concluded that there is a need to address the wider issues relating to HIV/AIDS in the University's Health and Wellness Programme. Male and female students need opportunities to better prepare to make decisions and negotiate for safer sex. According to them, the HIV/AIDS course must be made compulsory for all students. However, this will only be possible if the courses that offer resources such as staffing and classroom space are increased.

Uwalaka & Matsuo (2002) conducted a study on the impact of knowledge, attitudes, and beliefs about AIDS on sexual behavioural change among college students in Nigeria. AIDS-related knowledge, attitude, beliefs about susceptibility, and concerns of college students would provide crucial information to assess the level of AIDS risk in the student population and in targeting particular behaviours for prevention. In terms of sexual behavioural change and confidence in safe sexual practice, the researchers discovered that males are more likely to have changed sexual behaviours and to have more confidence in performing safer sexual practice. This finding showed how males dominate sexual relationships. The male dominance in sexual relationships must be changed to one where both sexes perceive the acceptability of safer sex practices (condom use or other safe sex behaviour) as important in reducing the risk of HIV/AIDS infections. One way to prevent the spread of AIDS is through educational efforts that target those individuals who practice high-risk behaviour, particularly students. For this reason, AIDS education should be incorporated as one of the compulsory general study courses for all colleges and universities in Nigeria. This is important, because students come from different areas of the country, and when they go back to their areas, they can become educators in their respective communities working in collaboration with age-groups, other members of civil society, and leaders to disseminate information about HIV/AIDS. Individual behavioural change, particularly sexual behavioural change, seems to be the most effective approach to preventing the spread of HIV.

### **2.6.7 Summary**

Chapter Two reviewed literature on HIV/AIDS/STI & TB prevention globally and in South Africa; the consequences of AIDS and denial in South Africa; HIV/AIDS stigma and discrimination; HIV prevention; HIV prevention campaigns in South Africa; the origin of peer education, and theories underlying peer education. The next chapter presents the methodology used by the researcher in this study to meet the research objectives.

# **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

### **3.1 Introduction**

Chapter Two reviewed literature and provided a broad understanding of the context of peer education programmes globally and in the South African setting, whilst at the same time indicating directions for this study. The literature suggested that the studies of the effectiveness of the peer education programmes have been done according to programme design in various institutions, worldwide. The purpose of this chapter is to present a detailed account of the research procedures that were followed in collecting and analysing data.

Quantitative and qualitative research strategies were used to assess the effectiveness of the Peer Education Programme of the HIV/AIDS Unit by identifying and determining the changes in sexual behaviours that could occur on the student peer educators (PE). A survey procedure was employed to solicit information of how peer educators perceived their behaviours before and after attending training and workshops.

The following data collection techniques were employed in order to validate this study and to obtain a full picture of peer educators' sexual behaviours before and after their participation in training and workshops:

- a. Questionnaire: A standard structured questionnaire was administered to peer educators of the HIV/AIDS Unit to solicit information about demographics, knowledge of HIV/AIDS/STI & TB, attitudes, practices, and beliefs of student peer educators who are based at the HIV/AIDS Unit at CPUT.
- b. Observation: To determine the disparity between the ideal HIV/AIDS peer educators' behaviour and their real behaviour in practice.
- c. Portfolio: Was used as analytical tool for annual assessment of the peer educators' work.

### **3.2 Quantitative and qualitative research strategies**

Quantitative and qualitative data collection techniques are two categories of methods normally employed to collect data for programme assessment; they possess structures and means of evaluating results which, when applied properly are laborious. And the two data collection techniques will be discussed in the following sections.

Quantitative research is often based on numerical data analysed and displayed statistically.

It examines the effects of specified circumstances on an outcome of interest in ways that can be expressed numerically. It is also used because things that can be measured or counted have more scientific credibility than the unmeasurable.

Quantitative research is often considered best for looking at cause and effect. It is used also to study human behaviour by addressing the why and how of a situation. It is employed to identify patterns and predict behaviour (Punch, 2014).

According to Punch (2014), qualitative research deals with contradictory behaviours, beliefs, opinions, emotions, and relationships of individuals. The researcher in qualitative research purposes to gather an in-depth understanding of human behaviour and the reasons that govern it.

The most common techniques used in quantitative data collection include questionnaires, survey and service statistics. And the techniques used in qualitative data collection comprise: focus group discussions, In-depth interviews, participant observation and ethnography.

Data were collected using the CPUT HIV/AIDS unit's peer education programme in order to explore peer educators' perceptions of the impact of their training on their sexual behaviours. This study used a post-data collection design consisting of post-intervention questionnaires taken after undergoing training and attending workshops.

Quantitative and qualitative research strategies were utilised in order to assess the effectiveness of the peer education programme by identifying and determining the changes in sexual behaviours that could occur on student peer educators of the HIV/AIDS Unit at CPUT. Therefore, the effectiveness was assessed by the degree of changes in sexual behaviour that could occur among students that are peer educators as a result of their participation in training and workshops. The intervention that the study monitored included all HIV/AIDS activities that the peer educators participated in, such as HIV/AIDS training and workshops.

### **3.3 Sampling**

This study used the purposive sampling technique, and the population in this study were student peer educators of the HIV/AIDS Unit at CPUT. Of the 40 active peer educators, 31 active student peer educators based at the HIV/AIDS Unit at CPUT agreed to participate in this study, were included in this research, peer educators in the HIV/AIDS peer education programme were selected from the wider CPUT student community. The profile of these students showed that there was diversity in gender, age, year of study, course of study, country of origin, and religious background. All the peer educators who agreed to participate in this study did so on a voluntary basis. The 31 peer educators who participated in this study represented the sample size. The Peer Educators came from various campuses of CPUT: Cape Town, Bellville, Tygerberg, Mowbray, Granger Bay and Athlone. The 31 active student peer educators were selected and data collected from this population was used to help the researcher answer the research questions.

### **3.4 Data collection techniques**

All peer educators of the HIV/AIDS Unit at CPUT were invited to participate in this study during two days of the Dram Aids workshop in May 2012 at the Bellville campus. In total there were 40 peer educators. The researcher explained the purpose of the study to all forty peer educators. Only 31 peer educators consented to take part in the study. The remaining nine peer educators declined to participate in this study.

Consent forms for participation were provided to the 31 (78%) peer educators who agreed to participate, and proceeded to complete the post- training questionnaire.

### **3.5 Data analysis**

Data from the closed-ended questions of the questionnaire were analysed using two statistical analysis software products- SPSS version 19.0 and Statistica version 10 (Norman et al,1970). The researcher started by obtaining frequencies for all the variables in quantitative data analysis. Hereafter, the analysis packages were used to analyse and run tests on applicable variables in post-test training questionnaires. McNemar's Chi-square was used to test for statistically significant differences between before and after training and workshops. Paired t-test analysis was used to determine if the means on two normally distributed interval variables differ from one another.



The open-ended questions were designed and administered to obtain information of peer educators' perceptions resulting from their participation in the CPUT peer education programme. The study uses this information to assess the effect of the programme on peer educators' participation in the HIV/AIDS training activities. Data from this section of the questionnaire was analysed using content analysis (which consists of analysing qualitative information collected in textual form) to provide knowledge and understanding of the phenomenon under study. In this study, these texts included notes from (i) observation as a result of observing and listening, (ii) portfolios assessment of student peer educators, and (iii) qualitative data resulting from post-training opened-ended questionnaires.

### **3.5.1 Questionnaires**

This study utilised a survey procedure and questionnaire data collection technique to obtain information about the perceptions of peer educators after participating in the various training workshops. The questionnaires were designed by adapting and modifying a basic questionnaire that measure changes in knowledge, attitudes and practices (KAP) designed by Johns Hopkins Bloomberg School of Public Health Centre for Communications Programmes (JHU/CCP). More questions related to Higher Education Institutions, and specifically to CPUT context were added. The structured questionnaire was administered to active student peer educators based at the CPUT HIV/AIDS Unit. For ethical reasons peer educators completed the questionnaire anonymously as the information was sensitive and to be kept confidential.

For the closed-ended questions, the peer educators were asked to choose the answer from alternatives provided by the researcher. The closed ended questions (quantitative) were used to obtain information about the peer educators' demographics, knowledge and understanding of HIV/AIDS, sexually transmitted infections (STI), tuberculosis (TB), as well as their attitudes, practices, and beliefs regarding HIV/AIDS infections.

For the open-ended questions (qualitative) the peer educators were asked to provide their own answers to questions around personal feelings and opinions about HIV/AIDS, their needs, and challenges.

Validity and reliability are used in both quantitative and qualitative research assessment. All research has to present effective and dependable findings in an ethical manner, especially when dealing with human lives. According to Joppe (2000, 1) validity in quantitative research refers to whether the researcher actually assessed what he wanted to measure, and not

something else how truthful the research result are. Reliability in quantitative means the researchers would obtain similar results if they repeated their questionnaire soon afterwards with the same population. A pilot study was undertaken on few peer educators.

In this study, the researcher tried to assess any change that could occur in peer educators after they went through training and workshops with the knowledge they gained.

Stenbacka (2001) argued that the concept of reliability is irrelevant and even misleading in qualitative research. Patton (2001) in contrary specified that validity and reliability are two factors which any qualitative researcher should be worried about while designing a study, analysing results and judging the quality of the study.

In this study, validity can be understood by the use of some data collection techniques such as questionnaires, observation and portfolio assessment, and qualitative methods to approve the outcome of the research.

Lincoln & Guba (1985) suggest some criteria to assess the reliability in qualitative research: credibility, confirmability, dependability and transferability which can be used to examine both the process and the product of the research for consistency. Are the findings of the research believable, can be generalised and confirmed by other researchers? In this study, the research presented people who participated in this study, how the study was conducted, the environment in which data were collected, and how the results were found.

### **3.5.2 Observation**

The researcher attended and observed various activities of the peer education programme; in order to obtain insight and informative data about any behavioural changes; that might occur as a result of their participation in the HIV/AIDS training interventions during a period of 12 months. Training in these workshops included peer educators awareness of HIV/AIDS campaigns, HIV/AIDS Counselling and Testing (HCT), condom distribution, community outreach and camping. The researcher was able to observe the behaviour of peer educators and collect valuable information. Field notes taken during observations as result of watching and listening allowed the researcher to determine the disparity between the ideal HIV/AIDS peer educators' behaviour and their real behaviour in practice. The field notes added and enriched the data that were obtained from other instruments employed in this study.

### **3.5.3 Portfolio**

The researcher assessed the individual portfolio of each peer educator. The portfolios provided valuable information about the peer educators' behaviour, needs, and their level of improvement and growth over the period they were involved in the programme. Each portfolio was used as analytical tool for assessment of the peer educator's work over the year. Peer educators were asked to write reports and submit them at the end of the training and workshops. They were also asked to present, from all the activities and workshops that they attended, the recommendations from what they learned, the photos of those activities. This was used as indicators of changes in their behaviours. The portfolios assessments present unique pictures and evidence of the peer educators' personal reflections, learning and development. The outcome of portfolios assessment allowed the researcher to determine any change that could occur amongst peer educators as result of their participation at various training and workshops.

