



**An analysis of communication tools employed for HIV/AIDS education by
student support services at universities in KwaZulu-Natal**

By

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DECLARATION

I, the undersigned, Ntheno Lentsu Nchabeleng, student number 20618503, hereby declare that this dissertation entitled:

**AN ANALYSIS OF COMMUNICATION TOOLS EMPLOYED FOR HIV/AIDS EDUCATION
BY STUDENT SUPPORT SERVICES AT UNIVERSITIES IN KWAZULU-NATAL**

Is my own work and that it has not been submitted in part or in full to any other degree or to any other institution for other purpose. Subsequently, other sources are acknowledged giving explicit references.

Signature: N.L Nchabeleng

Date: 21- April- 2018

ABSTRACT

HIV/AIDS remains a global health crisis. In sub-Saharan Africa, young people continue to be disproportionately affected by HIV/AIDS. While access to antiretroviral (ARVs) is an important factor in the success of HIV/AIDS treatment, socio-cultural factors continue to exacerbate the spread of HIV/AIDS particularly among young people. This has necessitated the need for comprehensive strategies to be designed in order to address contextual factors that undermine HIV/AIDS prevention efforts for young people.

The Higher Education HIV and AIDS Programme (HEAIDS) exists to address HIV/AIDS related challenges and to manage HIV/AIDS programmes in Higher Education institutions (HEIs) in South Africa. Despite efforts to mitigate the spread of HIV/ADS among university students, students continue to engage in risky sexual behaviour. Using the Interactive Model of Communication, Behaviour Change Communication (BCC) and the Health Belief Model (HBM), this study analysed the communication tools employed for HIV/AIDS education by student services at four public universities in KwaZulu-Natal. A mixed method approach, consisting of a questionnaire and semi-structured interviews were employed to obtain data from 474 university students and 24 health care providers to assess the communication tools utilised in HIV/AIDS education at HEIs.

Findings revealed that university students are well informed about HIV/AIDS; however, students' health seeking behaviour remains poor. Key findings highlighted that students' reception and interpretation of HIV/AIDS messages are embedded in their autobiographical and socio-cultural circumstances. Thus, in order for HIV/AIDS communication strategies to be effective in influencing positive sexual behaviour among university students, there is need for an assessment of their autobiographical and socio-cultural circumstances in order to understand how students receive and interpret HIV/AIDS messages.

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DEDICATION

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LIST OF ACRONYMS

AAU	Association of African Universities
AIDS	Acquired Immunodeficiency Syndrome
ANC	African National Congress
ARV	Antiretroviral Treatment
BCC	Behaviour Change Communication
DUT	Durban University of Technology
GEAR	Growth, Employment and Redistribution Programme
HBM	Health Belief Model
HCT	HIV Counselling and Testing
HESA	Higher Education South Africa
HEIs	Higher Education Institutions
HIV	Human Immunodeficiency Virus
HEAIDS	Higher Education HIV/AIDS Programme
MDGs	Millennium Development Goals
MSM	Men having sex with Men
MUT	Mangosuthu University of Technology
NAP	National Aids Plan
NACOSA	National Aids Convention of South Africa
NSP	National Strategic Plan
NGOs	Non-Governmental Organisations
LGBTI	Lesbian, Gay, Bisexual, Transgender and Intersexed persons
RDP	Reconstruction and Development Programme
SADAC	Southern African Development Community
SANAC	South African National AIDS Council
SARUA	Southern African Regional Universities Association
STI	Sexually Transmitted Infections
TAC	Treatment Action Campaign

WHO	World Health Organisation
VCT	Voluntary Counselling and Testing
UKZN	University of KwaZulu-Natal
UNIZULU	University of Zululand
UNAIDS	United Nations Joint Programme on HIV/AIDS

CHAPTER ONE

INTRODUCTION OF THE STUDY

1.1 Introduction

This study sought to analyse communication tools for HIV/AIDS education by student support services at universities in KwaZulu-Natal. The focus of this study was the communication process between the health care providers and university students in encoding and decoding HIV/AIDS messages. The primary objective of this study was to comprehend how students' interpretation of HIV/AIDS messages by student services has contributed to positive sexual behaviour. This chapter provides an overview of the study.

The chapter provides a background on HIV/AIDS, as well as how the epidemic affects young people, particularly in South Africa. Subsequently, the research problem is outlined and the aim which was addressed through the objectives is presented. This is followed by the review of literature and methodological approach selected for this study. Furthermore, the study provides definition of key concepts, and outlines the structure of the thesis. The chapter concludes with a summary highlighting key issues discussed in this chapter.

1.2 Background of the study

In 2016, about 36.7 million people were living with HIV/AIDS worldwide, with approximately 2.3 million new infections globally (UNAIDS 2016c: 24). According to the Joint United Nations Programme on HIV/AIDS, more than half of the current new infections in the world happen among young people aged between 12 and 24 years (UNAIDS 2013: 24). Although there has been a notable decline of new infections observed in Sub-Saharan Africa (Gouws and Cuchi 2012: 77; World Health Organization 2013), this region bears the largest burden of the virus. In 2016, Southern Africa accounted for 44% of new infections globally (UNAIDS 2016c: 35).

A total of 7.1 million people were infected with HIV/AIDS in South Africa in 2016 (UNAIDS 2016c: 26). KwaZulu-Natal, where the study was conducted has the highest HIV prevalence in South Africa estimated at 40% with 12% of the youth in the 15-24 age group infected with HIV/AIDS (SANAC 2014: 5). Recent studies on youth sexual behaviours in South Africa show that young people continue to face the greatest risk of HIV infection (Mulwo 2009: 2). A study

conducted in 2005 by the Human Science Research Council (HSRC) discovered that the median age of first sexual encounter among adolescents in South Africa is at 17 years. The study also revealed that about 57.9% of young people had already engaged in penetrative sex (Shisana 2005: 76). According to the South African National Youth Policy 2009-2014 and the National Youth Commission Act 1996, young people are persons between the ages of 14 – 35 years (South Africa 2008: 12). This is the age group which Higher Education Institutions (HEIs) particularly deal with, as students gain admission into post-school education.

According to the White Paper for Post-School Education and Training (2013:15), about 937 000 students were enrolled at 23 South African universities in 2011 and an increase to about 1.6 million enrolments in 2030 is expected. Given the fact that university students tend to engage in risky sexual behaviour, effective HIV/AIDS communication tools should be implemented to mitigate the spread of HIV among this community. In South Africa, mass media approaches have been instrumental in promoting positive sexual behaviour among young people (Parker, Makhubele, Ntlabati and Connolly 2007: 22). These mass media approaches include television series such as *soul city*, *soul buddy*, *Tsha Tsha* and *khomanani* to mention a few. In the higher education sector, outreach programmes such as *DramAidE*, peer education and condom distribution programmes have been initiated to educate about HIV/AIDS in schools and institutions of higher learning (South Africa 2009: 12).

The Higher Education HIV and AIDS Programme (HEAIDS) operates at sub-sector level in the Department of Higher Education. HEAIDS coordinates HIV and AIDS programmes at all institutions in South Africa with a view to strengthening capacity and responding comprehensively to related HIV/AIDS challenges. The national HEAIDS policy exists to reduce the threat of the spread of HIV and AIDS among students, staff and the surrounding community, as well as to mitigate the impact of HIV and AIDS (HEAIDS 2004: 5). Despite the HEAIDS efforts to mitigate the impact of HIV/AIDS in university students, high prevalence of HIV infection still occurs among students. This highlights the need for effective tools for HIV/AIDS education within this community. Therefore, the objective of this study is to analyse communication tools for HIV/AIDS education employed by student services at universities in KZN. This investigation highlighted how these tools address factors driving sexual risk behaviour (such as low condom use, transactional

sex and multiple concurrent partners), the challenges faced by providers in implementing these tools, and the recipients' response to the message communicated.

HIV/AIDS has a direct influence on student development as students represent a source of future skills, and knowledge base (Dell 2010). Education institutions offer an environment that is conducive for imparting skills and knowledge. Universities have a social responsibility for increasing skills level of university students (Kelly 2001: 4). Higher Education Institutions (HEIs) are not only teaching institutions; largely, the role of universities is also in research and the dissemination of findings. Therefore, HEIs have the dual role of protecting the health of the students as well as carrying out research that improves the understanding of the epidemic (Gobind and Ukpere 2014: 347).

1.3 Research problem

The South African higher education sector is affected fundamentally by the HIV/AIDS epidemic. The latest study by HEAIDS noted that 1 in 4 students is infected with HIV/AIDS in South Africa (Higher Education HIV/AIDS Programme 2010: 6). A majority of students in HEIs in South Africa have had sex before matriculation (73%) and by each additional year of age an increasing proportion have had sex. A large number of students are likely to have sex for the first time during the period they are at university (HEAIDS, 2009). In 2010, the South African government implemented an HIV Counselling and Testing (HCT) and peer education approach in order to increase knowledge about HIV/AIDS. This campaign was part of the HIV and AIDS programme in higher education institutions (Higher Education HIV/AIDS Programme 2010: 6).

Despite several programmes initiated to influence sexual behavioural change among the youth in South Africa, recent studies show that young people continue to engage in risky sexual behaviour that place them at risk of acquiring HIV/AIDS (Mulwo 2009: 10).

1.4 Aim and objectives of the study

The aim of this study is to analyse communication tools employed for HIV/AIDS education by student services at universities in KZN.

This involves the following objectives:

- 1) To examine HIV/AIDS communication strategies used by HEIs for student support services.
- 2) To analyse the communication tools used by student services for HIV/AIDS at various HEIs.
- 3) To analyse the extent to which the interactive model is applied by student services at various HEIs.
- 4) To determine the influence of the interactive model in bringing about behavioural change among students.
- 5) To provide recommendations to improve and strengthen HIV/AIDS education in university settings.

1.5 Literature review

1.5.1 Interventions to curb the impact of social and structural drivers of the HIV/AIDS epidemic

HIV/AIDS is a major public health concern globally especially in many parts of Africa. Although the continent is home to about 15.2% of the world's population, sub-Saharan Africa alone accounted for an estimated 790 000 of all new infections, about 43% of the global total (UNAIDS 2016a). Southern Africa is the worst affected region on the continent. As of 2011, HIV has infected at least 10% of the population in Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe (Joint United Nations Programme on HIV/AIDS 2012: 33).

In response, a number of initiatives have been launched in various parts of the world to educate the public on HIV/AIDS. A recent effort in response to the HIV/AIDS epidemic is the Global Plan to end the AIDS epidemic by 2030 through the establishment of the 90-90-90 treatment target. The UNAIDS 90-90-90 ambitious target treatment aims to diagnose 90% of all people infected with HIV/AIDS by 2020; to make provision of antiretroviral therapy to 90% of all people living with HIV/AIDS by 2020 and to ensure that by 2020, 90% of all people receiving antiretroviral therapy have viral suppression (UNAIDS 2014: 1). Within the education sector, numerous public education initiatives have been launched to curb the spread of HIV/AIDS in Africa (Joint United Nations Programme on HIV/AIDS 2012: 33).

Various innovative responses to the threat of HIV/AIDS by African universities include an HIV/AIDS toolkit for higher education institutions in Africa by the Association of African Universities (AAU). The AAU HIV/AIDS toolkit was aimed primarily at supporting the efforts of African universities to initiate or improve their institution-specific HIV/AIDS prevention programs (Chetty 2000: 2). A study commissioned by the Southern African Regional Universities Association (SARUA) on institutional responses to the HIV/AIDS epidemic from higher education institutions in the Southern African Development Community (SADC) reported that although most institutions surveyed stated having HIV/AIDS policies, peer education programmes, voluntary counselling and testing, curriculum development and research which could constitute a university's institutional response to HIV/AIDS, there is yet no integrated, coherent regional response to HIV/AIDS in the higher education sector in the SADC region (Van Wyk, Pieterse and Otaala 2006: 1).

In South Africa, the recent National Strategic Plan (NSP) on HIV, STIs and TB 2017- 2022 sets out eight core goals and interventions. To ensure the achievement of the NSP goals on HIV, STIs and TB 2017-2022, the NSP aims to:

1) Goal 1: Reduce new HIV/AIDS and TB infections and STIs by accelerating prevention

The objective of goal 1 of the NSP is to break the cycle of transmission by scaling up core prevention strategies that combine biomedical prevention programmes, including voluntary medical male circumcision, pre-exposure antiretroviral prophylaxis, elimination of mother to child transmission and antiretroviral drug (ARVs), with communication tailored to teach and promote safer sexual behaviour in the case of HIV and STIs. In the context of this study, institutions of higher learning should put in place comprehensive quality HIV/AIDS strategies to enhance prevention efforts within the student community. These include easy access to HIV/AIDS counselling, treatment, care and support within university campuses.

2) Goal 2: Minimize HIV/AIDS related mortality and morbidity by providing treatment, care and adherence support for everyone.

Goal two of the NSP is aligned with the UNAIDS 90-90-90 prevention targets. Since the roll out of the antiretroviral treatment (ARVs) in 2004, there has been a tremendous change on the national mortality figures and an increase in life expectancy of the population due to effective HIV/AIDS and TB treatment. The NSP 2017-2022 approach to treatment and care will call for a speed in

scale-up of testing for HIV and screening for STIs and TB. This will require an enormous extension of treatment programmes and innovative ways to maintain individuals in treatment as well as track their movements between health care facilities using a master patient index for registering all patients. It is evident that HIV/AIDS treatment is an important tool in eradicating the HIV/AIDS epidemic. Thus, student support services should maximise prevention effects of HIV/AIDS treatment among university students in order to improve uptake of treatment. This includes the provision of treatment such as ARVs and PrEP (Pre-Exposure Prophylaxis) on campus in order to limit the distance of travelling to receive treatment services.

3) Goal 3: Reach all key and vulnerable populations with comprehensive, customised and target interventions

This goal emphasises that all sections of the society will be accommodated in efforts to combat HIV/AIDS, STIs and TB. The NSP 2017-2022 refer to key populations as individuals who experience vulnerability to infection in most aspects of their lives, while vulnerable population are individuals that are highly susceptible in certain contexts. Key population include sex workers, men who have sex with other men (MSM), transgender people and people who use drugs. Vulnerable populations consist of adolescent girls and young women, people with disabilities, LGBTI populations, mobile population, and residents of informal settlements. By prioritising key and vulnerable populations, the NSP can help reverse the marginalisation and stigmatisation that has ripened exposure to HIV risk and infection. Taking into account the sexual orientation diversity within the student community, student support services should create enabling environment that can improve uptake of HIV/AIDS health services by key and vulnerable populations. This includes provision of sensitivity training for health care providers in order to reduce stigmatisation and prejudice within health facilities.

4) Goal 4: Address social and structural drivers of HIV/AIDS, STIs and TB infections

There are underlying key factors that play a significant role in determining an individual's risk to acquiring HIV, STIs, and TB. These include social, economic, and environmental factors. The NSP aims to reduce risky behaviour by implementing social and behavioural change programmes that will address major factors that drive the spread of the HIV/AIDS epidemic. This includes increasing provision of health services for sexually assaulted victims and survivors of gender based violence. Implementing economic development programmes for youth in vulnerable situations and

scaling up access to social protection for people susceptible to HIV/AIDS infection. This suggests that in order to reverse the spread of HIV/AIDS a multi-sectoral approach is needed to address the economic, social, and environmental factors that shape an individual's risk to HIV/AIDS infection. Thus, universities have a critical role to play in mitigating the spread of HIV/AIDS within the student community.

5) Goal 5: Ground the response to HIV/AIDS, STIs and TB in human rights principles and approaches

In order to respond effectively to the HIV/AIDS epidemic, the NSP has grounded its approaches in principles of human rights and social justice. The NSP proposes that stigma, judgement, and human right violation associated with HIV/AIDS be addressed through monitoring and responding to human rights. In addition, social and behaviour change communication programmes to tackle some of the well-known causes of social ostracism such as moral judgement, ignorance of the impact of stigma, gender based discrimination and unreasonable fear of infection. This suggests that in order to tackle stigma and discrimination around HIV/AIDS in universities, health care providers should create enabling environment where university students can receive health care services without fear of being judged and discriminated. In other words, more emphasis should be placed on confidentiality and treatment that does not discriminate.

6) Goal 6: Promote leadership at all levels and shared accountability for a sustainable response to HIV/AIDS, STIs and TB

This goal of the NSP calls for a powerful leadership to play a critical role of spearheading an integrated, multi-sector planning for the implementation of the NSP through provision of health, education and social services. This suggests that a strong and robust multi-sectoral leadership approach is a crucial component of addressing HIV/AIDS and recognising the objectives of the NSP.

7) Goal 7: Mobilise resources to support the achievement of NSP goals to ensure a sustainable response

This goal of the NSP is to increase effectiveness and mobilise enough resources to attain the goals, objectives, and target of the NSP. Thus, it is important that the NSP allocates sufficient resources to relevant population groups that are more susceptible to HIV/AIDS as compared to the public.

The NSP should also secure financial support from the private sector in order to cover the extension of activities envisioned in the NSP.

8) Goal 8: Strengthen strategic information to drive progress towards achievement of NSP goals

This goal emphasises the use of producing and using relevant data to monitor progress on the implementation of the NSP and trace the effect of the interventions in order to allow for appropriate adjustments where required. The NSP also put emphasis on the role of research in providing crucial information for planning and perfecting interventions to provide prevention and treatment services for HIV/AIDS, STIs, and TB adequately. Given the fact that universities are academic institutions that provide education and skills to capacitate students, HEIs have a responsibility to strengthen strategic information that can help reverse the impact of HIV/AIDS on human development in universities.

With regard to departmental HIV/AIDS intervention, the Department of Education (DoE) has implemented programmes with objectives aligned to the NSP. The Higher Education HIV and AIDS programme (HEAIDS) was formed in 2000/2001 as a collaboration between the National Department of Education, the South African Universities Vice- Chancellors Association (SAUVCA) and the committee of Technikon Principals (CTP) currently called Higher Education South Africa (HESA). The strategic framework of HEAIDS reflects objectives of the Department of Education. The department of education has aligned its key result area along the national and sectoral HIV/AIDS strategies. Three of the areas identified for particular support included peer education, curriculum integration, and voluntary counselling and testing (HEAIDS 2004: 5).

A study evaluating HIV/AIDS programmes within South African universities showed that despite a multitude of prevention initiatives, young people continue to be infected with HIV (Mulwo 2009: 5). Prevention programmes do not address the social and cultural context of the population groups and do not take into account possible class and socio-economic differences and their implications on HIV/AIDS (Gobind and Ukpere 2014: 355). Similar findings by Kahn (2014: 9) report that South African youths; in particular tertiary students, are becoming less knowledgeable about HIV/AIDS despite all efforts by the government to include HIV/AIDS policy in the learning curriculum.

1.5.2 Voluntary counselling and testing (VCT) in universities

The United States Agency for International Development defines VCT as “an HIV intervention that includes both pre-and post-test counselling, and voluntary HIV testing. “People of their own free will, opt for VCT, and it provides them with opportunity to confidentially explore and understand their HIV risks and to learn their HIV test results” (UNAIDS 2016a: 12). The expected effect of VCT is to lower HIV transmission through reduction in higher risk behaviour, improved medical care (particularly for sexually transmitted infections), and improved access to care and support services for both HIV positive and HIV negative persons (Gonani, Makuti, Macheso, Shongwe, Kinoti and Ndyabangi 2005: 4).

Voluntary counselling and testing is globally recognised as a gateway to comprehensive HIV/AIDS prevention, care, and treatment. However, uptake of VCT services among students in higher education institutions remains low (Mbengo, Ngirande, Ndou and Mavundla 2014: 458). A study commissioned by the foundation for professional development (FPD) and HEAIDS at the University of Limpopo Turfloop campus reported that HIV/AIDS counselling and testing uptake among students is low and more females than males utilise the available reproductive health services (Foundation for Professional Development 2010; Higher Education HIV/AIDS Programme 2010). This highlights the failure of HIV/AIDS programmes to facilitate participation and involvement of men in HIV/AIDS related issues. It is therefore not surprising that men have attracted limited interest to sexual health information, particularly HIV/AIDS.

Similar findings are reported in a study on HIV/AIDS knowledge and uptake for HIV counselling and testing among undergraduate private university students in Accra, Ghana which revealed that there was a significant difference in knowledge of HIV/AIDS by gender where female students had more knowledge about HIV/AIDS than males. The study also revealed that over half of the participants had not tested for HIV, although over 95% of them know where to access counselling and testing services (Asante 2013: 1). Although women are well informed about HIV/AIDS, young women remain most vulnerable to HIV/AIDS because of underlying drivers of sexual risk behaviour such as multiple concurrent partners, transactional sex, low condom use, intimate partner violence, poverty, and inequality.

1.5.3 Communication strategy

Communication is defined as a complex and dynamic process of exchanging meaningful messages. Considering communication as a process means that it is an ever-changing sequence of events with no fixed beginning or end (Tubbs 2012: 9). Pearson, Nelson, Titsworth and Harter (2013: 12) postulate that there are various components of communication, namely:

- **People:** are involved in the human communication process in two roles- as both the sources and the receivers of messages.
- **The message:** is the verbal and nonverbal form of the idea, thought, or feeling that one person (the source) wishes to communicate to another person or a group of people (the receivers).
- **The channel:** is the means by which a message moves from the source to the receiver of the message.
- **Feedback:** is the receiver's verbal and nonverbal response to the source's message.
- **Code:** is a systematic arrangement of symbols used to create meanings in the mind of another person or persons.
- **Encoding and Decoding:** encoding is the process of translating an idea or a thought into a code, while decoding is the process of assigning to that idea or thought.
- **Noise:** is any interference in the encoding and decoding process that reduces the clarity of a message.

Tubbs (2012: 9) further states that to fully define communication, certain models of communication should be discussed. Communication should be defined from a linear (technical) view, an interactional (process) view and from a transactional view. The technical/linear considers communication as simply sending and receiving messages, or the transmission of messages from one person to another. The technical/linear does not mention how means of communication are used, why the communication takes place, and what happens when there is communication. This model does not explain the communication process in detail. The interactional/process extends the technical/linear view by focusing on the interpretation and meaning of messages in addition to their transmission. The interaction process illustrates communication as a process in which meaningful messages are exchanged by two active participants. The models highlight feedback (message response), thus the process becomes a two-way instead of linear. The emphasis on

feedback shifts focus from the transmission of messages (such as in linear model) to the interpretation of meaning by actors in the communication process. Following the view of communication, as a process or interaction is the view that communication is more than the dynamic process of exchanging meaningful messages; a transaction between the participants or actors of the communication encounter during which a relationship is developed. In a transactional process the people communicating are mutually responsible for the outcome of the communication encounter as they transmit information, create meaningful and elicit response through the simultaneous sending and receiving of messages (West and Turner 2006: 13).

For the purpose of this study, an interactive communication model was used to identify factors that hinder the encoding and decoding process between student services and students. The interactive model of communication illustrates how the communicator encodes a message according to own socio-cultural background and autobiographical make-up. The message is then sent to the recipient through a medium. The recipient then decodes the message according to their own socio-cultural and autobiographical make-up. The interactive communication model further illustrates how active both participants are during the communication process and how they can have an effect on one another.

1.6 Research Methodology

1.6.1 Research design

To achieve the defined objectives, the researcher used the mixed methods approach, which is a procedure for collecting and analysing persuasively and rigorously both qualitative and quantitative data and integrating the two forms of data concurrently by combining them (merging them), sequentially by having one build on the other, or embedding one within the other (Creswell and Clark 2011: 5). The rationale for mixing both types of data is that neither qualitative nor quantitative methods are sufficient by themselves to analyse the complexities and comprehensive details associated with communication strategies for HIV/AIDS education employed by student services for universities in KZN. Babbie (2010: 17) postulates that the quantitative approach aims to find out how much and how many, and is concerned with the relationship between variables whilst the qualitative approach attempts to describe and understand human action from the insider's perspective. Based on this, the researcher was determined that a large representative of the population will require a quantitative, numeric approach (questionnaires) to ascertain the

communication tools used by student services at various universities in KZN. A qualitative approach (semi structured interviews) was used to highlight how student services uses communication tools to engage and educate students about HIV/AIDS.

1.6.2 Population

The sample population of this study consisted of 474 university students and 24 health care providers at DUT, UKZN, MUT, and UNIZULU. These respondents comprised of undergraduate and postgraduate students, HIV/AIDS counsellors, nurses, and HIV programme managers.

1.6.3 Sampling method

According to Sekaran and Bougie (2013: 241), a sample is a subset of the population. It comprises some members selected from it. In other words, some, but not all, elements of the population form a sample. The sample population/sampling unit is the element or set of the elements that is available for selection in some stage of the sampling process (Sekaran and Bougie 2013: 242). Because of the large number of elements involved in this study, the researcher selected full-time university students, health providers, and HIV/AIDS managers at four public universities in KZN to produce more reliable results.

1.6.4 Data analysis

Quantitative data was analysed using Statistical Package for Social Science (SPSS). Responses were summarised in tabular form for easier analysis and interpretation. Descriptive analysis was used to summarise and present data in a meaningful way and inferential statistics was used to explore the data further. Chi-square test was used to measure statistical significance of variables. Correlation analysis was done to measure the relationships among variables. Qualitative analysis involved identifying patterns and major themes emerging from the interviews conducted. Data from audio tapes was transcribed and coded into themes.

1.6.5 Pretesting

The questionnaire was pretested prior to distribution. Ten students from DUT were asked to critique the questionnaire and comment on the clarity and appropriateness of the questions. Pretesting was therefore used to ensure the questionnaire clarity, readability and coherence. The

feedback from pretesting was incorporated and amendments were made to the final version of the questionnaire.

1.7 Scope of the study

The study was conducted at four HEIs in the KwaZulu-Natal province, which has the highest HIV/AIDS prevalence in South Africa at 18.8% in 2013 (Statistics South Africa 2013). The primary focus of this study was to analyse the communication tools employed for HIV/AIDS education by student services at KZN universities.

1.8 Significance of the study

In the absence of a cure, HIV/AIDS communication approaches and awareness campaigns remain critical tools to combat the spread of HIV/AIDS. Findings of this study are expected to shed insight into further interactive communication approaches that can be used to enhance HIV/AIDS education at universities. Research findings might be useful for health providers/practitioners and policy makers when implementing health education programmes and tools to address issues on HIV/AIDS in university institutions. This may improve HIV/AIDS communication approaches in universities to be tailored to the local context. Hence, students can respond effectively to HIV/AIDS communication approaches. The findings of this study might benefit and enlighten those who conduct research in the same discipline.

1.9 Definition of terms

Behaviour change communication: John Hopkins: centre for communication programs (2017) defines behaviour change as “the use of communication to change behaviour, including service utilisation, by positively influencing knowledge, attitudes and social norms”.

HIV/AIDS education: a prevention tool in the fight against the transmission of HIV/AIDS with the primary goal of imparting knowledge and information about HIV/AIDS and other HIV/AIDS related issues (Lindley, Coleman, Gaddist and White 2010: 13).

HIV/AIDS prevention programmes: Are interventions that are implemented to mitigate the spread of HIV/AIDS (AVERT 2016a).

Risky sexual behaviour: Contemporary literature defines “risky sexual behaviour” as behaviours that are characterised by the increased exposure to contracting sexually transmitted infections and

HIV/AIDS. Risky sexual behaviour also includes having multiple concurrent sexual partners, engaging in unprotected sex, and engaging in transactional sex. This study adopts the aforementioned view to describe risky sexual behaviour.

Young people: The South African National Youth Policy of 2009-2014 define young people as those between the ages of 14-35 years, which is based on the National Youth Commission Act 1996 and National Youth Policy 2000 (South Africa 2008: 2). In this study, the phrase “young people” is used interchangeably with youth to describe a population group of young men and women falling within the 14-35 age group.

HIV: The acronym HIV stands for human immunodeficiency virus. HIV is a virus that attacks the immune system. The virus destroys a type of white blood cell in the immune system referred to as T-helper cell, and doubles itself inside these cells. T-helper cells are also referred to as CD4 cells (AVERT 2017). This perspective is adopted in this study.

AIDS: A set of symptoms caused by the HIV virus is called AIDS. In this study, HIV/AIDS are used concurrently to describe the virus and the condition caused by the virus (AVERT 2017).

1.10 Chapter outlines of the Dissertation

Chapter One serves as an introduction of the study. It provides the scope of and background to the study. The context of the study covers HIV/AIDS education, communication tools, university students, and Higher Education institutions (HEIs). This chapter also provides the purpose of the study (research aim and objectives), research problem, and literature review, an overview of the methodology and the definition of key terms. The summary exemplifies key facts of the chapter.

Chapter Two expounds on HIV/AIDS globally and highlights major historical events of HIV/AIDS in South Africa. The chapter also demonstrates steps taken to address HIV/AIDS in South Africa and documents HIV/AIDS public policy interventions by the democratic government.

Chapter Three reviews communication tools implemented in higher education institutions to curb the spread of HIV/AIDS. The chapter examines the impact of the HIV/AIDS epidemic on the education sector. The chapter also summarises prevention and treatment campaigns implemented at higher education institutions.

Chapter Four presents theoretical framework upon which the study is conceived. The chapter begins by presenting a brief account on strategic communication and then it explores the concept of health communication. The chapter also discusses principal theories that inform the study and the synergies between the Interactive Model of Communication, Behaviour Change Communication, and the Health Belief Model in conceptualising students' interpretation and responses to the HIV/AIDS messages by student support services.

Chapter Five outlines the description of the appropriate research methodology to address the study objectives. This chapter outlines the research design selected for the study, measuring instruments used to collect the data from study participants, the sample size selected for the study, and the data collected. The chapter explains how data was analysed and presented.

Chapter Six presents the results of the research and the analysis. The chapter focuses on the survey and interview data collected from study participants. The chapter is divided in two sections. Section A provides findings from the questionnaires distributed to university students. Section B focuses on the interpretation of data from the interviews conducted with health care providers.

Chapter Seven presents the conclusion and recommendations for future research; it highlights the methodological contribution of the study.

1.11 Conclusion

This chapter provided a comprehensive background aligned with the study aim and objectives. The problem statement highlighted that despite several programmes put in place to influence positive sexual behaviour among university students, young people continue to engage in risky sexual behaviours. Therefore, this study aims to analyse communication tools employed for HIV/AIDS education by student services at universities in KwaZulu-Natal. The chapter also presented relevant literature from previous studies related to the study phenomenon. The research structure of the study is outlined, and the meaning of the key terms is provided.

The following chapter reviews literature on HIV/AIDS in South Africa.

CHAPTER TWO

HIV/AIDS IN SOUTH AFRICA

2.1 Introduction

This chapter presents an overview of the global evolution of the HIV/AIDS epidemic and highlights the historical background of HIV/AIDS in South Africa. Furthermore, an in-depth review on South Africa's response to the AIDS epidemic is discussed. Focusing on HIV/AIDS policy making in South Africa, the chapter highlights the management of HIV/AIDS, particularly in a post-apartheid South Africa. This chapter further examines the HIV/AIDS public policy interventions by the democratic government and the outcome of these initiatives. This chapter concludes with a brief summary of the key issues highlighted in the chapter.

2.2 Global evolution of HIV/AIDS

There has been a lot of debate around the origin of HIV/AIDS. The discussion in this section provides evidence about the origin of the HIV/AIDS epidemic and how it became a global health issue. Notably, there are two kinds of HIV, namely HIV-1 and HIV-2. This type of virus is known as lentivirus, meaning it attacks the immune system. The same way SIV (simian immunodeficiency virus) attacks monkey and ape's immune system. HIV-1 is linked to a strain of HIV identified in chimpanzees, and HIV-2 related to a strain found in sooty mangabeys also known as the old world monkeys (Worobey, Telfer, Souquière, Hunter, Coleman, Metzger, Reed, Makuwa, Hearn and Honarvar 2010: 1487).

Sharp and Hahn (2011: 1) add that both HIV strains are the result of double cross-species transmission of SIVs naturally contaminating African chimpanzees. This brings up the discussion on HIV-2 crossover from chimps to humans. According to Sharp and Hahn (2011: 4), a universally adopted theory is that a hunter killed and ate a chimp infected with SIV and as a result the virus adapted within its new human host. Earliest studies documented on HIV-1 and HIV-2, provide data on how HIV first appeared in humans and how it evolved. With intensive research done on HIV, scientists have been able to form a lineage of HIV transmission. Research conducted by Faria, Rambaut, Suchard, Baele, Bedford, Ward, Tatem, Sousa, Arinaminpathy and Pèpin (2014: 57) concludes that the earliest spread of SIV to HIV in humans took place around 1920 in Kinshasa in the Democratic Republic of Congo. Kinshasa is known for its transport links such as

roads, railways and rivers. High population migration has been identified as a key driver of the HIV/AIDS epidemic through growing sex trade around this time (Faria *et al.* 2014: 58). This serves as a sufficient explanation of how HIV spread along these trade routes.

However, it was only in the 1980s in the United States of America (USA) that people became aware of HIV/AIDS and it was recognised as a notifiable disease (Lewthwaite and Wilkins 2009: 333). Subsequently, a cluster of cases of rare disease such as lung infection were reported among gay men in California and New York suggesting that HIV/AIDS might be caused by a sexually transmitted infectious agent. In the meanwhile, a 20 month-old child who had received numerous blood transfusion and blood products died from HIV/AIDS related infections (UNAIDS 2015: 80). This means that in the midst of discovering the infectious agent, scientists were faced with an unexpected scale of an epidemic which seemed to spread unnoticeably.

The above case of the 20-month-old child elucidated the mystery and confusion around HIV/AIDS and provided solid proof that HIV/AIDS was caused by an infectious agent. It wasn't until mid-1982 that the disease was spreading among other population such as haemophiliacs and heroin users. It was only in September 1982 that the disease was named "AIDS" (Lewthwaite and Wilkins 2009). By the end of 1982, HIV/AIDS had been identified in 14 countries, including Australia, Brazil, Canada, several European countries and South Africa (UNAIDS 2015: 80). It is reasonable to speculate that the complexity of the disease created a challenge for service provision within the health sector which can be articulated to rapid growth of HIV infection. This shows that the first decade of the epidemic received reaction of panic from the international community, scientists and the general public.