### **3.6 Ethics**

This study was approved by the Ethics Committees of the Faculty of Applied Sciences. All respondents understood the importance of their participation in this research and how the information given by them would be employed and reported. The respondents were briefed about the nature, purposes and goals of the study before they decided to take part. The respondents participated on a volunteer basis in the research, and signed a detailed, informed consent form. Respondents were informed that they cannot answer questions if they feel uncomfortable, and they were free to withdraw their participation at any time. They were asked to contact the researcher if they have any question concerning the research. Respondents were informed that their information will be treated confidentially, and will be used for research purposes only; that no confidential and personal information will be shared with any third person. To ensure anonymity and confidentiality, respondents were also asked not to write their names on the questionnaire sheets, because this study discussed personal and sensitive issues related to safe, safer and safest sex practices, and HIV/AIDS.

### **3.7 Summary**

This chapter discussed the research methodology and data collection procedures employed, and sampling technique as well as ethical principles that underlie the scientific research. The next chapter will present the results that were obtained for the study.

# **CHAPTER FOUR**

## **DATA ANALYSIS: RESULTS**

### **4.1 Introduction**

Chapter 3 discussed the research methodology, and data collection and sampling techniques employed in the study. This chapter presents the analysis of the data and results of the research. Evidence from the questionnaire, participant observation, and other relevant documents of Peer Education Programmes were evaluated for the results.

SPSS version 19 statistics software was used to perform analysis of the quantitative data. The questionnaire data were analysed to meet the aim of the study- evaluating the reflexive effect that the Peer Education Programme has on student peer educators who volunteer their services at the HIV/AIDS Unit at CPUT.

### **4.2 Quantitative results**

The questionnaire comprised of different sections that measured changes in HIV/AIDS knowledge, attitudes, beliefs, and practices. It also included a section to record the demographics of the participants. Of the total forty (40) student peer educators who were registered in the HIV/AIDS Unit, only thirty one (77.5%) were active during the time of the survey. Of the thirty one (31) active student peer educators, twenty six (83.9%) were South Africans, two (6.5%) were from Zimbabwe; two (6.5%) from Rwanda, and one (3.2%) from the Democratic Republic of Congo.

#### **Respondents Age**

The ages of the peer educators ranged from 19 to 25. The youngest peer educators were 19 years (6.5%), and this is the appropriate age for the first year student at most of Higher Education Institutions. In this group of peer educators, we had first year, second year and third year students (See table 4.1).

## **Respondents Gender**

The gender distribution of peer educators showed a higher percentage(58.1%) of male peer educators in the programme. This is in line with the Unit's goal of having a greater number of males participating in the Peer Education Programme. Most of the times, men are at centre of woman and child abuse ( See table 4.2).

## **Respondents marital status**

The marital status of peer educators demonstrated that 93.5 % are singles and 6.5% are married. Of the two married peer educators (6.5%) one was female and the other male (See table 4.3)

## **Respondents HIV/AIDS education at high school and their involvement in the community in the context of HIV/AIDS/STI&TB before becoming peer educators at CPUT.**

The peer educators (54.8%) had HIV/AIDS education at high school and (45.2%) of student peer educators were exposed to HIV/AIDS education for the first time at university. This is important, because most of them will be exposed to the world of freedom (not living under the guidance of their parents) and will experience sexual intimacy for the first time (See table 4.4)

Only 45.2% of student peer educators from 54.8% who had HIV/AIDS education at high school were involved in the community in the context of HIV/AIDS/STI & TB before becoming peer educators. The other 9.6% were not involved in community after receiving HIV/AIDS education; they had gained in grade 11 and 12; since they did not have an opportunity to apply their knowledge and skills on HIV/AIDS in their respective communities that could have had a meaningful and positive impact in the reduction and spread of HIV infection (See table 4.5).

## **Respondents' thoughts on an HIV positive person**

Majority of student peer educators (93.6%) agreed that an HIV positive person can look and feel healthy for many years ,if he is on ARV medication and take his/her medication daily (See table 4.6).

## **Respondents HIV test (tables 4.7, 4.8, 4.10, 4.11 and 4.12).**

The HIV test of the peer educators showed that two student peer educators (6.5%) had never been tested for HIV, they were afraid to know their HIV status, because of stigma and

discrimination attached to HIV positive person. But, 93.5% of peer educators had been tested for HIV (See table 4.7).

However, after underwent through training and workshops organized by the HIV/AIDS Unit and other organisations, the HIV test result attested that even (6.5%) of student peer educators who had never been tested for HIV, had also HIV test (See tables 4.8 &4.9).

The last result of HIV test showed that (9.7%) of student peer educators were HIV-positive. The three who tested HIV-positive knew their CD4 Count, but none were on ARV medication at the time (See tables 4.10, 4.11&4.12).

**Contribution of the peer education programme on respondents changes (tables 4.13 – 4.23).**

A majority of student peer educators (90.3%) acknowledged that the peer education programme prepared them with skills and expertise to effectively persuade students/staff to be tested for HIV. The (9.7%) of peer educators were ineffective during HCT Campus Drive (See table 4.13).The peer education programme showed an increase in knowledge gained in HIV/AIDS transmission amongst peer educators of the HIV/AIDS Unit at CPUT (See table 4.14).

A majority (93.6%) of student peer educators agreed that the peer education programme equipped them with knowledge and skills to face the challenges of sexual behaviours amongst their peers, but (6.4%) of peer educators still confused about the effectiveness of the peer education programme of the HIV/AIDS Unit at CPUT (See table 4.15).

The peer education programme described the perception of level of knowledge of the HIV/AIDS/STI & TB of the respondents before becoming a peer educator. It is noted that eleven (35.5%) of respondents rated their knowledge as good or excellent before becoming a peer educator (See table 4.16),which means about two thirds of the Peer Educators did not have knowledge on HIV/AIDS that could be rated as good or – excellent prior to them becoming Peer Educators.

The perception of respondents' level of knowledge of HIV/AIDS/STI & TB after becoming a peer educator is represented in the table 4.17. It is noted that 26 (84%) of respondents rated their knowledge as good or excellent after becoming a peer educator. This shows the improvement in the knowledge of HIV/AIDS/STI & TB of student peer educators.

The results of these tables will be corroborated in Cross tabulation and Paired samples statistics tables below.

However, the paired samples statistics ( bad to fair) compared to (good to excellent) showed that there is a significant change in the average rating of the knowledge from before becoming a peer educator, being 3.21 ( close to fair), to after becoming a peer educator being 4.28, which is between good and excellent (See table 4.19).

Most (80.6%) of the student peer educators were of opinion that abstinence is the safest technique to prevent HIV/AIDS/STI and pregnancy, but the most difficult option. There were - (6.5%) of Peer Educators who recommended the (be faithful) option , but stated that this was a dangerous since if one of the partners is unfaithful , and only 3.2% of Peer Educator recommended ( condomise), stated that this was a good option if only one used a condom correctly and consistently every time s/he was involved in sexual intercourse ( See table 4.20).

A majority of student peer educators (83.9%) felt comfortable about condom demonstration and speaking about sexual behaviours with members of the opposite sex. However, there were (16.1%) of peer educators who did not respond to that question, and thus one could assume that some peer educators may not feel comfortable to do female and male condom demonstration with members of opposite sex (See table 4.21).

There were 22% of student peer educators that had been treated for a sexually transmitted infection. Thus; attending training and workshops will equip them with knowledge and skills to avoid future sexually transmitted infections. Repeated sexually transmitted infections could have a negative impact on the health of the person with recurring sexually transmitted infections (See table 4.22).

The peer education programme showed change of attitudes amongst peer educators after underwent through training and workshops, and that change of attitudes, had helped them to remove stigma and discrimination when facing an HIV positive person (See table 4.23).

### **Comparison of respondents' sexual behaviours changes before and after becoming peer educators.**

Although the Peer Education programme indicated that there were no significant differences in sexual behaviours before and after becoming peer educators, there were some positive outcomes in change of sexual behaviours noted. The tables showed a slight increase in

abstinence ( from 16.1% to 22.6%), an increase in reduction of the number of partners ( from 9.7% to19.4%), and some increase in use of condom correctly and consistently every times( from 12.9% to 29.0%) they are involved in sexual intercourse after becoming peer educators (See tables 4.24 &4.25).

The peer education programme showed that (45.3%) of student peer educators continue to use alcohol after becoming peer educators. The problem with alcohol consumption amongst peer educators was that some reported that they were not able to control themselves when under influence of alcohol. Since it was for one who is under influence of alcohol to have sex without using condom (See table 4.26).

Only one student peer educator (3.2%) continued to use recreational drugs after becoming a peer educator, while the majority of student peer educators (80.6%) were drug free, which is obviously the desired state for role model peer educators. The peer educator (3.2%) who continued to use recreational was at great risk of becoming infected with HIV by exchanging of contaminated needles, or by having sex without condom (See table 4.27).

The peer education programme demonstrated that 38.7% of student peer educators still engaged in sexual intercourse while under the influence of alcohol. This is a great risk for HIV infection. However, it was noted 32.2% of peer educators were avoiding having sex when they were under the influence of alcohol. However, this stills a concern. However it was encouraging to note that 9.7% of peer educators still reported to have maintained their virginity until they will get married (See table 4.28). However, how many peer educators who may have been influenced by the peer education programme to take up this option were not able to be determined.

The peer education programme indicated that 25 (80.7%) of student peer educators disagreed with the statement that an HIV-positive person can be cured by having sex with a virgin female, and considered that statement as a myth. Some men are abusing children by believing in that statement (See table 4.29). This meant 1 out of 5 may believe that having sex with a virgin may cure one of HIV/AIDS.

The concern here is that 16.2% of peer educators still do not know that people under the influence of alcohol and drug are at high risk of contracting HIV. This is one of the objectives of the peer education programme, which is to teach peer educators how to protect against HIV infection (See table 4.30)



The 32.3% of peer educators still lack knowledge of HIV/AIDS and its implications. The peer education programme as a mandate to make sure that there is an increase in knowledge, attitudes, practices and beliefs of HIV/AIDS amongst peer educators of the HIV/AIDS Unit at CPUT (See table 4.31).

Most of student peer educators (74.2%) agreed that the use of correct and consistent condom was effective in reducing HIV and STI transmission (See table 4.2).

### **Respondents' opinion on themselves**

The diversities of opinions among student peer educators about their relationships with students were showed in this table 4.33. The table indicated that 51.7% of peer educators do not know how to disseminate the information about HIV/AIDS/STI & TB to their peers, and they are not fulfilling their role as peer educators (See table 4.33).

The majority of student peer educators (83.6%) agreed that they provide accurate information about HIV/AIDS/STI & TB to their fellow students; otherwise the peer education programme would be meaningless (See table 4.34).

The 9.7% of peer educators did not consider themselves as role models. Thus it would be difficult for these peer educators to persuade their fellow students to attend awareness campaigns, the HCT Campus Drive, condom demonstration and distribution or join them in the peer education programme or change their behavior in terms of safer sex practices. These peer educators do not practice what they are teaching to their peers (See table 4.35).

Most peer educators (61.3%) agreed that they had made a difference to the lives of their fellow peers by exchanging knowledge, skills, and expertise that they had acquired as peer educators (See table 4.36).

An overwhelming majority of student peer educators (48.4%) had engaged in sexual intercourse by the age of 17 before joining the peer education programme of HIV/AIDS Unit at CPUT. This demonstrated how many young people started experiencing sexual intercourse at earlier age. In this table, the study is more interested in the age of (18 years old), as this is the age of most of the first year students at university (See table 4.37).

Eleven respondents representing (23.4%) of the student peer educators said that they did not use a condom when they had their first sexual intercourse experience because of ignorance (See table 4.38).

### **Activities in which peer educators of the HIV/AIDS Unit at CPUT participated:**

A majority of peer educators participated in various activities and campaigns organized by the HIV/AIDS Unit at CPUT; 80.6% of peer educators participated in workshops, 77.4% on campaigns, 67.7% on community outreach, awareness programme and 22.6% on radio broadcasting. There is less participation of peer educators on radio broadcasting, because the conditions of participation at radio broadcasting are difficult and complicated, they do not allow too many students to participate (See tables 4.39 – 4.43).

The student peer educators (38.7%) continued to visit a bar, shebeen, or night club after becoming peer educators. There is nothing wrong to visit those places, but the only concern is when people visiting those places are under the influence of alcohol and get involved in sexual intercourse, they can easily have sex without using condom (See table 4.44).

A minority (19.4%) of student peer educators do not know how to apply knowledge and skills that they acquired as peer educators to make a difference to the lives of their fellow students. The programme needs to teach all peer educators how to employ their knowledge and skills for the benefit of their peers (See table 4.45).

Few of the student peer educators (29%) have been pregnant or made their partners pregnant. Here again there is a problem of using condom correctly and consistently every times involved in sexual intercourse (See table 4.46).

At this question, the table demonstrated that 6.5% of peer educators were pregnant or made their partners pregnant after becoming peer educators. The study could not determine if the 6.5% who were pregnant were either married or single females, but the study can confirm of seeing one female peer educator pregnant while she was still peer educator and first year student (See table 4.47).

Among 9 respondents who were pregnant or made their partners pregnant, 3.2% of respondents terminated their pregnancy or his partner's pregnancy. There were 25.8% who did not terminate their pregnancy or their partners' pregnancies. The peer education programme does stress the strategy the ABC Model (Abstain, Be Faithful, and Condomise) (See table 4.48).

**Comparison of respondents' result of their sexual behaviours changes, if there is any statistical significant between before and after becoming peer educators.**

In the following tables, the study will compare the results of before and after, cross tabulation and Chi-Square Statistics will determine if there is any statistic significant between before and after.

The result of before and after in both tables (4.49 & 4.58), demonstrated that (3.2%) of peer educator confirmed that she/he was subjected to rape before and after becoming a peer educator. The two tables showed the same result between before and after becoming a peer educator- therefore no statistic significant (See tables 4.49 & 4.58).

The result in tables (4.50 & 4.59) confirmed that no student peer educator had been subjected to date rape either before or after becoming a peer educator. No statistic significant (See tables 4.50 & 4.59).

The result in table 4.51 indicated that (6.5%) of peer educators were subjected to transactional sex (sex for gift or money) before becoming peer educators. No student peer educator (0.0%) was involved in transactional sex after becoming a peer educator (table 4.60). This result shows an improvement in practices of student peer educators (See tables 4.51 & 4.60).

A majority ( 51.6%) of student peer educators had sex with a person five or more years or older than them before becoming peer educators; and after becoming peer educators, table 4.61 showed that 22.6% of peer educators had sex with a person 5 or more years older than them. Most of older partners can be living with HIV, therefore risking exposure to young people. The comparison between tables 4.52&4.61 will be demonstrated in cross tabulation and Chi-Square Statistics below, to determine if there is a statistic significant.

		Have you been subjected to Sex with a person 5 or more years older than you before becoming a Peer Educator:		Total
		Yes	No	
Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	Count	7	0	7
	% within Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	100.0%	0.0%	100.0%
	Yes			
	% within Have you been subjected to the following before becoming a Peer Educator: Sex with a person 5 years or more older than you	58.3%	0.0%	30.4%
	Count	5	11	16
	% within Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	31.3%	68.8%	100.0%
No	% within Have you been subjected to the following before becoming a Peer Educator: Sex with a person 5 years or older than you	41.7%	100.0%	69.6%
	Count	12	11	23
	% within Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	52.2%	47.8%	100.0%
Total	% within Have you been subjected to the following before becoming a Peer Educator: Sex with a person 5 years or older than you	100.0%	100.0%	100.0%
	% within Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you			

### Chi-Square Statistics Section

Chi-Square	9.223958	
Degrees of Freedom	1	
Probability Level	0.002389	Reject H0
McNemar's Test Statistic	5.000000	
McNemar's Degrees of Freedom	1	
McNemar's Probability Level	0.025347	

McNemar's test tests the 5 v 0, ie 1 Before going to 2 After V 2 Before going to 1 After.

### Fisher's Exact Test Section

Hypothesis	Prob Level	Test Type	Calculation Method
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**P-Value**< 0.05 there is a significant difference between before and after.

Few student peer educators(19.4%) had been threatened with violence before becoming peer educators; compared to table 4.63 that shows that (0.0%) of peer educator had been threatened with violence after becoming a peer educator. This result demonstrates also an improvement in attitudes after becoming a peer educator (See tables 4.53 & 4.63).

The result in table 4.54 indicated that 12.9% of student peer educators had been subjected to violence before becoming peer educators, and the table 4.64 showed that (0.0%) of peer educator had been subjected to violence after becoming peer educators. This showed an improvement in attitudes after becoming peer educators (See tables 4.54 & 4.64).

Few student peer educators (16.1%) had been subjected to sexual harassment before becoming peer educators; compared to 3.2% of student peer educator (table 4.65) who had been subjected to sexual harassment after becoming a peer educator. One more time, this result showed an improvement in attitudes and practices after becoming peer educators (See tables 4.55 & 4.65).

The result in table 4.56 demonstrated that 6.5% of female student peer educators believed that using morning after pill could protect them from HIV infection before becoming peer educators. However, in the table 4.66, 0.0% of student peer educator could not believe that taking morning

after pill will protect him from HIV infection. This result showed an improvement in belief and knowledge after becoming peer educators (See tables 4.56 & 4.66).

In the next table, which is table 4.57, showed that 19.4% of student peer educators were engaged in unprotected anal sex ( without condom) before becoming peer educators; compared to 3.2% of student peer educator who were engaged in unprotected anal sex after becoming peer educator( table 4.67). In these tables we did not determine if student peer educators engaged in unprotected anal sex were homosexual or heterosexual. The comparison between tables 4.57 & 4.67 will be described in cross tabulation and Chi-Square Statistics below to determine if there is a statistic significant.

**Table 4.68: Cross tabulation**

		Have you been subjected to the following before becoming a Peer Educator: Engaged in unprotected anal sex		Total
		Yes	No	
Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex	Count	1	0	1
	% within Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex	100.0%	0.0%	100.0%
	Yes			
	% within Have you been subjected to the following before becoming a Peer Educator: Engaged in unprotected anal sex	16.7%	0.0%	4.5%
	Count	5	16	21
	% within Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex	23.8%	76.2%	100.0%
No	% within Have you been subjected to the following before becoming a Peer Educator: Engaged in unprotected anal sex	83.3%	100.0%	95.5%
	Count	6	16	22
	% within Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex	27.3%	72.7%	100.0%
Total	% within Have you been subjected to the following before becoming a Peer Educator: Engaged in unprotected anal sex	100.0%	100.0%	100.0%
	% within Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex			

### Chi-Square Statistics Section

Chi-Square	2.625000	
Degrees of Freedom	1	
Probability Level	0.105193	Accept H0
McNemar's Test Statistic	5.000000	
McNemar's Degrees of Freedom	1	
McNemar's Probability Level	0.025347	

### Fisher's Exact Test Section

Hypothesis	Prob Level	Test Type	Calculation Method
------------	------------	-----------	--------------------

**P-Value** <0.05 there is a significant difference between before and after, but if **P-Value** is not < 0.05, then there is no significant statistical difference between before and after. In most of this combined report, the test showed no significant difference between before and after.

### 4.3 Qualitative results

The results of qualitative analysis also indicate changes in HIV/AIDS knowledge, attitudes, beliefs, and practices of student Peer Educators based at the HIV/AIDS Unit at CPUT. The portfolios assessment, observation and opened-ended questions provided the study with information about the peer educators' behavior, needs, and levels of improvement and growth over the period of time that they were involved in the programme.

The following questions were posed:

To your knowledge, explain what the difference is between an HIV-positive person and a person with AIDS. **Some responses are the following:**

- *A person with AIDS has his CD4count below 350 and the immune system is much weakened and opportunistic illness starts attacking the body.*
- *An HIV-positive person has just the virus, but a person with AIDS has all opportunistic diseases due to a low CD4 count (below 350).*



- *An HIV-positive person is the person that is infected with the virus, and a person with AIDS is a person that is infected with diseases because of the virus.*
- *An HIV-positive person is a person who has only the virus, which causes AIDS, and a person with AIDS has the disease.*
- *An HIV-positive person has the virus, and a person with AIDS has accumulated HIV infections that destroy the immune system, which is no longer strong.*
- *An HIV-positive person means that the virus is not at a lethal stage yet, and in a person with AIDS the virus is at lethal stage and the person can die anytime.*
- *An HIV-positive person has the virus in his/her system, but is not yet sick, whereas a person with AIDS has his/her immune system very weak and opportunistic diseases can attack the body.*
- *An HIV-positive person has a better chance to live longer than the one with AIDS.*
- *An HIV-positive person is a person infected by the virus that leads to AIDS, and a person with AIDS has collective diseases.*

A majority of the respondents agreed that an HIV-positive person is a person who is infected by the virus, can be healthy, and live longer. A person with AIDS, on the other hand, is a person who his/her immune system is weakened, and opportunistic diseases can start attacking the body. **Table 4.69:** Summary of responses above

Response	Frequency ( in number)	%	
An HIV-positive person has her/his CD4 Count below 350	10	32.3	
An HIV-positive is infected with the virus, and a person with AIDS has the disease	6	19.4	
An HIV-positive person has the virus, but a person with AIDS has accumulated diseases that destroy the immune system	5	16.1	
An HIV-positive person's virus is not yet at lethal stage, but in a person with AIDS, the virus is at lethal stage and the person can die anytime	6	19.4	
An HIV-positive person has the virus in her/his system, but is not yet sick, and a person with AIDS has her/his immune system very weak and is sick	4	12.9	

Challenges faced by peer educators when educating students regarding HIV/AIDS/STI & TB as a peer educator.