To date, HIV/AIDS is globally recognised as a major health problem. The UNAIDS 2014 Global Statistics: Fact Sheet reports that since the year 2000, 38.1 million people have contracted HIV and 25.3 million people have died of AIDS –related diseases. In 2016, about 36.7 million people were living with HIV/AIDS (including 1.8 million children) and 1.8 million new infections- a decline from 2.1 million reported in 2015 (UNAIDS 2016b) . The figures presented below give an indication of global and regional statistics of people living with HIV/AIDS.

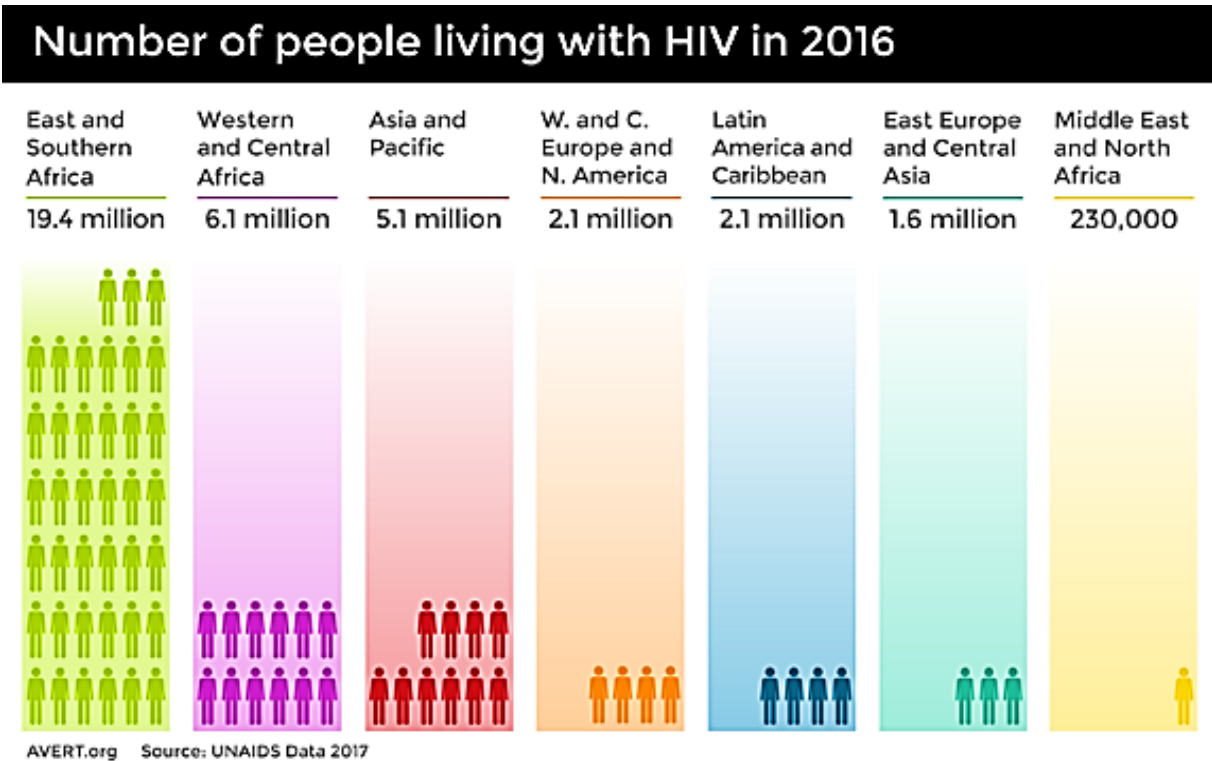


Figure 2. 1: Global Statistics of people living with HIV/AIDS (Source: Adapted from UNAIDS, 2016b)

The statistical data presented in Figure 2.1 shows that HIV/AIDS remains a global health challenge. It is clear that the initial global response of knowing the transmission of the disease was not enough to halt the spread of the epidemic. Although the global response has speeded up rapidly, efforts to prevent, treat and educate people about HIV/AIDS should be enhanced. Intensifying HIV/AIDS programmes should be a priority in all countries particularly in low-income countries where key affected populations are hard to reach. Resources of HIV/AIDS should also be prioritised in government policies.

According to UNAIDS (2016b: 40), 19.4 million people are living with HIV/AIDS in East and Southern Africa. The East and Southern region accounts over 50% of the total number of people living with HIV/AIDS globally. Although there are numerous factors that can be attributed to the density of the disease in this region, Denis and Becker (2006: 31) report that the lengthy denial period in Africa has exacerbated the spread of the HIV/AIDS epidemic, where the majority of sub-Saharan African governments failed to recognise the existence of the epidemic but instead demonstrated cynical skepticism by accepting international aid without combating the epidemic.

As a result, HIV/AIDS turned into a political and cultural stake before it was considered a health issue. African elites condemned HIV/AIDS as a foreign disease and accused white homosexuals of spreading the disease within the continent as an attempt to reduce the birth rate by imposing condom use in the face of African traditions such as the practice of marrying multiple spouses (Denis and Becker 2006: 31). It is evident that HIV/AIDS in Africa was perceived as a form of crisis to development. HIV/AIDS was still not accepted as a disease that was transmitted heterosexually.

To thoroughly comprehend the trajectory of the epidemic, the historical perspective of HIV/AIDS should be highlighted, particularly in Southern Africa where factors contributing to the spread of the epidemic cannot be demonstrated without taking into account the role of migrant labour which under the apartheid regime led men to abandon their traditional families in search of economic and social power. This is supported by Health24 (2014) that the system of migrant labour has been a driver of HIV/AIDS transmission. Labourers were not permitted to settle where they worked in the urban area; nonetheless they maintained their relationship with their families in the rural areas. This pattern of labour movement has been a major aspect in the transmission of the disease. This suggests that the long periods of separation led the migrant labourers to seek sex outside their stable relationships.

In addition, issues of male dominance and power exerted over women have aggravated the spread of the disease. It is clear that unequal socioeconomic and cultural aspects of HIV/AIDS are still prominent in our society today. According to Health24 (2014) the patriarchal nature of African culture renders women at lower social standing than men. Women are considered inferior and should be under the control of men. This results in unequal gender and power relations particularly when negotiating sexual encounters. As a result women become more vulnerable to HIV/AIDS and this accelerates the rates of the HIV/AIDS epidemic. This means that women have no power to negotiate safer sex practices with their partners or refuse sex. These social aspects can be attributed to the high HIV/AIDS prevalence in East and Southern Africa region (see Figure 2.2 and Figure 2.3).

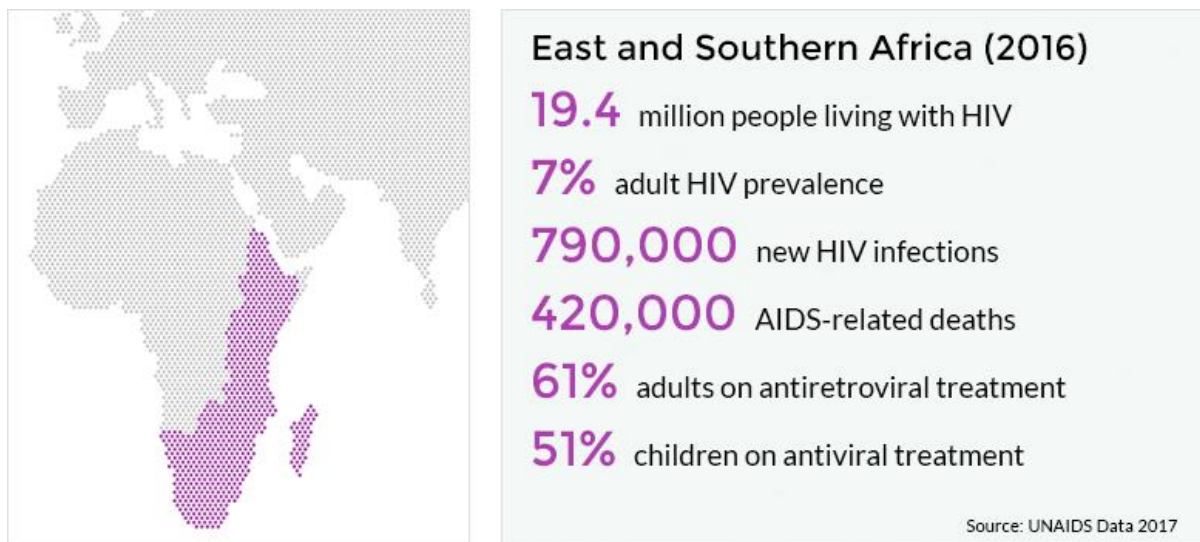


Figure 2. 2: Regional statistics of people living with HIV/AIDS in East and Southern Africa (Source: Adapted from UNAIDS, 2016b)

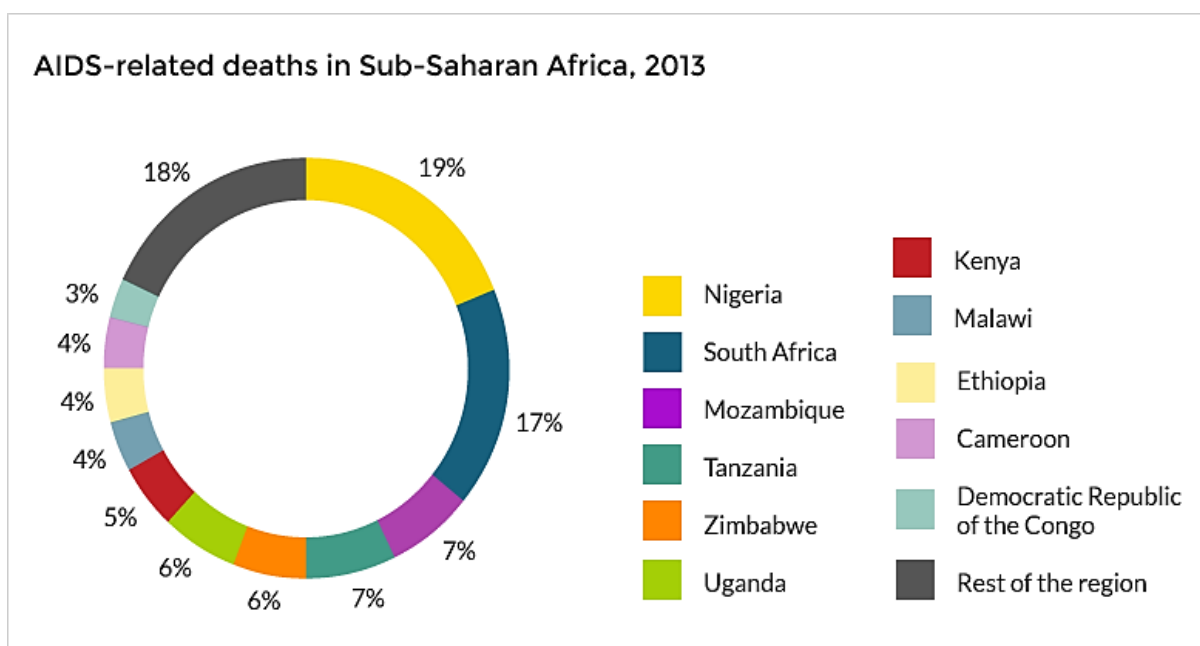


Figure 2. 3: AIDS- related deaths in Sub-Saharan Africa in 2013 (Source: Adapted from UNAIDS, 2015)

The statistical data presented in the Figures 2.2 and 2.3 demonstrate the high population numbers that endure the increasing burden of the HIV/AIDS epidemic. Figure 2.2 shows that 19.4 million people were living with HIV/AIDS in 2015, whilst Nigeria had the highest number of Aids-related deaths at 19%, followed by South Africa at 17% (see figure 2.3) (UNAIDS 2015: 33). It is a fact that the effects of the HIV/AIDS epidemic extend far beyond biomedical and economic costs.

Behind the statistical estimates reports lies the social commotion caused by the epidemic. This means that coexisting conditions that foster and exacerbate the spread of HIV/AIDS such as poverty, unemployment, culture and social norms should be addressed. A turning point in the recent evolution of HIV/AIDS was the establishment of the Millennium Development Goals (MDGs).

2.3 Millennium Development Goals

The United Nations Millennium Development Goals (MDGs) were eight international development goals that 193 United Nations member states, including South Africa, pledged to help achieve by the year 2015. The MGDs were adopted following the Millennium Summit of the United Nations in 2000 (World Health Organization 2016).

Each goal had specific targets, and dates for achieving those targets. These targets include (World Health Organization 2016) :

- MDG1: Eradicating abject poverty and starvation;
- MDG 2: Achieving universal primary education;
- MDG 3: Promoting gender balance and women's empowerment;
- MDG 4: Reduce child death;
- MDG 5: Improving maternal health;
- MDG 6: Combating HIV/AIDS, malaria and other diseases;
- MDG 7: To ensure environmental sustainability; and
- MDG 8: To develop a global partnership for development.

For the purpose of this study, this section of the chapter will only address the MDG 6: Combating HIV/AIDS, malaria and other diseases. In his address in the UNAIDS MDG 6 report, the UN Secretary-General, Ban Ki-Moon, remarked that the MDG 6 was instrumental in the massive global mobilisation to improve action against one of the most complex and overwhelming development challenges in the 21st century (UNAIDS 2015). The primary targets of the MDG 6 was (World Health Organization 2016):

- 1) Target 6A: By 2015, to have stopped and reserved the spread of HIV/AIDS.
- 2) Target 6B: To provide, by 2010, universal treatment for HIV/AIDS for all who need it.

- 3) Target 6C: Have ceased by 2015 and begun to reverse the incidences of malaria and other major diseases.

In relation to this study, only target 6A and target 6B will be analysed in view of the relevance to the study. Good progress has been made in accomplishing the Target 6A and 6B. According to UNAIDS (2015: 32), there has been a reduction of 35% in the number of new infection since 2000. A decline of 2.0 million annual new infections has been observed in 2014, as compared to 3.3 million fourteen years ago. Prior to the implementation of the MDGs, there was only a decline of 2% of new HIV infection between 1995 and 1999; however, between 2000 and 2005, they fell by 15%. In addition, there was a 10% reduction of new infections between 2006 and 2010. In sub-Saharan Africa a 41% decline of new infections have been recorded between 2000 and 2014 (UNAIDS 2015: 32).

The decline in new HIV infections marked a defining moment in the HIV/AIDS response. The achievement of reducing new HIV infections from 3.3 million to 2.0 million shows that a shared vision and uniformity through global solidarity can change the course of the HIV/AIDS epidemic. A key indicator adopted to gauge the success of the MGD 6 was reducing HIV prevalence among young people aged 15-24 by 25% (UNAIDS 2015). In the South African context, this age group is more likely to be enrolled at institutions of higher learning. UNAIDS (2015: 33), reports that there has been a 37% reduction among young people. This reduction can be attributed to behavior change, decline in early sexual debut, condom use and fewer sexual partners. This decline highlights that behavior and structural interventions are effective in reducing HIV/AIDS incidences among young people. Accordingly, HEIs should strengthen their behavioral interventions in order to mitigate the spread of HIV/AIDS among students.

With regard to achieving the target of 15 million people on HIV treatment by 2015, data shows that there are currently more than 15 million people on treatment in 2015 worldwide. In 2000, only 8% of people living with HIV/AIDS were on treatment worldwide; however, in 2014 the figure climbed to 72%, which is nine times greater than in 2000. Furthermore, an estimated 76% of people on treatment in sub-Saharan Africa are virally suppressed (UNAIDS 2015: 40). Knowledge of HIV status has been noted as a major gap which is the main barrier to treatment access (UNAIDS 2015: 36). It is evident that the target of achieving universal access to HIV treatment worldwide by 2010 has been accomplished.

In South Africa, the national response to HIV/AIDS focused on stabilising the epidemic and the government has invested significantly in evidence-based prevention and treatment interventions for HIV/AIDS (South Africa 2015). The promulgation of the National Strategic Plan is one of the ways the government is committed to fighting the spread of the HIV/AIDS epidemic and responding to the MDG 6. Key interventions implemented by the national department of health include scaling up free antiretroviral therapy (ART), distribution of condoms and substantial improvements to access condoms particularly at health facilities and public facilities including institutions of higher learning (South Africa 2015: 85). Because students tend to be sexually adventurous, often taking part in age-disparate sexual relations, unsafe sex and multiple sexual partners, distribution of condoms and access to ART should be intensified within university campuses. It can also be contended that key interventions developed for the general public may not be relevant for students; accordingly appropriate interventions targeted specifically for students should be developed to address the overall HIV risk profile of students.

South African data and Information for the MDG 6 shows that new HIV infection among population aged 15-24 have been consistently declining in the country from 10.3% in 2005 to 7.1% in 2012; however, this is falling below the MDG 2015 target of 8.7%. (South Africa 2015: 85). As stated in the population-based HIV prevalence survey in South Africa, decline in new infection rates may be attributed to the effect of interventions targeted to stop the spread of HIV/AIDS within this age group. These interventions include peer education, HIV Counseling and Testing (HCT) and medical male circumcision campaigns in institutional settings (South Africa 2015). The approach of implementing key interventions particularly for students is vital because it will contribute meaningfully to the body of knowledge needed in addressing different risky sexual behaviors between young people in general and students. South Africa has made significant progress in achieving the MGD 6. Great developments in confronting the HIV/AIDS epidemic are evident through policies such as the National Strategic Plan and the ART programme.

It is important to outline the key historical moments that have shaped the HIV/AIDS epidemic over the past 30 years. This timeline of the HIV/AIDS epidemic is adapted from AVERT (2012).

Pre-1980

As noted earlier, HIV/AIDS was widely believed to have originated in Kinshasa, in the Democratic Republic of Congo around 1920 when HIV crossed from chimps to humans.

1980s

In 1981, rare lung infection cases were reported among previously healthy gay men in Los Angeles. By the end of 1981, 270 cases of severe immune deficiency were reported among gay men.

In June 1982, reports gathered among gay men in Southern California suggested that the gay-related immune deficiency was caused sexually. In September of the same year the term “AIDS” was used for the first time to describe the epidemic. More cases of AIDS were reported in various European countries and in Uganda medical doctors reported cases of a new fatal disease which locals named “slim”.

In 1983, HIV/AIDS was linked with heterosexual sex. In November the World Health Organization (WHO) held its first meeting to evaluate the state of HIV/AIDS globally and initiated international surveillance.

In 1985, the first international AIDS conference was held in Atlanta Georgia hosted by WHO and the United States Department of Health and Human Services (HHS). By the end of the year, there were 20, 303 cases of HIV/AIDS reported from every region in the world.

In 1986, the virus that caused AIDS was officially called HIV (Human Immune Deficiency Virus).

In 1987, the Global Program on HIV/AIDS was launched by WHO. The program aimed to raise awareness, provide financial support to countries, enhance NGOs participation, conduct research, create evidence-based policies and protect the rights of people living with HIV/AIDS. The first antiretroviral drug, Zidovudine (AZT) was approved as treatment for HIV/AIDS.

In 1988, the 1st of December was declared as the first World AIDS Day.

1990s

In 1991, the Red Ribbon Project was launched to create a symbol of compassion for people infected and affected by HIV/AIDS. The red ribbon became an international symbol of AIDS awareness.

In 1994, AZT was recommended to prevent the mother to child transmission of HIV by the United States Public Health Service.

In 1995, a highly active antiretroviral treatment (HAART) was approved.

In 1996, the Joint United Nations Programme on AIDS (UNAIDS) was established to advocate for global action on the epidemic and to coordinate HIV/AIDS efforts across the United Nations. By the end of 1996, about 23 million people were living with HIV/AIDS.

In 1999, WHO announced that HIV/AIDS was the fourth biggest cause of death worldwide, and the number one killer in Africa.

2000s

In 2000, the Millennium Development Goals were adopted by the United Nations which included ending new infections and reversing the spread of HIV/ADS.

In 2002, the UNAIDS declared HIV/AIDS as the leading cause of death in sub-Saharan Africa

In 2003, the United States President's Emergency Plan for AIDS Relief (PEPFAR) was created by former President George W. Bush to mitigate HIV/AIDS in countries with high HIV infections.

In 2006, male circumcision was found to reduce HIV transmission by 60% in heterosexual sex.

In 2010, the Centre for the Aids Programme of Research in South Africa 004 microbicide trial was hailed a success after results showed that tenofovir gel reduces the risk of HIV infection in women by 40%.

In 2013, UNAIDS reported that AIDS-related deaths had fallen by 30% since their peak in 2005.

The overview of the HIV/AIDS epidemiology presented above is dominated by biomedical events. However, particular attention should be paid to HIV/AIDS as a multidimensional epidemic. This means that social determinants of HIV/AIDS should be considered when addressing issues of periodisation of HIV/AIDS particularly in South Africa where socio-economic inequality, labour migration, and political instability have contributed to the management of the epidemic.

2.4 Historical background of HIV/AIDS in South Africa

HIV/AIDS was first reported in South Africa in 1982. According to Webb (1997: 14), two cases of AIDS were identified in male homosexuals in South Africa. In the early part of the HIV/AIDS epidemic in South Africa (1982-1987), HIV/AIDS was mainly linked to homosexuals, blood transfusion recipients and haemophiliacs. In the early-1980s, the first peak in the HIV/AIDS

epidemic occurred in male homosexuals who were being diagnosed with HIV/AIDS-related opportunistic diseases (Karim and Karim 2010: 136). The first two cases were seen in white homosexuals. It was not until July 1991 that the number of heterosexual transmitted cases equaled the number of homosexual cases. In the early years of the HIV/AIDS epidemic, the disease was primarily identified as a “gay white disease” (Abdool Karim 2010: 138).

The first cases of HIV within the black community were seen in the mid-1980s among mine workers and these are believed to have been presented by migrant workers from what was then named the Central African AIDS Belt (Kenya, Uganda, Rwanda, Burundi and Tanzania). Similar findings in the mid 1980’s reported by Fourie (2006: 55) found that HIV infection in migrant workers was a primarily Pattern II epidemic, spread through heterosexual intercourse. This was seen to be spreading South-Westwards, following major truck routes (Quintero Johnson, Harrison and Quick 2013: 14). According to Lurie (2005: 20), migration was observed as a channel that spread out the HIV infection towards the north of Gauteng region. Furthermore, Crush (2011: 7) notes that in Southern Africa migrants’ socio-economic environment generates various opportunities for mobile and transactional sex, which leads people to engage in high risk sexual behaviour. Hence, migrant workers are subject to social conditions that make them vulnerable to several risks including HIV/AIDS and sexually transmitted infections (Anon 2012: 1).

A number of studies have shown that migrants are at greater risk of infection with HIV and other STIs (sexually transmitted infections) than non-migrants, both in South Africa and elsewhere (Lurie 2010: 304). In South Africa migration is commonly associated with rural men working on the gold mines, although population movement in the Southern Africa region takes many forms. High rates of STIs have been found in gold miners and the rate of HIV infection among migrants is 50% higher than among their non-migrant counterparts, (Lurie, 2010: 306).

A study conducted in South Africa has shed light into the link between migration and HIV. The study revealed that HIV prevalence among migrant men to be 25.9% compared with 12.7% among non-migrant men. Migrant men were 2.4 times more likely to be HIV infected than non-migrant men (Lurie, Williams, Zuma, Mkaya-Mwamburi, Garnett, Sweat, Gittelsohn and Karim 2003: 149-156). Other studies have shown that mobile workers such as long-distance truck drivers have a higher probability of HIV infection than their communities of origin. It has been noted that migrant labourers, and those constantly migrating between urban and rural settings, who have

parted for a longer period from their families, are likely to visit sex workers or engage in multiple sexual relationships, contract HIV and then return to their primary sexual partners to spread the virus in their home communities (Fourie, 2006: 32). Decosas (1998:12) demonstrates that the profile of HIV infection in West and Southern Africa is directly related to the regional pattern of labour migration.

Although labour migration has been primarily identified as a major contributory factor to the spread of HIV/AIDS in sub-Saharan African countries, other factors that facilitate the spread of the virus include armed conflicts which perpetuates the risk of sexual violence and leave a large number of vulnerable women unaccompanied to become easy prey for rapists. Child survivors of war who resort to transactional sex as a means of economic survival also perpetuate the vicious cycle of HIV/AIDS (Ateka 2001: 1168). Disparity of gender power relations and cultural mores that allow males to have multiple sex partners contribute to the high HIV/AIDS prevalence in this region (Hellandendu 2012: 144).

South Africa's HIV/AIDS epidemic remains the largest in the world with 19.1% HIV prevalence in the 15-49 age groups. According to the UNAIDS (2016b: 47), a total number of 7.1 million people were living with HIV/AIDS in South Africa in 2016 (see Figure 2.4). Albeit early cases of HIV were identified among homosexual white men; South African townships have been recorded to have high HIV prevalence where many black South Africans live. In South Africa, townships continue to be characterised by absolute poverty, unemployment and poor primary health (Cain, Pitpitani, Eaton, Carey, Carey, Mehlomakulu, Harel, Simbayi, Mwaba and Kalichman 2013: 1). A study conducted by Kalichman and Simbayi (2004: 573) states that black South Africans who reside in townships are more likely to hold distorted beliefs about HIV/AIDS transmission and prevention due to lack of education and awareness programmes.

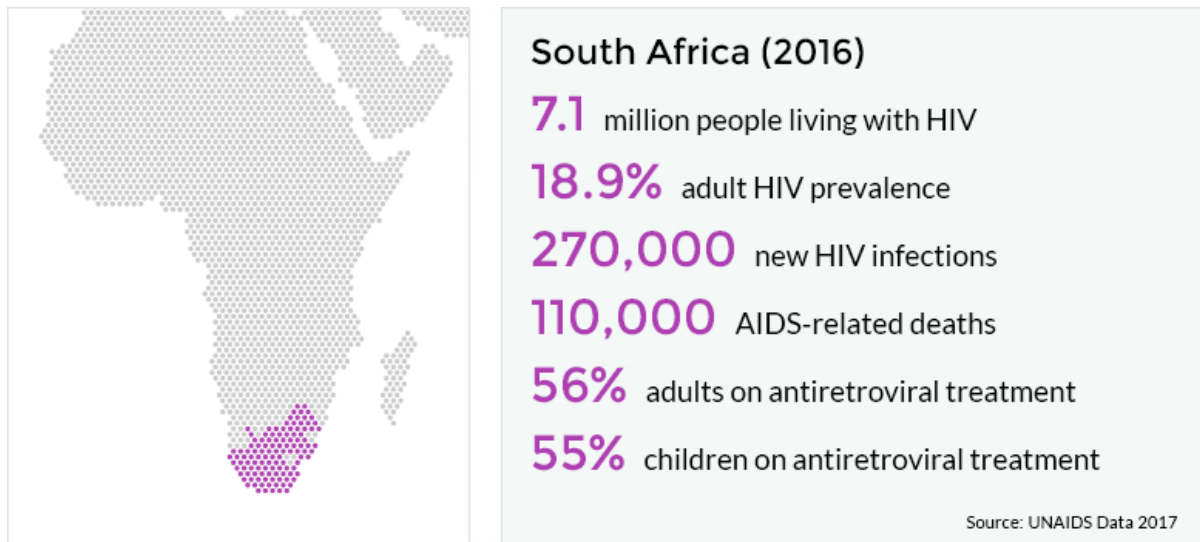


Figure 2. 4: Number of people living with HIV/AIDS in South Africa (Source: Adapted from UNAIDS, 2016b)

Due to limited educational resources and lack of awareness campaigns, distorted beliefs about HIV/AIDS cures such as raping a child and raping a virgin girl are common among township residents in South Africa (Leclerc-Madlala 1997: 368). In addition, many South Africans residing in townships are not well informed about primary modes of HIV/AIDS transmission such as having unprotected sex with an HIV positive individual, contact with blood of an HIV positive individual, multiple sexual partners and mother-to-child transmission during pregnancy, labor and breastfeeding (HIV/AIDS care 2012).

This implies that for communication strategies on HIV/AIDS to be effective, HIV/AIDS education should be incorporated into HIV/AIDS initiatives to infuse accurate and factual information regarding HIV/AIDS. Secondly, this highlights the need for HIV/AIDS education programmes that will influence behavior change and address social determinants of HIV/AIDS. Sociocultural factors such as gender disparity and male dominance, stigma and discrimination, poverty, domestic and sexual violence, and commercialisation of sex have been identified to have contributed significantly to the rapid spread of HIV/AIDS in South Africa (Leclerc-Madlala, Simbayi and Cloete 2009: 15).

In KwaZulu-Natal where the current study focused on the analysis of communication tools for HIV/AIDS education by student services at universities has the highest HIV/AIDS prevalence in South Africa, estimated at 18.8% in 2013 (Statistics South Africa, 2013: 4). The HIV/AIDS

infection rate among those in the 20-24 age group is estimated at 26.6% (Shisana, Rehle, Simbayi, Zuma and Jooste 2009: 198). In the South African context, this is the age group that is likely to be studying in universities.

2.5 Response to the HIV/AIDS epidemic during Apartheid South Africa

In South Africa, the initial response by the government to HIV/AIDS developed slowly and reached new depths of denial and inaction for various ideological reasons. The response to the Aids epidemic in South Africa was tainted by government inaction, pseudoscience, denialism, dissident beliefs, conflict and harmful practices (Van Dyk 2012: 9). This view is supported by Tomaselli (2006: 28), who argues that for the past two decades, the South African response to the HIV/AIDS epidemic has been embedded in repudiation, confused policy developments, controversial medical responses and continuous ideological battles between anti- HIV/AIDS activists and the government.

During the 1980s, the South African socio-political environment offered a fertile ground for the rapid spread of HIV/AIDS infection. This is due to governmental inaction or misapplied interventions to address the HIV/AIDS epidemic (Fourie 2006: 51). Given the fact that the South African society was previously defined on racial separation and was characterised by unequal distribution of resources, abject poverty and gender inequality (Fourie 2006: 51), it is reasonable to speculate that non-biomedical factors such as poverty, migration and political turmoil exacerbated the spread of HIV/AIDS within previously disadvantaged communities and marginalised groups. In addition, Abdool Karim (2010: 34) reported that *“In the mid-1980s, HIV/AIDS was seen in South Africa as a gay epidemic confined to select high-risk sub-groups within larger urban centres of the country. As a result it evoked minimal response from the government”*. This demonstrates that the inability of South African leaders to acknowledge HIV/AIDS as a threat to human development prevented the implementation of successful policies to mitigate HIV/AIDS when it was initially discovered in the country.

Immediately after the first cases of HIV/AIDS were reported, an official acknowledgement of the potentially perilous impact of HIV/AIDS was announced in 1987 by the then Minister of Health, Dr. Wille van Niekerk who acknowledged publicly that *“although a relatively small number of cases has been diagnosed so far in South Africa, the disease certainly has the potential to become a major problem”*(Grundlingh 2001: 127). It was during this period that requests were made,

particularly from medical circles that HIV/AIDS should be declared a notifiable disease and be addressed with a sense of urgency. This opinion was however excluded by medical representatives such as Dr. Dennis Sifris, head of the HIV Clinic in Johannesburg who clearly stated that “*the association of HIV/AIDS with marginalized groups meant that the government could ignore the problem because it was supposedly only affecting ‘expandable’ people and not the general public*”. Their inaction to respond to the epidemic was that stigmatised and racially-ostracised people were involved (Grundlingh 2001: 126). It is interesting to note that the government did not see the urgency to address HIV/AIDS in its initial stages because of the belief that the virus did not affect the heterosexual group. It is evident that the government did not protect equal rights for people infected with HIV/AIDS.

It is therefore reasonable to speculate that the delay by government in declaring HIV/AIDS as a notifiable disease contributed to the HIV/AIDS related stigma, discrimination and human rights violation of people living with HIV/AIDS that persists to date. Consequently, stigma and discrimination remains the major reasons people are reluctant to go for HIV/AIDS testing, disclose their HIV status and to start antiretroviral therapy (ART). Contrary to government’s response, various non-government initiatives such as the National Progressive Primary Health Care Network (NPPHCN) provide policy formulation, relevant training and focus on advocacy on health care issues. Furthermore, it mobilises and educates communities regarding health related issues. Another non-governmental initiative is the Red Cross Society (RCS) which provides training and organisational development for primary health care workers responded by initiating localised preventive care and support programmes for people living with HIV/AIDS and those affected by HIV/AIDS. The aforementioned non-government organisations responded to the HIV/AIDS epidemic through prevention and care and mobilised treatment and support for those living with HIV/AIDS. Subsequently, the recognition of the need for a more specific response from the government led to the formation of a dedicated AIDS Unit within the National Health Department (Karim and Karim 2010: 34).

The first Aids Advisory Group was established in 1985; the Aids Training and Information Centres (ATICs) was implemented in each province in the country, with an objective of creating awareness and involving communities through educational programmes, and health services provided by trained nurses (Grundlingh 2001: 135). Although the development of ATICs was

funded by the government, they could not make any progress because of the lack of leadership and guidance from the government (Van Dyk, 2012: 9). According to Webb (1997: 17) none of the ATICs was placed in black residential areas. This suggests that HIV/AIDS in South Africa was clearly divided along racial lines and education programmes were implemented based on racial discrimination.

The effects of this racial discrimination are still being felt in the townships where the spread of HIV/AIDS continue to escalate due to the lack of education and awareness programmes (Johnson and Budlender 2002: 21). Due to limited educational resources and skills in the townships and rural areas, levels of knowledge and awareness of HIV/AIDS are substantially lower. Attempts by the government to raise HIV/AIDS awareness have largely failed to reach destitute communities, where the quality of education is poor (Johnson and Dorrington 2002: 8). Instead traditional beliefs and culture contribute to sexual violence in these areas, because township and rural residents are more likely to hold false beliefs regarding HIV/AIDS cures due to a lack of formal education and skills (Kalichman and Simbayi 2004: 574). This implies that further education is required to shift deeply rooted beliefs and attitudes regarding HIV/AIDS.

2.5.1 Government's efforts to nationalise HIV/AIDS awareness campaigns

In an effort to nationalise HIV/AIDS education, in 1989, the first ever condom commercial on South African television was aired on M-Net (Electronic Media Network) and Bop-TV, and not the South African Broadcasting Corporation (SABC). The SABC at that point had turned its back on condom advertising because it was frank and explicit. The aim of the adverts was to educate and inform the general public about HIV/AIDS, transmission and prevention, and the risks involved (Grundlingh 2001: 136). On the other hand, by 1990 the government claimed to have dispensed 25 million condoms yearly through all state family planning facilities and distribution points around the country.

The issue of condom distribution was a complex and intricate matter, because some white people believed that free condoms would encourage promiscuity (Grundlingh 2001: 136). Nonetheless, the condoms were resisted and overlooked by a large part of the population because of insufficient knowledge on the importance of condom use (Die Burger 1990: 5). In other words, the government's efforts to provide access to condoms was interpreted as a sign to encourage avenues

for sexual networking such as multiple concurrent sexual partnerships were HIV/AIDS could easily be transmitted.

According to Abdool Karim (2010: 41), a major step taken to address the misconception of HIV/AIDS in South Africa was the formation of the National Aids Convention of South Africa (NACOSA) in 1993 – a coordinating body involving representatives of the apartheid government and representatives of anti-apartheid Aids activists. The government explored all avenues to educate and to inform the public about HIV/AIDS. An unfamiliar method used was placing adverts of HIV/AIDS on 800 taxis nation-wide. Drivers' training on HIV/AIDS was provided and drivers were able to enlighten and advise their passengers' about the epidemic (Grundlingh 2001: 141). This campaign was aimed primarily at commuters who reside in the townships, because they rely on taxis as a means of transport and they can help disseminate any HIV/AIDS related information to their friends and families in the townships and rural areas.

The National Health Department stated that taxis are literally the *“best vehicle to carry the HIV/AIDS message because it reached further than any newspaper, radio or television”* (Grundlingh 2001: 141). Although taxis are the most commonly used mode of public transport in South Africa, this suggested that other commuters using rail, air and water transport were excluded from the HIV/AIDS awareness campaigns. Furthermore, this proposed racial stereotyping, because taxis are regularly used by black people. Therefore the advertisements were aimed at black people, which suggest that HIV/AIDS was perceived as a disease almost completely amid black people.

Rather, a determined attempt to educate and inform learners about HIV/AIDS was through the “Aids and lifestyle education package” implemented by the Department of Education and Training in 1991, which was compulsory in all white secondary schools. The programme focused on the needs of teenagers, parents and educators. However, in 1993 the programme was extended to black high schools and was mandatory in its curriculum. Even so, criticism rendered these programmes ineffective (Grundlingh 2001: 143). According to Webb (1997: 20) the criticism was based on the use of highly metaphorical language rather than clear and simple information.

2.6 Response to HIV/AIDS in a democratic South Africa: Implementing the National Aids Plan (NAP)

With the appointment of the first post-apartheid government, the Mandela administration was confronted by the urgent need for reconciliation and nation building which took precedence over the need to address HIV/AIDS with assertion and insistence (Abdool Karim 2010: 35). When Nelson Mandela took office in 1994, as a democratically elected president, there was great anticipation for the government to address the HIV/AIDS epidemic with dedicated and effective measures, especially with the adoption of the first comprehensive National Aids Plan by NACOSA (Fourie 2006: 107). NACOSA drafted a far-reaching National Aids Plan (NAP) which was promptly accepted as the policy of the Government of National Unity in July 1994 (NACOSA 1994: n.p). The NAP's objectives were (Fourie 2006: 108):

- To prevent new HIV infections;
- Provide care among people living and affected by HIV/AIDS;
- Provide interventions to reduce HIV/AIDS stigma in communities;
- Encourage HIV negative people to retain their status;
- Create platforms for all South Africans to engage in efforts to combat the spread of HIV and AIDS;
- Identify tools that could be used to fight against HIV/AIDS, and
- Ensure full participation of communities in the development, planning and implementation of the plan.

It can be gleaned from the goals of the NAP that the government aimed to mitigate the impact of the HIV/AIDS epidemic through policy implementation. However, the goals of the NAPs were too ambitious to contend with the high rate of HIV/AIDS infection in the setting of a radical political transformation. Moreover, the goals of the NAPs were not practical in terms of budget realities (Fourie and Meyer 2010: 111), and implementation capacity, hence the crisis of implementation.

Even though the African National Congress (ANC) worked closely with the first non-governmental organisation (NGOs) such as the NPPHCN, the AIDS Consortium, and the National Association of People Living with HIV/AIDS (NAPWA) that emerged in the early 1990s to tackle the HIV/AIDS epidemic, the Mandela administration failed to prioritise HIV/AIDS prevention

(Heywood 2005: 4). It was evident by the end of the Mandela presidency in June 1999 that the NAP policy framework failed dismally in obtaining its goals. Regardless of the assertion that the NAP was a perfect policy that incorporated normative underpinnings and human rights- centred policy prescriptions, the empirical data proved otherwise (Fourie 2006: 108). This is reflected in Table 2.1 which quantifies the growth in HIV/AIDS prevalence figures taken from antenatal clinic surveys, as well as national extrapolations that covered the whole South African population during the period of the NAP being implemented.

Table 2. 1: HIV seroprevalence in South Africa (Source: Adapted from Dorrington and Johnson, 2002)

Year	Women attending antenatal Clinics (%)	Total population
1990	0.8	0.1
1991	1.4	0.3
1992	2.4	0.6
1993	4.3	1.1
1994	7.6	1.8
1995	10.4	2.9
1996	14.2	4.5
1997	17.0	6.3
1998	22.8	8.2
1999	22.4	10.1
2000	24.5	11.7

Table 2.1 demonstrates that the NAP was ineffective. It was unable to accomplish its main goal of reducing HIV prevalence and AIDS-related morbidity and mortality in South Africa (Johnson and Dorrington 2002: 14). It is clear from Table 2.1 that the HIV/AIDS prevalence figure among women attending antenatal clinics in 1994 tripled from 7.6% to 24.5% in 2000 and the national HIV prevalence has increased from 1.8 % to 11.7%, which was during the implementation of the NAP. This clearly highlights that NAP was ineffective in achieving its desired goals.

According to Wouters, Van Rensburg and Meulemans (2010: 174) the causes of the NAP policy failure was due to four dimensions of policy framework. To start with, the content of the policy was impractical in its goals and it completely overestimated the absorptive capacity of the health care system. The difference between policy intentions and policy implementation was by no means limited to HIV/AIDS during the social and political transition. The NAP overrated the economic and human resources at the disposal of the incoming government (Schneider and Gilson 1999: 95). Secondly, in relation to the role players involved in the policy implementation, employing the NAP director within the Health Department was not ideal.

This gave an impression that the epidemic is more of a health issue than a social and developmental issue, and this hindered any multi-sectoral response (Pelser 2004: 176). In addition, the provincial stakeholders entrusted with the implementation of NAP had little control over dysfunctional district structures and minimal network with non-governmental relations. Power struggles between various levels of government further obstructed management and decentralisation of NAP (Marais 2001: 43). Failure to include stakeholders who contributed to the draft of the plan during the implementation phase led to a crisis of implementation. Furthermore, HIV/AIDS was not addressed with a sense of urgency in the early years of the new democracy (Fourie 2006: 112). Thirdly, South Africa had to contend with expanding HIV/AIDS prevalence rates in the context of a democratic transformation (Marais 2001: 44).

The lethargic development of the programme infrastructure, lack of appropriate skills among the new cadres, frequent fights between different HIV/AIDS stakeholders has been noted as deficiencies and gaps in the programme (Van Rensburg and Ngwena 2001: 368). Lastly, the policy implementation process has been a major weakness. This is because the national and provincial department of health were the primary location for the implementation of the programme; NAP became rooted in the medical arena. In addressing HIV/AIDS as solely a public health issue, the policy response negated the social causes, economic and behavioral factors (Van Rensburg and Ngwena 2001: 370). The implementation phase therefore formed a visible gap between the policy intentions and the policy reality, averting the NAP from accomplishing its comprehensive goals (McIntyre and Klugman 2003: 116).

The NAP was implemented when the democratic South Africa's first seminal macroeconomic and developmental framework, the Reconstruction Development Programme (RDP), was being

drafted (Fourie 2006: 109). RDP was the key socio-economic development blueprint of the first democratic government in South Africa (Reitzes 2009: 5). In addition, the RDP draft embraced the principles embedded in the NAP, and the RDP announced the adoption of the NAP as one of its five key elements (Fourie 2006: 109). It is of interest therefore, to assess the relationship between the NAP and the RDP, as both were the nexus of the democratic government in a post-apartheid South Africa.

2.7 HIV/AIDS policy in a post- apartheid South Africa

In 1994, when the new democratic government took office, the health system was faced with many health challenges including HIV/AIDS policy implementation. The public health system has been changed into a cohesive, inclusive national service, but failures in leadership and poor management has resulted in inadequate policy implementation (Coovadia, Jewkes, Barron, Sanders and McIntyre 2009).

Over the last few years, South African HIV/AIDS policy has undergone a partial shift from a divided politicisation of the right to treatment towards controversies regarding implementation of treatment programmes for People Living with HIV/AIDS (PLWHA) (Evensen and Stokke 2010: 151). This suggests that political dynamics associated with HIV/AIDS policy making have produced hurdles for implementing HIV/AIDS policies in a post-apartheid South Africa. According to Fourie and Meyer (2010: 116), during the Mandela administration there were three main phases of HIV/AIDS policy- making that are discernible. The initial phase, 1994 to early 1996 of public policy-making on HIV/AIDS under the Mandela government saw the implementation of the Reconstruction and Development Programme (RDP). Indicators of the shift to a second phase of HIV/AIDS public policy making include: the noticeable failure to implement the NAP effectively, the move from RDP to Growth, Employment and Redistribution Programme (GEAR) and the emergence of an HIV/AIDS policy environment characterised by public scandals such as the Sarafina 2 in 1996, Virodene in 1997 and the announcement from the government that it will not provide AZT (Azidothymidine) to HIV-positive pregnant women. The third and shortest phase of HIV/AIDS public policy making during the Mandela administration was the announcement of a new “partnership against HIV/AIDS” by the then deputy president Thabo Mbeki in an effort to renew government’s commitment against HIV/AIDS (Fourie 2006: 131).

In summary, it can be noted that the Mandela administration was faced with challenges of implementing HIV/AIDS policies at local and national level. Consequently, the policy contestation around HIV/AIDS resulted in failure of ideal content of policies such as the NAP, RDP and GEAR being implemented. As noted, in terms of content, the RDP and GEAR appeared to be the perfect blueprint of an HIV/AIDS public policy.

2.7.1 Reconstruction Development Programme

According to Fourie (2006: 106), during the Mandela administration there were three main phases of HIV/AIDS policy-making that are discernible. The first phase- 1994 to early 1996- saw the implementation of the Reconstruction and Development Programme (RDP) which detained the broad public policy blueprint that would improve the country's socio-political equity. The RDP also functioned as the ideological foundation of other policy measures, including the NAP. Juxtaposing RDP and NAP, the following congruencies are notable: both policies espoused policy-making that would be inclusive, pacifying, stable and consensual, addressing issues using the bottom-up approach, and mainstream measures to ensure that all the relevant policy stakeholders take ownership of the policies (Marais 2001: 45).

The Reconstruction Development Programme was considered as a broad policy blueprint that will bring a positive change in South African socio-political landscape (Fourie 2006: 106). The RDP White Paper describes the RDP as *“an integrated, coherent socio-economic policy framework. It seeks to mobilise all our people and our country's resources towards the final eradication of apartheid and the building of a democratic, non-racial and non-sexist future. It represents a vision for the fundamental transformation of South Africa”* (African National Congress 1994: 1). It can be noted that the NAP reflected the broad policy objectives of the RDP by prioritising the intersectoral approach and contextualising HIV/AIDS within the RDP paradigm. This echoes the inheritance of normative views during the adoption of the NAP, which suggest that old structures and conflicting views regarding HIV/AIDS were embraced in the policy context. Consequently, these shortcomings hindered the implementation of the NAP policy. Nonetheless, the RDP blueprint aimed to consolidate democracy and promote capacity building.

Through the RDP, it can be inferred that the African National Congress was determined to integrate growth, development, reconstruction, and redistribution into a cohesive policy. The RDP base document highlighted the following, in conjunction with other things (Fourie 2006: 110):

- 1) To move the health system from curative hospital-based services to primary health care (PHC), with free medical services for pregnant women and children younger than six years of age;
- 2) Generate 2.5 million new jobs in a period of ten years;
- 3) Provision of electricity to 2.5 million households by the year 2000, expanding the number of homes with such access from the then 36 percent;
- 4) Supply 1 million households with clean running water and sewerage systems;
- 5) Provide access to free education;
- 6) Enlarge infrastructure by means of public works programme and;
- 7) Reform state institutions to reflect the racial, class and gender composition of South African society.

It is evident from the aforementioned that the RDP base document was embedded in the need to unite democratisation and the need to encourage sustainable human development. In terms of health care, the RDP stressed a Primary Health Care (PHC) approach to address the provision of health care based on racial differences under the apartheid era (Wouters, Van Rensburg and Meulemans 2010: 174). This accentuates community participation and empowerment, inter-sectoral associations and cost effective- care, in addition to integration of prevention, curative and rehabilitative services (African National Congress 1994: 48).

In addressing primary health care in university settings, it is imperative for campus clinics to provide student friendly services that cater for registered students and staff regardless of color, race and gender. Prioritising of health care services in universities can mitigate the spread of HIV/AIDS and other sexual related infections among students and will raise awareness about the HIV/AIDS epidemic. In addition, campus clinics should focus on promoting healthy lifestyles and prevention of illness.

The RDP also outlined the implementation of programmes to combat the spread of HIV/AIDS and sexually transmitted infections, provision of early treatment for these diseases at all health facilities and mass education programmes, which includes mass media, schools and community organisations is paramount (African National Congress 1994: 48).

In assessing the basic principle of the RDP in terms of health care, it is notable that the democratic government aimed to provide equitable access to primary health care services and to improve the

healthcare system by improving infrastructure, reducing the cost of healthcare and ensuring quality of care at primary health care institutions. Nonetheless, the prospects of success for the RDP policy proved otherwise. The RDP policy was marked with failure due to numerous inherent weaknesses. Implementation was noted as a shortcoming, unrealistic target set and lack of experience by new appointed government officials worked to shorten the life of the RDP (Garrity 2007: 11).

Even though the NAP and RDP seemingly presented solutions to many of the development problems facing South Africa, both policies failed to make any substantial impact on the country's rapidly escalating AIDS epidemic. Fourie (2006: 106) states that in April 1996 (within 2 years), the RDP was abandoned and replaced by the monetarily conventional Growth, Employment and Redistribution Programme (GEAR).

2.7.2 Growth, Employment and Redistribution Programme

The Growth, Employment and Redistribution programme (GEAR) aimed at providing a suitable economic environment, designed to ensure an acceleration of economic growth and a considerable job creation (Venter 2003: 124). The GEAR policy framework was seen as a strategic policy to transform and rearrange the economy (Mhone and Edigheji 2003: 23). The Growth, Employment and Redistribution programme was introduced in 1996, in place of the RDP to be the new macroeconomic keystone of the government (Fourie 2006: 121). The GEAR, was fostered to introduce faster economic growth that will provide resources to meet social investment needs (Reitzes 2009: 10).

The GEAR, has identified government spending on social services as the primary mechanism for wealth distribution. However, in the context of the challenges of the HIV/AIDS epidemic, the restriction of government expenditure on health and other services has been widely questioned (Coovadia *et al.* 2009). This suggests that essential facets of primary health care have been ignored in order to decrease government spending, while a substantial human resource crisis is facing the health sector. Furthermore, the rapid escalation of HIV/AIDS cases have contributed and accelerated the challenges faced by the health sector.

According to Arndt and Lewis (2000: 2), when analysing the macro impact of HIV/AIDS, there are various significant features of the HIV/AIDS epidemic that are likely to have extensive economic implications such as high HIV infection among young people. As a result, morbidity

among young people reduces life expectancy and declines average labor production. GEAR's main goal was to upsurge employment. However this did not materialise (Reitzes 2009: 11).

Addressing unemployment and HIV/AIDS in South Africa poses major challenges for economic growth. HIV/AIDS is a severe constraint on current economic growth because those who are severely ill cannot obtain a qualification to work, which represents loss in economic output. HIV/AIDS impacts on the economy in various ways. The impact may be direct, as when a household loses a bread winner, or a company loses a manager through HIV/AIDS, or indirectly, as when large numbers of the population are affected by HIV/AIDS with adverse consequences for the gross domestic product (GDP) of a country (Levinsohn, McLaren, Shisana and Zuma 2013: 2).

Furthermore, age cohorts with the highest unemployment are essentially the same as those with the highest HIV prevalence rates (Levinsohn *et al.* 2013). Given the high levels of youth unemployment in South Africa, this means that young people face the highest HIV/AIDS infection rate. This suggests that there is a direct correlation between unemployment and HIV/AIDS in South Africa, particularly among young people.

Thus, HIV/AIDS poses social and economic challenge in this age group. It is reasonable to speculate that high levels of unemployment, poverty and economic inequality intensifies the high HIV/AIDS prevalence among South African youth. Therefore, the goal of GEAR of restructuring the economy could not materialise due to poverty which is underpinned by scarce employment opportunities, low levels of education and poor access to economic assets. Poverty is further exacerbated by the increase of HIV/AIDS infection. The implications of the epidemic placed pressure on individuals and institutions that address its direct effects, such as the health care system for those infected with HIV/AIDS and social services for the care of dependents of HIV/AIDS victims (Arndt and Lewis 2001: 1).

2.7.3 Politics of HIV/AIDS policy making and the implementation crisis

The first democratic government made impressive gains to widen economic opportunities for the poor, sustain poverty reduction, and improve social development. However, Mandela's government was faced with so many challenges in a new democratic era that HIV/AIDS and its co-infected TB were marked trivial. The country was plagued by controversies caused by the

Sarafina 2 scandal in 1996, where R14, 27 million of the money donated by the European Union was used to produce a single AIDS awareness musical play. *Sarafina 2* was criticised for its content and its key messages were attacked for falling short of the intended target market. Another scandal was the Virodene scandal in 1997, when the government supported a so- called cure for Aids consisting of toxic industrial solvent (van Dyk, 2012: 9). The most catastrophic omission of the Mandela government was denying pregnant women with AZT (zidovudine) to prevent mother-to-child transmission in 1998, four years after it was proven to be successful in the United States. These events led to an ineffective third phase of public policy-making on HIV/AIDS during the Mandela administration (Fourie, 2006: 107).

2.7.3.1 Thabo Mbeki's denialism

Following the second democratic elections in 1999, Thabo Mbeki took office as Head of State. During his term as president, Mbeki was faced with intense policy implementation demands to address the fast-growing HIV/AIDS epidemic. This remains South Africa's darkest days in response to the AIDS epidemic (Van Dyk 2012: 11). Mbeki's era was characterised by its responses of errors in AIDS policy and its inability to address the challenge that AIDS posed to South Africa, (Abdool Karim 2010: 35). Mbeki was associated with AIDS dissidents in a denial viral causation of AIDS, who also questioned the extent of the infection and the effectiveness and safety of anti-retroviral therapy (Mbali 2003: 318). Mbeki's denialism became clear in 2000 when he assembled a Presidential Advisory Panel on AIDS and included nonconformist scientists as Peter Duesburg and David Rassnick, who argued that HIV was not the cause of AIDS, and insisted that HIV tests are inaccurate and anti-retroviral causes AIDS deaths (Schüklenk 2004: 61).

Mbeki's government on AIDS management was portrayed as controversial by the local and international media, particularly at the 2000 International AIDS Conference, which took place in Durban where Mbeki utilised this global forum to echo his dissidence. Mbeki stated that not everything could be "blamed on a single virus" and that more people around the world died of poverty than AIDS (Mbali 2003: 319). Mbeki's view was supported by his Health Minister Manto Tshabalala- Msimang, who continued to publicly support untested and unlicensed 'vitamin' supplements as a cure for AIDS, and her promotion of vegetables like beetroot, garlic and lemon as an alternative for antiretroviral treatment at the International Aids conference in Toronto in 2006 (Van Dyk 2012: 10).

The former Health Minister urged the use of nutrition instead of anti-retroviral as treatment for HIV/AIDS (Fourie 2006: 149); because drugs were too expensive to parallel import or to produce locally (Deane 2005: 541). New hope came in when Deputy Minister Nozizwe Madlala- Routledge took over South Africa's response to the AIDS epidemic. Her dogmatic views resulted in her dismissal by President Thabo Mbeki in 2007 (van Dyk, 2012: 10). Mbeki ultimately surrendered to internal and international pressure to change his views on questioning established scientific knowledge on HIV/AIDS, although he at times resorted to his dissident views when challenged (Nattrass 2004: 53).

2.7.3.2 Jacob Zuma's response to the HIV/AIDS epidemic

When President Jacob Zuma took over the presidency in 2009, South Africa was fraught with denialism and controversies surrounding the HIV/AIDS epidemic. President Zuma himself was caught in controversy due to certain HIV-related remarks he made. Zuma was accused of raping, a 31-year-old family friend and claimed he took a shower to minimise the risk of contracting HIV. As a result, Zuma was labeled a traditionalist with no respect for gender rights. Zuma was further condemned for setting a bad example to his followers, particularly in the context of his leadership position in the HIV/AIDS epidemic (Stent 2008: 63). Nonetheless, the Zuma administration prioritised the treatment of HIV/AIDS and prevention of new infections. Jacob Zuma and his new administration, with Dr Aaron Motsoaledi as Minister of Health dedicated themselves to implementing the five- year National Strategic Plan for both HIV/AIDS and TB (Van Dyk 2012: 11). Moreover, Jacob Zuma announced on World Aids Day in December 2009, new key interventions to improve antiretroviral therapy access to marginalised groups (such as pregnant women and patients with HIV-TB co-infection) to decrease the burden of HIV/AIDS, to address maternal and child mortality and lastly to improve life expectancy (Karim and Karim 2010: 35).

It is notable that the South African HIV/AIDS policy has changed drastically under the leadership of President Jacob Zuma. The establishment of the national- scale HIV/AIDS prevention programs such as the HIV/AIDS counselling and Testing (HCT) campaign, launched in 2010 and the provision of free HIV/AIDS treatment has made significant progress in mitigating the spread of HIV/AIDS (Joachim 2013: 1).

Scientific evidence shows that 20 million South Africans have been tested for HIV/AIDS since the implementation of the HCT campaign in 2010, surpassing the target of 15 million. In 2010, there

were only 490 health facilities offering ART treatment, however, this number has increased to 3600 by 2015 (Bodibe 2015: 1). It is evident that the Zuma administration has invested immensely in comprehensive prevention strategies to mobilise HIV/AIDS knowledge and change in risky behavior. Although there are numerous challenges faced by the government in curbing the HIV/AIDS epidemic, the current government has shown commitment in HIV/AIDS management. This commitment is further demonstrated through the new National Strategic Plan on HIV, STIs and TB for 2012-2016, which builds on the achievements of the previous National Strategic Plan 2007-2011 and the National Strategic Plan for 2000-2005.

2.8 National Strategic Plans

The National Strategic Plan (NSP) was introduced to establish health rights and health equity for the purpose of overcoming inequalities in health care and restoring human dignity (Kondlo and Maserumule 2010: 118). The National Strategic Plan for HIV/AIDS, Sexually Transmitted Infections (STIs) and Tuberculosis (TB) was groundbreaking in the country's response to the dual epidemics of HIV/AIDS and TB. The NSP is an outline to address and guide key players whose work is associated to HIV/AIDS, STIs and TB in South Africa (SANAC 2010: 4). The Strategic Plans to be discussed focused on the following periods: 2000-2005, 2007-2011 and 2012- 2016.

Table 2.2 highlights the prevalence of HIV/AIDS during the periods under review, with the NSP framework.

Table 2. 2: HIV prevalence estimates and the number of people living with HIV, 2002- 2014
(Source: Adapted from Statistics South Africa, 2014)

Year	Prevalence					Incidence	HIV Populatio n (millions)
	Women 15- 49	Adults 15-49	Youth 15- 24	Total Population		Adult 15- 49	
2002	16.7	15.8	14.1	9.0		1.64	4.09
2003	16.9	15.9	13.2	9.1		1.64	4.20
2004	17.0	15.9	12.5	9.2		1.69	4.29
2005	17.1	15.9	11.9	9.3		1.73	4.38
2006	17.3	15.9	11.5	9.4		1.69	4.48
2007	17.5	16.0	11.1	9.5		1.59	4.61
2008	17.7	16.2	10.8	9.7		1.47	4.75
2009	17.9	16.3	10.4	9.8		1.36	4.88
2010	18.0	16.5	10.1	9.9		1.29	5.02
2011	18.2	16.6	9.7	10.0		1.25	5.14
2012	18.3	16.6	9.3	10.1		1.16	5.26
2013	18.4	16.7	9.0	10.1		1.14	5.38
2014	18.5	16.8	8.7	10.2		1.11	5.51

2.8.1 National strategic plan for 2000-2005

The National Strategic Plan for 2000-2005 served as South Africa's guide to the HIV/AIDS epidemic. The plan acknowledged that no single sector, ministry, department or organisation is solely accountable for eradicating the HIV/AIDS epidemic (South Africa. Department of Health 2000: 6). Therefore, all government departments, organisations and stakeholders adopted the document as a basis to create their own strategic plans that will effectively complement the government's response to the epidemic (South Africa. Department of Health 2000: 6).

This suggests that the new government embraced the need for a multiple approach to address the HIV/AIDS epidemic by involving external stakeholders such as civil societies and non-government organisations. The primary goals of the NSP of 2000-2005 were to lessen the number of new infections, particularly among young people and to reduce the impact of HIV/AIDS on individuals, families and communities. The NSP of 2000-2005 was structured according to four areas, namely (South Africa. Department of Health 2000) :

1) Prevention

The goal was to promote safe and healthy sexual behavior and to create easy access to voluntary testing and counselling. In retrospect, however, it is evident that the target to reduce the HIV/AIDS incidence did not materialise as the HIV prevalence in 2002 escalated from 4.9 million to 4.38 million in 2005 (As shown in Table 2.2). It is also noticeable that post 2005 the HIV prevalence continued to escalate.

However, reports on the status of HIV/AIDS communication campaign during the NSP 2000-2005 period indicate that various HIV/AIDS awareness programmes, including Soul City, Khomanani and love Life made enormous progress in reaching out to the general population and becoming well known for disseminating HIV/AIDS information (South Africa. Department of Health 2007: 46). Despite the awareness made by these campaigns, behavioral change still remains a problem. Although, the quantity of male condoms acquired and distributed during the NSP 2000-2005 improved significantly, consistent condom use among young people is still not optimal (South Africa. Department of Health 2007).

This suggests that the NSP 2000-2005 failed to accentuate strategies that are designed to influence behavior change rather than simply raise awareness.

2) Treatment, care and support

The goal was to supply adequate treatment, care and support services in health care structures. Treatment guidelines for HIV/AIDS management and relation conditions in public health division were implemented and training for health care workers was provided. A major developmental milestone was the formation of the National Operational Plan for comprehensive HIV/AIDS Management, Treatment, Care and Support. This plan ensured that a comprehensive package of quality health care is fairly accessible to everyone whilst improving the health care system (South Africa. Department of Health 2007: 48).

Staff training improved, laboratory services were more accessible and physical infrastructure improved. Community and home-based care improved rapidly during the NSP 2000-2005 period and guidelines to train home-based care-givers were developed. Moreover, South Africa has the highest number of people enrolled on antiretroviral therapy in the world (South Africa. Department of Health 2007: 48). This shows that the government's response to the HIV/AIDS epidemic was multi-sectoral and comprehensive.

3) Research, monitoring and evaluation

The goal was to ensure that new research and current approaches on HIV cure research is followed through. In addition, the goal was to conduct policy research and do regular monitoring. New developments in HIV/AIDS vaccine have strengthened community involvement in scientific research. South Africa's efforts in being a key role player in new developments in HIV/AIDS research have met with international compliments (South Africa. Department of Health 2007: 49). Various HIV/AIDS research projects have been commissioned during the NSP 2000-2005 to explore various treatment options in South Africa (South Africa. Department of Health 2007: 49). Although many projects were commissioned during the period of the NSP 2000-2005, a major weakness of the strategic plan was the failure to create a monitoring and evaluation framework to set clear targets and assign responsibilities.

4) Human and Legal rights

The goal was to create an environment that is conducive for caring and supporting people affected and infected with HIV/AIDS. Moreover, to create appropriate legal and policy environment, after 1994, human rights became the epicenter of legal framework addressing health issues in South Africa. Various policies, guidelines and judgments were put in place to protect the rights of people living with HIV/AIDS. Nevertheless, people were not well informed about these rights due to poor communication. Poor resource allocation for human rights education and protection, led to human rights- based response being limited (South Africa. Department of Health 2007: 49). Reviewing the human and legal rights area, it is evident that stigma and discrimination still remain a challenge. Due to HIV-related stigma, people living with HIV/AIDS deter seeking HIV testing, treatment and support.

In summary, the NSP 2000- 2005 increased levels of HIV/AIDS awareness, although behavior change still remains a challenge. Participation in the fight against HIV/AIDS has broadened to

involve agencies. Furthermore, there's been a significant increase of key programmes such as voluntary HIV counselling and testing (VCT), antiretroviral therapy (ART) and prevention of mother to child transmission (PMTCT).

Assessing the progress made during the implementation of the NSP 2000-2005 and taking into account the state of the HIV/AIDS epidemic in South Africa, a second attempt to address the epidemic was inevitable.

2.8.2 National Strategic Plan of 2007-2011

In an effort to address the HIV/AIDS epidemic, the NSP of 2007-2011 aimed to reduce HIV infections by 50% in 2011. The primary goals of the NSP 2007-2011 were to (South Africa. Department of Health 2012: 5):

- 1) Reduce the risk of new HIV infections by 50% by 2011.
- 2) Minimise the burden of HIV/AIDS on individuals, families, communities and the society at large by providing access to quality health care, treatment and support to 80% of people living with HIV/AIDS and their families by 2011.
- 3) The interventions applied to obtain the NSP 2007-2011 goals were structured under four primary areas (South Africa. Department of Health 2007: 10).

Prevention

The objective was to make sure that the majority of South Africans who are HIV negative maintain their negative status. As indicated in Table 2.2, the total number of people living with HIV/AIDS in 2007 was 4.61 million and the figure escalated to 5.14 million in 2011. This means that the NSP of 2007-2011 also failed to achieve its goal of reducing new HIV infections, as a result the new NSP 2012-2016 was formulated.

Treatment, care and support

Reduction of HIV/AIDS mortality and morbidity and its socioeconomic impacts through provision of adequate medical treatment care and support were a priority for this key area. This included increasing access to voluntary counselling and testing, promoting regular HIV testing and addressing special needs of pregnant women and children.

Research, monitoring and evaluation

The NSP 2007-2011 acknowledged monitoring and evaluation as an essential policy and management tool. The NSP 2007-2011 identified national, provincial and local indicators to monitor inputs, processes, outputs and outcomes to evaluate collective progress.

Human rights and access to justice

The priority of this area was to mainstream policies and programs to alleviate stigma and discrimination. As noted in the previous NSP of 2000-2005, stigma and discrimination continue to remain fundamental challenges in managing the HIV/AIDS epidemic.

In retrospect, there are several factors that contributed to the failure of the NSP 2007- 2011, the challenging gap between policy making and policy implementation led to the shortfall in achieving the NSP of 2007-2011 goals (Wouters, Van Rensburg and Meulemans 2010: 181). Fiscal and human resources shortage of the NSP created a policy context that was incapable of confronting a public health issue of the scale of the HIV/AIDS epidemic. In fiscal terms, the HIV/AIDS allocations did not meet the target set by the 2007-2011 NSP (Mukotsanjera 2008: 18).

Furthermore, it was during the global economic recession in 2009 that the Treatment Action Campaign (TAC) activists stated at the 4th Southern African AIDS conference in Durban that reducing HIV/AIDS spending is not an option because HIV is not in recession (Treatment Action Campaign 2009). Nonetheless, even if funds were made available to upsurge HIV/AIDS treatment, the government's delay to address the epidemic in its early years, deferral of treatment rollout and underinvestment in the health sector cannot be reversed in a short period. Schneider, Blaauw, Gilson, Chabikuli and Goudge (2006: 13) stated that even if adequate monetary resources were made available to mount up treatment, years of failure to invest in the public health system cannot be retreated in a short term.

The failure of the NSP for 2007-2011 echoed the call for change in the discourse that shapes the implementation of the National Strategic Plan. Although the content of the NSP 2007-2011 represents an ideal policy that can address the biomedical and socio-economic determinants of HIV/AIDS, it is not sufficient for biomedical and behavioral interventions to try convincing people to change their behavior or persuade them to attend health facilities. Policy implementation of the NSP for 2007-2011 should have created a health-enabling system where community members can facilitate and promote their own health campaigns. A bottom-up approach should be used to

engage community members to be key players in addressing socio-economic determinants of HIV/AIDS. Whilst it is necessary to have a functioning and effective health system, community members should be empowered to engage in health development strategies and interventions in order to create situations that enable behavioral change. This sort of approach will strengthen communities from the bottom up and enhance social cohesion in addressing the HIV/AIDS epidemic at a local level.