Some of respondents' answers:

- *Ignorance from students.*
- *Students do not want to be tested and know their status.*
- *Non participation of students.*
- *Can't convince students that abstinence is the best prevention of HIV infection, because many students think that it is impossible to abstain from sex.*
- *AIDS fatigue.*
- *Negligence from students.*
- *Negativity towards HIV/AIDS.*

Most of the respondents recognise that many students are ignorant about the disease, but they pretend to know more about it. There is also AIDS fatigue among students; students are tired of hearing same message or information about HIV/AIDS.

**Table 4.70:** Summary of responses above

Response	Frequency (in number)	%
Ignorance from students	7	22.6
Non participation of students	8	25.8
AIDS fatigue	12	38.7
Negligence from students	4	12.9

Student peer educators were asked to list the three most important changes that occurred in their life in the context of HIV/AIDS/STI & TB.

The answers of some of the respondents:

1. *I protect myself from HIV infection.*
2. *I live a positive life.*

3. *Improved Communication skills.*
  1. *Improved knowledge of HIV/AIDS/STI & TB.*
  2. *More revelation on link between TB & HIV/AIDS.*
  3. *More comfortable to stay around an HIV-positive person (destigmatisation).*
1. *Tested with ease after becoming a peer educator.*
2. *Be responsible and accountable for my actions.*
3. *Avoid mistakes and risky behavior.*
1. *Community outreach.*
2. *Change the perceptions of my friends*
3. *Use condoms correctly and consistently.*

A majority of respondents confirmed that they have improved their knowledge about the diseases, that they have improved communication skills, and that they have learned to accept, support and love an HIV-positive person (destigmatisation).

**Table 4.71.** Summary of responses above.

Response	Frequency (in number)	%
Knowledge	15	48.4
Attitudes	8	25.8
Practices	6	19.4
Beliefs	2	6.5

The single most important reason why you became involved in the Peer Education Programme at CPUT.

In response to the above, most respondents said they wanted to learn more about the disease so that they may be able to share their knowledge and skills with their peers and relatives; because we are all infected and affected by the disease in one way or another.

Assistance of peer educators to their peers with the knowledge and skills they have acquired as peer educators.

Below is a summary of some answers from respondents:

- *Yes, I made a difference to the lives of my peers, because many of my friends are abstaining from sex, and others have reduced their alcohol behavior.*
- *Yes, during the HCT Campus Drive we encouraged many students to get tested and to know their status, and the turnout has been pretty good.*
- *Yes, many of my peers know more about the disease and they are scrutinising their sexual behaviours.*
- *Yes, I always have a box of condoms in my room, and my peers come to ask for them.*
- *Yes, I speak freely to my peers about the disease, and they also relate easily to me about their sexual problems.*

Regarding this question, most respondents indicated that they made a difference in the lives of fellow students by sharing with them their knowledge and skills that they acquired as peer educators, hence practicing what they preached.

What challenges and needs have been identified by student peer educators in terms of capacity building in the Peer Education Programme?

Below are some of the challenges that peer educators face when educating their peers on the campuses and residences:

- *Ignorance from students - many students pretend to know more about the disease, but in reality they are ill-informed;*
- *Many students do not want to be tested, as they are afraid to know their HIV status;*
- *Many students do not participate in events that are organised by the HIV/AIDS Unit;*
- *They are negative and negligent towards HIV/AIDS/STI & TB issues.*
- *It is difficult to convince students about abstinence, because many think that it is impossible to abstain from sex.*
- *Many students say that the HIV/AIDS Unit needs to change their way of presenting awareness campaigns because of HIV/AIDS/STI & TB fatigue and information overload.*

The researcher was able to confirm from the report that peer educators wish to see more ethnic diversity amongst them - only black students were involved in the Peer Education Programme, whereas CPUT is a multi-cultural university.

#### **4.4. Summary**

Chapter Four utilised tables to present detailed results from the survey in this study. The qualitative results were also presented, but observation and portfolios assessment results will be discussed in chapter five. While the results of the data analysis show increased knowledge and an improvement in attitudes, practices, and beliefs in some areas of peer educators' behaviour, it also shows inconsistency or no change in other areas of peer educators' behaviour. The following chapter discusses the different results of the data analyses obtained in the study.

# CHAPTER FIVE

## DISCUSSION

### 5.1 Introduction

The previous chapter presented the results obtained from the data analysis of the survey during the study. This chapter discusses the outcomes and conclusions drawn from the analysis results. It focuses on the outlined problem statement, research questions, and objectives of the study. Discussion revolves around changes that could occur in sexual behaviours (knowledge, attitudes, practices, and beliefs) of student peer educators of the HIV/AIDS Unit at CPUT in the context of HIV prevention. This study aimed to assess the effectiveness of the Peer Education Programme on student peer educators of the HIV/AIDS Unit at the Cape Peninsula University of Technology (CPUT).

Survey procedures, quantitative and qualitative strategies, and various data collection techniques were utilised in the estimation of the research study in order to answer the main research question. The researcher needed to know what was the perception of sexual behaviours of the student peer educators before they joined the Peer Education Programme of the HIV/AIDS Unit at CPUT

**5.1.1** To what extent does the Peer Education Programme have a positive effect on student peer educators of the HIV/AIDS Unit at CPUT?

For a better understanding of this question, the study reverted to some questions of the study questionnaire.

Firstly, the researcher checked if there is any difference in the perceptions of knowledge that the peer educators had before becoming a peer educator and after. This difference was tested by using the paired t-test in quantitative analysis.

The quantitative analysis of the perception of knowledge of peer educators before becoming a peer educator (as indicated in table 4.16) show an improvement or a move towards the desired change ( as shown in tables 4.17, 4.18, 4.19). The paired samples statistics showed that there

is a significant change in the average rating of the perception of knowledge from before becoming a peer educator, being 3.21( close to fair), to after becoming a peer educator being 4.28, which is between good and excellent. The response rate (as described in tables 4.6, 4.14, 4.29, 4.30, 4.31, and 4.32) stated that there is an increase in knowledge of student peer educators after becoming peer educators.

**5.1.1.1** The researcher checked if there was an improvement in attitudes among student peer educators, after participating in various training and workshops.

Many students and staff are afraid to know their HIV status, because of stigma and discrimination attached to HIV positive person. The response rate (as presented in tables 4.7, 4.8, 4.9 and 4.13) demonstrates that there is an improvement in attitudes of peer educators after becoming peer educators. After attending training and workshops organised by HIV/AIDS Unit and other organisations, peer educators were courageous enough and went for HIV test and encouraged staff and other students to go also for HIV test during HIV Counselling and Testing Campus Drive. A majority of peer educators (93.5%) knew their HIV status, and 67.7% of peer educators had their HIV test during HIV Counselling and Testing Campus Drive. Peer educators (74.2%) said they had their HIV test after being motivated by training and workshops they attended, and 90.3% of peer educators acknowledged that the peer education programme helped them to motivate other students and staff to be tested for HIV.

**5.1.1.2** The researcher determined if there is an improvement in practices among student peer educators of the HIV/AIDS Unit at CPUT after becoming peer educators. The statistical significance is demonstrated by the Chi-Square statistical technique that was employed.

The results in some tables showed improvement in practices, but other tables shown no difference between before and after. The findings as presented in( tables 4.51 and 5.60), showed that before becoming peer educators,6.5% of peer educators were subjected to sex for money or gifts, and after becoming peer educators, no peer educator (0%) were subjected to sex for money or gifts. This result showed an improvement in practices of peer educators. In the table (4.57), 19.4% of peer educators agreed that they were engaged in unprotected anal sex before becoming peer educators, and in the table (4.67), 3.2% of peer educator acknowledged that he/ she was engaged in unprotected anal sex after becoming a peer educator.

a Table 4.67 indicates that there is less unprotected anal sex amongst peer educators of the HIV/AIDS Unit at CPUT after becoming peer educators. Chi-Square Statistics showed that **P-Value** <0.05 there is a significant difference between before becoming peer educators and after

becoming peer educators. This statistical technique indicates an improvement in practices amongst student peer educators. Peer educators knew that anus was not designed for sexual intercourse, but to release waste matter from human body.

The response rate in (tables 4.52 and 4.61) shown that 51.6% of peer educators were subjected to sex with persons older than them before becoming peer educators, and 22.6% of peer educators agreed that they were subjected to sex with persons older than them after becoming peer educators. The table 4.61 indicates minimal improvement in practices of peer educators. The concern in those tables is the phenomenon of sugar daddy and sugar mummy, it is a reality we are experiencing in most of students residences. Most of the times, sugar daddy and sugar mummy initiate sex or impose to the female and male students what kind of sex they like (sex with condoms or without condoms), and they always get what they want because of their money. This is very dangerous, because sugar daddy and sugar mummy who are HIV positive are infecting female and male students consciously.

Chi-Square Statistics proved that there is an improvement in practices before becoming peer educators and after becoming peer educators. **P-Value** < 0.05 there is a significant difference between before and after.

There were a case of peer educators who knew their HIV status, they knew their CD4 Count, but they were not taking antiretroviral medication (ARV) as described in tables (4.10, 4.11 and 4.12). This case showed that there is no improvement in practices or attitudes of peer educators, because an HIV positive person who knows his/her status and his/her CD4Count needs to start immediately with ARV medication.

The response rate in tables (4.49 and 4.58) demonstrated that there is no improvement between before becoming peer educators, and after becoming peer educators. Peer educator (3.2%) had been subjected to rape before becoming a peer educator and (3.2%) of peer educator had been subjected to rape after becoming a peer educator. The two tables showed the same result between before and after, therefore there is no improvement. Significant Statistics are not possible for these tables.

**5.1.1.3** The researcher also checked if there was an improvement in the beliefs of student peer educators of the HIV/AIDS Unit at CPUT after becoming peer educators.

The response rate in table (4.29), indicated that (80.7%) of peer educators disagreed with the statement that stated an HIV positive person can be cured if he has sex with a virgin female. These are situations we are experiencing in our country (cases of rape), because some wicked people (sangomas) are telling HIV positive people that if they want to be cured from HIV/AIDS, they need to have sex with virgin female, and in reality this statement is just a myth. The



response rate in table (4.29) proved there is improvement in beliefs of students after becoming peer educators.

**5.1.1.4** Does the current training programme equip student peer educators with knowledge and skills to face the challenges of sexual behaviours amongst their peers in the context of HIV prevention on the campuses and residences?

The results as indicated in the table (4.15) showed that (90.3%) of respondents agreed that the current training of the Peer Education Programme does equip them with the necessary tools to face the challenges of sexual behaviours amongst their peers. It is believed that for a student to become a peer educator, he should participate in various training (HIV/AIDS modules 1&2, Communication skills and Portfolio management with HIV/AIDS Unit; Man As Partner (MAP) with Engender Health and Men who have sex with men with Desmond Tutu Foundation), workshops, awareness campaigns, HCT drives, and community outreach programmes with the HIV/AIDS Unit and other organisations (such as NGOs).