The failure of the NSP 2007-2011 led to the implementation of the NSP 2012-2016 which was developed based on the findings and recommendations of the NSP of 2000-2005, NSP of 2007-2011 and the Operational Plan for Comprehensive HIV and AIDS Care Management and Treatment.

2.8.3 National Strategic Plan of 2012- 2016

The National Strategic Plan 2012-2016 is a third National Strategic Plan of South Africa's response to the challenges posed by the HIV/AIDS epidemic and seeks to mitigate the spread of HIV/AIDS and its impacts.

The five goals of the plan are as follows (South Africa. Department of Health 2012: 12):

- 1) Halve at least 50% of new infections by employing a combination prevention approach;
- 2) Recruit at least 80% of patients who are eligible for antiretroviral therapy (ART), with 70% alive and on treatment five years after recruitment;
- 3) Reduce new TB infections and death from TB by 50%;
- 4) Ensure an enabling and accessible legal framework that protects and promotes human rights in order to support implementation of the NSP; and
- 5) Reduce at least 50% of self-reported stigma related to HIV and TB.

The NSP 2012- 2016 goals build on the challenges and successes of the preceding NSP of 2007-2011. Nonetheless, the NSP aims to increase prevention and treatment, as strategic interventions to mitigate new HIV infections. With prevention being a primary goal of the NSP 2012-2016, the aim is to ensure that a great majority of South Africans who have tested HIV negative maintain their negative status. This means that the NSP must be concentrated around young people to infuse behavioral change and impart HIV/AIDS education in this cohort. To reduce new infections, the NSP must increase treatment and uptake of voluntary testing and counseling. To address the issue

of human rights and stigmatisation, the NSP must create a health-enabling community structure that facilitates and supports members of the community infected and affected by HIV/AIDS. The goals of the NSP represent a multi-sectoral approach to address the socio-economic and cultural dimensions of HIV/AIDS in South Africa.

There are four strategic objectives of the NSP, which form the foundation of the HIV, STI and TB response. Effective communication is essential for the execution of the NSP. Each of the NSP strategic objectives entails major communication determination at all levels of implementation (South Africa. Department of Health 2012: 13).

The NSP for 2012-2016 highlights the following key strategic objectives (South Africa. Department of Health 2012: 14):

1) Strategic Objective 1: Addressing social and structural barriers that increase vulnerability to HIV, STI and TB infections

The primary objective of the NSP for 2012-2016 is to address socio-economic, cultural dimensions and behavioral determinants of HIV/AIDS and TB. The focal point of the objective is to promote community youth engagement by providing educational and employment opportunities for young people to keep them at bay from sexual risky behavior. This structural objective further aims to address gender norms and violence directed at persons on the basis of gender.

Taking into account the social determinants (such as risky sexual behavior, poverty) of HIV/AIDS among young people in higher education institutions, the above strategic objective will help address challenges of primary healthcare in university settings, and create educational programmes and strategies that will benefit young people.

2) Strategic Objective 2: Preventing new HIV, STI and TB infection

Secondly, the NSP aims to implement key strategies to avert sexual and vertical transmission of HIV and STIs and TB infection by means of a spectrum of prevention approaches. This comprises of biomedical, behavioral, social and structural interventions that will reduce transmission of HIV/AIDS, STIs and TB. Several combined approaches will be assessed for different target populations. In the context of higher education institutions, prevention strategies are the backbone of effective tools to mitigate the spread of HIV/AIDS among university students. Therefore,

strengthening of prevention strategies at a national level will encourage university institutions to develop comprehensive HIV/AIDS prevention strategies that promote safe sexual practices.

3) Strategic Objective 3: Sustaining health and wellness

The objective here is to attain a major decrease in mortality and ill health due to HIV/AIDS and TB. To achieve this goal, access to sensible and adequate quality diagnosis, treatment and care will be provided. In order to meet this objective, the government will have to scale up the coverage of comprehensive care and treatment, particularly in poor communities where low levels of social and physical infrastructure intensifies vulnerability to the HIV/AIDS epidemic.

4) Strategic Objective 4: Increasing protection of human rights and improving access to justice

Human rights are inextricably linked with the infection of HIV/AIDS, STIs and TB. Lack of knowledge and respect for human rights aggravate the spread of HIV/AIDS, STIs and TB. A major objective of the NSP is to identify the need to constantly assess obstacles to admission of services and cases of stigma and judgment and to implement formal structures that will address such issues. With regard to protecting human rights in higher education, stigma and discrimination should be addressed as they tend to pose a serious challenge in the management of HIV/AIDS.

In protecting human rights in the context of HIV/AIDS, civil society organisations played a pivotal role in promoting and protecting human rights as a response to HIV/AIDS in South Africa.

Lessons from the previous NSPs suggest that even with a good policy, the outcome can be unsatisfactory mainly because of poor policy implementation and lack of engagement with local people. It is evident that for an effective response to the HIV/AIDS epidemic, HIV/AIDS strategies should move beyond sending health messages about risky behavior, distribution of condoms and start addressing issues of power networks, stigma and discrimination and other unidentified factors (for instance, cultural practices) that impede individuals from acting on rational information for behavioral change. The NSP of 2012-2016 should enhance community-led development in addressing the HIV/AIDS epidemic and encourage communities to find sustainable solutions to socio-cultural and economic factors that contribute to the spread of HIV/AIDS. This will create confidence among community members and will reduce the sense of marginalisation that local people feel when dealing with external stakeholders (such as government officials) to find solutions to their health problems.

In consonance to the aforementioned role of the NSP of 2012-2016, the proceeding section will elaborate on the progress made thus far by this policy.

2.8.4 Progress report of the National Strategic Plan of 2012-2016

In assessing the progress against the five main goals of the NSP of 2012-2016, the following has been noted (South African National AIDS Council 2014: 18):

Goal 1: Halve new infections by at least 50% using combination prevention methods

There has been a decrease of HIV incidence (%) in the 15- 49 age group from 1.79% in 2008 to 1.47% in 2012. However, high HIV incidence has been reported in young women aged 15-24 at 2.83%.

As this is the age group that is likely to be enrolled at institutions of higher learning, this suggests that interventions put in place to address structural drivers of HIV/AIDS are not having a desired impact. Although the dynamics of HIV/AIDS are complex and cannot be explained by one variable, various structural drivers are likely to drive the epidemic in HEIs. These structural factors include transactional sex, multi concurrent partners, lack of knowledge of HIV transmission; and make young women vulnerable to HIV/AIDS as compared to their male counterpart. It is therefore important for policy makers and health care providers in HEIs to understand the main drivers of the HIV/AIDS epidemic in implementing outreach programmes, health interventions and tailoring a message that will have a desired effect.

Goal 2: Initiate at least 80% of eligible patients on antiretroviral treatment (ART), with 70% alive and on treatment five years after initiation.

As of March 2013, 2.5 million people have been reported to be on the antiretroviral treatment in South Africa, making it the largest treatment programme in the world. In addition, 2.3 million people are on treatment in the public sector and an estimated 200 000 patients on treatment in the private sector through medical scheme. Availability of HIV/AIDS treatment in campus clinics means that students living with HIV/AIDS can now live longer to graduate and be key players in the South African economy.

Goal 3: Reduce the number of new TB infections as well as death from TB by 50%.

There has been an increase in TB incidence in South Africa, with new cases estimated at 530 000 in 2012, an increase from 490 000 cases in 2009. In addition, 88 000 TB related deaths has been reported in people living with HIV/AIDS. This suggests that slow progress has been made in the NSP 2012-2016 goal of reducing new TB infections and deaths by 50%.

Goal 4: Ensure an enabling and accessible legal framework that protects and promotes human rights in order to support implementation of the NSP.

Progress in programmes designed for key populations including sex workers and men who have sex with men (MSM) has been established. South Africa's response to HIV/AIDS, STIs and TB embrace the human rights approach in protecting and promoting marginalised groups in the right context of HIV/AIDS, STIs and TB. This means that wherever service provision occurs, it is important that it is provided in a manner that supports the dignity of people living with HIV/AIDS or TB. In terms of university campus clinics, ongoing campaigns educating students and staff about discrimination and human rights is needed.

Goal 5: Reduce self-reported stigma related to HIV and TB by at least 50%.

At the time of compiling this report, a pilot stigma reduction programme was being drafted for two districts in the Eastern Cape with an aim of national rollout in areas where stigma is high.

In retrospect, much more needs to be done to accomplish the goal of reducing 50% of self-reported stigma related to HIV/AIDS and TB.

The National Strategic Plan of 2012-2016 has noted four strategic objectives, which form an integral part of the HIV/AIDS, STIs and TB response (South African National AIDS Council 2014: 22):

Strategic Objective 1: Addressing social and structural barriers that increase vulnerability to HIV, STI and TB infections

The NSP 2012 -2016 expressed that until key social and structural drivers of HIV/AIDS are adequately addressed, the response to the HIV/AIDS and TB will be limited. Social factors that have been identified to be the key driver of the epidemic such as substance abuse, sexual abuse, gender disparity and gender based violence have not been completely addressed.

Low skills levels and high dropout rate due to poor quality education in schools, Further Education and Training (FET) colleges, and Higher Education Institutions (HEIs) further aggravate the effect of the structural driver by denying young South Africans the opportunity to be employed and escape poverty.

In order to address HIV/AIDS prevention among young people, the national Department of Higher Education and Training (DHET) created the Higher Education and Training HIV/AIDS programme (HEAIDS) as a national response to facilitate and support HIV/AIDS programmes at public institutions of higher learning in South Africa.

In terms of the current response of the NSP 2012-2016 Strategic Objective 1, more effort should be invested in social and behavior change programmes that will protect young people from HIV risk exposure of HIV/AIDS.

Strategic Objective 2: Preventing new HIV, STI and TB infection

Prevention is the foundation of the NSP. This is noted in the primary goals of the NSP, decreasing incidences of HIV/AIDS by 50% over the five year period of the current NSP. Despite the record of the decline in incidence during the peak of the epidemic in 2003- 2004, HIV incidence remains higher than expected. Consequently, reduction efforts are disappointingly slow. This suggests that investment in prevention efforts should be prioritised.

Nonetheless, it has been noted that greater effort has been made with regard to Strategic Objective 2 in the current NSP of 2012-2016. The National Communication Survey of 2012 reports that 17 million South Africans have tested for HIV, with 10 million having tested in 12 months prior to the survey. On the other hand, HIV Counseling and Testing (HCT) targets set in the NSP have not been met.

Present data shows that Medical Male Circumcision (MMC) lowers the risk of HIV infection in men during heterosexual intercourse by at least 60%. The National Department of Health (NDOH) records that 514 991 medical circumcisions were conducted for the 2012/2013 target of 600 000 medical circumcisions. Accordingly, promoting medical male circumcision and increasing uptake is a key HIV prevention strategy for lowering HIV incidence among men. This points to the needs of HEIs to promote and incorporate MMC in their HIV/AIDS mitigation programmes.

Strategic Objective 3: Sustaining health and wellness

More patients are enrolled on the antiretroviral treatment by the department of health. The 2013 UNAIDS Regional Report records that there has been a decrease in AIDS related deaths in South Africa, where the high HIV epidemic has been addressed through increase in antiretroviral provision. The HIV antiretroviral treatment programme in South Africa is estimated to have saved about 780 000 lives in 2003-2012, increasing the number to an estimated 2.2 million by end of 2016.

Strategic Objective 4: Increasing protection of human rights and improving access to justice

The 2013 National HIV and TB review revealed that informed consent is sought prior to testing for HIV, and those who qualify for antiretroviral treatment are referred to relevant health facilities. Sexual and reproductive health rights of women living with HIV/AIDS are respected and rape survivors are provided with Post-Exposure Prophylaxis (PEP) services. In essence, human rights and access to health care services are respected.

A major role player in the establishment of the NSPs is the South African National AIDS Council (SANAC).

2.9 The South African National AIDS Council (SANAC)

In terms of the National Strategic Plan for 2000, the National AIDS Council (SANAC) was formed in January 2000, substituting the Inter-Ministerial Committee (IMC) on AIDS. The formation of this council was organised by the then Minister of Health Manto Tshabalala-Msimang. The primary objectives of the council is to consolidate political leadership and upsurge civil society involvement in the fight against HIV/AIDS (McNeil 2012: n.p)

According to Fourie and Meyer (2010: 144) SANAC was the natural product of the government's stated commitment to inter-sectoral approach to HIV/AIDS. The objectives of the council are to (SANAC 2016):

- 1) To facilitate dialogue between the government, civil society organisations, and other relevant key players in response to HIV/AIDS, STIs and TB.
- 2) Guide and direct the government on policies and strategies related to HIV/AIDS, STIs and TB.

- 3) Support the multi-sectoral response to HIV/AIDS, TB and STIs as input to improving the social and economic development of South Africa.
- 4) Organise financial resources locally and internationally to fund HIV/AIDS, STIs and TB initiatives.
- 5) Make sure that the targets set in the NSP are continuously monitored and ensure mid and end of term evaluations for the current NSP.
- 6) Establish and support partnerships for an expanded national response in South Africa to HIV/AIDS, STIs and TB among government agencies, non-government organisations, donor funds, agencies of the United Nations, the South African private sector and people living with HIV/AIDS, STIs and TB.

The above roles illustrate that the duties to be fulfilled by SANAC were perceived as an effective interface between the government and the HIV/AIDS civil society. This therefore, suggests that SANAC was regarded as a potential structure to address previous HIV/AIDS scandals that occurred during the Mandela administration. The reality, however, was starkly different from the rhetoric. According to Galloway (2000: 15), within weeks of the SANAC launch, the South African media and a large number of individuals from the South African HIV/AIDS civil society accused SANAC of appointing membership unilaterally and the elected members were government officials. There was a total absence of scientists, clinicians and pharmaceutical company representatives, and the AIDS Consortium (which is a network representing about 200 NGOs).

This painted a negative partnership between the government and other health representatives. It was obvious that the membership of SANAC was not a representative of the HIV/AIDS community. On the contrary, SANAC represented an exclusive government structure that was formed to respond to the HIV/AIDS epidemic. This suggests that numerous HIV/AIDS specialists who could have contributed effectively in advising the government on matters of HIV/AIDS policies and strategies were neglected.

However, it was not long until SANAC was affiliated with key players of the South African AIDS community. The South African National AIDS Council incorporate government, civil society, and the private sector under one umbrella to create a controlled and uniform response to the HIV/AIDS epidemic (SANAC 2016).

Currently, SANAC has 17 different civil society sectors (such as the children's sector, the youth sector, the NGO sector) and these sectors represent a particular section of the society. SANAC defines a sector as a "group of organisations that democratically represents a defined constituency and is appropriately representative around a common theme aligned to the over-arching subject of strategy for HIV/AIDS, STIs and TB"(SANAC 2016). Each sector represented at SANAC have a pivotal role in combating the HIV/AIDS epidemic, STIs and TB with specific reference to the National Strategic Plan of 2012-2016 (SANAC 2016).

It is evident that the participation of civil society actors in addressing structural and social drivers of HIV/AIDS is key to achieving the goals of the NSP 2012-2016. The role of civil society organisations and NGOs is strongly recognised for relating to advocacy and service provision in the context of HIV/AIDS.

2.10 Civil society activism as a response to HIV/AIDS

Globally, civil societies have contributed to the public health arena for many years. They have become more prominent recently, growing in scale and influence, and having a major impact on health policy and issues, predominantly in the area of HIV/AIDS (World Health Organization 2001: n.p).

In the South African context, civil society activism in health care has been noticeable in the domain of communicable diseases such as HIV/AIDS, STIs and TB; notably by the Treatment Action Campaign (TAC). Although, advocacy for inclusive care of people living with non-communicable diseases exists, these are much less visible than the organisations that deals with communicable disease Human Sciences Research Council (2013: 32).

Given the state of HIV/AIDS in South Africa, civil societies play an essential role in meeting human needs, especially of those most vulnerable. With HIV/AIDS being a prominent health concern particularly among young people, civil society organisations use community mobilisation to address community needs, resources and solutions pertaining to HIV/AIDS. This promotes representative participation, accountability and change.

A stakeholder that became instrumental in promoting and advocating for the rights of those infected with HIV/AIDS is the Treatment Action Campaign (TAC).

2.10.1 Treatment Action Campaign

The Treatment Action Campaign (TAC) became the first AIDS activist group to facilitate innovative forms of citizen participation in South Africa. The TAC promotes these activities in multiple sites, ranging from intermediate institutions that function as an interface between the state and the underprivileged, to more temporary, non- institutional forms of participation in environments created by marginalised people themselves (Robins and Von Lieres 2004: 576). TAC was launched in South Africa on the 10th of December 1998 by a small group of political activists on International Human Rights Day. The fundamental agreement within the group was that equitable health care is a human right (Heywood 2009: 15).

TAC was established with the objective of changing government policy to make antiretroviral treatment accessible to poor South Africans (Dubula and Heywood 2011: 30). In addition, Vorster (2015: 6) reports that the TAC's conduct was directed at two terrains of South African society. Primarily, TAC aimed to promote and create awareness about the HIV/AIDS epidemic among South Africans by using peaceful protests. Secondly, the civil organisation disseminated information to demonstrate the unit ability of the government's viewpoint and its delay to respond to the HIV/AIDS epidemic.

This shows TAC's ability to stimulate active and constructive criticism on how to address matters relating to the HIV/AIDS epidemic; moreover, TAC's ability to act correctively in outlining and indorsing government policy.

A remarkable success story of the TAC was the 2002 Constitutional Court ruling where TACs lawsuit to order the government to provide PMTCT was favored (Grebe 2011: 859). To date, the TAC represents public healthcare users across the country and foster awareness campaigns and legal process on critical issues related to access to quality healthcare(Treatment Action Campaign 2016).

Another active participant in the fight against HIV/AIDS in South Africa is the AIDS Consortium.

2.10.2 The AIDS Consortium

The AIDS Consortium (AC) was established in 1992, and is one of the largest non-governmental organisation (NGO) networks in South Africa. The AC serves over 200 associated members in the HIV/AIDS and human rights domain. The primary goal of the AIDS Consortium is to promote a

non-discriminatory response to HIV/AIDS based on people's basic human rights as enshrined in the South African constitution (The AIDS Consortium 2015). The objectives of the AIDS Consortium are (The AIDS Consortium 2015):

- 1) Engage communities in a network that encourage and mobilise change by addressing human rights issues centered on HIV/AIDS.
- 2) To provide direct engagement with AIDS service organisations, individuals and stakeholders to address the needs, issues and challenges facing people living with HIV/AIDS.
- 3) To uphold the philosophy and values outlined in the AIDS charter.

The founding document of the AIDS Consortium (AC) is the AIDS Charter, which outlines the basic human rights of people living with HIV/AIDS. The early days of the HIV/AIDS epidemic in South Africa were marked with uninformed understanding of the human rights issues raised by HIV/AIDS. Stigma and discrimination were extensive, and rapidly became institutionalised. In response to this situation, a Charter of Rights for people living with HIV/AIDS was drafted in 1992, forming the basis for the work of the AIDS Consortium. The Charter was endorsed by local and international organisations such as the Medical University of South Africa, Centre for Health Policy and the European Socialist Group (The AIDS Consortium 2015).

In 2009, the AIDS Charter was re-launched, taking into account the current context of HIV/AIDS epidemic in South Africa. The Charter also complements policy frameworks, such as the National Strategic Plan and the National Health Act. The AIDS Consortium NPC Annual Report of 2013 reveals that the AC implemented six projects under three themes namely, sustained community systems, advocacy and policy change and prevention of HIV/AIDS, TB and STIs across five provinces in response to the Strategic Objectives of the NSP 2012-2016. The following projects were executed to address a particular Strategic Objective as noted below (AIDS Consortium 2013: 10).

Theme: Sustained Community Systems

Project 1: Increase the size community care organizations (Limpopo Province).

Project 2: Improving organisational capacity of twenty five community based organisations (Gauteng Province).

NSP Strategic Objective 1: Address social and structural drivers of HIV, STIs and TB prevention.

Theme: Advocacy and Policy Change

Project 3: Employing interventions to combat HIV/AIDS related stigma in South African communities through community dialogues (North West Province).

Project 1: Increase the size community care organisations (Limpopo Province).

NSP Strategic Objective 4: Ensure protection of human rights and improve access to justice.

Theme: Prevention of HIV/AIDS, TB and STIs

Project 4: Improve uptake of PMTCT services and retention of pregnant mothers and their partners in the PMTCT cascade (Mpumalanga Province).

Project 5: Scaling up HIV combination prevention (Mpumalanga Province).

Project 6: Combination prevention of HIV/AIDS in the Northern Cape Province.

NSP Strategic Objective 2: Prevent new HIV, STIs and TB.

The projects implemented by the AC in several provinces across the country shows the importance of community engagement in mitigating the spread of HIV/AIDS, STIs and TB. Community mobilisation is an essential HIV/AIDS intervention tool to disseminate adequate HIV/AIDS information and support. This suggests that community members are encouraged to talk about HIV testing and counselling, ART uptake, and prevention methods. Therefore, issues relating to HIV/AIDS stigma and discrimination can be well addressed within these community projects. A key player that links community based organisations and non-government organisations that provide HIV/AIDS related services with donors and funding agencies is the AIDS Foundation.

2.10.3 The AIDS Foundation

The AIDS Foundation of South Africa (AFSA) was formed in 1988, and is the first HIV/AIDS NGO to be registered in South Africa. Initially, AFSA acted as an interface between donors and community-based organisations (CBOs) and non-governmental organisations working within the HIV/AIDS sector. The role of the AFSA is to provide ongoing mentoring, technical support and capacity building to CBOs and NGOs dealing with HIV/AIDS (The AIDS Foundation 2016).

However, the AFSA has evolved over the years repositioning itself as a holistic development organisation in responding to the evolving course of the HIV/AIDS epidemic. The AIDS Foundation applies a holistic approach to thoroughly comprehend the social epidemiology of HIV/AIDS within affected communities. Thus, the AFSA rely on joint efforts in the form of partnerships with CBOs and NGOs across the country that are located within close proximity to the target population. This approach has shown to be effective and serves to improve upon various existing intervention employed to address social determinants of HIV/AIDS within these communities (The AIDS Foundation 2016).

The AIDS Foundation of South Africa supports CBOs in under-resourced communities that focus on reducing the impact of HIV/AIDS. Key areas include (The AIDS Foundation 2016):

Prevention: HIV/AIDS education is the cornerstone of HIV/AIDS prevention. Target populations include marginalised and vulnerable groups such as women and children, sex workers and men who have sex with other men (MSM). Behavior change communication and HIV/AIDS interventions leading to positive social change are key priorities of the AFSA.

Care and Support: AFSA form partnership with CBOs that provides antiretroviral literacy (ART) and voluntary counselling and testing.

The aforementioned Civil Society Organisations (CSOs) have been an integral element to the HIV/AIDS response in South Africa. It can be noted from the above mentioned CSOs that each organisation has a different role in mitigating the spread of HIV/AIDS. The comparison between the TAC, the AIDS Consortium and AFSA demonstrate that there is often a different approach to addressing socio-economic, cultural and behavioral determinants of HIV/AIDS. In the context of CBOs, some organisations such as the TAC are more activism/advocacy oriented, while some like AFSA and the AIDS Consortium simply provide HIV/AIDS services. Therefore, it can be argued that some CBOs tend to make a difference to the quality of HIV/AIDS response by the state. For example, the TAC challenged the government to introduce a national programme to prevent mother-to-child HIV transmission (PMTCT). This campaign caught attention of women living with HIV/AIDS, the media and funding agencies (Heywood 2009: 20). Through social mobilisation, TAC advocated for access to HIV/AIDS treatment as a human right. In essence, the TAC has put immense pressure on the government to improve the response to HIV/AIDS and to execute robust interventions to mitigate the spread of HIV/AIDS.

Nonetheless, service oriented CBOs also play a major role in understanding the multiple factors that drive the HIV/AIDS epidemic in vulnerable communities. Although AFSA and the AIDS Consortium may not foster change through activism or advocacy, these CBOs acknowledge varying issues that perpetuate the spread of the epidemic among under-resourced communities, including poverty, unemployment and culture. It can be argued that service oriented CBOs value making participation a custom that leads to development. It is also reasonable to speculate that participatory approaches such as HIV/AIDS youth projects used by service oriented CBOs enable previously marginalised individuals to usher into self-empowerment and active participation. Participation emancipates community members to address and find their own solutions to the HIV/AIDS epidemic without other structures of domination. In this sense, community members are enabled to fully participate in all matters that concern them and become self-reliant.

It is important to increase the recognition of HIV/AIDS as a community issue and to encourage community involvement and participation in HIV related activities. Higher Education Institutions form part of the larger community consisting of students, academic and administrative staff. Similarly, social determinants of HIV/AIDS should be addressed within the education sector. In other words HEIs have a dual role of protecting its stakeholders including students and conducting scientific research to mitigate the transmission of HIV/AIDS within universities.

2.11 Responses to HIV/AIDS from HEIs

Higher education participation in South Africa is at a gross rate of 15.9% as at 2007. Out of the 6.8 million young people in South Africa, an estimated 2.4 million are studying. The highest proportion of students are 18 year olds at 67.1% and 19 year olds at 55.1% in 2011 (Gobind and Ukpere 2014: 346). HIV/AIDS remains a prominent threat to the health of young people in South Africa. Studies conducted among students in South Africa provide overwhelming evidence that students tend to be sexually adventurous (Mulwo 2009; Mutinta and Govender 2012). It suffices to say that the higher education sector have a role in reducing the impact of HIV/AIDS in South Africa.

In November 1998, Professor Brenda Gourley challenged the Association of Commonwealth Universities (ACU) to pay attention to and respond to the impact of HIV/AIDS in Southern Africa universities (Association of Commonwealth Universities 2002: 23). It was only a year later that the tertiary institutions developed an HIV/AIDS policy and held a conference to boost the newly

created HIV/AIDS policy under the theme “Tertiary Institutions against AIDS”. However, the conference was poorly attended and many Vice- Chancellors were absent. The high absenteeism at the conference paints a disturbing picture, as it shows that many universities did not consider HIV/AIDS a serious health issue that can affect the functioning of the entire university. This concludes that ignorance was embedded in the HIV/AIDS epidemic. In other words, silence, denial and fear of stigmatization characterised responses to HIV/AIDS.

On the other hand, a symposium around the Commonwealth Heads of Government was organised by University of KwaZulu-Natal in 1999. The symposia aimed to address HIV/AIDS and other related issues such as social policy and how ACU could serve a longer purpose in promoting a response to the HIV/AIDS epidemic (Association of Commonwealth Universities 2002: 25). At the end of the symposium, a draft HIV/AIDS policy for students and staff was developed and presented to ACU member universities to use as a framework to respond to the HIV/AIDS epidemic (Association of Commonwealth Universities 2002: 25).

In responding to the HIV/AIDS epidemic, in 2001 the National Plan on Higher Education (HE) was announced by the then Minister of Education, Professor Kader Asmal to facilitate the management of HIV/AIDS in higher education. The essential principle was that HIV/AIDS should be treated in all relevant respects like any other life-threatening disease (Chetty 2000: 56). In addition, a study was conducted by the South African Universities Vice-Chancellors Association (SAUVCA) and the Association of Commonwealth Universities (ACU). As a result, two key organisations were established to assess the response to the HIV/AIDS crisis in higher education institutions. However, the findings of the study revealed that more focus was paid to universities and it lacked the enormous progress made by universities of technology in addressing the HIV/AIDS epidemic (Martin and Alexander 2001).

This called for a comprehensive response that will create and build capacity at national and institutional levels, to work closely with the Department of Higher Education (DHET) and University Deans in order to develop a strategic plan that will guide the sector’s response to HIV/AIDS (Chetty 2000: 6). In response to this, SAUVCA initiated the first nationally coordinated leadership and capacity building programme on HIV/AIDS in higher education (HEAIDS 2004: 14). This was a partnership between the Department of Education, SAUVCA and the Committee of Technikon Principals (CTP) which brought the formation of the Higher Education and Training

HIV/AIDS Programme (HEAIDS). The initial phase of the programme created an opening for the programme to strengthen key areas particularly those that are closely related to the National Strategic Plan. These include peer education, voluntary counselling and testing and curriculum integration(HEAIDS 2004: 18).

The establishment of the HEAIDS in institutions of higher learning presented a sector-wide response in addressing the HIV/AIDS epidemic. This shows significant progress in provision of HIV/AIDS education, prevention services, treatment, care and support across South African universities. Although progress has been made in addressing the epidemic, HIV/AIDS related stigma and discrimination continues to impact negatively on interventions to mitigate the spread of HIV/AIDS in institutions of higher learning.

2.11.1 Addressing HIV/AIDS related stigma and discrimination

HIV/AIDS related stigma, discrimination and violation of human rights are key obstacles to effective response to HIV/AIDS. HIV/AIDS related stigma has been linked to repudiation of HIV testing, non-disclosure to family and lack of interest in biomedical prevention approaches (Stangl, Lloyd, Brady, Holland and Baral 2013). In the context of eliminating HIV/AIDS related stigma and discrimination, institutions of higher learning should mobilise and educate all stakeholders including students about stigmatisation. Addressing the stigmatisation process will reduce personal suffering of individuals infected and affected by HIV/AIDS and it will also create a social environment that will encourage both students and staff to seek and use HIV/AIDS services on campus.

The stigmatisation process is divided into various areas, each of which can be addressed through programmatic and policy efforts. These areas are (Stangl, Go, Zelaya, Brady, Nyblade and Stackpool-Moore 2010):

Drivers: these are individual –level factors that negatively encourage the stigmatisation process such as poor programmes on stigma awareness and its bad consequences, fear of economic difficulties and social breakdown because of an HIV positive family and community members.

Facilitators: are societal level-factors that exacerbate the stigmatisation process either in a good way or in a bad way. This includes protective or punitive laws, structural obstructions at public policy level, cultural and gender norms and rights awareness.

Intersecting stigma are numerous stigmas that people usually encounter due to their HIV status, sexual and gender orientation, poverty and substance abuse.

Manifestation stigma refers to the immediate results, mostly undesirable, of a stigma experienced by an individual or group.

It suffices to say that social and structural environments in which individuals spend most of their time influence the drivers and indicators of HIV/AIDS related stigma. This shows that there is a need for interventions to be put in place that will target multiple areas. With reference to higher education institutions, the complexities of stigma and discrimination should be addressed through HIV/AIDS policies and interventions. Interventions can include knowledge-based approach where print information on HIV/AIDS related stigma is disseminated through posters and flyers.

By educating and creating awareness among students and staff on stigma related to HIV/AIDS will create a conducive environment for people living and affected by HIV/AIDS to utilise university health services such as Voluntary Counselling and Testing (VCT), access to treatment (ARVs) and it will encourage people to know their HIV status. In addition, health providers and HIV/AIDS programme managers should be trained effectively through skills building concerning patient confidentiality and patient centered care and approach. The age gap between health care practitioners (nurses, doctors and counsellors) and students has posed an impediment and dissuasion to students seeking counselling for HIV/AIDS related concerns. This assertion is primarily based on the perceptions that, health care workers are likely to be judgmental or extend some act of stigmatisation towards the patients (students). This is supported by Meiberg, Bos, Onya and Schaalma (2008: 50) that fear of being identified with HIV/AIDS usually hinder people from getting tested, exploring various prevention methods at their disposal, changing risky behavior and supporting people living with HIV/AIDS.

Higher Education Institutions should therefore facilitate access to justice by reviewing HIV/AIDS policies and laws that threatens the utilisation and effectiveness of HIV/AIDS prevention, treatment and care efforts.

2.12 Triumphs and failures of HIV/AIDS in South Africa

South Africa has faced many challenges in addressing the HIV/AIDS epidemic. However, achievements of the country's response to HIV/AIDS to date include provision of primary

healthcare, implementation of HIV/AIDS policies and prevention programmes to mitigate the spread of HIV/AIDS.

Figure 2.2 by UNAIDS (2009) highlights the progress South Africa has made in attaining a comprehensive understanding of the challenges posed by the HIV/AIDS epidemic. The slow and interrupted response of HIV/AIDS in South Africa is also reflected in the diagram and the effects of the delayed reaction by the government which has contributed to the most rapid expanding epidemics in the country is also captured below. The diagram reports on the early phases of HIV/AIDS in South Africa and how unfounded politics, racial motivations and conspiracy theories have exacerbated the spread of HIV/AIDS epidemic.

In the early 1990s, with the new democratic government, there was an exponential rise in HIV/AIDS prevalence rates and the government pledged to tackle the epidemic, however it became evident that efforts to combat the epidemic did not address underlying socio-cultural, economic, political and other contextual factors related to HIV/AIDS. Nonetheless, major initiatives have been put in place to mobilise actual response to the HIV/AIDS epidemic such as the renowned play *Sarafina 2*; the initiatives have been surrounded with controversy making the efforts futile. Other challenges include the Virodene controversy and the fight for antiretroviral drugs (ARVs) for PMTCT, which was the initial major battle between the government and the civil society organisation (TAC).

Denialism views by former president Thabo Mbeki and the former Minister of Health, Manto-Tshabalala Msimang's advocacy on good nutrition in curbing the virus are profiled as one of the challenges South Africa had to overcome to confront the epidemic. However, some success includes the rollout of the antiretroviral drugs that covers 54% of the population, implementation of the National Strategic Plans and positive results for South Africa's research on a vaginal microbicide gel (1% tenofovir gel) (Van Dyk, 2012: 14).

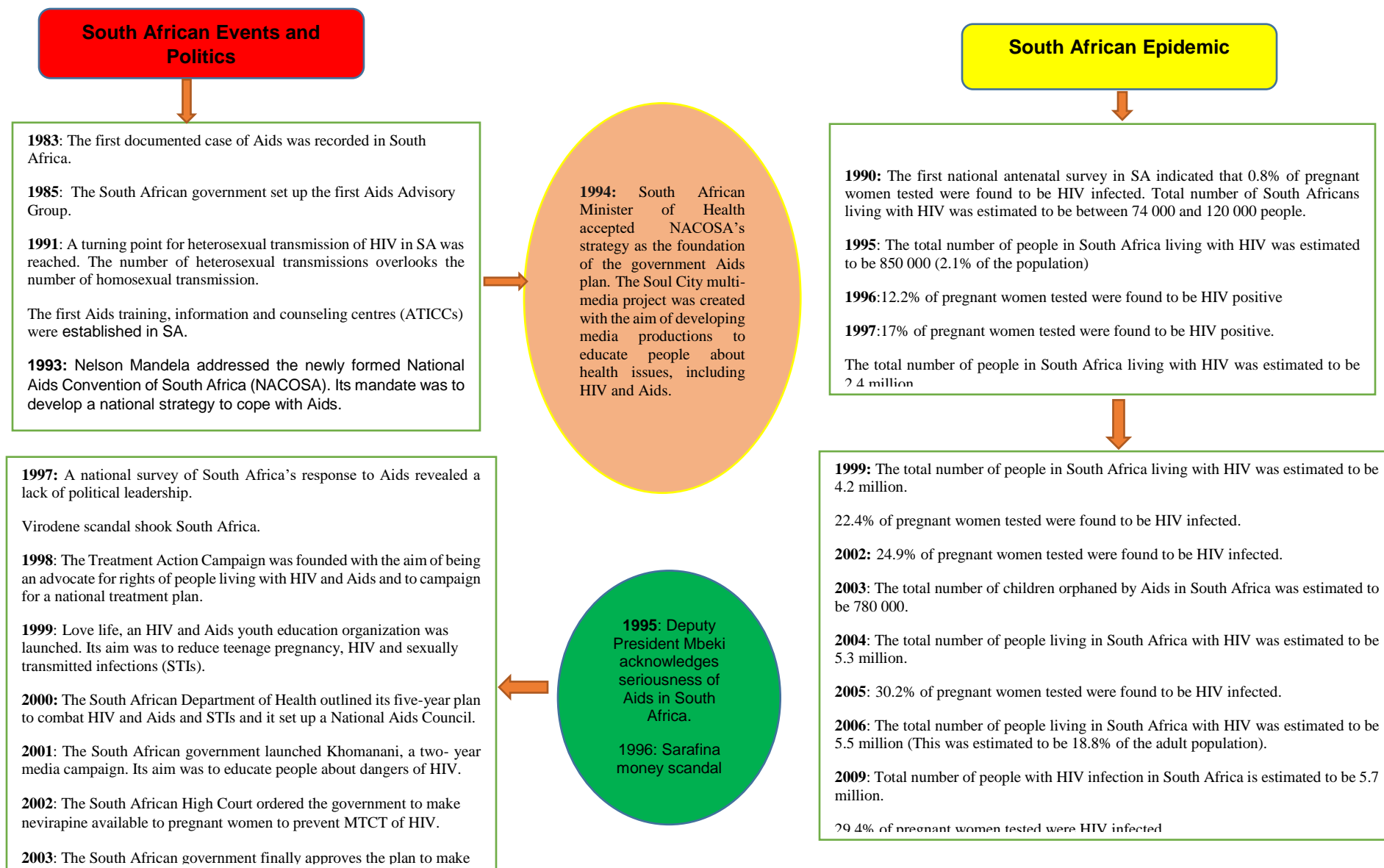


Figure 2. 5: Triumphs and Failures of HIV/AIDS in South Africa (Source: Adapted from UNAIDS, 2009)

2.13 Conclusion

HIV/AIDS continues to be a global health issue that affects all populations. The mystery of the epidemic in its early stages has resulted in a delayed response from the global community in addressing the epidemic. However, global interventions and institutions have been put in place to address the HIV/AIDS epidemic.

South Africa remains the country that bears the largest burden of the HIV/AIDS epidemic. The South African AIDS epidemic has been reported to be chiefly heterosexual driven although other marginalised groups such as homosexuals, MSM (men who have sex with men) and bisexuals have contributed to the spread of the epidemic. Since the appearance of the HIV/AIDS epidemic, the virus has also been linked to migration; commonly associated with rural men working on the gold mines; delays in policy making and failure in policy implementation; poor health facilities and lack of health education. The South African government has implemented various policy intervention programmes to respond to the HIV/AIDS epidemic, which has been rated ineffective by numerous AIDS analysts. The development of a national AIDS treatment policy has been a lengthy and complicated process. The NP (National Party) government 1982- 1994, defined the HIV/AIDS epidemic as a moral issue, as a result there was no policy response. As the virus engulfed the country, the epidemic was increasingly associated with the black community. By 1992, NACOSA political evolution conceptualised HIV/AIDS as a developmental and human rights issue.

When the Mandela government took office in 1994, the government re-conceptualised the AIDS policy problem and abandoned its pledge to supply rape survivors with ARVs which raised issues of human rights. This remained the situation up until President Thabo Mbeki took office in 1999, who exacerbated the situation by questioning the link between HIV and AIDS, and further denied that HIV causes AIDS. The confusion in the policy environment was characterised by denialism, ideological squabbles and provocative medical responses. Current response to the HIV/AIDS epidemic is guided by the National Strategic Plan on HIV, STIs and TB, 2012-2016 under the leadership of President Jacob Zuma. The South African AIDS civil society (TAC) continues to ensure the rollout of treatment strategies. HIV/AIDS still remains one of the greatest challenges facing South Africa. In the context of responding to the increasingly pervasive HIV/AIDS

epidemic, addressing socio-economic, structural barriers and cultural factors influencing health should be at the forefront in tackling the epidemic.

CHAPTER 3

INSTITUTIONAL RESPONSE TO THE HIV/AIDS EPIDEMIC

3.1 Introduction

This chapter reflects on communication tools employed by HEIs to alleviate the spread of HIV/AIDS through HIV/AIDS education by utilising diverse communication tools. It examines the impact of HIV/AIDS on the education sector. It further reviews the Policy and Strategic Framework on HIV/AIDS for Higher Education in South Africa. This is followed by a brief discussion on the response to the HIV/AIDS epidemic by South African Higher Education Institutions. In addition, the chapter highlights prevention and treatment campaigns implemented at HEIs to address the HIV/AIDS epidemic.

3.2 Regional responses to the HIV/AIDS epidemic in the Higher Education sector

The HIV/AIDS epidemic remains a serious threat in undermining extensive progress in development in Africa. One- tenth of the world's population resides in Africa, yet it accounts for two- thirds of the world's HIV/AIDS infection (Association of African Universities 2010: 5). Although Africa is divided by geographical variations, the epidemiological pattern of HIV/AIDS remains common across the continent. For example, poverty, gender inequality, intense social conflict and war, cultural dynamics and economic constraints have been identified as core drivers of HIV/AIDS within the region (Van Wyk, Pieterse and Otaala 2006: 1). Therefore, it is important to thoroughly comprehend the core drivers of the epidemic in order to implement appropriate mitigating measures. The main purpose of HIV/AIDS strategies in higher education institutions is to produce, disseminate and increase HIV/AIDS related knowledge and practices as a component of institutionalised and mainstream response to the HIV/AIDS epidemic (Van Wyk, Pieterse and Otaala 2006: 3). Figure 3.1 on page 3 highlights the institutional responses to HEIs in addressing the HIV/AIDS epidemic.

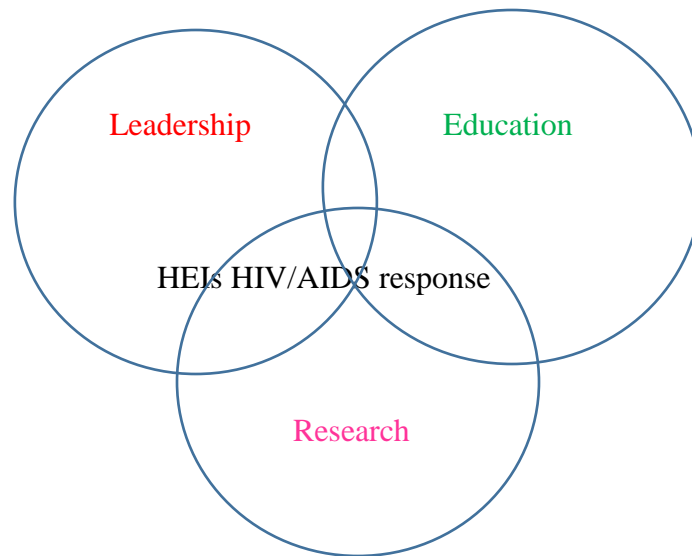


Figure 3. 1: Integrated response by HEIs (Source: Field Data, 2017)

3.2.1 Education

Education is seen as the answer to addressing HIV/AIDS as a social problem (Weiler and Martin-Weiler 2012: 14). However, for education to be effective in addressing HIV/AIDS in HEIs, a critical analysis of its role is essential. With young people accounting for the highest HIV/AIDS infection rates globally (UNAIDS 2015: 33), higher education institutions predictably become potential fertile ground for HIV/AIDS infection as they harbor a large number of young people at their prime years of sexual activity. Nonetheless, education, whether formal or informal is seen as a social vaccine for prevention, care and management of HIV/AIDS (Association of African Universities 2010: 5). This highlights the crucial role of universities in addressing the impact of HIV/AIDS within an institutional context and to create an environment that is conducive to HIV/AIDS knowledge and management.

HIV/AIDS education is a pivotal tool for an effective HIV/AIDS response and it should be used to upsurge students' consciousness in responding to HIV/AIDS as a social problem. A study conducted on HIV/AIDS knowledge and awareness in Kenya reports that university students had high levels of HIV/AIDS knowledge as compared to secondary school pupils (Kenya National Bureau Statistics 2015: 171). Contrary to this, young people aged 15-24 in Zimbabwe are reported to have lower levels of HIV/AIDS knowledge (Zimbabwe National Statistic Agency 2013: 206). This suggests that although HIV/AIDS education is a vital tool for HIV/AIDS prevention,

provision of HIV/AIDS education should be tailored to suit the needs of the target audience and it should be delivered through channels accessible to the desired population. Although there is no standard HIV/AIDS approach to be applied holistically to every university, it is pertinent for universities to initiate relevant responses and determine how the constituents are handling the realities of the HIV/AIDS epidemic.

In Kenya, institutions of higher learning have incorporated HIV/AIDS education as a core unit in their academic programmes. This came as an effort to combat the spread of HIV/AIDS on university campuses. The universities in Kenya use education, information and communication strategies to mitigate the spread of HIV/AIDS among students (Buchere 2009). It can be argued that such intervention mechanisms in Kenya can assist in producing graduates that are well informed about HIV/AIDS and competent to deal with the virus. Similarly, the integration of HIV/AIDS in the curriculum will promote knowledge about HIV/AIDS and reduce stigma and discrimination towards students infected and affected by HIV/AIDS.

On the contrary, a study commissioned by the ACU in 35 universities in the sub-Saharan region found that HIV/AIDS was not fully incorporated into the official curriculum of most universities, but lecturers invented their own approaches to disseminate HIV/AIDS knowledge to students. Most lecturers use interactive teaching methods such as group discussions and debates to disseminate HIV/AIDS knowledge to students (Association of African Universities 2010). This suggests that universities should cascade HIV/AIDS training among academic staff in order to increase skills, ability and confidence for lecturers to conduct HIV/AIDS classes.

The lack of HIV/AIDS education in the formal curriculum of most tertiary institutions is perhaps the main intractable problem that hinders an effective response to the HIV/AIDS epidemic in universities. With regard to lecturers adopting the implicit curriculum approach to educate students about HIV/AIDS, it is the universities' responsibility to put in place an explicit curriculum that has been meticulously designed to infuse technical, scientific and social knowledge on HIV/AIDS.

In Uganda, the AIDS Commission recruits youth leaders from universities to educate them about HIV/AIDS and expose them to the key drivers of HIV/AIDS in university settings. The AIDS Commission of Uganda utilises education to engage and mobilise influential individuals such as youth leaders in universities to reach out to students and their respective communities in disseminating accurate HIV/AIDS prevention messages (Ugandan AIDS Commission 2016). This

suggests that HIV/AIDS education alone cannot bring about the desired change needed to reverse and mitigate the spread of HIV/AIDS and therefore it should be complemented by influential efforts. In other words, student leaders can use the power of influence to educate and equip their peers or followers with relevant and accurate HIV/AIDS knowledge. This view is supported by the United Nations Educational, Scientific and Cultural Organisation that education can help fight HIV/AIDS and address social and structural factors that exacerbate the spread of HIV/AIDS in universities by engaging with student leaders (UNESCO 2011: 10).

3.2.2 Leadership

Leadership has come to be acknowledged as a critical tool in addressing HIV/AIDS in Africa (Ezeh 2015: 2141). From the earliest known cases of HIV/AIDS, leadership has been acknowledged as a crucial element to an effective HIV/AIDS response (Szekeres, Coates and Ehrhardt 2008: 19). In addition, Szekeres, Coates and Ehrhardt (2008: 19) argue that although strong leadership may not always bring about the desired achievement for particular HIV/AIDS prevention, care, or policy programme, it is evident that, without effective leadership, growth and achievement is practically impossible. This suggests that without a dynamic leadership culture in universities, mitigating the spread of HIV/AIDS can become extremely difficult. Success cases of HIV/AIDS management due to strong leadership have been noted in countries like Senegal, Uganda and Kenya.

In Uganda, President Yoweri Museveni has shown the capacity to lead and the commitment to halt the spread of HIV/AIDS by implementing a nationwide strategy in the 1980s to mitigate the spread of HIV/AIDS, enlisting joint efforts of state agencies, academic institutions and non-government organisations (Gray, Serwadda, Kigozi, Nalugoda and Wawer 2006: 349). As a result Uganda successfully reversed the HIV prevalence in the late 1980s and early 1990s (Putzel 2003: 23). Currently, the University of Makerere in Uganda runs a fellowship training programme which aims to enhance leadership and management of HIV/AIDS programs. This shows the commitment of state agencies and academic institutions in equipping academic staff and members of the community with leadership skills needed to curb the spread of HIV/AIDS. This further suggests that universities leaders should invest in HIV/AIDS education because increased level of education has been acknowledged to have contributed to curbing the spread of HIV/AIDS. Wawer, Gray, Serwadda, Namukwaya, Makumbi, Sewankambo, Li, Lutalo, Nalugoda and Quinn (2005: 23)

postulate that the decline of the HIV prevalence in Uganda is attributed to increase access to, and use of condoms and government-sponsored HIV/AIDS education programme.

The Senegalese government developed a National AIDS Control Programme immediately after the first six cases of HIV/AIDS were recognised in 1986 (Boone and Batsell 2001: 12). Senegal has managed to keep the HIV prevalence below 0.5% since the 1980s (Putzel 2003). The immediate action taken by the Senegalese government was taking advantage of the public education principle spearheaded by Senegal's Socialist Party to roll out education programmes against HIV/AIDS countrywide. The systematic public education programmes included mass media and social communication channels led by state agencies, academic institutions and community organisations (Wawer *et al.* 2005: 23). It is evident that the Senegalese government drew upon the support of HEIs academic leaders and community organisations to mobilise a united front in addressing HIV/AIDS across the country. This shows that the Senegalese government recognised the value of other stakeholders and acknowledged that the fight against HIV/AIDS needs a multi-sectoral approach.

In sub-Saharan Africa, Kenya has become a point of reference in relation to HIV/AIDS prevention success cases. In 1999, the then President of Kenya Daniel Aron Moi declared HIV/AIDS as a national disaster (Odhiambo-Otieno 2005: 33). It was this declaration that set the stage for the emergence of various stakeholders including the education sector in mounting intensive prevention campaigns against the HIV/AIDS epidemic (Cheluget, Baltazar, Orege, Ibrahim, Marum and Stover 2006: 22). In Kenya, the Education Sector Policy on HIV/AIDS 2013 implemented programmes to enhance HIV/AIDS knowledge, prevention, care and support. In addition, Vice-Chancellors from the seven public universities in Kenya have incorporated HIV/AIDS education into universities strategic plans by institutionalising HIV/AIDS education. HIV/AIDS has been institutionalised through HIV/AIDS policies, mainstreaming HIV/AIDS into the curriculum by offering HIV/AIDS education and information as a compulsory course for all undergraduates and engaging in HIV/AIDS community projects (Kelly 2000: 17).

Thus, leaders in institutions of higher learning must set a standard by advocating for HIV/AIDS prevention, treatment, care and support. In addition, leadership is a significant instrument to driving management structures and to mobilise resources that will address HIV/AIDS (Association of African Universities 2010: 6). In other words, leadership is key in intensifying an effective

response to the HIV/AIDS epidemic in HEIs. This points to the fact that leadership is the cornerstone of an effective HIV/AIDS response in the higher education sector, because only leadership ensures commitment to change, mobilisation of resources and the overcoming of barriers. This highlights the crucial role of management structures in generating new knowledge to mitigate and manage HIV/AIDS within universities.

It is important for HEIs to provide intellectual leadership that will challenge HIV/AIDS related assumptions and provide accurate knowledge in order to produce HIV/AIDS competent graduates.

3.2.3 Research

HIV/AIDS in the higher education sector needs to be addressed through a process of inquiry. Therefore, institutional response should further an understanding of the HIV/AIDS epidemic and should also pervade institutional structures and the local community, while collaborating with national and regional policies (Van Wyk, Pieterse and Otaala 2006: 2). This suggests that in order to grow the body of knowledge needed to develop relevant interventions to mitigate the spread of HIV/AIDS in the tertiary education sector, universities are expected to offer an intellectual response to the HIV/AIDS epidemic through research, skills and innovation.

Thus, universities have a crucial role to play in the area of HIV/AIDS research. Although several universities in Africa are applauded for contributing meaningfully to HIV/AIDS research on an international scale, previous studies by Chetty (2000) and Kelly (2000), reveal that information on HIV/AIDS and related services, were not adequately disseminated within or between universities. Furthermore, Kelly (2001) noted that most of the researches conducted on HIV/AIDS in universities are commissioned by individuals and results of the studies are mainly disseminated at HIV/AIDS conferences and international journals than at their home institutions or nationally. This shows that universities lacked a coordinated and coherent response to the HIV/AIDS epidemic. As a result, there was no uniform and consistent response in the fight against HIV/AIDS.

To bridge this gap, the Association of African Universities (AAU), through its HIV/AIDS programme responded to the threat and management of HIV/AIDS in institutions of higher learning in Africa. Representing over 230 universities, the AAU's HIV/AIDS programme aimed to ensure that the higher education community in Africa uses all resources at their disposal to

prevent the spread of HIV/AIDS, lessen the impact and manage the HIV/AIDS epidemic (Association of African Universities 2010: 7).

Through constant financial support from the Swedish/Norwegian regional HIV/AIDS team, the AAU has sponsored numerous universities in Africa to develop institutional HIV/AIDS policies and to undertake research that will help address HIV/AIDS in HEIs. In East Africa the training of policy implementation is coordinated by Kenyatta University in Kenya, in Central Africa it is coordinated by the National University of Rwanda, in West Africa it is coordinated by University of Port Harcourt in Nigeria and in the Southern Africa region it is coordinated by University of Limpopo in South Africa (Association of African Universities 2010: 7). AAU's efforts to mitigate the spread of HIV/AIDS through research in the education sector are well documented. A study titled "HIV/AIDS and Higher Education in Africa: a review of best practice models and trends" commissioned by the AAU under its HIV/AIDS programme was noted as the initial response to the HIV/AIDS epidemic by African higher education institutions. Findings revealed a consensus to strengthen leadership in universities, to create a care and support environment for people affected and infected by HIV/AIDS and to generate knowledge that would improve society's understanding of the HIV/AIDS epidemic (Association of African Universities 2007: 20). Other studies commissioned by ACU include the "The response of Higher Education Institutions in Africa to the HIV/AIDS epidemic" surveyed 35 universities from 19 countries (Association of African Universities 2007: 3).

It is evident that the AAU's has done more to impact the HIV/AIDS response in African universities. The AAU used research as a tool to comprehend the key drivers of HIV/AIDS in the education sector and subsequently helped institutions to develop and implement HIV/AIDS policies to mitigate the spread of the HIV/AIDS epidemic. The contribution of the AAU's response to the HIV/AIDS epidemic has enabled African universities to implement evidence-based strategies that address the needs and challenges facing their universities.

In 2008/2009 the latest AAU report commissioned four impact assessment surveys in 35 institutions of higher learning in 19 countries in Sub-Saharan Africa to analyse the extent to which concerns about HIV/AIDS have influenced policy making in universities. The assessment surveys also examined the degree to which these concerns have been included into the formal curricular and other learning activities. The findings of this study revealed that 80% of the universities

surveyed, have policies in place to respond to the HIV/AIDS epidemic, however, a good number of the policies have errors such as a monitoring and evaluation mechanism.

In the sub-Saharan region, a study was commissioned in 46 HEIs by the Southern African Regional Universities Association (SARUA) on “institutional response to HIV/AIDS from institutions of higher education in the Southern African Development Community” in 14 SADC countries. The study examined HIV/AIDS policies within universities, workplace and peer education programmes, curriculum development and research, and VCT and treatment services. Findings from the report revealed that there is no cohesive, coherent regional response to the HIV/AIDS epidemic within universities in the Southern African Development Community (SADC) region. Furthermore, the report stated that in all institutions surveyed, there is a culture of HIV/AIDS related to stigma and discrimination (Van Wyk, Pieterse and Otaala 2006: 44). Taking into account that universities are strategically placed to shape and educate the society about HIV/AIDS, it is interesting to note that the culture of silence has defined the response to the HIV/AIDS epidemic in many universities in the SADC region. It is the role of the university to raise levels of awareness about the HIV/AIDS epidemic and stimulate research to eliminate HIV/AIDS related stigma and discrimination borne out of ignorance and fear. Moreover, university structures should be placed in a position that adequately responds to the epidemic by providing intellectual and educational leadership in society.

Although there is still much to be done in terms of mitigating the spread of HIV/AIDS within universities in the SADC region, some universities like the University of Cape Town, University of KwaZulu-Natal and University of Pretoria have institutionalised their HIV/AIDS response by moving beyond a prevention-based approach to a more comprehensive approach to assimilate the social dynamics of the HIV/AIDS epidemic (Van Wyk, Pieterse and Otaala 2006: 4). These universities have HIV/AIDS-specific research centres to facilitate the application of detailed research and analysis to understand the multi-faceted impact of the HIV/AIDS epidemic. This suggests that universities are responsible for protecting the health and wellbeing of their human capital resources, especially the age strata in society (young people) mostly affected by the HIV/AIDS epidemic.

3.3 HIV/AIDS education within Higher Education

HIV/AIDS education has been identified as an important component of HIV/AIDS prevention (Fighting AIDS Continuously Together 2016). HIV/AIDS education is about providing people with information about HIV/AIDS and teaching them how to put the information to use. This suggests that recipients of HIV/AIDS education are equipped with relevant knowledge to make sound sexual decisions. School-based HIV/AIDS education is a commonly used intervention strategy for disseminating information on HIV/AIDS particularly among young people (Sarma and Oliveras 2013: 20). School-based HIV/AIDS education has shown to lessen HIV/AIDS risks, particularly when the HIV/AIDS programme helps students to develop knowledge, and life skills needed to protect themselves against HIV/AIDS. This means that HIV/AIDS education is a social vaccine that can be used to reduce the vulnerability of students to the HIV/AIDS epidemic.

A study conducted by Mavhandu-Mudzusi, Netshandama and Risenga (2014: 188) on different HIV/AIDS education approaches such as health promotion, peer education, HIV/AIDS awareness campaigns implemented at the University of Venda, South Africa reveals that these approaches have failed to yield positive results as evidenced by the unabated risky sexual behavior among students, persistence of stigma and discrimination and promotion of negative HIV/AIDS messages. The evidence from the aforementioned study suggests that although various HIV/AIDS education approaches are put in place to mitigate the spread of HIV/AIDS within this university, the HIV/AIDS education approaches do not address the contextual challenges that predispose the university community to the risk associated to HIV infection.

Scholars such as Rugalema and Khanye (2002: 87) argue that the mainstreaming of HIV/AIDS education in learning institutions should be grounded on three essential conditions. Firstly, programmes for students and lecturers should be designed in a way that incorporates both curriculum-based and extracurricular programme. Secondly, training of support staff and health managers working within educational institutions should prioritise and lastly, institutions of higher learning should design and sustain a robust management information system concerning HIV/AIDS. This suggests that in order for HIV/AIDS education to be a success in institutions of higher learning, universities should identify key area requiring prioritisation in mitigating the spread of HIV/AIDS. This means that HIV/AIDS education programmes will be tailored to address the specific needs of each university.

The Southern African Regional Universities identify the following components as an effective response to the HIV/AIDS epidemic (SARUA 2007: 18).

3.3.1 Prevention strategies

Almost four decades into the HIV/AIDS epidemic in Africa, the disease has reached a situation where progress in prevention, care and support programmes confronts inflexible socio-economic and emerging funding difficulties (Paul, Ayo and Ekundayo 2014: 6287). Similarly, attempts to deliver prevention programmes in African institutions of higher learning have been rigorously constrained by socio-economic and socio-cultural limitations in discussing HIV/AIDS, sexual relations and power inequalities (Paul, Ayo and Ekundayo 2014: 6288). This suggests that the manifestation of the socio-economic and socio-cultural constraints presented themselves in a manner that hindered the HIV/AIDS message to the university community or the HIV/AIDS communication process was restricted to scientific interventions such as publishing science related articles. This further suggests that HIV/AIDS prevention strategies should be culturally appropriate in order to address attitudes, beliefs and behaviors associated with HIV/AIDS. This means that although HIV/AIDS prevention programmes contribute significantly to mitigating the spread of HIV/AIDS, these approaches cannot end HIV/AIDS independently.

A study by Oppong and Oti-Boadi (2013: 270) conducted among students in Ghana revealed that some senior female students were reluctant to use condoms as preventative measures due to cultural beliefs. In Nigeria, a study that analysed data set from the Nigerian 2007 National HIV/AIDS and Reproductive Health Survey revealed that female students in higher education institutions were identified as predictors of non-use of condoms. The findings shows that regardless of high HIV/AIDS knowledge students engage in non-protective sexual behavior (Omoyeni, Akinyemi and Fatusi 2014: 331). In other words, high knowledge of HIV/AIDS is not statistically significant in HIV/AIDS protective behavior particularly among students. This suggests that age-appropriate HIV/AIDS prevention programmes should be implemented in universities in order to determine the gap in HIV/AIDS knowledge and its relationship with behavior and attitudes among students.

In a university setting, prevention strategies are means of keeping students, academic staff and administrative staff free from contracting HIV/AIDS. HIV/AIDS prevention strategies, must not only promote awareness but they should rather address primary factors that make students

vulnerable to HIV/AIDS infection. These factors include structural and social determinants of HIV/AIDS such as poverty and unemployment, behavioral determinants of HIV/AIDS including inconsistent condom use, transaction sex and multiple concurrent partnering (Terhemba 2007: 3).

Prevention activities such as HIV/AIDS awareness raising, distribution of both male and female condoms, provision of VCT and access to reproductive health services should be prioritised in universities. There is sufficient evidence that show that education is one of the best defense mechanisms to fight HIV/AIDS (Kelly 2000: 5) and (Chetty 2000: 17). This is purely based on the fact that education is sustainable because it equips people with the skills and tools they need to shape their lives.

In higher education institutions, education has been used to inform students about HIV/AIDS. This is usually conducted through Information, Education, and Communication (IEC) strategies which are performed through social mobilisation (SARUA 2007: 17). The IEC include activities such as peer education programmes, HIV/AIDS awareness day, mass campaigning on HIV/AIDS or distribution of HIV/AIDS pamphlets and other resources such as DVDs or displaying of posters (SARUA 2007: 17).

3.3.2 Treatment, care and support

Wellness centres that offer treatment, care and support for people living and affected by HIV/AIDS should be provided at institutions of higher learning (SARUA 2007: 18). This will help counsel students and staff on issues regarding HIV/AIDS. Venter (2007: 8) states that the purpose of HIV/AIDS awareness is not only to provide basic information about HIV/AIDS but to encourage students and staff to know their status so that they can receive support and timeous referral for ARV treatment, which means prolonged life expectancy and social progress.

According to SARUA (2007: 17), the following HIV/AIDS treatment, care and support programmes should be integrated into the university wellness programme:

Availability of HIV/AIDS treatment programmes: Since HIV/AIDS treatment programmes have proved sufficient to control the spread of HIV/AIDS, it is important for universities to provide HIV/AIDS treatment programmes in order to mitigate the spread of the HIV/AIDS epidemic within this community and reduce HIV/AIDS related morbidity and mortality.

Provision of HIV/AIDS testing: HIV/AIDS testing is considered as a cornerstone to an effective HIV/AIDS response, therefore provision of HIV/AIDS testing in universities means that students and academic staff can conveniently get access to HIV/AIDS services and know their HIV status without commuting long distances. This means that those who are diagnosed early have a better chance at getting treatment earlier.

Access to psycho-social support and counselling programmes: The availability of HIV/AIDS treatment and support in universities means that individuals who are infected with the virus can remain in good health, with a life expectancy similar to the people who are not infected with HIV/AIDS.

Access to nutrition and diet for people living with HIV/AIDS: It is important for universities to provide healthcare professionals that will advise students and academic staff infected with HIV/AIDS on how to eat a balance diet and provide fitness training classes on campus in order to keep fit.

Programmes that address HIV/AIDS related stigma: Because of fear, many individuals that are vulnerable to HIV/AIDS face stigma and discrimination this include university students and staff. Therefore, it is imperative for institutions of higher learning to create an environment where people living with HIV/AIDS can have access to treatment, care and support without feeling judged. Addressing HIV/AIDS related stigma can help improve the HIV/AIDS response in universities.

It is clear that in order for universities to develop a meaningful response to the HIV/AIDS epidemic, programmes should provide comprehensive HIV/AIDS services. In South Africa, the higher education sector has located its response on its primary mandate which is teaching and learning, research and innovation, and community engagement (HEAIDS 2012: 7).

3.3.3 Overview of responses by South African higher education

The higher education sector has been active in responding to its responsibilities under the three National Strategic Plans. Various policies and interventions have been undertaken, which include the following (HEAIDS 2012: 18):

Endorsement and the Policy Framework implementation- The purpose of the Policy Framework on HIV/AIDS for higher education sector adopted in November 2008 was to guide institutions in developing and implementing institutional policies. The Policy Framework has contributed

significantly to the improvement and implementation of institutional policies in order to lessen the impact of HIV/AIDS within the higher education sector. By implementing HIV/AIDS policies in higher education institutions, it is apparent that universities strive to ensure that members of staff and students affected and infected with HIV/AIDS receive appropriate support and access to HIV/AIDS treatment.

Higher Education Institutions' norms and standards for HIV/AIDS prevention, treatment, care and support in South Africa- A set of norms and standards relevant for costing HIV/AIDS interventions, in line with the Policy Framework on HIV/AIDS for higher education in South Africa as well as for incorporating HIV/AIDS education into the curriculum. In addition to putting policies in place, the set of norms and standards assisted in guiding universities to strengthen the implementation of continuum HIV/AIDS healthcare. This shows that the higher education sector formulated a comprehensive response to mitigate the spread of HIV/AIDS within this community.

An HIV/AIDS communication toolkit for higher education institutions- These guidelines support the application of the whole HEAIDS communication strategy and through various practical examples it offers guidance to higher education institutions on how to successfully and sensitively communicate their institutional HIV/AIDS programmes. Taking into account the role of HIV/AIDS communication in informing, persuading and encouraging individuals about HIV/AIDS, the implementation of the HIV/AIDS communication tool is an appropriate promotion tool for effective HIV/AIDS response.

A rapid assessment of curricular responses in South African higher education institutions- Based on a study titled "Theories and models of teaching and HIV/AIDS in higher education", the report provides various recommendations noting that the curricula of universities is an effective tool to infuse HIV/AIDS knowledge and that teaching in an HIV/AIDS era should be instrumental in creating positive social change. This suggests that incorporating HIV/AIDS education into the curriculum creates a participatory environment for students and lectures to use teaching and learning as techniques to identify contextual factors that contribute to the spread of HIV/AIDS within their regional settings.

3.4 Policy Framework on HIV/AIDS for Higher Education in South Africa added in 2008

In October 2008, the then Minister of Education Naledi Pandor and the Vice Chancellors of public Higher Education Institutions (HEIs) validated the Policy Framework on HIV/AIDS for Higher Education in South Africa. The purpose of the Policy Framework was to provide practical guidelines to assist institutions of higher learning in the process of creating and implementing institutional policies and programmes on HIV/AIDS (South Africa 2009: 4). The Policy Framework called for a comprehensive national response in three key areas, namely, mobilisation of leadership, addressing the vulnerability of the sector and the country, collective response through collaboration and cooperation between all Higher Education Institutions (HEIs) and their different stakeholders. The conceptual framework of the policy development process is outlined below (South Africa 2009: 6):

Each institution should establish the need, roles and responsibilities

The National Policy Framework acknowledges that although parameters for an effective response from the sector has been put in place, it recognizes that the characteristics of HIV/AIDS will differ from institution to institution based on different socio-economic factors and the profile of the various stakeholders (staff, students) that the institution serves. This suggest that each institution should study the socio-economic factors that exacerbate the spread of the epidemic in order to address the impacts and needs of HIV/AIDS within their particular institutional context. In addition, it can be argued that an effective response to the HIV/AIDS can best be attained through a good HIV/AIDS institutional policy.