Homosexuality, teenage pregnancy, and stigma and discrimination among students who are HIV-positive are some cases that were presented to peer educators of the HIV/AIDS Unit at CPUT. In most cases peer educators had the requisite knowledge, skills, and expertise to assist the affected students and refer them to suitable places for counseling

### **5.1.2 Qualitative data analysis discussion**

Qualitative data presented in this study was analysed with the use of content analysis.

According to Powell & Renner (2003), content analysis comprises coding and classifying data, also discussed to as categorisation and indexing, and its aim is to make sense of the data collected and to highlight the significant message, or findings.

Content analysis can often be employed when qualitative information has been collected in textual form, and this study these texts included notes from observation and portfolio assessment of peer educators of the HIV/AIDS Unit at CPUT, and qualitative data resulting from post-training opened-ended questionnaire. The majority of peer educators recognised an increase in knowledge about HIV/AIDS /STI & TB after going through training and attended workshops organised by HIV/AIDS Unit and other organisations. The increase in knowledge was related to basic HIV/AIDS /STI & TB facts, the mode of transmission, CD4 Count and ARV medication. The researcher could also state that minimal increase was observed in some

student peer educators, it looks like some students joined the peer education programme because they were influenced by their friends, but they were not fully committed themselves.

Even if 54.8% of peer educators had HIV/AIDS educations at high school (grades 11&12), and 45.2% of peer educators out of 54.8% were involved in community in the context of HIV/AIDS/STI &TB, but they had broad knowledge of HIV/AIDS/STI&TB.

Most peer educators stated that they changed their attitudes after underwent through training and workshops. They are responsible and accountable for all their actions, they are living positive life, they improved communications skills, they are avoiding mistakes and risky behavior, they have learned how to accept, support and love an HIV positive person (destigmatisation), and they knew how to accept differences and choices.

Peer educators testified also change in practices as result of attending training and workshops organised by HIV/AIDS Unit and other organisations. They have confidence and ability to initiate and facilitate discussions with their peers about risky behaviours. They are avoiding risky behavior by using condoms correctly and consistently every times they are having sex. They made a difference in lives of their peers by sharing with them knowledge and skills that they acquired as peer educators and by practicing what they are teaching.

#### **5.1.2.1 Portfolio assessment**

Peer educators were asked to write reports and submit them at the end of the training and workshops. These portfolio were in the form of personal reflections, self –evaluation, and were contained with narrative descriptions. The portfolio provided valuable information about peer educators' behaviour, needs, and their level of improvement and growth over the period they were involved in the peer education programme. Peer educators were also asked to bring their recommendations from training and workshops they attended, and the photos of the events they participated. From the peer educators' portfolio assessment, an increase in knowledge, and improvement in attitudes, practices and beliefs were noticed in a majority of peer educator; and minimal increase in knowledge and improvement in attitudes, practices and beliefs in minority of peer educators was also shown. The researcher could see from portfolios assessment, that peer educators acquired transferable skills in communication, facilitation, listening, leadership and problems solving. The events which peer educators were asked to write reports and present their photos included: Scrutinise campaign organised by Drum AIDS, awareness

campaigns, HCT Campus Drive, Condom distribution, community outreach, prison outreach, group discussion and school outreach.

### **5.1.2.2 Observation**

The researcher attended and observed various activities of the peer education programme; in order to obtain insight and informative data about any behavioural changes; that might occur as a result of their participation in the HIV/AIDS training interventions during a period of 12 months. Observation allows a researcher to understand more about the programme implementation and the outcome of that programme. Training in these workshops included peer educators awareness of HIV/AIDS campaigns, HIV/AIDS Counselling and Testing (HCT), condom distribution, community outreach and camping. The researcher was able to observe the behaviour of peer educators and collect valuable information. Field notes taken during observations as result of watching and listening allowed the researcher to determine the disparity between the ideal HIV/AIDS peer educators' behaviour and their real behaviour in practice. The peer education programme contributed to peer educators their personal growth by helping them shape confidence, cultivate a sense of fulfilment and become more open-minded, self-aware and mature.

Although most peer educators reported increase in knowledge, improvement in their attitudes, practices and beliefs, there was a case where one female peer educator was impregnated, and she was a first year student. This is contrary to what is taught in peer education programme training and workshops: use condom correctly and consistently every times involve in sexual intercourse. This female peer educator did not come to CPUT to make babies, but she came to study. It is unacceptable for someone who underwent through training and workshops organised by HIV/AIDS Unit and other organisations. The case of this pregnancy showed the weakness of the peer education programme of HIV/AIDS Unit at CPUT. As a role model, this female peer educator was expected to avoid that pregnancy in her first year at University and focus only on her study.

### **5.1.2.3. Conclusion**

This chapter discussed results obtained from data analysis in terms of changes in sexual behaviours (knowledge, attitudes, practices, and beliefs) that could occur amongst student peer educators of the HIV/AIDS Unit at CPUT. It can be concluded that training and workshops of the Peer Education Programme of the HIV/AIDS Unit at CPUT have had a positive effect on the

student peer educators. They have been empowered by knowledge and skills of HIV/AIDS prevention, and these have helped them to respond earnestly against the spread of the disease. The results have acknowledged that there is a positive change in sexual behaviours amongst student peer educators. The answers relating to knowledge, attitudes, practices and beliefs were in line with desired results. However, some responses indicated that there was no change in practices (knowledge remaining constant) between, before and after becoming peer educators (Tables 4.49 and 4.58). Majority of the responses in this research show tendencies that indicate changes towards the desired results (change in sexual behaviours), confirming an improvement in knowledge, attitudes, practices, and beliefs amongst student peer educators of the HIV/AIDS Unit at CPUT. A fusion of sexual behavioural changes such as reduction in the number of sexual partners, increase in the correct and consistent use of condoms, abstinence, being faithful, and delayed age of first sexual intercourse experience, might play an energetic part in dropping new HIV infections and teenage pregnancy amongst peer educators and their peers.

The next and final chapter presents the conclusion and recommendations based on the research findings in the study and future research or programmes in this field.

## CHAPTER SIX

# CONCLUSION AND RECOMMENDATIONS

### 6.1 INTRODUCTION

This study was conducted to assess the effects that the Peer Education Programme had on student peer educators who volunteer their services at the HIV/AIDS Unit of the Cape Peninsula University of Technology (CPUT). The assessment centred on the effectiveness of the Peer Education Programme in effecting changes in sexual behaviours (knowledge, attitudes, practices, and beliefs) amongst student peer educators. The Programme purports to see student peer educators effectively apply their acquired knowledge and skills, and to become role models for their peers by practising what they teach. In order to achieve its objectives, the study utilised a survey, quantitative and qualitative research strategies, and multiple data collection techniques.

The study focused on three objectives:

**6.1.1** To determine whether the Peer Education Programme has had a positive effect on changes in sexual behaviours (knowledge, attitudes, practices, and beliefs) amongst student peer educators who are based at the HIV/AIDS Unit in terms of the prevention of HIV infection.

As shown in Chapter 5 (Tables 5.1 and 5.2), the respondents generally felt more confident about their knowledge after becoming peer educators, with 84% rating their knowledge as good or excellent against 35% before joining the programme. Likewise, Table 5.4 showed a notable improvement in rating from an average of 3.21 (about Fair) to 4.28 (Good to Excellent).

**6.1.2** To determine if there are differences in knowledge between male and female student peer educators before and after being exposed to the Peer Education Programme.

Before becoming peer educators, 8 of 17 male respondents (47.1%) rated their knowledge as good or excellent, compared to 3 of 13 female respondents (23.1%) for the same question. But, after becoming peer educators meaning after underwent through training and workshops; 15 of

16 male respondents (93.8%) and 12 of 13 female respondents (92.3%) rated their knowledge as good or excellent

These values showed that, there was a substantial difference between the improvement in knowledge of the male and female respondents. However, the small number of respondents had a negative impact on the statistical significance of the difference between male and female respondents.

**6.1.3** To identify student peer educators' needs and challenges in terms of capacity building in the context of HIV/AIDS/STI & TB prevention in the Peer Education Programme.

Here the researcher distinguished between the needs of the Peer Education Programme on the one hand, and needs of the peer educators on the other hand.

#### **6.1.3.1 Peer Education Programme needs:**

All student peer educators expressed the need of the peer education programme at CPU, because of many high – risk activities and situations that are taking place in student residences and on campuses such as: the use of substance abuse (alcohol consumption, and use of recreational drugs), be involved in high risky behaviours (having sex without using condom correctly and consistently), and negative peer pressure on some students. Many students believed that peer education programme could be able to address much negative behaviour that was taking place in student residences and on campuses; since this programme was conducted by trained peer educators to fellow students.

The Peer Education Programme should continue to introduce innovative methods to attract students to various HIV programmes, and address various aspects of the HIV infection in various ways.

Based on information about challenges regarding abstinence, there is a need for the HIV/AIDS Unit to launch a primary and secondary abstinence programme in the Peer Education Programme.

To overcome AIDS fatigue and information overload, the HIV/AIDS Unit should offer students incentives in the form of shopping vouchers (example: Pick n' Pay and Shoprite).

Currently there are only Black students as peer educators. The HIV/AIDS Unit should recruit students from a variety of population groups.

Lastly, the Peer Education Programme should be revised and reviewed on an annual basis based on the experiences, lessons, and feedback from peer educators and students.

#### **6.1.3.2 Peer educators' needs**

Further capacity building should be introduced annually based on the needs of peer educators. Peer educators must be identified as role model, educator and driven agent of change after going through workshops and training organised by the HIV/AIDS Unit.

Peer educators need to combat conservatism attitudes amongst students, these students do not want to be aware of HIV/AIDS consequences, and know their HIV status.

Incentives for peer educators should be awarded based on performance and output of the peer educators. Peer educators should be distinguished from other students by their uniform (badges).

The following provides a summary of the research that was produced in this study, while a discussion of the research findings, conclusion and recommendations are also presented in this chapter.

**Chapter 1** presented an introduction and background to the study, clarification of the terms and concepts employed, statement of the research problem and research questions; as well as the aims and objectives of the study.

**Chapter 2** reviewed relevant literature and provided a broad understanding of HIV/AIDS/STI & TB prevention in the context of the Peer Education Programme worldwide.

**Chapter 3** discussed research procedures (survey) and research strategies (quantitative and qualitative), as well as data collection techniques used. The post-test research design was utilised in this study. In this chapter the researcher also noted the approval of this study by the Ethics Committee of CPUT.

**Chapter 4** dealt with quantitative and qualitative analysis of data that were collected through open-ended and closed-ended questions. SPSS was applied to perform quantitative data analysis, using tables and graphs to present detailed results of the survey. The open-ended question results were obtained by collecting the personal opinions and feelings of the respondents. Content analysis was used for qualitative data analysis. Participant observation results were also highlighted in this chapter.