Research and analysis

A situation analysis is a rapid assessment of the present state of HIV/AIDS and institutional response to the impacts of the HIV/AIDS epidemic. The vulnerability of HIV/AIDS significantly impacts on socio-economic development. In the context of HEIs, direct impact of HIV/AIDS affect productivity by reducing the availability of human capital. This is likely to be reflected as loss of students and staff, financial debt due to unsettled tuition fees and decline in student enrolments.

To make sure that the HIV/AIDS epidemic is well managed at institutional level it is suggested that each HEIs should, with reference to the Policy Framework:

Evaluate the content and context of their response to the HIV/AIDS epidemic; and

Determine an effective way to respond to the HIV/AIDS epidemic by collecting baseline data to start a relevant monitoring and evaluation process.

Therefore, this implies that extensive consultation with external and internal stakeholders should be conducted in order to identify structural factors that drive the epidemic. This will enable institutional policy makers to develop a policy that will address various issues around the risk and management of HIV/AIDS in an effective manner.

Developing the policy

An institutional HIV/AIDS policy can be both a management strategy and an institutional response by all stakeholders to the internal and external impacts of and vulnerabilities to the HIV/AIDS epidemic. Institutional policies should be aligned to the Policy Framework and to the strategic and operational plans of the institution in order to direct an integrated and mainstreamed response. The institutional HIV/AIDS policy should address issues of human rights in the context of HIV/AIDS, democratic principles and HIV/AIDS treatment, care and support.

Consultation and participation

The policy development process involves consultation from various key players and stakeholders. Each consultation contributes meaningfully to the understanding of the reach and the scope of the policy by emphasising the prospects and responsibilities of key role players and the stakeholders. Participation and involvement of stakeholders is key to an effective policy development and implementation. This will give stakeholders a sense of ownership to the policy implementation and co-ordination.

Authorisation, communication and finalisation

The institutional policy on HIV/AIDS should be held at executive level and it is the responsibility of the university management to align the policy with the strategic and operational planning to ensure strategic leadership and resource allocation. Policy implementation should be headed by a chairperson selected by the university's Senate and Council in order to provide guidance and leadership that will help reduce the impact of the HIV/AIDS epidemic within the institution and surrounding areas.

This means that institutional HIV/AIDS policies should focus on teaching and learning, research, knowledge generation and community engagement. It is also of importance that the language and tools used to communicate with stakeholders should be easily understood.

Align, engage and mobilise an integrated response

Integrating a conventional HIV/AIDS institutional policy into the higher education sector key areas including management and support will ensure positive incorporation of the policy into the whole institutional and operational planning processes.

Participation of internal and external stakeholders will simplify a coordinated and integrated implementation plan. Constant stakeholder involvement and participation will mobilise strategic resources and commitment to a combined and all-inclusive service delivery system which is sensitive to issues such as gender equity, violence and human rights.

Advocate and lobby for participation and support

Advocacy and lobbying strategies should be embedded in the implementation of institutional policies on HIV/AIDS in an effort to mobilise involvement and continuous participation from key role players and stakeholders. Advocacy is a “strategic process of negotiating consensus amongst all stakeholders for an integrated response, while lobbying is the active, continuous engagement between stakeholders to ensure the effective implementation of the policy and programme”.

Leadership plays a key role in advocacy and lobbying. Identifying key players that will support the implementation of the policy and programme is significant to a successful policy implementation. In the context of HIV/AIDS advocacy in HEIs, advocacy around social determinants of HIV/AIDS will mobilise internal and external stakeholder engagement.

Implementation and monitoring

An effective institutional policy development process should ensure a successful implementation of the policy through an inclusive, integrated institutional programme. Therefore, timelines, reports and tracks should be put in place to trace the implementation process. The HIV/AIDS committee should conduct a monitoring and evaluation report to monitor the progress of policy implementation. Continuous monitoring of progress will make sure that all relevant issues are addressed.

Review and upscale integrated institutional HIV/AIDS response

Reviewing institutional policies and programmes on HIV/AIDS on a regular basis is essential in evaluating the progression of the epidemic and the impact the policies have on mitigating the spread of the HIV/AIDS epidemic. Reviewing the policies and programmes should also be made within the socio-economic and socio-political changes at institutional, provincial and national levels. Reviewing the policy and programme will determine if the policy or programme have achieved its primary goal. Data obtained from the review will provide information of what can be done to address shortcomings from the previous policy and programme.

It is evident that the Higher Education sector recognises its responsibility in the fight against HIV/AIDS. The implementation of the 2008 Policy Framework on HIV/AIDS for the responses to HIV/AIDS by the Higher Education in South Africa represents an integrated response to the HIV/AIDS epidemic. In other words, collaboration and cooperation between institutions of higher learning and mobilisation of leaders within the education sector are important in addressing the vulnerability of the higher education sector to the HIV/AIDS challenge. Taking into account the national momentum to scale up responses to the HIV/AIDS epidemic, effective institutional response to the HIV/AIDS epidemic is an essential investment.

In 2012, the Minister of Higher Education and Training, Dr. BE Nzimande endorsed the Policy and Strategic Framework on HIV/AIDS for Higher Education.

3.5 Policy and Strategic Framework on HIV/AIDS for Higher Education added in 2012

The Policy and Strategic Framework on HIV/AIDS for Higher Education 2012 was borne out of collective work by the Higher Education South Africa (HESA) and Higher Education AIDS (HEAIDS) secretariats, universities and the Department of Higher Education and Training (HEAIDS 2012: 7).. The 2012 Policy and Strategic Framework on HIV/AIDS for Higher Education has been reviewed and aligned with the 2012-2016 National Strategic Plan for HIV, STIs and TB and draws from the 2008 Policy Framework on HIV/AIDS for Higher Education in South Africa (HEAIDS 2012: 7). It is notable that the previous 2008 Policy Framework on HIV/AIDS for Higher Education in South Africa was not aligned with the 2007- 2011 National Strategic Plan. Aligning the 2012 Policy Framework on HIV/AIDS for Higher Education with the

2012-2016 National Strategic Plan will enable the contributions of the higher education sector to the goals of the NSP to be accounted for.

To be more specific, the Policy and Strategic Framework takes up the strategic role of the higher education sector as described in the National Higher Education Act (1997, as amended) and the National Plan for Higher Education (2001) (South Africa. Department of Higher Education 2001).

The alignment of the Policy and Strategic Framework 2012 with the National Strategic Plan for 2012-2016 was premised on the understanding that higher education institutions' relationship with society goes beyond teaching, learning and research. This vibrant relationship is given effect by the inclusion of "*community consultation and engagement*" as a principal agenda of higher education institutions (HEAIDS 2012: 20).

The aim of the Policy and Strategic Framework is to facilitate an in-depth, all-inclusive, strategic and united sector response to HIV/AIDS. There is a set of guiding principles that offer a solid foundation for the HIV/AIDS Policy and Strategic Framework. The following principles are also aligned with the NSP for HIV, STIs and TB for 2012- 2016 HEAIDS (2012: 21) :

- 1) **Integrated National Response-** Taking into account the scope and challenge of the HIV/AIDS epidemic, it is critical for the higher education sector to commit and collaborate on effective measures to mitigate the spread of HIV/AIDS.
- 2) **Loyal and Committed Leadership-** In order to strengthen a sector-wide response committed leadership at all levels is important.
- 3) **An All-inclusive Response:** An inclusive institutional HIV/AIDS response should include strengthening campus health services, address social, structural and behavioral drivers of HIV/AIDS, and include curriculum development, surveillance and research.
- 4) **Rights based-** The human rights approach should guide all interventions and programmes. This seems to suggest that vulnerable and marginalised groups within the higher education community should be given priority particularly in terms of equity and gender sensitivity.
- 5) **Active Partnerships-** Collaborations and effective partnerships should be promoted especially in a resource constrained context.
- 6) **Mainstreaming-** In order to provide appropriate and sustainable interventions in the higher education sector, mainstreaming the HIV/AIDS response into the core functions and operations of HEIs is important.

The Policy and Strategic Framework also consists of strategic objectives that outline the required action-focused direction lined up with the national objectives of the NSP for HIV, STIs and TB for 2012-2016. HEAIDS (2012: 22) outlines the objectives of the HIV/AIDS Policy and Strategic Framework as follows:

Strategic Objective 1: To ensure an inclusive and relevant use of the higher education mandate of education and training, research, innovation and knowledge generation; and community engagement to respond to the key drivers of the HIV/AIDS epidemic.

This objective is aligned to the NSP Strategic Objective 1, which is to “address social and structural barriers that increase vulnerability to HIV, STIs and TB infection, and the NSP Strategic Objective 2 which is to “Prevent new HIV, STIs and TB infections”.

The HIV/AIDS Policy and Strategic Objective 1 is divided into four components namely:

Component 1: Ensure the comprehensive and significant use of higher education mandate and intellectual response. This will be achieved by implementing clear strategies that adequately address the threat of HIV/AIDS on the education sector through research, skills and innovation management, teaching and training and community engagement. In addition, students should be equipped with personal and professional skills to become change agents and leaders in fighting the impacts of the HIV/AIDS in their respective communities. The role of the university is to generate and disseminate quality research to provide scientific evidence to guide policy and enhance the national response to HIV/AIDS at a societal level. This highlights the need for universities to develop a strategic focus which will strengthen and increase institutional response to the HIV/AIDS epidemic.

Component 2: To develop and implement appropriate, innovative and effective HIV/AIDS combination prevention strategies for higher education sector. This means that universities should provide access to comprehensive prevention programmes for both students and staff across all university campuses and residences. Universities should maximise opportunities for students and staff to get tested for HIV/AIDS and STIs screening.

Component 3: Addressing comprehensively the key drivers of the HIV/AIDS in the higher education sector. Institutions of higher learning should design and implement social and behavioral

change programmes, interventions and curricula to address the main drivers of HIV/AIDS in the sector which include unprotected sex, gender disparities and substance abuse.

Component 4: Implement a comprehensive social and behavioral change communication that serves to encourage positive attitudes and behaviors and to sustain change. Institutions of higher learning should use a variety of communication channels, tailor approaches and communication to behavior change objectives. In addition, universities should engage key populations and support marginalised groups through communication efforts to promote dialogues on HIV/AIDS, sex and sexuality as well as addressing particular risks contributing factors such as peer pressure, alcohol and drug use.

Objective 2: To enhance health and wellbeing of the higher education community at individual level, group and institutional level through strengthening capacity, systems and structures responding to the HIV/AIDS epidemic.

This objective is aligned to the NSP Strategic Objective 3 which aims to “Sustain health and wellbeing”

Component 1: Create and implement an all-inclusive health and wellness HIV/AIDS programme aiming to support and promote the physical and mental health of students and staff in the sector. Institutions of higher learning should build the required capacity of campus health services, based on the norms and standards developed by the Department of Health for a typical HI/AIDS clinic which provides primary health care services, to ensure that all students and staff have equitable access to treatment and wellness services. In addition, universities should ensure that the needs of people living with HIV/AIDS are reasonably accommodated for as long as possible, and that accurate procedure is followed in a non-discriminatory manner. Universities should also ensure that campus health services are able to encourage HIV testing and provide ARV treatment, care and support as per national policy guidelines.

Objective 3: To create a conducive environment that will enhance comprehensive and effective response to HIV/AIDS within the higher education sector free of stigma and discrimination.

This objective contributes to NSP Strategic Objective 4 which is to “Increase protection of human rights and improve access to justice”.

Component 1: Mobilise strategic leadership through all stakeholder engagement of the higher sector. Universities should ensure that they have a comprehensive institutional policy and a strategy on HIV/AIDS aligned with the Policy and Strategic Framework on HIV/AIDS for higher education. Institutions of higher learning should ensure commitment to and participation in HIV/AIDS institutional programmes by stakeholder leadership.

Component 2: Reduce and eliminate acts of stigma and discrimination through the promotion of equity, fairness and respect for self and others. Universities should make sure that their policies address issues relating to human rights protection, stigma and discrimination appropriately.

Component 3: Ensure coherent and consistent communication. This suggests that universities should enhance prominence and visibility of the sector's HIV/AIDS related activities.

Component 4: Develop comprehensive monitoring and evaluation systems. In other words, the monitoring and evaluation will set basis for universities to reflect critically on the programmes implemented to mitigate the spread of HIV/AIDS. In addition, the monitoring and evaluation system is essential for informing and enhancing HIV/AIDS interventions. This suggests that in order for HEAIDS to provide an effective and comprehensive response to the HIV/AIDS epidemic, intervention measures within universities need to be understood and driven by evidence-based scientific data.

It is important therefore for university leaders to play a vital role in creating an operational environment that is conducive for the HIV/AIDS multi-sectoral response. University environments should promote efficient and effective implementation of HIV/AIDS strategies and policies. In an effort to creating enabling environments for a comprehensive HIV/AIDS response within institutions of higher learning, the Higher Education and Training HIV/AIDS Programmes (HEAIDS) has implemented various student friendly programmes to engage young people in the fight against HIV/AIDS.

3.6 Comparative analysis of the policy framework for higher education in South Africa

It is notable that the impact of the HIV/AIDS epidemic has spurred the South African higher education sector to respond comprehensively to the HIV/AIDS challenge. Drawing from the Policy Framework on HIV/AIDS for Higher Education in South Africa 2008 and the Policy and Strategic Framework on HIV/AIDS for Higher Education 2012, it is evident that the Ministry of Higher

Education has established an inclusive HIV/AIDS response through policy implementation that focuses on prevention, treatment, care and support.

The purpose of the Policy Framework on HIV/AIDS for Higher Education in South Africa adopted in 2008 was to provide practical guidelines for creating and implementing HIV/AIDS policies for universities. As mentioned in 3.4 the Policy Framework called for a national response in three fundamental areas, namely, addressing the vulnerability of the sector and the country, leadership mobilisation and a comprehensive response through collaboration and cooperation between universities and their different stakeholders (South Africa 2009: 6). The Policy and Strategic Framework on HIV/AIDS for Higher Education adopted in 2012, by contrast, has been aligned with the NSP for 2012-2016 which positions a clear role for the higher education sector in responding to the HIV/AIDS epidemic. The emphasis of aligning the 2012 Policy and Strategic Framework on HIV/AIDS for Higher Education with the NSP for 2012-2016, shows a collaborative relationship between the government and HEIs in implementing comprehensive approaches to mitigate the spread of HIV/AIDS in HEIs. It can be argued that the initial Policy Framework on HIV/AIDS for Higher Education adopted in 2008 prioritised its objectives towards guiding universities in implementing HIV/AIDS policies and programmes. This suggests that the 2008 Policy Framework aimed to address HIV/AIDS at institutional level where universities can implement policies and programmes according to their specific socio-economic challenges.

The striking differences between the Policy Framework on HIV/AIDS for Higher Education adopted in 2008 and the Policy and Strategic Framework on HIV/AIDS for Higher Education in 2012 is that the former was an initial approach from the Ministry of Education to provide guidelines for HEIs in implementing HIV/AIDS policies and mitigation programmes. This suggests that before the implementation of the 2008 Policy Framework there was no uniform response from the education sector, and as a result universities did not have proper guidelines to mitigating the spread of HIV/AIDS among the university community. In addition, this means that the progress made in the education sector to address the impact of HIV/AIDS could not be accounted for. However, the Policy and Strategic Framework on HIV/AIDS for Higher Education adopted in 2012 addressed these shortcomings by aligning the Policy and Strategic Framework 2012 with the NSP for 2012-2016. In other words, as members of society HEIs can use its core functions of teaching, learning and research to halt and begin to reverse the spread of HIV/AIDS.

The preliminary comparative analysis of the Policy Framework on HIV/AIDS for Higher Education in South Africa adopted in 2008 and the Policy Framework on HIV/AIDS for Higher Education adopted in 2012 suggests that in order to effectively mitigate the spread of HIV/AIDS a strong unity of purpose is needed at all levels of HEIs, the education sector and the government.

3.7 Institutional responses to HIV/AIDS in South African universities

The South African Higher Education and Training Ministry is alarmed by the impact HIV/AIDS has on the education sector and in our society (HEAIDS 2010). The Ministry of Education and Training is of the view that an effective response to the HIV/AIDS epidemic comprises of numerous approaches in which all key stakeholders work together to lessen the negative effects of HIV/AIDS on all members of society (HEAIDS 2010: 10). This includes raising awareness about HIV/AIDS, combating further spread of the virus and providing treatment, care and support for people living with HIV/AIDS (Chokwe, Naidoo, Manana, Mbatha and Muchengetwa 2013: 727). In line with the aforementioned, it is therefore important for higher education leaders to be proactive and disseminating new knowledge in society through education and research. This means that as primary generators of knowledge, universities have the capacity to influence HIV/AIDS policies and contribute significantly to the national agenda of combating the spread of HIV/AIDS.

A supportive role player in combating the spread of HIV/AIDS in South African public universities is a representative body of Universities in South Africa also known as HESA (Higher Education South Africa).

3.7.1 Higher Education South Africa (HESA)

HESA is a representative body of 23 public universities in South Africa (HEAIDS 2015). The core function of HESA is to form a united voice in policy making on issues of national importance for all members (HEAIDS 2006). HESA was formed in May 2005, as a replacement of two legal representative organisations for universities and universities of technology, the South African Universities Vice Chancellors Association (SAUVCA) and the Committee of Technikon Principals (CTP) (HEAIDS 2006). The launch of HESA came as a process of restructuring the higher education sector, which resulted in the formation of new statutory bodies. Based on the aforementioned, it can be argued that the previous statutory representatives did not present a

unified body of leadership; resulting in poor management of critical issues of national importance such as HIV/AIDS.

In an effort to address the impact of HIV/AIDS on the education sector in South Africa, HESA launched the Higher Education and Training HIV/AIDS Programme (HEAIDS).

3.7.2 The Higher Education and Training HIV/AIDS Programme

The Higher Education and Training HIV/AIDS Programme (HEAIDS) is a national facility to improve and support the HIV/AIDS alleviation programmes implemented within South African Higher Education Institutions (HEIs), and gradually to Further Education and Training Colleges (FETs) (HEAIDS 2015). HEAIDS is an integral member of SANAC and is supported financially by organisations such as the Britain's Department for International Development, Centres for Disease Control in the United States and Development Cooperation of Ireland (HEAIDS 2015).

HEAIDS was initiated by the Department of Higher Education and Training that is undertaken by Higher Education South Africa (HESA), the representative body of South Africa's 23 public Higher Education Institutions. HEAIDS give assistance to the higher education in its response to fight the spread of the HIV/AIDS epidemic through their elementary functions of learning and teaching, research and innovation, and community engagement. The programme aims to address the HIV/AIDS epidemic based on the following five human rights principles (HEAIDS 2015):

- 1) Creating HIV prevention programmes aimed at students and staff and campus health facilities for treatment, care and support for students and staff infected and affected by HIV/AIDS.
- 2) Providing a beneficial workplace HIV/AIDS programme that meets the needs of staff.
- 3) Inculcate and prepare students to make a meaningful contribution to the fight against HIV/AIDS in their future career paths.
- 4) Engage in research that will strengthen society's ability to fight and eventually overcome the HIV/AIDS epidemic.
- 5) Provide HIV/AIDS services linked to related communities through outreach projects and practical training programmes.

In relation to the five principles listed above, it is clear that the programme is rooted in a concept of mitigating the spread of HIV/AIDS in all constituents of the higher education environment.

Because of the perplexing social fabric of the society we live in, intervention programmes implemented to fight the spread of HIV/AIDS should be inventive, imaginative and pre-emptive with unique messages that are tailored to address and suit the present way of life, especially the lifestyle young people pursue. Taking into account that we live in a digital world, universities should use media particularly social media to stem the tide of HIV/AIDS infection among students. Social media platforms such as twitter, facebook and Instagram can be used to disseminate HIV/AIDS knowledge because for a message to be effective it must be entertaining and educating. As part of increasing an inclusive HIV/AIDS programme to mitigate the spread of HIV/AIDS among university students, staff and administrative staff, and HEAIDS (2015) have put in place various programmes and partnered with a range of public and private key players.

3.7.3 HIV/AIDS mitigating programmes in HEIs by HEAIDS

As part of expanding institutional response to the HIV/AIDS epidemic in the higher education sector, HEAIDS implemented various programmes as shown below.

3.7.3.1 First things first (HIV/STI/TB) campaign

This public-private partnership campaign is headed by HEAIDS in collaboration with Innovative Medicines South Africa (IMSA) and the Foundation for Professional Development (FPD), with support from the United States Agency for International Development (USAID), the U.S. President's Emergency Plan for AIDS Relief (PEPFAR); Department of Higher Education and Training; the Department of Health; and the South African National Aids Council (HEAIDS 2015).

The campaign aims to upsurge access to HIV counseling and testing (HCT programme) for students and staff at higher learning institutions. HCT is basic to the efforts to lessen the spread of HIV/AIDS. Thus, the campaign adds to the strengthening and sustainability of continuing HCT programmes at HEIs. It helps mobilise students and the entire higher education community to know their HIV status, reduce HIV/AIDS related stigma and combat the HIV/AIDS epidemic (Innovative Pharmaceutical Association South Africa 2012). The First Things First campaign contributes to an objective of the National Strategic Plan 2012-2016 for HIV, STIs and TB to capitalise on opportunities for HIV testing. The campaign provides for the testing of large numbers

using HIV rapid finger prick test which is supported by an appropriate pre-test and post- test counseling and education programme(eThekweni Municipality 2015).

Assessing the HIV preventive cognitions as an important strategy, the First Things First campaign is a relevant campaign in the higher education sector. It is evident that the campaign serves as an entry point to HIV/AIDS prevention, care and support in the higher education sector. What this suggests is that, the activities of the programme are consistent with the overall 2012-2016 NSP goal of getting more young people tested for HIV/AIDS and screened for TB. Since the campaign provides HIV/AIDS testing for a large number of students using the finger prick test, more students are likely to be tested for HIV/AIDS. This means that the campaign has a positive impact on the higher education sector's response to the HIV/AIDS epidemic.

3.7.3.2 Brothers for life

Brothers for life is a national campaign led by SANAC, in partnership with the Department of Health, PEPFAR, Johns Hopkins Health and Education in South Africa (JHHESA), Sonke Gender Justice, UNICEF, the United Nations System in South Africa and other civil society organisations working on HIV prevention and health (HEAIDS 2015). Brothers for life seeks to address the risk linked with having multiple and concurrent sexual partners, substance use and alcohol, gender based violence, promoting HIV testing, and encouraging male involvement in PMTCT. Furthermore, the campaign promotes positive male norms and encourages the uptake of health services such as Medical Male Circumcision (MMC), consistent condom use by men and reduction of sexual partners (Brothers For Life 2015).

The MMC campaign was launched in May 2013, to lower the risk of HIV and STIs infection. The MMC campaign forms an integral part of an increasingly comprehensive HIV/AIDS programme in the higher education and training sector that is managed by HEAIDS, which also promotes HIV counseling and testing and other prevention, treatment and support services(HEAIDS 2015).

It is clear that the brothers for life campaign aims to promote and mobilise men to adopt healthy and responsible health behaviors. Since the campaign uses the spirit of brotherhood that exists among most South African, this campaign is relevant in the higher education sector where peer pressure exist among students, particularly male students. This suggests that universities can use

brothers for life campaign to get male students to positively influence each other in promoting male-health seeking behavior, uptake of medical male circumcision and HIV testing.

3.7.3.3 Future beats

Future Beats is a youth development which promotes HIV prevention through campus radio and social media. The main goal of the project is to create radio and social media programme at higher education institutions and community radio stations in South Africa that will create HIV/AIDS awareness and other HIV/AIDS related issues in the country. For example, factors such as Social justice and human rights, poverty, unemployment, alcohol and drug use and social transformation(German missions in South Africa 2015).

Taking into account the role of media in our society, it can be argued that media has a pivotal role to play in the fight against HIV/AIDS in South African universities. The role of media to foster HIV/AIDS discussions and to open channels of communication within universities cannot be overemphasised. It is evident that media can be instrumental in breaking the silence around HIV/AIDS, therefore universities should use media to facilitate the HIV/AIDS discourse. It is reasonable to assume that future beats as an HIV/AIDS programme can have a positive impact on the higher education sector and in society.

3.7.3.4 ZAZI-Know your strength

Zazi campaign was launched in May 2013 under the leadership of SANAC, women's sector, with support from the USAID/Johns Hopkins University HIV communication programme and PEPFAR in partnership with the Department of Women, Children and People with disabilities and the Department of Social Development. The campaign is aimed at women and girls to draw on their inner strength, ability, supremacy, and self-confidence in order to acknowledge their self-identity and uphold their moral values. The campaign consists of advocacy, mass media and community mobilisation activities. The principle goal of the campaign is to advocate for women to have better access to key services and techniques that can cease new infections, minimise unwanted pregnancies, and prevent mother-to-child transmission and early detection and management of chronic diseases. Zazi aims to achieve zero new HIV/AIDS and TB infections, zero infection due to vertical transmission; zero preventable deaths linked with HIV/AIDS and TB; zero HIV/AIDS and TB stigma and terminate Gender Based Violence (GBV). The vision of Zazi is aligned to the

NSP's 2012-2016 long term vision for South Africa in terms of HIV/AIDS, STIs and the TB epidemic (ZAZI-Know your strength 2013).

In line with the aforementioned, the ZAZI campaign is relevant for female students in institutions of higher learning as it advocates for women and girls to have better access to health care services and to lessen the spread of HIV/AIDS among women. Since most female students are vulnerable to HIV/AIDS, this programme will equip female students with HIV/AIDS knowledge, provide access to sexual reproductive services and empower female students to become confident and independent.

3.7.3.5 Lesbian, gay, bisexual, transgender and intersexed persons (LGBTI)

The LGBTI is a programme to promote an environment conducive to appropriate HIV treatment, care, prevention services for men who have sex with men (MSM) and Lesbian, Gay, Bisexual, Transgender and intersexed persons has begun conducting its Knowledge, Attitude and Practices (KAP) survey in universities. This is in terms of a partnership HEAIDS has with the Networking HIV/AIDS Community of South Africa (NACOSA) for the implementation of the programme at 13 nominated universities. This will be headed by a full-time Campus Programme Officer (CPO) at each of the selected universities. Due to funding constraints only a limited number of the institutions can participate in the three year programme. The 2012- 2016 National Strategic Plan for HIV/AIDS, STIs and TB identifies MSM/LGBTI persons as a key population to engage for a successful response to HIV/AIDS (Campus Sex 2014).

It is reasonable to suggest that the introduction of the LGBTI campaign in universities was to bridge the existing gap of sexual health needs for marginalised and stigmatised population groups. It is evident that the adoption of the LGBTI programme in universities promotes enabling environment for right-based health care system where sexual minorities can access vital health care services without fear of violation of their human rights. This highlights the universities effort to respond comprehensively to the HIV/AIDS epidemic by creating safe and stigma-free environment for sexual minorities to seek sexual health services without fear or discrimination.

3.7.3.6 Curriculum development

The National Skills Fund has donated a grant of R25 million to HEAIDS for skills academic staff at public universities and Further Education and Training (FET) colleges to incorporate and

address HIV/AIDS related issues in curricula. The National Skills Fund assists lecturers to integrate appropriate modules of HIV/AIDS into their teaching programmes, bringing HIV into the mainstream of several courses. This builds on the work conducted by HEAIDS since 2008, to incorporate the sector's HIV/AIDS response within a core mission of higher education (HEAIDS 2015).

According to the World Health Organization and Joint United Nations Programme on HIV/AIDS (2011), HIV/AIDS and STIs programmes should not be implemented separately particularly in university settings. This suggests that comprehensive HIV/AIDS programmes are key interventions in combating the spread of HIV/AIDS among students. According to HESA (2007: 1) curriculum integration in South Africa was considered against the backdrop of an assertion that the country bears the highest burden of HIV infection globally. This implies that HIV/AIDS curriculum integration plays a significant role in the country's response to the HIV/AIDS epidemic.

From 2007 to 2009, HEAIDS conducted a seroprevalence study to identify good practices at HEIs. The primary goal of the study was to identify a broader role of HEIs in national efforts to mitigate the spread of HIV/AIDS (Higher Education HIV/AIDS Programme 2010: 4). The following practices are considered good practices by HEAIDS.

3.8 Good Practices Programmes by HEAIDS

Good practices are considered well documented and assessed programming practices that offer proof for success/impact and which are valuable for replication and upscaling (HEAIDS 2010: 4).

3.8.1 Peer education

Earlier studies define peer education as a health promotion and intervention strategy that is used to unleash the potential of individuals in order to transform their lives and the lives of those around them (Deutsch and Swartz 2002: 111). Peer education programmes have been recognised as one of the effective approaches to inculcate and empower adolescents, as they feel comfortable receiving information provided by their peers (Mahat and Scoloveno 2010: 373).

Peer education makes use of peer influence to impact the lives of young people in a positive way (Vember 2013: 67). With focus of increasing positive behavior among students in HEIs, peer education programmes should be facilitated mainly by individuals with similar experiences so that

recipients can learn from the peer educator. A previous study by DiClemente (1991: 388) has shown that adolescents who are convinced that their peers engage in safe sex are more than twice as likely to use condoms as compared to teens who do not believe their peers use condoms. This suggests that peer education programs can be used to influence young people's behavior, knowledge and attitude towards HIV/AIDS.

Furthermore, Crosnoe and McNeely (2008: 73) state that peer influences are crucial in how young people learn and behave, especially in school. Similar remarks are noted by De Vreede, Warner and Pitter (2014: 39) that peer education take advantage of the power of peer influences to contribute meaningfully to young people's experiences.

According to Beshers (2008: 279), peer education is a potentially effective approach for reaching out to adolescents and young adults. In both community-based and school-based sexual risk reduction programmes, peer education has become a common method for educating teenagers and young adults about the risks and responsibilities of sexual behavior, ideally equipping them with various skills, knowledge and motivation needed to effectively refrain from sex or practice safer sex (Beshers 2008: 279). By using peers as resources, information, skills and caring can be extended in an exponential way and the social atmosphere can be enhanced. This suggests that peer education can be effective among university students because friends are usually a primary source of influence and information particularly on sexual practices. This means that young people have a natural influence on each other's knowledge and behavior. In addition, Visser (2007: 680) states that peer education and support involves the training and use of individuals from the target group to educate and support their peers. The following advantages of peer education and support are noted by Visser (2007: 680):

- Young people are more likely to talk about sexual practices with their peers than with adults who they regard as authority figures.
- Young people communicate about their experiences and knowledge in a language understood and shared by adolescents.
- Peers can be role models for one another. Adolescents are more likely to change their behavior if they observe their trusted peers convert from deviant behavior to a more positive lifestyle.

- Group meetings and debates can contribute to the development of new collective norms of behavior and relationships.
- Young people are recognised as role players in addressing problems. Participatory centred approaches encourage young people to take ownership of their own health and initiate addressing some of the problems they encounter. This contributes significantly to youth empowerment.
- The relation between peers and their families and friends can improve due to peer education and support.

In the context of HIV/AIDS in HEIs, peer education can help postpone sexual involvement and promote condom use among university students. The Higher Education HIV/AIDS Programme (2010) reports that many university students are in the prime of their lives. As part of exploring they engage in risky sexual behavior which often goes hand in hand with high HIV/AIDS rates and other Sexually Transmitted Infections (STIs). This usually is a result of new found freedom and being under no adult supervision. Because the university environment offers enormous opportunity for risky sexual behaviors (Mutinta and Govender 2012: 89), university campuses are therefore suitable to offer peer education. According to Deutsch and Swartz (2002: 114), the model of peer education in HEIs focus on the following:

- 1) Mitigating the spread of HIV/AIDS and other STIs on HEI campuses;
- 2) Encouraging good morals and providing support for developing healthy attitudes and behavior on campuses;
- 3) Addressing HIV/AIDS related stigma;
- 4) Providing role models for healthy sexual behaviour on campus;
- 5) Educating people about human rights issues with special reference to gender issues;
- 6) Promoting participation in voluntary counseling and training and
- 7) Promoting involvement in HIV/AIDS care and support particularly for people living with HIV/AIDS.

Deutsch and Swartz (2002: 115) further state that the above topics are aligned with the four roles that the Rutanang model proposes for peer education. Rutanang is a peer education model adopted by all HEIs in South Africa. One of the main outcomes for the first phase of HEAIDS was the

development of the Rutanang model for peer education. Rutanang is a sotho word meaning “ Learning from each other”(Deutsch and Swartz 2002: 115).

3.8.1.1 Rutanang model for peer education in HEIs

Rutanang was established as a collaborative project of the South African Vice-Chancellors’ Association (SAUVCA), the South African National Department of Health, and Department of Social Development and the Education Department, various non-governmental organisations (NGOs) and selected United States (US) partners. The project was intended to support life skills and HIV/AIDS activities within HEIs. The aim of the Rutanang process is to provide standards of practice and develop peer education in a manner that is not random and unplanned but rather as an inclusive process that can be recognised and understood by everyone (HEAIDS 2006: 6).The Rutanang process also aimed to provide facilitators and participants an opportunity to evaluate and reflect the contents of the series. Rutanang consist of five books, these are: standards of practice for peer education, peer education implementation guide for NGOs in South Africa, peer education implementation guide for schools in South Africa, peer education implementation for HEIs and lesson plans for peer education programmes (HEAIDS 2006: 6).

For the purpose of this study, focus will be placed on the fourth book which entails peer education implementation for HEIs. The rationale behind the implementation of peer education in South African HEIs is that for desired outcomes of HIV/AIDS education, sexual health education and behaviour change communication, face to face discussions with people who are trusted, knowledgeable, accessible and relatively comfortable talking about sexual matters are necessary.

Rutanang provides eleven essential standards towards the development of an excellent peer programme. These include (HEAIDS 2006: 6):

a) Planning

There should be a detailed plan of action based on actual needs with clear, measurable goals.

b) Mobilising

There should be a shared vision, structures and resources put in place to carry out the peer education programme. This highlights the importance of support, commitment and understanding from the leadership of the institution.

c) Supervision infrastructure

Well trained supervisors should be selected to monitor the progress of the peer education programme in each institution.

d) Linkages

Partners and support structures should be part of the programme. This means that the role of external stakeholders such as civil society movements, non-government organisation (NGOs) and private businesses have a major role to play in strengthening these programmes.

e) Learning programme

The curriculum should be effective, appropriate and interactive. Peer education programme must be adolescent friendly and students should be able to relate with the programme irrespective of their cultural background. In addition, the environment must be conducive to talk about sensitive issues.

f) Peer education infrastructure

Peer educators should be trained and their roles, responsibilities and performance standards should be clearly defined.

g) Management

Peer educators and supervisors need to be well managed, with quantifiable duties and targets.

h) Recognition and Credentialing

Individual development should be put in place by rewarding and accrediting both supervisors and peer educators in order to allow opportunity advancement.

i) Monitoring and evaluation

A realistic monitoring and evaluation plan should be implemented, including details regarding documentation and information management systems.

j) Sustainability

A practical and operative sustainability plan should be in place, addressing issues of compliance, public relations, staffing and peer ownership.

k) Gender

An opportunity should be provided for both men and women to dialogue and debate issues pertaining to HIV and AIDS. This suggests that peer education is a powerful tool to educate and empower young people towards healthy behavior. Peer education can also improve adolescents' HIV/AIDS knowledge and self-efficacy for limiting sexual risk behavior. Therefore, students can take initiative in protecting themselves against HIV/AIDS and STIs by practicing safe sex and utilising voluntary HIV counselling and testing (VCT) services at wellness centres at their respective universities and communities.

3.8.2 Voluntary counselling and training

Voluntary counselling and training (VCT) is considered as a priority area in approaches to mitigate the spread of HIV/AIDS and to provide care, support and treatment of people affected and infected with HIV/AIDS (World Health Organization 2003: 23). VCT exemplifies a mechanism for referral care, treatment and support systems. These include treatment for opportunistic infections, prevention of mother-to-child- transmission (PMTCT), and post- exposure prophylaxis (PEP), access to anti-retroviral (ARV), as well as extensive counselling and support for positive living (Baggaley 2001). Consequently, recipients of VCT are more likely to make better decisions about their sexual health because they know their HIV status and receive counseling about its implications.

In South Africa, VCT has been offered since the early 1990s through city-based AIDS Training, Information and Counselling Centres (ATICS), several NGOs, private sector services, and in various clinics and hospital (Department of Health 2003: 23). The process of expanding VCT in the health care sector began in 2000, as a component of the National Strategic Plan on HIV/AIDS and STIs of 2000-2005, the aim was to make VCT accessible beyond existing 'integrated' medical facilities that offer VCT, such as primary health clinics, STI clinics, family planning clinic, to create a bigger number of non- medical stand-alone sites that cater for marginalised groups, such as rural inhabitants, homosexuals and youth (Department of Health 2003: 24). In HEIs voluntary counselling and testing is regarded as the powerful weapon to curb the HIV/AIDS epidemic

(UNAIDS 2009: 8). In 2000, Higher Education Institutions in South Africa established a national project to fund and form HIV/AIDS programmes in HEIs. These programmes were aimed at expanding VCT services in HEIs (HEAIDS 2004: 39).

Mbengo *et al.* (2014: 459) state that despite the effectiveness of VCT as a key strategy for the prevention of HIV/AIDS and care, treatment and support for those infected with HIV/AIDS, VCT uptake still remains low among various student populations. A study by Asante (2013: 1) on knowledge of HIV/AIDS and uptake of VCT services among undergraduate students in a private university in Accra, Ghana reports that although 95% students have accurate information about HIV/AIDS and are knowledgeable about where to get an HIV test, 45.4% tested for HIV and utilisation of VCT services among university students remain low. Another study conducted in Zimbabwe revealed that over 90% of the students are informed about VCT, but only a quarter of the students have undertaken VCT. In South Africa, the Higher Education HIV/AIDS Programme (2010: 8) noted that by 2005, 74% of HEIs VCT services were operational, with 69% providing VCT for free. However, despite several set ups of VCT services at various HEIs, VCT uptake among university students remain lower than projected. Gaps in VCT service provision include HIV/AIDS related stigma and discrimination, fear of a positive result, concerns about confidentiality, inadequate VCT staff and poor infrastructure (Ileri, Tumuti, Mathuvi, Njagi, Piero, Gatumu, Njagi and Karugu 2012: 2). Because of the high prevalence of HIV/AIDS among young people in South African universities, strategies to improve VCT utilisation among university students should be implemented. Increasing of health providers, awareness campaigns and improving counselling services should be a priority for campus health clinics.

VCT services should also be student friendly in order to challenge and accommodate students in knowing their HIV status. Evidence from the Higher Education HIV/AIDS Programme (2010: 93) study on HIV prevalence and related factors in 21 HEIs in South Africa suggests that increased awareness campaigns regarding VCT services through a wide range of engaging student-led prevention activities such as drama groups, media and marketing projects, poetry slam, and games can boost VCT uptake by university students. In addition, Mbengo *et al.* (2014: 462) suggests that VCT services could be boosted by improving counselling, to increase uptake among university students.

3.8.3 Counselling

Counselling is a procedure that allows an individual to sort out issues and reach decisions affecting his/her life. The process of counselling involves having a trained counsellor discuss with a client a way forward in solving his/her issues (HEAIDS 2010). HIV counselling is a private dialogue that takes place between a patient and a health care provider aimed at supporting and empowering the patient to cope with pressure and take sound health decision related to HIV/AIDS. Counselling should be conducted in any place that offers peace of mind and confidentiality for the client (Desai, Parmar, Kosambiya, Solanky, Prajapati and Kantharia 2012: 349). In the context of HIV/AIDS, counselling has become a key component of HIV/AIDS prevention, treatment and care (National AIDS control 2006).

Counselling may cover various areas, such as counselling for behavior change, pre and post-test counselling as a component of VCT, or supportive counselling for HIV-positive people. In terms of HIV/AIDS prevention in HEIs, counselling mainly implies pre and post- test VCT counselling (HEAIDS 2010: 4). This implies that counsellors working within the environment of the university must be well trained to use counselling as a tool for prevention of HIV/AIDS transmission among university students. With the high HIV/AIDS prevalence among young people, it is essential for HIV/AIDS counsellors to have a strong knowledge of HIV/AIDS and provide adolescent friendly services to students.

Documented data in South Africa have shown frequent inadequate principles of counselling (Van Dyk and Van Dyk 2003: 72; Olley, Seedat and Stein 2004). A study relating to the aforementioned statement was conducted by Olley, Seedat and Stein (2004) in Cape Town, where 44 (64%) of the 69 patients only received post-test counselling. This number is very low, taking into account that everyone who goes for an HIV test should receive post-test counselling and information about safe sex practices irrespective of the test outcome. Similarly, Kelly (2001: 32) reported inadequate standards of counselling services provided for people living with HIV/AIDS (PLWHA) in the Eastern Cape where a counsellor was reported reading off a pamphlet and talking on the phone during a session with a client. It can be argued that it is due to poor unprofessional behavior that counselling uptake is very low especially among young people. Furthermore, MacPhail, Pettifor, Coates and Rees (2008: 90) reported that young people tend to be worried about lack of privacy of health care providers regarding testing information and are concerned about being humiliated

in public for being sexually active. This paints a picture of inappropriate counselling practice in South Africa which suggest that young people's needs are not being met by the health system. It is essential for HEIs to hire counsellors who are well informed about HIV/AIDS and have youth friendly counselling skills. This means that the skilled counsellors will not only be counselling students but they will be transferring relevant life skills to students.

3.8.4 Life skills

Life skills approach is a skills development approach that focuses on behavioral change as a primary tool of health education. In the context of HEIs, it is usually conducted by peer educators and it is very basic in character (HEAIDS 2010: 36). The World Health Organization (1999: 4) states that the main aim of life skills is to facilitate the growth of psychosocial skills that enable individuals to deal with life challenges.

Life skills consist of the abilities individuals require to obtain and use adaptive and positive behaviors. These behaviors empower individuals to cope with social demands challenges they encounter daily. Furthermore, life skills helps students to improve their communication skills, examine and simplify their values, and to develop decision-making and stress management techniques (Castle 2008: 8). The World Health Organization (1999: 4) identified five basic areas of life skills that are relevant across all cultures:

- Problem solving and decision making
- Innovative and critical thinking
- Communication and people's skills
- Self-consciousness and understanding
- Stress and anxiety management

It can be noted that the application of life skills aims to promote behavior change among adolescents. The life skills approach is tailored to meet the needs of young people. In HEIs, life skills can be used to disseminate HIV/AIDS and sexual health information. It can be argued that life skills have a potential of preventing health and social problems among university students by improving their HIV/AIDS related knowledge through group engagements and one-on-one sessions. In addition, HEAIDS (2010: 5) state that life skills integrates group work and discussions, as well as educational games, brainstorming and debates. This suggests that life skills are an

interactive and participatory approach that can be used to encourage positive attitudes and behavior and to sustain individual and social change.

3.9 Conclusion

This chapter discussed the response of the higher education sector to the HIV/AIDS epidemic. It has been noted that education is considered “the best hope” to address the epidemic, however, the HIV/AIDS prevalence among students prove otherwise. South African universities continue to lose increasing numbers of students and staff members due to the HIV/AIDS epidemic. Due to failure of acknowledging HIV/AIDS in its initial stages, HEIs are faced with high HIV/AIDS prevalence among students. To address the HIV/AIDS epidemic, South African Universities Vice Chancellor Association (SAUVCA) took the initiative for a holistic approach to the HIV/AIDS epidemic at institutions of higher learning in the country. This led to the formation of HEAIDS, which has become a driving force in coordinating and implementing HIV/AIDS prevention programmes at Higher Education Institutions. To reduce and mitigate the spread of HIV/AIDS in HEIs, HEAIDS has developed strategic and policy framework on HIV/AIDS. However, despite the efforts of curbing the HIV/AIDS epidemic, sexual risky behavior is reported common among university students, which is considered a primary risk factor for contracting HIV. In order to establish and analyse communication tools for HIV/AIDS education employed by student services at universities in KZN, an interactive model will be used to determine if the communication tools employed by student services are having the desired impact on the recipients.

CHAPTER FOUR

APPROACHES FOR HIV/AIDS COMMUNICATION IN HEIS

4.1 Introduction

This chapter presents a theoretical framework which will make it possible to analyse the reception of the communication tools used for HIV/AIDS education by student services in HEIs. The study is underpinned by two complimentary theoretical perspectives: The Interactive model of communication and the Health Belief Model. The Interactive model was useful in a dual sense. First, it offered a corresponding perspective to understand the factors that hinder the encoding and decoding process between student services and students. Secondly, the interactive model of communication provided framework to assess student behaviour change based on HIV/AIDS education programmes implemented by student services. The health belief model provided the theoretical basis for understanding how behaviour is a consequence of individual's expectations.

The chapter is divided into four sections. The first section presents a brief account on strategic communication, and its influence on the development of health communication in modern societies. The second section explores the concept of health communication. It highlights the role of health communication in addressing the HIV/AIDS epidemic. Furthermore, the role of culture in effective communication is highlighted. The third section presents HIV/AIDS interventions implemented at the four selected HEIs in KwaZulu-Natal. A SWOT analysis is presented to analyse the universities intervention programmes. The last section explored the principal theories that inform the study and synergies between the Interactive Model of Communication, Behaviour Change Communication, and the Health Belief Model in conceptualising students' interpretation and responses to the HIV/AIDS messages by student support services.

4.2 Strategic communication

Strategic communication has been associated with the manner in which an organisation conducts internal and external communication to fulfil its mission and to enhance success (Waisbord 2014: 148). Missirolì, Anderson, Gaub, Popescu and Wilkins (2016: 5) postulate that strategic communication integrates communication activities with a project's plan or agenda. In other words, strategic communication is instrumental in guiding an organisation towards its goals.

According to O'Sullivan, Yonkler, Morgan and Merritt (2003: 11) for communication to be strategic it should be:

Goal-oriented: The ultimate evidence that shows that a strategic communication effort is effective lies in health results. Health related research should be designed to improve audiences' knowledge, acceptance, and adoption of healthy behaviours. In relation to this study, student support services should understand the different demographics of the university community in order to implement HIV/AIDS communication strategies that will yield positive outcomes. In addition, student support services should be able to gather information on key aspects of the HIV/AIDS communication strategies implemented at their respective HEIs in order to understand how the programmes are progressing. This will enable student support services to assess what the HIV/AIDS communication strategies have achieved in relation to the objectives and planned activities. It will also help identify limitations that hinder the HIV/AIDS communication strategies from attaining the objectives.

Scientific: A scientific and research based approach to communication entails factual information, and appropriate theory. It starts with constructive research and accurate data to define a specific health issue, identify achievable solutions, and identify the target audience. This approach depends on the health sciences to ensure that content and context of the strategic communication efforts are accurate and relevant. A suitable example in relation to this study is a research conducted by HEAIDS at 21 public higher education institutions in South Africa. The main objective of the study was to acquire information on students and staff HIV/AIDS prevalence statistics and HIV/AIDS behavioural interventions. Results from the study were expected to inform the higher education sector of HIV/AIDS response in a meaningful way, especially with regard to policy making and implementation of HIV/AIDS prevention, treatment, care and support interventions (Higher Education HIV/AIDS Programme 2010: 2). Nonetheless, student support services should conduct their own research within their universities in order to design HIV/AIDS communication strategies that are relevant to their university community.

User-centered: A user-centered approach begins with understanding from the health user's point of view what the health needs are. Regular talks with the potential target audience provide insights about those health needs and limitations of fulfilling the articulated needs. Through research, members of the intended audience can contribute meaningfully to the design of the appropriate

messages and provide insights for other communication-related decisions to be undertaken. This suggests that student support services should encourage student participation, allowing students to choose their preferred method of communicating HIV/AIDS related issues and providing insights on how HIV/AIDS treatment, care, and support can best be provided to them.

Participatory: Strategic communication encourages members of the intended audience to take part in the decision making in all stages of the planning, implementation and evaluation process. It is important to involve key stakeholders at the beginning of the strategy design process. Student support services should promote participatory decision making by students regarding HIV/AIDS communication strategies used to disseminate HIV/AIDS messages. Engaging students in the strategy design will build a sense of ownership that will encourage students to make sound health decisions and to ensure that the HIV/AIDS communication strategies is designed to address the specific needs of the students.

Benefit-oriented: The recipients must have a clear understanding of the benefit in taking the action encouraged by the communication effort. In relation to this study, students support services should communicate benefits of taking actions promoted by HIV/AIDS messages. For example, a poster on condom use should state the benefits of using condoms and the consequences of not practising safe sex.

Service-linked: HIV/AIDS promotion efforts should recognise and promote HIV/AIDS related services, whether through healthcare delivery sites or health care providers. In other words, student support services should not only communicate HIV/AIDS messages to students but they should inform students about HIV/AIDS services offered on campus and how they can access HIV/AIDS services.

Multichannel: For strategic communication to be effective, different channels of communication should be utilised. Communication strategies usually incorporate interpersonal communication, community-based channels, and several media to produce a dynamic, two-way exchange of information and ideas. It can be argued that for students to understand and act upon the messages communicated by student support services depends on the type of channel used to disseminate HIV/AIDS messages. It is therefore crucial for student support services to use a combination of HIV/AIDS communication tools that is appropriate for the student population such as social media, radio, and theatre.

Technically high quality: Strategic health messages should be designed in high quality materials. This means investing in resources wisely to design effective strategies and materials that will convey clear and visible messages. Student support services should identify resources at their disposal such as teaming with arts and design students to produce quality HIV/AIDS messages and materials. This is another way of encouraging student participation in the strategy design process.

Advocacy-linked: Advocacy in strategic communication occurs at two-levels: personal/ social level and policy/programme level. Personal/ social level occurs when an individual adopts a new behaviour and acknowledges their change by encouraging family and friends to adopt the same behaviour. In the context of this study, peer education sessions can be used as platforms for students living with HIV/AIDS to share their experiences with other students. Students can get insights on how to practice safe sex.

Policy or programme advocacy occurs when the primary goal of the advocacy is to change specific policies or programmes. Pursuing to impact behaviour alone is insufficient if the principal social factors that shape the behaviour remain unchanged. In relation to this study, LGBTI HIV/AIDS programmes in HEIs has the potential to influence not only students but the community at large by bringing awareness to students and encouraging them to share the information with their family and friends. This can help influence community programmes dealing with HIV/AIDS. It is evident that the two levels of advocacy are intertwined and dependent upon one another.

Programmatically sustainable: A good strategy can be used to attain long term goals and can be used over time to reach new audience members and adopt to change in environment. Student support services should put in place HIV/AIDS communication strategies that can be used over time to change students' sexual behaviour. In addition, student support services should ensure continuity of HIV/AIDS programmes on university campuses to ensure that strategic communication efforts attain long term positive impact on students.

Based on the aforementioned characteristics of strategic communication, it is apparent that a sound and effective HIV/AIDS communication strategy should be established on overarching vision of what needs to be done to address HIV/AIDS as a health and socioeconomic problem. The strategy should be comprehensive, have long-term goals and should be responsive to students' behaviour change needs. It can be argued that a combination of scientific data, clear vision, and stakeholder

engagement such as students, university management, and other health agencies are essential for an effective HIV/AIDS communication strategy.

4.2.1 Components of a strategic communication plan

Houghton, Kemp and Pattison (2013: 5) postulate that the following components should be included in a strategic communication plan:

4.2.1.1 Objectives

The most important component of a strategy is its objectives. O'Sullivan *et al.* (2003: 79) argue that clear and short objectives keep a communication strategy focused and on track. This view is supported by Pearson and Culver (2016: 10) that objectives of a communication strategy should be specific, measurable, achievable, realistic and timely (SMART):

Specific: the objective should describe the focus of the communication effort and type of change envisioned. In relation to this study, student support services should outline the purpose of each HIV/AIDS communication programme implemented. For example, programmes such as the First Things First Campaign should outline the benefits of testing for HIV/AIDS and state the number of students they hope to target.

Measurable: the objective should entail a provable amount or proportion of change anticipated. Student support services should specify the percentage of students they want to reach out to and give a time frame for achieving the desired outcome.

Appropriate: the objectives should be thoughtful of recipients' needs and preferences. HIV/AIDS communication strategies should address current challenges faced by students in HEIs.

Realistic: the objective should include a degree of change that can rationally be accomplished within the stipulated time frame and conditions.

Timely: Objectives be clearly outlined and the timeframe for achieving the desired outcome.

The preceding key elements to developing a communication strategy objectives shows that objectives provide a clear picture of what is anticipated and how it can be accomplished. Thus, it is important for health care providers to develop objectives that are congruent with students' needs as determined by the university environment and student segmentation.

4.2.1.2 Determining audience segment

Segmenting an audience allows a programme to concentrate on those members of the audience who are critical to reach and also to design the most effective and efficient communication channels to reach the audience (The Health Compass 2016). O'Sullivan *et al.* (2003: 55) adds that audience segmentation is a process of grouping and organising an audience who have common communication needs, preferences, and characteristics into smaller groups. It is reasonable to suggest that without defining the target audience in a communication strategy, it is difficult to develop communication activities accurately that will address the needs of the audience. In the context of this study, understanding students' needs is essential because this will enable student support services to implement appropriate and effective ways to communicate with students about HIV/AIDS related issues. It can be argued that when students are segmented, communication activities can be more effective.

4.2.1.3 Develop the key message

When communication occurs between people there is sending and receiving of messages. The message contains content which is conveyed during the interaction process. The content may consist of factual information, or it may be an idea, feelings and thoughts articulated by the participants. Steinberg (2009:46) postulates that some messages have a clear and obvious content, while others are hidden or not so obvious. In relation to this study, student support services must communicate messages that have meaning and can be easily understood and interpreted by students.

4.2.1.4 Communication channels and tools

Communication channels are defined as “modes of transmission that enable messages to be exchanged between the sender and receiver whilst tools are referred to as tactics used to send messages through the channels ”(O'Sullivan *et al.* 2003: 141). In other words, channels enable the communicator to reach the audience, while tools are what the communicator uses on those channels.

O'Sullivan *et al.* (2003: 141) reinstate that the various types of communication channels are:

Interpersonal channels which consists of one-to-one communication such as peer education sessions, and provider to client communication. In relation to the aforementioned communication channel, student support services should encourage using interpersonal communication channels in order to build a trust relationship between the students and health care providers. This will enable health care providers to address students' needs appropriately.

Community-based channels which cater for the community (a set of people within a different geographical area, such as a village or neighbourhood, or a group of people who share common interests or characteristics such as occupational status or ethnicity); Community communication consists of:

- ***Community based media*** such as local newspaper, local radio stations, and posters.
- ***Community based activities*** such as health rallies and parades, drama and health exhibitions.
- ***Community mobilisation*** which is a participatory method where communities identify and find solutions for their shared concerns.

In relation to the study, student support services should use community based channels at their disposal such as university radios, university newsletters, and drama facilities to disseminate HIV/AIDS related information to students and the university community at large.

Mass media channels which can reach a larger target audience within a short period; Mass media channels include:

Radio: It was in the 1930s that radio attained a central position as a mass medium providing news and entertainment to an increasing number of audience. In the modern age, radio is used as a medium to address various Socio-economic issues such as HIV/AIDS, poverty, unemployment and crime. In South Africa, radio use dialogue and debate to educate and empower communities. It can therefore be argued that radio is participatory. In other words, radio encourages communication and is able to connect individuals from different cultural backgrounds. In HEIs, HEAIDS piloted a pioneering radio broadcast and social media programme named “Future Beats” at seven South African university radio stations. The primary goal of the radio broadcast and social media programme is to create awareness around HIV/AIDS and related topics in an entertaining

manner to overcome monotony among students with regard to HIV/AIDS information. This suggests that university radio stations have a significant role to play in disseminating facts about HIV/AIDS in a non-threatening manner where the university community can be educated and entertained about HIV/AIDS.

Television: It was after the Second World War that the expansion of television was rapid. It was during the 1950s that many shows that were aired became extremely popular. A development that had a significant impact on traditional television is the transition to digital television (DeFleur and Rokeach 1994: 12). Digital television offers various advantages over analog television. Pictures are clearer and sound quality is better (Graber and Dunaway 2014: 3).

In South Africa, HIV/AIDS television drama series have been used to facilitate HIV/AIDS awareness. Soul City is an example of an HIV/AIDS drama series that has been used to create awareness on HIV/AIDS and related issues such as rape, gender based violence and substance abuse. Soul City is a multimedia campaign that uses drama to address and impact social behaviour, norms and practices. According to MacPhail *et al.* (2008: 44), Soul City reaches 16 million viewers and 70% of South African youth watched the programme. Given the fact that student residences are equipped with television sets, student support services should encourage students to watch programmes such as Soul City as a way to facilitate HIV/AIDS awareness among students.

Another South African produced HIV/AIDS television drama series was Intersexions. Intersexions is a collaborative of South African Broadcasting Cooperation (SABC) Education, SABC 1 and Johns Hopkins Health and Education in South Africa (JHHESA) (Makalela 2015: 402). Intersexions dramatises the effects of a sexual network, tracing the movement of HIV/AIDS from partner to partner across age, class, sexual orientation and race (Tomaselli and Chasi 2011: 12). In an effort to expand the reach of intersexions to the public, the television drama was complimented by a radio show which broadcasted on the SABC eleven local language stations, a blog and social media such as facebook and twitter (Renburg 2011: 43). This shows that the television drama aimed to bring to the fore society's unspoken issues on HIV/AIDS and sexual activities. It is important for student support services to use television as a channel to disseminate HIV/AIDS related information.

Film: Although most films pursue to amuse or entertain by providing information and knowledge, films are also socially significant in other ways. For instance, many documentaries seek to inform

people and persuade them (Wirth, Hofer and Schramm 2012: 407). In addition, most films reflect the society that produces them and thereby enrich their cultural experiences as well. In the context of HIV/AIDS theatrical health education creates an environment that is conducive for students to learn and explore various social determinants of HIV/AIDS through film and theatre work. In other words, student support services at universities should use film to demonstrate the negative impact of risky sexual behaviour and model the benefits of making sound sexual health choices.

E-mail (electronic mail): Email has become an integral part of our daily communication. For many people email has replaced letters, faxes, and telephone calls. Emails has made it easier for communicators to develop relationships through connection rather than physical proximity (Ball-Rokeach 1998: 5). It is evident that the use of information and communication technology has made it easier for HIV/AIDS information to be disseminated across a large audience. The use of email can be used to link students with health care providers and to educate students about new HIV/AIDS developments by providing reading materials that are based on HIV/AIDS.

The World Wide Web: The WWW combines words, graphics, video and sound, adds colours, and includes advertising and downloadable text and programmes (Ball-Rokeach 1998: 8). With the internet as a platform to share information, student support services should ensure that information on HIV/AIDS on the university's website is updated regularly and the link to HIV/AIDS information is easily accessible to students.

Social media: The latest trend that is shaping the evolution of mass media is called "social media". Social media can be defined as online communications that use special techniques that involve participation, conversation, sharing, collaboration, and linkage. Smith, Wollan and Zhou (2011: 10) define social media as "the swift and easy development, creation, dissemination, and consumption of information and entertainment by both organisation and individual". Based on the aforementioned definitions it can be said that social media can be used to educate individuals in conjunction with entertainment education by sharing educational information and entertainment. This suggests that student support services can facilitate educational HIV/AIDS discussions on social media by engaging students and health care providers. In other words, student support services can use social media to expand the limits of dialogue between students and health care providers by enabling discussions to take place between students and health care providers.

It is evident that mass media initiatives are a powerful tool to disseminate HIV/AIDS information across the geographical landscape and cultures. The aforementioned technological inventions show that the introduction of information and technology communication tools has revolutionised dialogue and how information is disseminated. In the context of HIV/AIDS, mass media has shown enormous potential to influence individuals and the public in a positive way. This means that HEIs should use mass media to influence students at an individual level, for instance encouraging condom use, and to go for an HIV/AIDS test and counselling. At a society level, student support services can use mass media to influence the external environment such as reducing HIV/AIDS related stigma and negative beliefs with regard to condom use among students.

It cannot be overemphasised that to communicate effectively, student support services should employ a set of tools that are relevant to students' HIV/AIDS related needs. In a book titled "A field guide to designing a health communication strategy", O'Sullivan *et al.* (2003: 153) identified the following strategic communication tools:

Advocacy: Advocacy involves public communication in support of a specific development issue (Wilkins 2014: 57). Servaes and Malikhaio (2012: 229) describe advocacy as a "key term in development discourse aiming to foster public policies that are supportive to the solution of an issue or programme". Based on the aforementioned definition, advocacy focuses on lobbying for changes in policies by mobilising collective action through mass media such as television, radio, internet, and newspapers to provide a basis for dialogue and to advocate for social change. In HEIs, advocacy as a communication tool can be used to create a shift in students' opinion about risky sexual behaviour by creating an environment that supports safe sex practices. Advocacy can be the impetus for mobilising students to support issues on HIV/AIDS policy and social change in HEIs.

Advertising: a set of tools to influence and promote ideas, goods, or services through media such as radio, billboards, television, social media, and magazines. Student support services should use advertising to create a favourable climate for disseminating HIV/AIDS related information. In addition, student support services should use advertising as a means to disseminate information about HIV/AIDS with a view to bring about social change.

Interpersonal communication enhancement: a set of tools that can improve one-on-one communication between the health care provider and the client. These include discussions within and outside the health care facility, training of health care providers, improving health

infrastructure, and providing quality health services. Taking into account that HEIs are predominantly dominated by young people, university health care clinics should provide adolescent friendly health services that provides for the needs of young people.

Community participation: a set of tools to assist a group of people who share similar interest or a community to participate actively in facilitating the adoption of a desired behaviour. In HEIs, student engagement in matters relating to HIV/AIDS should be prioritised in order to create a culture of responsibility among students. Students' involvement and participation in HIV/AIDS strategic planning can help curb the spread of HIV/AIDS among the university community.

Publicity: utilising unpaid media communication to improve audience awareness and affect behaviour positively. HEIs should use publicity to mobilise students' participation in HIV/AIDS issues, promote HIV/AIDS awareness and to build strategic interventions for behaviour change among university students.

Promotion: a set of tools used to publicise an idea, a product or venture to create awareness or to encourage the audience to think positively about a desired behaviour. This includes merchandising, coupons, and free samples. Student support services should have promotional items when hosting HIV/AIDS activities around campus. Promotional materials such as free t-shirts, condom distribution, and food coupons can be used as incentives to lure students to participate in HIV/AIDS activities.

Entertainment Education (EE): is a “strategic and theoretically informed process of developing educational messages using a range of media platforms to facilitate a desired behavioural or social change” (Govender 2013: 1) . With many health challenges facing university students, the use of entertainment education as a tool of communication has the potential to influence HIV/AIDS knowledge, attitudes, behaviour, and awareness. Entertainment Education interventions include the use of radio programmes, drama, theatre, songs and soap operas (Quintero Johnson, Harrison and Quick 2013: 162). EE interventions persuade audiences by using role models to demonstrate information, increase knowledge and create attitude for positive social change (Singhal 2013: 3). This suggests that EE does not only describe behaviour but it shows the audience how to adopt new behaviour. Based on the aforementioned reflections, HEIs should use EE to generate insights into HIV/AIDS challenges faced by university students. It is reasonable to suggest that students' interest in EE interventions can increase demand for HIV/AIDS services on campus.

In relation to this study, Dram Aide is used in HEIs to demonstrate HIV/AIDS related information through forum theatre. Dram Aide is an entertainment education intervention implemented in HEIs in South Africa. Dram Aide engages young people to communicate about HIV/AIDS through theatre and role playing (Cardey, Garforth, Govender and Dyll-Myklebust 2013: 293). In addition, Dram Aide also uses peer education to capacitate students and engage them in participatory techniques to stage their own events on campus for HIV/AIDS prevention, awareness and support (Cardey *et al.* 2013: 293).

It can be argued that the implementation of Dram Aide as an EE intervention influences students to identify solutions to their HIV/AIDS related problems through forum theatre and resonate with what has been demonstrated by making sound decisions and adopting positive sexual behaviour.

Although student support services may have various tools to choose from, it is important to select the best combination of tools that are aligned with the strategic approach and objectives. In other words, student support services needs to thoroughly comprehend how the tools work, what tools will effectively achieve the objectives of the strategic approach and when to implement the tools.

4.2.1.5 Evaluation Plan

Evaluation serves the purpose of knowing whether the implementation activities outlined in the work plan were actually carried out and determining if the objectives spelled out in the strategy were achieved (O'Sullivan *et al.* 2003: 195). This suggests that evaluation should be addressed at the initial stages of the strategic communication project and it should be identified as a crucial component of the communication process.

In the context of this study, student support services should conduct thorough research on students' sexual behaviour from their respective universities before implementing communication activities in order to measure change in behaviour and attitudes after communication strategies have been implemented. In other words, by understanding students' sexual behaviour student support services are more likely to put in place relevant communication activities and a robust evaluation plan.

Furthermore, it is evident that the approach to communication is more than the dynamic process of exchanging meaningful messages; it is a transaction between the participants or actors of the communication process, during which a relationship is developed. In relation to this study, student support services should put in place participatory approaches that enable students to participate actively in defining the scope of HIV/AIDS prevention and mitigating strategies that are relevant to them and determining applicable solutions. The importance of participation in this context is to enable students who may now or previously have been marginalised to have a say in bringing about positive behavioural change.

In order to understand the health behaviour of students in institutions of higher learning and the context in which they occur, the study explored the role of health communication in the context of HIV/AIDS education.

4.3 Health communication

The international community has made a significant investment on HIV/AIDS health and development programs. This is illustrated by development of programs such as the United States of America's PEPFAR programme which supplies ARVs to people infected with HIV/AIDS, particularly those residing in low-income countries, the Joint United Nations Programme on HIV/AIDS (UNAIDS), the World Health Organization (WHO) and the United States Agency for International Development (USAID) just to mention a few (Healthy People 2010: 2).

Healthy People (2010: 3) defines health communication as:

“Health communication is the art and technique of informing, influencing, and motivating individual, institutional, and public audiences about important health issues. The scope of health communication includes disease prevention, health promotion, health care policy, and the business of health care as well as enhancement of the quality of life and health of individuals within the community”.

Schiavo (2013: 6) defines health communication as a:

“A multifaceted and multidisciplinary approach to reach different audiences and share health-related information with the goal of influencing, engaging and supporting individuals, communities, health professionals, special groups, policy makers and the public to champion, introduce or sustain a behaviour, practice or policy that will ultimately improve health outcomes”.

The aforementioned definitions of health communication relate to the context of this study, which aims to ensure that young individuals are constantly informed and motivated on health issues and disease prevention and receive constant social support. Health communication remains a cornerstone in addressing HIV/AIDS worldwide. Since it is assumed that health communication is a transactional and interactional process (Srivastava and Moreland 2012: 295), it is important to identify role players in the health communication process. The government, NGOs and private organisations normally disseminate health information to individuals and communities by means of numerous communication strategies (Rensburg and Krige 2011: 79). In other words, the root of health communication is about enlightening and encouraging individual and community to make choices that enhance good health. Similarly, the role players in this study consist of students and health care providers.

Street (2003: 65) emphasises that an important aspect in the health-care context is the significance of linguistic resources in both the health-care provider and patient/client as a vital factor within the health communication context. As the message relies mainly on verbal communication codes, it is important that both the encoder (message sender) and decoder (message recipient) have suitable linguistic competence in the chosen code (language) of health communication message. This means that health related interactions that take place between the health care provider and patient should be mutually intelligible.