**Chapter 5** presented a discussion of the results and findings of the quantitative and qualitative data analysis. This chapter answered the research question- to assess the effectiveness of the Peer Education Programme regarding changes in sexual behaviours amongst student Peer Educators at the HIV/AIDS Unit in the context of HIV prevention.

**In Chapter Six** the researcher concluded the research study, presented the limitations of the research study and made recommendations based on the research findings for the implementation of future studies or programmes.

The findings of this study show that the Peer Education Programme of the HIV/AIDS Unit at CPUT was successful to achieve most of its objectives, especially positive changes in HIV/AIDS/STI & TB knowledge, attitudes, practices and beliefs amongst student peer educators. The results show an increase in knowledge and improvement in attitudes, practices, and beliefs of student peer educators in the context of HIV prevention. However, it also acknowledged where there was no change in the practices of student peer educators between, before and after becoming peer educators. Majority of the respondents acknowledged behavioural changes owing to various training and workshops organised by the HIV/AIDS Unit at CPUT and other organisations nationally.

## **6.2 Limitations of the research study**

Only Black student peer educators were involved in the Peer Education Programme of the HIV/AIDS Unit at CPUT, whereas CPUT is a multi- cultural university. The HIV/AIDS Unit had 40 student peer educators, but only 31 (77.5%) student peer educators participated in this survey. This small sample impacted on the reliability of the quantitative data.

The study was initially intended to conduct the survey on the enrolment of students (pre-test) and at the end of the year (post-test). However, this was changed because of the delay in the Ethics Committee's approval of this study. It is conceded that the methods of completing the questionnaire before and after were more reliable and valuable. Furthermore, the study did not compare the past findings of the Peer Education Programme with the current findings of the Peer Education Programme of the HIV/AIDS Unit at CPUT.



Ideally, the study should have covered a longer period- at least three years. Opportunities (time available) might have been a problem in the responses of student peer educators at the HIV/AIDS Unit at CPUT in this survey.

### **6.3 Recommendations**

The study examined whether the Peer Education Programme has had a positive effect on changing the sexual behaviours (knowledge, attitudes, practices, and beliefs) of student peer educators of the HIV/AIDS Unit at CPUT. Based on this study, the following recommendations are made:

Firstly, there is a need to observe changes in the sexual behaviours of student peer educators for a longer period to be able to evaluate them objectively, and to see whether there are any practical changes. Some student peer educators can pretend to improve their attitudes, practices and beliefs and increase their knowledge of HIV/AIDS/STI & TB, but remain involved in high-risk sexual behaviours that could put them at risk of HIV infection. Thus, peer education programme should be expanded and intensified.

Secondly, the HIV/AIDS Unit at CPUT should find innovative strategies to improve on the diversity of peer educators, because only Black student peer educators were involved in the Peer Education Programme, whereas CPUT is a multi- cultural university. This creates the perception that HIV/AIDS infects only Black students, while it clearly infects all categories and population groups of students. Furthermore, the HIV/AIDS Unit should motivate student peer educators who were not active in the programme for various reasons, and who did not participate in this research survey.

Thirdly, the HIV Programme should be reviewed and revised on an annual basis based on the experiences, lessons and feedback from peer educators and students.

Based on observation, for the HIV/AIDS Unit to become more effective, staff should be employed on a permanent basis. Currently only two staff members are employed in the Unit.

There is an urgent need to expand the office of the HIV/AIDS Unit, since it currently has an acute space challenge. The output of the Unit does not match the current office space. This is a health and safety issue for the HIV/AIDS Unit and its staff, since the flow of visitors to the HIV/AIDS Unit is larger than the current space of the office allows

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## TABLES IN CHAPTER FOUR

**Table 4.1:** Respondents Age (years)

<b>Years</b>	<b>N</b>	<b>%</b>
18	0	0.0
19	2	6.5
20	5	16.1
21	8	25.8
22	4	12.9
23	2	6.5
24	5	16.1
25	5	16.1
<b>Total</b>	<b>31</b>	<b>100.0</b>

**Table 4.2:** Respondents Gender

<b>Sex</b>	<b>N</b>	<b>%</b>
Male	18	58.1
Female	13	41.9
<b>Total</b>	<b>31</b>	<b>100.0</b>

**Table 4.3:** Respondents Marital status

<b>Marital status</b>	<b>N</b>	<b>%</b>
Married	2	6.5
Single	29	93.5
Divorced	0	0.0
<b>Total</b>	<b>31</b>	<b>100.0</b>

**Table 4.4:** Respondents HIV/AIDS education at high school?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	17	54.8%
No	14	45.2%
<b>Total</b>	<b>31</b>	<b>100.0%</b>



**Table 4.5:** Respondents level of involvement in the community in the context of HIV/AIDS/STI & TB before joining the peer education programme at CPUT?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	14	45.2%
No	17	54.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.6:** Respondents thoughts of an HIV positive person.

<b>HIV-positive</b>	<b>N</b>	<b>%</b>
Yes	29	93.5%
No	2	6.5%
<b>Total</b>	<b>31</b>	<b>*100.0%</b>

**Table 4.7:** Respondents HIV test?

<b>HIV test</b>	<b>N</b>	<b>%</b>
Yes	29	93.5%
No	2	6.5%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.8:** Respondents most recent HIV test?

<b>HIV test</b>	<b>N</b>	<b>%</b>
During HCT Campus Drive	21	67.7%
At Campus Health Clinic	3	9.7%
At other Health Centres	7	22.6%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.9:** Did the peer education programme contribute to the respondents undertaking the HIV test?

<b>HIV test</b>	<b>N</b>	<b>%</b>
Yes	23	74.2%
No	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.10: Respondents** most recent results of HIV test?

<b>HIV test</b>	<b>N</b>	<b>%</b>
Positive	3	9.7%
Negative	25	80.6%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.11:** If positive, are respondents currently taking antiretroviral medication (ARV)?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	0	0.0
No	3	100.0
<b>Total</b>	<b>3</b>	<b>100.0</b>

**Table 4.12:** Did respondents know their CD4 Count?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	3	9.7%
No	20	64.5%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.13:** Did the peer education programme contribute to respondents referring other students and/ staff to be tested for HIV?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	28	90.3%
No	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.14:** Respondents Indication on the following statements: true or false:

Question	True		False		Don't know		Total	
	N	%	N	%	N	%	N	%
HIV can be transmitted by blood transfusion of HIV positive person	29	93.6	1	3.2	1	3.2	31	100.0
HIV can be transmitted through breastfeeding by an HIV positive mother	31	100.0	0	0.0	0	0.0	31	100.0
A pregnant HIV positive woman can transmit HIV to her unborn baby	27	87.1	3	9.7	1	3.2	31	100.0
HIV can be transmitted through having unprotected sex	31	100.0	0	0.0	0	0.0	31	100.0
HIV can be transmitted through sharing plates, forks, utensils, ect with an HIV/AIDS person	2	6.5	29	93.5	0	0.0	31	100.0
HIV can be transmitted through using the same toilet with an HIV/AIDS person.	1	3.2	30	96.8	0	0.0	31	100.0
HIV can be transmitted through sharing of needles for drug use with an HIV/AIDS person	29	93.6	1	3.2	1	3.2	31	100.0
Abstaining from sex is an effective way to prevent pregnancy ,HIV/AIDS and STIs amongst young people	31	100.0	0	0.0	0	0.0	31	100.0

**Table 4.15:** Has the current training programme as peer educator adequately equipped respondents with knowledge and skills to face the challenges of sexual behaviours amongst your peers?

Response	N	%
Yes	29	93.6%
No	0	0.0%
Don't know	1	3.2%
No response	1	3.2%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.16:** Respondents level of knowledge of HIV/AIDS/STI & TB before becoming a Peer Educator

Response	N	%
Bad	1	3.2%
Poor	4	12.9%
Fair	14	45.2%
Good	9	29.0%
Excellent	2	6.5%
No response	1	3.2%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.17:** Respondents level of knowledge of HIV/AIDS / STI & TB after becoming a Peer Educator

<b>Response</b>	<b>N</b>	<b>%</b>
Bad	0	0.0%
Poor	2	6.5%
Fair	1	3.2%
Good	12	38.7%
Excellent	14	45.2%
No response	2	6.5%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.18:** Respondents rate of level of knowledge of HIV/AIDS/STI & TB before becoming a peer educator? Respondents rate of level of knowledge of HIV/AIDS/STI & TB after becoming a peer educator? Cross tabulation.

			Rate knowledge of HIV/AIDS/STI & TB after becoming a peer educator?					Total	
			Bad	Poor	Fair	Good	Excellent		
Rate your know-ledge of HIV/AIDS/STI & TB before becoming a peer educator?	Bad	Count	0	1	0	0	0	1	
		% of Total	0.0%	3.4%	0.0%	0.0%	0.0%	3.4%	
	Poor	Count	0	0	1	2	1	4	
		% of Total	0.0%	0.0%	3.4%	6.9%	3.4%	13.8%	
	Fair	Count	0	0	0	8	6	14	
		% of Total	0.0%	0.0%	0.0%	27.6%	20.7%	48.3%	
	Good	Count	0	1	0	3	4	8	
		% of Total	0.0%	3.4%	0.0%	10.3%	13.8%	27.6%	
	Excellent	Count	0	0	0	0	2	2	
		% of Total	0.0%	0.0%	0.0%	0.0%	6.9%	6.9%	
	<b>Total</b>		<b>Count</b>	0	2	1	13	13	29

**Table 4.19:** Paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Rate your knowledge of HIV/AIDS/STI & TB before becoming a peer educator?	3.21	29	.902	.167
	Rate your knowledge of HIV/AIDS/STI & TB after becoming a peer educator?	4.28	29	.841	.156

**Table 4.20:** Respondents 'sexual behaviours they recommended to the students in their role as a peer educator as the safest?

Response	N	%
Abstinence	25	80.6%
Be faithful	2	6.5%
Condomise	1	3.2%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.21:** How comfortable did respondents feel to speak about HIV/AIDS/STI & TB and sexual behaviours with members of the opposite sex?

Response	N	%
Very comfortable	23	74.2%
Comfortable	3	9.7%
Not comfortable at all	0	0.0%
No response	5	16.1%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.22:** Have you been treated for any Sexually Transmitted Infection in the past?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	7	22.6%
No	20	64.5%
No response	4	12.9%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.23:** The situation that contribute to the peer education programme:

<b>Question</b>	<b>Yes</b>		<b>No</b>		<b>N/ response</b>		<b>Total</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
I became a friend of an HIV/AIDS person	22	71.0	2	6.5	7	22.6	31	100.0
I am giving support and care to an HIV/AIDS person without the fear of being infected	17	54.8	5	16.2	9	29.0	31	100.0
I changed my sexual behaviours	21	67.7	2	6.5	8	25.8	31	100.0

**Table 4.24:** If respondents changed their sexual behavior, which of these sexual behaviours were they using before they underwent the peer education training?

<b>Response</b>	<b>N</b>	<b>%</b>
Abstinence	5	16.1%
Be faithful	5	16.1%
Reduce the number of sexual partners	3	9.7%
Use condom every time correctly	4	12.9%
Use condom sometimes	7	22.6%
No response	7	22.6%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.25:** If respondents changed their sexual behaviours, which of these sexual behaviours were they using after they underwent the peer education training?

<b>Response</b>	<b>N</b>	<b>%</b>
Abstinence	7	22.6%
Be faithful	4	12.9%
Reduce the number of your sexual partners	6	19.4%
Use condom every time correctly	9	29.0%
No response	5	16.1%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.26:** Respondents rate of alcohol consumption

<b>Response</b>	<b>N</b>	<b>%</b>
Don't take any alcohol	12	38.6%
Only weekends	10	32.3%
Some days in the week	2	6.5%
Daily	2	6.5%
No response	5	16.1%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.27:** Respondents used of recreational drugs (tik, dagga, cocaine, etc.)?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	1	3.2%
No	25	80.6%
No response	5	16.2%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4. 28:** Respondents engagement in sexual intercourse while drunk?

<b>Response</b>	<b>N</b>	<b>%</b>
Can't recall/remember	4	12.9%
Less than 5 times	5	16.1%
5-times and more	3	9.7%
Not applicable, I never have sex while drunk	10	32.2%
Not applicable, I am still a virgin	3	9.7%
No response	6	19.4%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.29:** Respondents perception that an HIV/AIDS person can be cured if he has sex with a virgin female.

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	1	3.2%
Agree	1	3.2%
Disagree	1	3.2%
Strongly disagree	24	77.5%
No response	4	12.9%
<b>Total</b>	<b>31</b>	<b>100.0%</b>



**Table 4.30:** Respondents perception of people taking alcohol and/or using recreational drugs and their risk of contracting HIV?

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	9	29.0%
Agree	13	41.9%
Unsure	1	3.2%
Disagree	2	6.5%
Strongly disagree	2	6.5%
N/ response	4	12.9%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.31:** Respondents perception that the use of a vaccine is available to the public that protects a person from getting HIV.

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	0	0.0%
Agree	3	9.7%
Unsure	7	22.6%
Disagree	3	9.7%
Strongly disagree	14	45.1%
N/ response	4	12.9%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.32:** Respondents perception that the use of condoms is effective in reducing HIV transmission.

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	8	25.8%
Agree	15	48.4%
Disagree	1	3.2%
Strongly disagree	3	9.7%
N/response	4	12.9%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.33:** Respondents conversation with students on their sexual activities

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	1	3.2%
Agree	10	33.2%
Unsure	6	19.4%
Disagree	6	19.4%
Strongly disagree	4	12.9%
No response	4	12.9%
<b>Total</b>	<b>31</b>	<b>*101.0%</b>

**Table4.34:** Respondents dissemination of accurate information about HIV/AIDS/STI & TB to the students.

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	9	32.0%
Agree	16	51.6%
Unsure	2	6.5%
Disagree	0	0.0%
Strongly disagree	1	3.2%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.35:** Respondents' perception as role models in the context of HIV/AIDS by the students on the campuses.

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	8	25.8%
Agree	17	54.8%
Unsure	2	6.5%
Disagree	0	0.0%
Strongly disagree	1	3.2%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.36:** Perception of respondents making a difference to the lives of their fellow peer educators.

<b>Response</b>	<b>N</b>	<b>%</b>
Strongly agree	12	38.7%
Agree	7	22.6%
Unsure	7	22.6%
Disagree	1	3.2%
Strongly disagree	1	3.2%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.37:** Respondents age of their first sexual intercourse experience

<b>Response</b>	<b>N</b>	<b>%</b>
Have never had sexual intercourse	3	9.7%
15 years of age or younger	8	25.8%
16 years of age	4	12.9%
17 Years of age	3	9.7%
18 Years of age	2	6.4%
19 Years of age	3	9.7%
20 Years of age	2	6.4%
21 Years of age	3	9.7%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.00%</b>

**Table 4.38:** Respondents use of condom on their first sexual intercourse experience?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	14	45.2%
No	11	23.4%
I have not had sexual intercourse before	3	9.7%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

Activities in which respondents participated (4.39-4.43).

**Table 4.39:** Workshops

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	25	80.6%
No	2	6.5%
No response	4	12.9%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.40:** Campaigns (HCT, Condom distribution)

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	24	77.4%
No	1	3.2%
N/ response	6	19.4%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.41:** Community outreach

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	21	67.7%
No	2	6.5%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.42:** Radio broadcasting on campus

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	7	22.6%
No	6	19.4%
No response	18	58.0%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.43:** Awareness programmes in residence

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	21	67.7%
No	2	6.5%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.44:** Respondents visit to a bar, tavern, shebeen or night club where alcohol is served.

<b>Response</b>	<b>N</b>	<b>%</b>
Never	13	41.9%
Every end of the month	5	16.1%
4 times a month	3	9.7%
Every weekend	4	12.9%
No response	6	19.4%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.45:** Do knowledge and skills that respondents acquired made a difference to the lives of their peers (fellow students/youth)?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	17	54.8%
No	1	3.2%
Don't know	5	16.2%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.46:** Respondents pregnancies or made their partner pregnant?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	9	29.0%
No	19	61.3%
No response	3	9.7%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.47:** Occurrence of pregnancy, before or after becoming peer educators?

<b>Response</b>	<b>N</b>	<b>%</b>
Before becoming a peer educator	7	22.5%
After becoming a peer educator	2	6.5%
No response	22	71.0%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.48:** Termination of their pregnancies, or of their partners' pregnancies.

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	1	3.2%
No	8	25.8%
No response	22	71.0%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.49:** Respondents subjected to rape before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	1	3.2%
No	22	71.0%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.50:** Respondents subjected to date rape before becoming a peer educator: date of rape?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	0	0.0%
No	24	77.4%
No response	7	22.6%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.51:** Respondents subjected to transactional sex (sex for money or gifts) before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	2	6.5%
No	23	74.2%
No response	6	19.4%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.52:** Respondents subjected to sex with a person five or more years older than you before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	16	51.6%
No	11	35.5%
No response	4	12.9%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.53:** Respondents threatened with violence before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	6	19.4%
No	19	61.3%
No response	6	19.4%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.54:** Have you been subjected to violence before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	4	12.9%
No	21	67.7%
No response	6	19.4%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.55:** Respondents subjected to sexual harassment before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	5	16.1%
No	19	61.3%
No response	7	22.6%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.56:** Respondents used of the morning after pill thinking that it would prevent HIV before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	2	6.5%
No	22	71.0%
No response	7	22.6%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.57:** Respondents engaged in unprotected anal sex before becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	6	19.4%
No	16	51.6%
No response	9	29.0%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.58:** Respondents subjected to rape after becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	1	3.2%
No	22	71.0%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.59:** Respondents subjected to date rape after becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	0	0.0%
No	23	74.2%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.60:** Respondents subjected to transactional sex (sex for money or gifts) after becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	0	0.0%
No	23	74.2%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>



**Table 4.61:** Respondents subjected to sex with a person 5 or more years older than you after becoming peer educators.

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	7	22.6%
No	16	51.6%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

The comparison between table 4.52 and 4.61 between before and after becoming peer educators will be described by Cross tabulation and Chi- Square Statistics below

**Table 4.62: Cross tabulation**

		Have you been subjected to Sex with a person 5 or more years older than you before becoming a Peer Educator:		Total
		Yes	No	
Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	Count	7	0	7
	% within Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	100.0%	0.0%	100.0 %
	Yes	58.3%	0.0%	30.4 %
	% within Have you been subjected to the following before becoming a Peer Educator: Sex with a person 5 years or more older than you			
Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	Count	5	11	16
	% within Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	31.3%	68.8%	100.0 %
	No	41.7%	100.0%	69.6 %
	% within Have you been subjected to the following before becoming a Peer Educator: Sex with a person 5 years or older than you			
Total	Count	12	11	23
	% within Have you been subjected to the following after becoming a Peer Educator: Sex with a person 5 years or older than you	52.2%	47.8%	100.0 %
	% within Have you been subjected to the following before becoming a Peer Educator: Sex with a person 5 years or older than you	100.0%	100.0%	100.0 %

### Chi-Square Statistics Section

Chi-Square	9.223958	
Degrees of Freedom	1	
Probability Level	0.002389	Reject H0
McNemar's Test Statistic	5.000000	
McNemar's Degrees of Freedom	1	
McNemar's Probability Level	0.025347	

McNemar's test tests the 5 v 0, ie 1 Before going to 2 After V 2 Before going to 1 After.

### Fisher's Exact Test Section

Hypothesis	Prob Level	Test Type	Calculation Method
Ha: P1<>P2	0.004577	Two-Tailed	Sum of prob's of tables where  D >= D0  <b>P-Value</b> < 0.05 there is a significant difference between before and after.

**Table 4.63:** Respondents threatened with violence after becoming a peer educator?

Response	N	%
Yes	0	0.0%
No	23	4.2%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.64:** Respondents subjected to violence after becoming a peer educator?

Response	N	%
Yes	0	0.0%
No	22	71.0%
No response	9	29.0%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.65:** Respondents subjected to sexual harassment after becoming a peer educator?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	1	3.2%
No	22	71.0%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.66:** Respondents used of the morning after pill thinking it would prevent HIV after becoming a peer educator.

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	0	0.0%
No	23	74.2%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

**Table 4.67:** Have you, after becoming a peer educator, engaged in unprotected anal sex?

<b>Response</b>	<b>N</b>	<b>%</b>
Yes	1	3.2%
No	22	71.0%
No response	8	25.8%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

The statistical significant between tables 4.67 & 4.57 between before and after becoming peer educators will be described in Cross tabulation and Chi-Square Statistics below.

**Table 4.68: Cross tabulation**

		Have you been subjected to the following before becoming a Peer Educator: Engaged in unprotected anal sex		Total
		Yes	No	
Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex	Yes	Count 1	0	1
		% within Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex 100.0%	0.0%	100.0%
	No	Count 5	16	21
		% within Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex 23.8%	76.2%	100.0%
		% within Have you been subjected to the following before becoming a Peer Educator: Engaged in unprotected anal sex 83.3%	100.0%	95.5%
		Count 6	16	22
Total		% within Have you been subjected to the following after becoming a Peer Educator: Engaged in unprotected anal sex 27.3%	72.7%	100.0%
		% within Have you been subjected to the following before becoming a Peer Educator: Engaged in unprotected anal sex 100.0%	100.0%	100.0%

### Chi-Square Statistics Section

Chi-Square	2.625000	
Degrees of Freedom	1	
Probability Level	0.105193	Accept H0
McNemar's Test Statistic	5.000000	
McNemar's Degrees of Freedom	1	
McNemar's Probability Level	0.025347	

### Fisher's Exact Test Section

Hypothesis	Prob Level	Test Type	Calculation Method
Ha: P1<>P2	0.285714	Two-Tailed	Sum of prob's of tables where  D >= D0

**P-Value** <0.05 there is a significant difference between before and after, but if **P-Value** is not< 0.05, then there is no significant statistical difference between before and after. In most of this combined report, the test showed no significant difference between before and after.

## Evaluation on knowledge, attitudes, belief and practices on HIV/AIDS

### RESPONDANT'S CONSENT FORM

*I..... Peer Educator of HIV/AIDS Unit's Peer Education Programme hereby gives my informed consent to Mr Jean Bosco Moto Kalunga, a post graduate student registered for MTech at the Cape Peninsula University of Technology based in Cape Town.*

*I understand that this study aims to evaluate the effectiveness of Peer Education Programme on the student Peer Educators of the HIV/AIDS Unit at Cape Peninsula University of Technology(CPUT), and that the outcome of this study will further enhance the Peer Education Programme.*

*With this consent I understand the following:*

- *My participation in the study is voluntary and will involve in completing the questionnaire anonymously.*
- *That I can refuse to participate in responding to the questionnaire, or have the right to skip any particular question in the questionnaire.*
- *That confidentiality will be maintained and none of the responses could be identified to any particular respondent.*
- *That I have the right to ask any question before, during and after the administration of the questionnaire for the clarification.*

*I hereby confirm that I participate in this study of my own free will , and trust that by completing this questionnaire anonymously, will contribute to the enhance of the Peer Education programme of the HIV/AIDS at CPUT.*

*Name of Respondent..... Signature:.....Date.....Place.....*

*Name of Witness:..... Signature.....Date.....Place.....*

**Cape Peninsula University of Technology**  
**Faculty of Applied Sciences**  
**Department for Environmental Health and Occupational Studies/HIV/AIDS Unit**  
**Tel.0214603194 /0214604252/3**  
**Fax: 0214604244**  
**Researcher's e-mail:jeanbosco.kalunga @yahoo.co.uk**  
**Researcher's contact no: 0833746018**

**Evaluation of knowledge, attitudes, practices and belief about HIV/AIDS/STI & TB  
amongst Peer Educators at the Cape Peninsula University of Technology**

**QUESTIONNAIRE**

**INTRODUCTION**

Thank you for your willingness to participate in this research project.

The aim of this study is to evaluate the impact of the Peer Education Programme on sexual behaviours (knowledge, attitudes, practices and belief) in terms of HIV/AIDS/ STI & TB amongst student Peer Educators of the HIV/AIDS Unit at CPUT.

All information will be treated as confidential and the researcher undertakes not to link any information to the respondent. The respondents will not be required to identify themselves anywhere on this questionnaire.

Please tick your response in the appropriate square provided. For the open-ended questions, please respond clearly and briefly in your own words in the space provided.

Thank you

Researcher: Mr Jean Bosco Moto Kalunga  
Supervisors: Prof. Ashraf Mohammed: HOD HIV/AIDS Unit, CPUT  
Dr Tholong Z Maqutu: Coordinator: Curriculum and Academic Development



**Evaluation of knowledge, attitudes, practices and beliefs about HIV/AIDS/STI & TB amongst Peer Educators at Cape Peninsula University of Technology (CPUT).**

1. Please indicate your age (years).

≤18	1
19	2
20	3
21	4
22	5
23	6
24	7
≥25	8

2. Please indicate your gender

Male	1
Female	2

3. What is your current marital status?

Married	1
Single	2
Divorced	3
Widow / Widower	4
Separated	5
Living together	6

4. Did you have HIV/AIDS education at high school?

Yes	1
No	2

5.1 If yes, state in which grade you received HIV/AIDS education

.....

5. Were you active in the community in the context of HIV/AIDS/STI&TB before joining the Peer Education Programme at CPUT?

6.1 If yes, please explain

.....

.....

6. To your knowledge explain what you think is the difference is between an HIV-Positive person and a person with AIDS?

.....

.....

7. Do you think that someone who is HIV-positive can look and feel healthy for many years?

Yes	1
No	2
Do not know	3

8. Have you ever been tested for HIV?

Yes	1
No	2

9. Where did you have your most recent HIV test?

10. Did the Peer Education Programme contribute to you undertaking the HIV test?

Yes	1
No	2

11. What was the result of your most recent HIV test?

11.1 If positive, are you currently taking antiretroviral medication (ARV)?

12. Do you know your CD4 Count?

Yes	1
No	2

12.1 If yes, state your CD4 Count.

.....

13. What do you think the abbreviation HIV stands for?

.....

14. What do you think the abbreviation AIDS stand for?

.....

.....

15. Did the Peer Education Programme contribute to you referring other students and/or Staff to be tested for HIV?

Yes	1
No	2

16. List the biggest challenge that you encountered when educating students regarding HIV/AIDS/STI & TB as a Peer Educator? (Name only one)

.....

....

.....

.....

17. Indicate if the following statements are True or False.

Statement	Don't know	True	False
HIV can be transmitted through blood transfusion of HIV positive person	1	2	3
HIV can be transmitted through breastfeeding by an HIV positive mother	1	2	3
A pregnant HIV positive woman can transmit HIV to her unborn baby	1	2	3
HIV can be transmitted through having unprotected sex	1	2	3
HIV can be transmitted through sharing plates, forks, utensils, etc. with an HIV/AIDS person	1	2	3
HIV can be transmitted through using the same toilet with an HIV/AIDS person	1	2	3
HIV can be transmitted through sharing of needles for drug use with an HIV/AIDS person	1	2	3
Abstaining from sex is an effective way to prevent pregnancy, HIV/AIDS and STIs amongst young people.	1	2	3

18 .Has your current training Programme as Peer Educator, adequately equipped you with knowledge and skills to face the challenges of sexual behaviours amongst your Peers?

Yes	1
No	2
Do not know	3

19. How do you rate your knowledge of HIV/AIDS/STI & TB Before and After becoming a Peer Educator?

Knowledge before becoming a Peer Educator				
Bad	Poor	Fair	Good	Excellent
1	2	3	4	5

Knowledge after becoming a Peer Educator				
Bad	Poor	Fair	Good	Excellent
1	2	3	4	5

20. List **three** changes that occurred in your life, after you become a Peer Educator in the context of HIV/AIDS/STI & TB?

- 1.....
- 2.....
- 3.....

21. Which of these sexual behaviours do you recommend to the students in your role as a Peer Educator as the safest?

Behaviour	Recommend	Don't recommend
Abstinence	1	2
Be faithful	1	2
Condomise	1	2

22. How comfortable do you feel to speak about HIV/AIDS/STI &TB and sexual Behaviours with members of opposite sex?

Very comfortable	1
Comfortable	2
Not comfortable	3
Not comfortable at all	4

23. Have you been treated for any Sexually Transmitted Infection (STI's) in the past?

Yes	1
No	2

24. Which of the following situations can you directly contribute to the Peer Education programme?

Situation	Yes	No
I became a friend of an HIV/AIDS person.	1	2
I am giving support and care to an HIV/AIDS person without the fear of been infected.	1	2
I changed my sexual behaviours.	1	2

25. If you changed your sexual behaviour, which of these sexual behaviours were you using before you underwent the Peer Education training and which are you using now?

Sexual behaviour before becoming a Peer Educator	
Abstinence	1
Be faithful	2
Reduce the number of your sexual partners	3
Never use condoms	4
Use condom sometimes	5
Use condom every time correctly	6
Other: .....	7

Sexual behaviour after becoming a Peer Educator	
Abstinence	1
Be faithful	2
Reduce the number of your sexual partners	3
Never use condoms	4
Use condom sometimes	5
Use condom every time correctly	6
Other: .....	7

26. How often do you take alcohol?

Do not take any alcohol	1
Only weekends	2
Some days in the week	3
Daily	4

27. Do you currently use recreational drugs (tik, dagga, cocaine, ect...)?

Yes	1
No	2

28. How many times were you engaged in sexual intercourse while you were drunk?

Can't recall/remember	1
Less than 5 times	2
5-times and more	3
Not applicable, I never have sex while I am drunk	4
Not applicable, I still a virgin	5

29. To what extent do you agree or disagree with the following statements?

Statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
An HIV/AIDS person can be cured if he has sex with a virgin female.	1	2	3	4	5
There is a vaccine available to the public that protects a person from getting HIV	1	2	3	4	5
Condoms are effective in reducing HIV transmission	1	2	3	4	5
Students speak freely about their sexual activities to the Peer Educators	1	2	3	4	5
Peer Educators are providing accurate information about HIV/AIDS/STI & TB to the students	1	2	3	4	5
Peer Educators are considered as role models in context of HIV/AIDS by the students on the campus	1	2	3	4	5
I made a difference to the lives of my fellow Peer Educators	1	2	3	4	5

30. Give the single most important reason why you became involved in the Peer Education Programme at CPUT?

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31. How old (years) were you when you **First** had sexual intercourse?

Have never had sexual intercourse	1
15 years of age or younger	2
16 years of age	3
17 years of age	4
18 years of age	5
19 years of age	6
20 years of age	7
21 of age or older	8

32. Did you use a condom when you had your first sexual intercourse experience?

Yes	1
No	2
I have not had sexual intercourse before	3

33. Tick of one or more activities you participated as Peer Educator of HIV/AIDS Unit at CPUT.

Activity	Yes	No
Workshops	1	2
Campaigns ( VCT, Condom distribution)	1	2
Community outreach	1	2
Radio broadcasting on the Campus	1	2
Awareness programmes in residence	1	2

34. How often do you go to a bar, tavern, shebeen or night club where alcohol is served after having been trained as a Peer Educator?

Never	1
Every end of the month	2
4 times a month	3
5 times a month	4
Every weekend	5
Daily	6

35. Do you believe that you made the difference to the lives of your Peers (fellow students/youth) with knowledge and skills that you acquired as Peer Educators?

Yes	1
No	2
Don't know	3

36.1 Please explain your answer above.

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.....

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37. Have you been pregnant or made your partner pregnant?

Yes	1
No	2

37.1 If your response is yes did this occur?

Before becoming a Peer Educator	1
After becoming a Peer Educator	2
Before & After becoming a Peer educator	3

38. If you or your partner was pregnant, did you terminate the pregnancy?

Yes	1
No	2

39. Have you been subjected to the following?

Before becoming a Peer Educator		After becoming a Peer Educator	
Rape	1	Rape	1
Date Rape	2	Date Rape	2
Transactional Sex (sex for money/gifts)	3	Transactional Sex (sex for money/gifts)	3
Sex with a person 5 years or more older than you	4	Sex with a person 5 years or more older than you	4
Threatened with Violence	5	Threatened with Violence	5
Was subjected to violence	6	Was subjected to violence	6
Was subjected to sexual harassment	7	Was subjected to sexual harassment	7
Used morning after pill thinking that it would prevent HIV	8	Used morning after pill thinking that it would prevent HIV	8
Engaged in unprotected anal sex	9	Engaged in unprotected anal sex	9

**Thank you for your cooperation**