Healthy People (2010: 4) identified the following attributes for effective health communication:

Accuracy- The content must be precise, factual and without explanation errors, or judgement. This implies that HIV/AIDS information disseminated in higher education institutions should undermine incorrect information about HIV/AIDS transmission as an effort to change the social climate and to promote behaviour change among students. When students are well informed about HIV/AIDS, they tend to make sound health decisions which in turn promote behaviour change.

Availability- The channels used to deliver the content should be accessible to the target audience. Placement of the content varies according to the audience, message aim, and complexity, ranging from interpersonal to mass media. In the context of HIV/AIDS communication in universities, channels used to disseminate information relating to HIV/AIDS should be student friendly so that all students regardless of age and demographic differences should be able to empower themselves through accessible HIV/AIDS education and information.

Balance- Where relevant, the content should outline the benefits and risks associated with issues or identify different and valid views on the issue. It is important for universities to foster accurate HIV/AIDS information because incorrect HIV/AIDS knowledge has implication for perceived risk and knowledge shapes students risk perception.

Consistency- The content should be consistent overtime and it should be consistent with information from other sources. Information relating to HIV/AIDS should be relatable. HIV/AIDS education and information disseminated in universities should be consistent with other external sources so that students can relate to the information even when it is communicated outside the academic community.

Cultural competence- The design, implementation, and evaluation process of the message communicated should accommodate special population groups. Since universities harbour students from different demographics and ages, HIV/AIDS information should be communicated in a manner that promotes and protect human rights. This will also help lessen the social impacts of the HIV/AIDS epidemic such as stigma and discrimination.

Evidence base- Information communicated should be up to date scientific data that has undergone comprehensive review and rigorous analysis to develop a practical guideline and monitoring and evaluation technique measures. The role of universities is to generate HIV/AIDS knowledge through research and formulate new practices of understanding the HIV/AIDS epidemic.

Reach- The content should be accessible and available to the largest number of the people in the population. This means that students across all campuses and at all levels should have access to HIV/AIDS information.

Reliability- The source of the content should be trustworthy, and the content must be applicable. HIV/AIDS information communicated to students should be reliable.

Repetition- The content communicated should be repeated overtime, to reinforce the impact of the issue. In other words, HIV/AIDS information in universities should be communicated through different channels in order to get the message across.

Timeliness- The content should be provided or available when the target audience is most receptive to, or in need of, the precise information.

Understandability: The language and jargon used should be appropriate for the specific audience. HIV/AIDS information should be communicated in a simple language that scientists and non-scientist can relate to.

It has been noted that the most effective public health programs and interventions are based on a thorough comprehension of health behaviours and the context in which they take place (Healthy People 2010: 4). This suggests that initiatives implemented to improve health behaviour should be designed with in-depth knowledge and understanding of appropriate theories of behaviour change.

4.3.1 Combination HIV/AIDS prevention

Combination HIV/AIDS prevention advocates for an all-inclusive approach to HIV/AIDS prevention; this is a holistic approach whereby prevention of HIV/AIDS is not a sole intervention such as distribution of condoms, but the dual utilisation of paired behavioural, biomedical and structural prevention strategies (UNAIDS 2010: 10). Comprehensive HIV/AIDS interventions take into account factors specific to each setting, such as the standard of the infrastructure, local cultural norms and traditions. These combined prevention programmes can be implemented at individual, community and national levels (UNAIDS 2010: 11). This seems to suggest that culture has a particular influence on how people view and respond to HIV/AIDS related information. It is important therefore for institutions of higher learning to consider the culture of their target audience, when implementing HIV/AIDS prevention strategies.

The Joint United Nations Programme on HIV/AIDS defines combination prevention as

“ rights-based, evidence-informed, and community-owned programmes that use a mix of biomedical, structural and behavioural interventions, prioritised to meet the current HIV prevention needs of particular individuals and communities, so as to have the greatest sustained impact on reducing new infections” UNAIDS (2010: 5).

Based on the aforementioned definition, it is clear that for combination HIV/AIDS prevention to be effective, it needs to be tailored to the local context of the priority population.

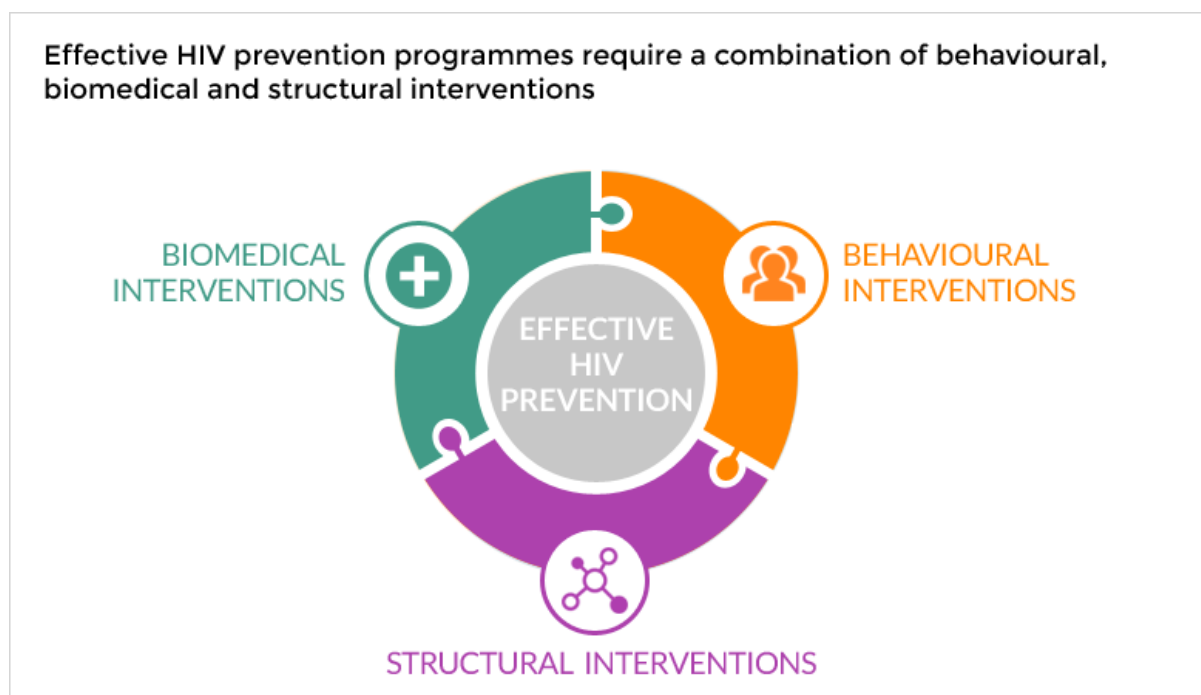


Figure 4. 1: Combination HIV/AIDS prevention (Source: Adapted from AVERT, 2016b)

Figure 4.1 highlights the three elements for effective HIV prevention. The UNAIDS (2010: 5) on global AIDS epidemic reveals that a large number of prevention efforts have focused on minimising individual HIV/AIDS risk, neglecting the need to address structural factors, socio-cultural, and other contextual factors that increase the vulnerability to HIV/AIDS. Brown, Sales and DiClemente (2014: 363) argue that combination HIV/AIDS prevention that incorporates effective behavioural and biomedical strategies have a potential to mitigate the spread of new HIV/AIDS infections. In consideration of the abovementioned views, HEIs should implement HIV/AIDS programmes through a combination prevention lens. This means designing HIV/AIDS programs that reflect the socio-cultural, economic, and legal realities of the students. This view is supported by UNAIDS (2010: 5) that combination prevention depends on strategic, evidence-based, concurrent use of complementary biomedical, behavioural and structural prevention strategies. Combination HIV/AIDS prevention include (Bekker, Johnson, Cowan, Overs, Besada, Hillier and Cates 2015: 73):

4.3.1.1 Biomedical interventions

Biomedical interventions combine clinical and medical approaches to mitigate the spread of HIV/AIDS. An example of biomedical intervention is medical male circumcision which has shown

to reduce the risk associated HIV/AIDS transmission by up to 60% during unprotected heterosexual sex (Chirowodza, Lane, Fritz, Humphries, Khumalo-Sakutukwa, Van Rooyen, Timbe, Morin and Chingono 2015: 12). This suggests that although given the effectiveness and safety of medical male circumcision in HIV/AIDS transmission, biomedical interventions should be used in conjunction with behavioural interventions. Therefore, medical male circumcision should be combined with VCT and provision of condom use education. Other biomedical HIV/AIDS prevention approaches include pre-exposure prophylaxis (PrEP) antiretroviral (ARV) medication which is used as a preventive strategy among high risk seronegative individuals, post-exposure prophylaxis which is the use of ARV following exposure to HIV/AIDS and HIV/AIDS testing and retention to HIV/AIDS care (Brown, Sales and DiClemente 2014: 365). Although biomedical approaches have the potential of minimising the risk of HIV/AIDS infection, structural factors should be addressed to optimise the implementation of biomedical interventions.

4.3.1.2 Structural interventions

It is important to note that structural drivers contribute significantly to the spread of HIV/AIDS. Structural interventions aim to address primary factors that make people susceptible to contracting HIV/AIDS. These include social, political and environmental factors (AVERT 2016b). Given the complexities of structural drivers of HIV/AIDS infection, implementing structural intervention can be difficult because they address entrenched socio-economic issues such as poverty, social marginalisation and gender inequality. Therefore, structural interventions should be complimented by government policies and cooperation (AVERT 2016b). In relation to this study, structural intervention of HIV/AIDS in universities should address issues of poverty among students and discrimination against marginalised groups such as the LGBT (Lesbian, Gay, Bisexual, and Transgender) community. Structural interventions should address economic and social inequality among students. However, to enhance the efforts of biomedical and structural HIV/AIDS prevention, it is essential to address behaviour.

4.3.1.3 Behavioural interventions

Behavioural interventions pursue to lessen exposure to HIV/AIDS transmission by addressing risky sexual behaviour. Behaviour interventions aim to decrease multiple concurrent sexual partnerships an individual has to, improve adherence to treatment among people living with HIV/AIDS and promote consistent and adequate condom use. Coates, Richter and Caceres (2008:

670) argue that behavioural interventions have proved to be successful in addressing risky sexual behaviour. Example of behavioural interventions consist of provision of HIV/AIDS related information such as sex education, counselling, care and support for people affected and infected by HIV/AIDS, and stigma and discrimination reduction programmes.

Although behavioural interventions are a subset of the general HIV/AIDS communication strategies, it crucial for student support services to recognise and understand socio-cultural factors as catalyst for effective HIV/AIDS communication in HEIs.

4.4 Culture and Health

The complex relationship between culture and health cannot be overemphasised. Culture is defined as “the learned, shared and transmitted values, beliefs, norms and life ways carried by groups of people, which guides their decisions, thinking and actions in patterned ways”(Gibbs 2005: 356). For Matsumoto and Juang (2016: 12) culture should be regarded as “ a dynamic system of rules, explicit and implicit, established by groups in order to ensure their survival but harboured differently by each specific unit within the group, communicated across generations, relatively stable but with the potential to change across time”. In consideration of the aforementioned views, it can be argued that culture is one of the various factors that influence human behaviour. In other words, culture is a determinant of socially acceptable behaviour, social morality, and values. If culture contributes to the richness of human experience, it stands to reason that culture and health are intertwined.

Airhihenbuwa and Webster (2004: 5) are of the view that despite the disciplinary basis in which culture is defined, it is normally accepted that culture is the foundation on which health behaviour, in particular HIV/AIDS is articulated and through which health must be well-defined and thoroughly comprehended. In view of the aforesaid, Somma and Bodiang (2003: 10) assert that over the years, HIV/AIDS prevention campaigns have failed to elicit positive behaviour change where sexuality is concerned because conventional HIV/AIDS prevention efforts failed to recognise that behaviour patterns are not influenced by individual patterns, but rather they are rooted in cultural norms that are inherited. This view is supported by Uwah (2013: 141) that the primary reason many health communication campaigns have been unsuccessful is that the health promoters or facilitators possessed limited knowledge of the cultural norms of their target

audience. It is therefore crucial for HEIs to understand the ways students think about health, particularly HIV/AIDS and examine individual behaviour and habits that influence sexual health.

Nxumalo, Okeke and Mammen (2014: 136) emphasise that many prevention strategies where cultural norms have been neglected, HIV/AIDS prevalence continue to rise. A study conducted by Sallar (2009: 85) revealed that cultural practices implicated in high HIV/AIDS prevalence among adolescents include multiple sexual partners, gender inequality, substance abuse and refusal to wear condom during sexual intercourse. In consideration of the above-mentioned view, it is evident that key drivers of HIV/AIDS among young people are rooted in the cultural context of society.

Thus, it is important for student support services to implement HIV/AIDS communication strategies that are sensible in the context of local beliefs and practices. Uwah (2013: 142) argue that a cultural approach provides an opportunity to advance the effectiveness of HIV/AIDS strategies and to re-establish the trust of communities through sensitive modes of participation and engagement. This suggests that student support services should prioritise on cultural sensitivity when planning and executing HIV/AIDS prevention programmes.

Cultural sensitivity is defined as the “extent to which ethnic/ cultural beliefs of a population as well as relevant historical, environmental and social forces are incorporated in the design, delivery and evaluation of targeted health promotion material and programmes (Resrucow, Soler, Braithwaite, Ahluwalia and Butler 2000: 272). In addition, Resrucow *et al.* (2000: 272) reinstate that for health programmes to achieve cultural sensitivity, the program developers must take into consideration both the explicit or surface cultural indicators such as language, context and tradition, and implicit or deep indicators of culture such as morals, beliefs, roles and customs. For this reason, student support services should understand the cultural diversity of students and the various cultural traditions that exacerbate the vulnerability to HIV/AIDS.

According to Kreuter and McClure (2004: 440), there are a number of strategies that have been advanced to achieve cultural sensitivity. The first is the presentational strategy which refers to exterior and approachability, for example it is about the use of indigenous language. In the context of this study, student support services should use language that is understood by students and

culturally sensitive scripts and context to disseminate HIV/AIDS information. Second is the cultural strategy which refers to interventions used to improve message prominence by grounding the intervention content in the context, experience, beliefs and norms of the priority population; lastly, the constituent strategy, which refers to active participation of the priority population in the programme design process. In relation to this study, engaging universities students in the programme design process will shed some degree of light on how cultural norms contribute to the spread of HIV/AIDS among university students.

It can be argued that for HIV/AIDS communication strategies that do not take cognisance of the cultural diversity of the target community, is bound to result in failure. It is evident that for HIV/AIDS communication efforts to be successful, cultural norms should be embedded in HIV/AIDS communication strategies rather than being rooted in communication theories that are unrelated to the socio-economic and structural realities of the student community.

In order to analyse HIV/AIDS interventions aimed at university students, it is essential to understand the whole HIV/AIDS risk profile of students, particularly their risky sexual behaviour within the university environment.

4.5 HIV/AIDS risk profile of university students

Recent studies on youth sexual behaviours in South Africa show that young people continue to face the greatest risk of HIV infection (Mulwo 2009: 2). A study conducted in 2005 by the Human Science Research Council (HSRC) revealed that about 57.9% of young people had already engaged in penetrative sex. The study estimated the median age of a first sexual encounter at 15 years. Possible reasons for early sexual debut among young people include peer pressure, low self-esteem, sexual-coercion and transactional sex (HSRC, 2005: 76). Early sexual debut has been noted as an important driver of HIV/AIDS. Literature on risky sexual behaviour among young people (MacPhail *et al.* 2008; Pettifor, O'Brien, MacPhail, Miller and Rees 2009) report that early sexual debut increases vulnerability to HIV infection. It is imperative for prevention campaigns to reiterate the message of discouraging premarital sexual activity as it poses a higher risk to HIV infection. Furthermore, evidence shows that engaging in sexual activity at a later age lowers vulnerability to HIV infection per act of sex (UNAIDS 2013).

Findings from the Higher Education HIV/AIDS programme reports that the majority of students in institutions of higher learning have engaged in sexual activity before matriculation (73%) and by each additional year of age a growing number of this population have had sex (HEAIDS 2010: 3). In addition, an increasing proportion of students are likely to engage in premarital sexual activity for the first time during the period they are at university (Mutinta 2014: 148). This highlights the need to intensify multi-sectoral HIV/AIDS response in order to address the factors that contribute to early sexual debut among young people

4.5.1 Socio-economic factors that influence the spread of HIV/AIDS among students

Numerous factors have been reported to perpetuate early sexual debut among university students. New found freedom for students residing away from home for the first time and peer pressure lead students to become sexually adventurous (Mulwo 2009). A study by Mutinta and Govender (2012: 21) found that majority of university students from rural areas and same-sex schools tend to partake in risky sexual behaviour in their first year at university because they tend to be naive. The students mentioned that in their naivety they succumbed to pressure of engaging in unprotected premarital sex with senior students and older partners.

It is notable that students fail to manage the risks linked to their new-found freedom. In addition, Mutinta and Govender (2012: 22) state that students residing in rented houses away from parents' control and those coming from rural backgrounds are susceptible to risky sexual behaviour. It is also reasonable to speculate that senior students and older non-students take advantage of first year students due to their vulnerability. This view is supported by Amos (2009) that students residing in poorly located residences and rented houses such as those around drinking places and night clubs tend to engage in risky sexual behaviour such as having multiple sexual partners.

A study by Leclerc-Madlala, Simbayi and Cloete (2009) found that chasing modernity make students vulnerable to HIV infection. Mulwo (2009) argues that lack of financial support to meet basic needs encourages students to engage in risky sexual behaviour. Findings from the HEAIDS report reveal that poor students struggle to meet the most basic needs, and are consequently driven into transactional sex where they have limited power to negotiate safer sex. This trend has been noted particularly among female students who are prone to being lured into relationships with older and wealthier sexual partners (Higher Education HIV/AIDS Programme 2010). It is evident

that transactional sex in this community tends to be associated with poverty, poor socio-economic backgrounds, and the influence of Western consumerism.

Lack of economic necessities has been recorded as a primary driver for sex in exchange for a variety of commodities. Although not similarly dominant, various forms of exchange comprises of students who have sex with lecturers for academic advancement, students who have sex to finance their studies, and relationships that are based on the obligation to engage in sex in exchange for gifts, favours and opportunities with individuals with a high social ranking in society (Higher Education HIV/AIDS Programme 2010: 81). This points to the fact that socio-economic conditions in which these students find themselves in drive them to intentionally pursue sexual relationships with financially resourced partners for social aspiration and recreation. It is thus important for universities to implement HIV/AIDS prevention programmes that will shape students' approach to sex and management of their sexual reproductive health.

Although data shows that young women and men aged 15-24 years can accurately recognise various methods of preventing sexual transmission of HIV (Shisana, Rehle, Simbayi, Zuma, Jooste, Zungu, Labadarios, Onoya, Davids and Ramlagan 2014), the UNAIDS (2013) posits that regardless of the enhancement of HIV/AIDS awareness campaigns, adequate knowledge about HIV/AIDS remain poor. Similarly, statistical findings from the 2014 National HIV, Behaviour and Communication survey shows that only 24% of young adults between the ages of 15- 24 could properly identify ways to prevent sexual transmission of HIV. However, this was way lower to the target of 80% of the 2015 Millennium Development Goal (South Africa 2015).

Knowledge of HIV transmission among students was reported high, however knowledge of HIV transmission through mother-to child and availability of drugs for post-exposure prophylaxis in case of sexual coercion was poor (Higher Education HIV/AIDS Programme 2010: 21). Although knowledge to HIV transmission has been noted as a key prevention, it is imperative not to overemphasise the importance of HIV/AIDS knowledge above other HIV/AIDS prevention strategies and interventions, since it does not predictably render change in behaviour, attitude and practice. In the same way, it has also been shown that accurate HIV/AIDS knowledge is not a predictor of behavioural change, however, correct HIV/AIDS knowledge is a prerequisite for change (Shisana *et al.* 2014).

Given the fact that the majority of students are adolescents, this points to the fact that they are at a stage of discovery and experimentation aligned with individual and social issues linked to knowing and asserting sexual identities. In 2010, students were about 18 times more susceptible to have sexually transmitted infections such as gonorrhoea and about 10 times as likely to have syphilis as young people in the general population (Higher Education HIV/AIDS Programme 2010).

Breier (2010) notes that even though students have increased risk of contracting HIV compared with the general population, they do not manifest risk at the level that exist within their larger national community. This suggests that prevention strategies designed within the education sector are finding their mark. Nonetheless, students remain susceptible to HIV infection because of the physical, social, psychological, and economic elements of adolescents. Thus, institutions of higher learning have a responsibility of creating pathways for accelerating HIV prevention within this community.

Based on the literature above, it is evident that university settings tend to be fruitful grounds for risky sexual behaviour. As universities are unique communities, they have a greater role of educating and developing students for long term development. University students constitute an integral community in HIV/AIDS interventions (Mulwo, Tomaselli and Dalrymple 2009: 311). This suggests that interventions that are designed for the general population may be unsuitable for students. It is through communication that HIV/AIDS knowledge gets disseminated across the education sector, however, limited attention is paid to interrogating the impact of these interventions is addressing behavioural drivers of HIV/AIDS within the student community.

4.6 Case description of the selected HEIs

The forthcoming analysis will highlight HIV/AIDS communication programmes implemented at the four selected universities for the study.

4.6.1 Durban University of Technology

The Durban University of Technology (DUT), formerly known as the Durban Institute of Technology emerged as a merger of two technikons, namely, ML Sultan and Technikon Natal in April 2002. DUT has seven campuses and is located in Durban and Pietermaritzburg. 75% of the students at DUT are African.

The Durban University of Technology has an HIV/AIDS committee that is made up of various stakeholders from all sectors of the institution. The committee plays a vital role in all major consultative and communication structure. The role of the HIV/AIDS committee is to create, analyse, and effectively put in place an HIV/AIDS policy. In addition, the university has an HIV/AIDS centre that assists students with information and provides support for their HIV/AIDS related concerns. Student counselling offers counselling for students, while the university health care clinic provides primary health care and conducts a wellness programme for students infected with HIV/AIDS (Durban University of Technology 2016).

As part of the communication structure of the HIV/AIDS prevention programme and services offered at DUT (Durban University of Technology 2016), the following programmes are currently in place:

4.6.1.1 HIV/AIDS Programmes at DUT

Peer Education Programme- at the Durban University of Technology peer education is used to promote health and to encourage positive change among students. The HIV/AIDS centre at DUT conducts its peer education programme yearly by recruiting first and second year university students. The primary role of a peer education at DUT is to facilitate peer sessions in order to explore students' attitude and values towards social issues such as gender based violence, sexual reproductive health issues and HIV/AIDS.

HIV/AIDS Prevention and Awareness- The Durban University of Technology facilitates the following programmes to promote HIV/AIDS prevention and awareness among students:

Zwakala Men's Forum: the aim of the Zwakala men's forum is to support and encourage young male students to actively contribute meaningfully to their communities, rather than being the perpetrators of violence. In the context of HIV/AIDS, the Zwakala Men's forum promotes safer sexual practices and a positive sex approach.

The lady's lounge: The lady's lounge is a student led project which aims to empower female students by providing a space and resources to address HIV/AIDS challenges among female students. Through this initiative female students discover several issues as well as celebrate their collective strengths. This is done through poetry, dialogue, and film and event art.

First Things First Campaign: The First Things First Campaign is a wellness programme that is run by the HIV/AIDS centre at DUT. The wellness programmes take place every semester across all campuses. The aim of the campaign is to encourage HIV testing among students and to create student friendly environment for students to test for HIV.

Gender- based violence: The silent protest: The DUT hosted its first silent protest in 2015. The silent protest is an anti-rape and sexual violence protest that raises awareness about gender based violence.

ReTHINK your Drink: This project addresses the potential dangers of substance abuse among university students. Risky sexual behavior has been associated with the abuse of alcohol and illicit drugs. This suggests that higher education institutions have a critical role to play in disseminating information about responsible drinking habits among these group of individuals.

Counselling and Testing

The Durban University of Technology HIV/AIDS centre offers pre and post HIV/AIDS counselling to students in order to encourage them to explore possible solutions to their HIV/AIDS related issues. In addition, HIV/AIDS counselling is offered to students to make informed decisions about testing for HIV.

4.6.2 University of KwaZulu-Natal

The University of KwaZulu-Natal (UKZN) was formed in January 2004 as a result of the merger between University of Durban-Westville and the University of Natal. The university campuses are located in two cities, namely, Durban and Pietermaritzburg. The University of KwaZulu-Natal is a home to more than 40 000 students, including international students from more than 70 countries.

The University of KwaZulu-Natal has an HIV/AIDS policy in place and the policy provides guidance on how the university should handle various issues pertaining to HIV/AIDS such as confidentiality, education, HIV/AIDS counselling, prevention and care. In order to fulfill this, the University of KwaZulu-Natal provides information and education materials relating to HIV/AIDS, encourage students and staff to participate in HIV/AIDS awareness campaigns during induction and orientation days. In an effort to mitigate the spread of HIV/AIDS on campus, the university has created the Centre for HIV/AIDS Network (HIVAN) in 2002. HIVAN works closely with the

UKZN AIDS Programme in carrying out the university's HIV/AIDS agenda (University of Kwazulu- Natal 2016).

4.6.2.1 HIV/AIDS Programmes

The University of KwaZulu-Natal offers various services with other stakeholders in each campus as part of the university's commitment to ensure that there is an institutional response to HIV/AIDS to minimise the impact of HIV infection on students and staff, UKZN offers the following services (University of Kwazulu- Natal 2016):

Free Post- exposure prophylactic ARV treatment for victims of sexual assault:

Free treatment of opportunistic infections and STIs: with students engaging in sexual behavior that place them at a high risk for HIV/AIDS and STIs infection, it is evident that the university of KwaZulu-Natal has placed key emphasis on free prevention and care of HIV/AIDS for students who are vulnerable to the HIV/AIDS epidemic and economically burdened to afford private health care.

Wellness programme for the management of students living with HIV/AIDS: provision of wellness programmes across UKZN campuses contribute to the provision of support and care services for students affected and infected with HIV/AIDS. In other words, the implementation of wellness programmes across university campuses will help in curbing the negative impact of HIV/AIDS among students.

Peer training and education programme in each campus: Imparting of HIV/AIDS knowledge through peer education programmes is important in influencing students' behavior and attitudes regarding HIV/AIDS. This suggests that peers can influence each other positively by promoting health enhancing behavior among their peers.

Post- exposure prophylactic ARV treatment of occupational exposure to HIV: The University of KwaZulu-Natal provides free medication to students and staff who have been potentially exposed to HIV infection. This involves taking antiretroviral medication (ARVs) after being potentially exposed to HIV to prevent being infected. This shows that UKZN is committed to minimising the risk of HIV infection, whilst caring for patients who are infected with HIV/AIDS.

4.6.3 University of Zululand

The University of Zululand (UNIZULU) is situated north of the uThukela River in KwaZulu-Natal. UNIZULU has two campuses. The main campus is located in KwaDlangezwa and the second campus is situated in Richards Bay. The majority of students are Black African and reside on campus (University of Zululand 2016).

4.6.3.1 HIV/AIDS Programme

The HIV/AIDS programme aims to create a working environment that is supportive, sensitive and responsive to staff and students living with HIV/AIDS and encourage employees and students to adopt positive and healthy lifestyle thus taking personal responsibility for preventing further spread of HIV/AIDS.

In 2003, the University of Zululand received funding through The HIV/AIDS Tertiary Education Linkages Programme (TELP) which led to the development of the HIV/AIDS programme. The aim of TELP was to provide support to HEIs in mitigating the spread of HIV/AIDS on campuses (University of Zululand 2016).

Through this funding the University of Zululand was able to (University of Zululand 2016):

Establish a site for HIV/AIDS testing: The establishment of the HIV/AIDS counseling and testing site was supported by the Department of Health. The Department of Health provides the centre with test kits and has also provided two HIV/AIDS counsellors. The support of the Department of Health shows the government's commitment in playing an active role and partnering with all stakeholders to mitigate the spread of HIV/AIDS across the country.

Create a peer education programme for students: The University of Zululand runs a student peer education programme which upholds the principles of the "Rutanang" model. The process of recruitment includes inviting students to participate in the programme and being selected based on a particular criteria determined by the HIV/AIDS committee. Students receive training on HIV/AIDS and facilitation skills. The peer education is monitored through the use of a portfolio management system. By monitoring the peer education programmes the HIV/AIDS committee will be able to identify gaps within the programme and the impact of the programme on students.

Train staff members as HIV/AIDS counselors: internalising HIV/AIDS programmes will encourage the university community to play an active role in mitigating the spread of HIV/AIDS on university campuses.

Implement mass communication campaigns: Mass communication campaigns are a vehicle to promote HIV/AIDS awareness and knowledge. The communication campaigns in place include condom distribution, HIV/AIDS week and memorial candle light day. This highlights the university's effort in implementing student friendly HIV/AIDS programmes to combat the impact of HIV/AIDS within the university community.

Develop materials that could be used during the mass communication campaigns: Having print materials during a campaign can help disseminate in-depth information regarding HIV/AIDS.

Other strategies of HIV/AIDS at the University of Zululand include the Drama in AIDS Education (DramAidE).

4.6.3.2 Drama in AIDS Education

DramAidE was founded in 1992 as an outreach program of the University of Zululand that promotes HIV/AIDS awareness and facilitates transfer of skills among poor resourced communities in KwaZulu-Natal. DramAidE uses the arts and other participatory approaches to:

- Mitigate the spread of HIV/AIDS and reduce new infections,
- Reduce HIV/AIDS related stigma and discrimination,
- Develop and implement peer education programs,
- Promote treatment literacy,
- Create awareness on voluntary medical male circumcision,
- Promote health and wellness, and
- Promote prevention of mother to child transmission.

In addition, DramAidE runs for major projects which are as follows (University of Zululand 2016):

4.6.3.3 Voluntary Medical Male Circumcision Demand Creation

The Voluntary Medical Male Circumcision (VMMC) is an all-encompassing strategy that mobilises all stakeholders in a concerted and combined effort. DramAidE employs community

mobilisers to undertake VMMC activities such as men-to-men sessions, condom distributions, presentations on campus and at community events. It is evident that the University of Zululand has rolled out VMMC as an HIV/AIDS prevention strategy. Although VMMC interventions focus mainly on men, VMMC awareness messages should be tailored in a manner that empower female students to engage in VMMC communication campaigns.

4.6.3.4 Women and Girls sexual reproductive health

The primary goal of the project is to improve maternal and child health outcomes by providing women and girls with information related to HIV/AIDS and sexual reproductive health. The project also links women and girls to health services in their respective communities. The project intervention integrates social mobilisation, advocacy and communication together with health systems to improve access to quality sexual reproductive health services. Taking into account the sexual culture of students at university campuses it is vitally important for student services to enhance sexual reproductive health services on university campuses.

4.6.3.5 Act alive comprehensive health program

This project aims to initiate and sustain a communication process that develops the capacity of universities and schools to create enabling environments where university students can feel safe. The project strives to facilitate awareness on substance abuse and HIV/AIDS, whilst providing psycho-social support to students. With substance abuse leading to irresponsible and risky sexual behavior, it can be argued that students can contract HIV, STIs or become pregnant. This intervention is therefore an appropriate strategy to curb the effects of substance abuse on high risk sexual behavior among university students.

4.6.3.6 Travelling Theatre

The travelling play consists of a mobile theatre group that takes place in tertiary institutions, communities and schools. The play uses participatory forum theatre techniques that creates opportunities for people to engage in an interactive discussion in a fun, non-threatening manner. The travelling play centers its message on HIV/AIDS, gender based violence, substance abuse, family planning and prevention of mother to child transmission. The university's approach in using theatre plays to educate and entertain students is a student friendly method to engage students in mitigating the spread of HIV/AIDS on campus.

The HIV/AIDS policy at UNIZULU was established in 2002. The policy provides guidelines for the university's response to the HIV/AIDS epidemic. An HIV/AIDS committee has been formed to ensure ongoing response to the HIV/AIDS epidemic and to support senior management in implementing HIV/AIDS programmes and strategic planning on HIV/AIDS. The University of Zululand adopted the Rutanang Model in addressing HIV/AIDS education within the university. Furthermore, prevention activities conducted at the University of Zululand include peer education, condom distribution, life skills training in partnership with the KwaZulu-Natal Health Department, Behavioral Change Communication (BCC), awareness campaigns and outreach activities (University of Zululand 2016).

4.6.4 Mangosuthu University of Technology

Mangosuthu University of Technology (MUT), formerly known as Mangosuthu Technikon was established in 1979 as part of a project undertaken by the South African Labour and Development Research Unit (SALDRU) of the University of Cape Town. MUT is located in a semi-urban area at the heart of Umlazi Township, Durban. Currently, the University of Technology has 10 000 registered students, which 60% reside in university residence.

MUT provides student health services on campus. There are presently, two professional nurses and part-time doctors who provide health services to students. The following services are provided at the health clinic: STIs treatment and counselling, HIV blood testing and VCT, pap smear and pregnancy test (Mangosuthu University of Technology 2016).

4.6.4.1 HIV/AIDS Unit at Mangosuthu University of Technology

The Mangosuthu University of Technology runs the following HIV/AIDS programmes:

The First Things First Campaign: On the 27th of May 2010, MUT launched its First Things First campaign as an effort to ensure accessibility to the provision of health care services for the university community (Students and Staff). The First Things First Campaign is an annual event that is led by the MUT university clinic. During each event, students receive various health-related services such as testing for HIV/AIDS, STIs, and Pap smear. Other services provided during this period is pre and post HIV/AIDS counselling.

Medical Male Circumcision Programme (MMC): In line with the National Strategic Plan for HIV/AIDS 2012-2016, MUT has established a programme to promote medical male circumcision

to reduce the risk of HIV infection among the university community. This shows the commitment of the university in making provision for health intervention in addressing the HIV/AIDS epidemic at MUT.

MSM/LGBTI Programme: In order to bridge the gap that existed in addressing the sexual health needs and prevalence among the LGBTI community and the MSM marginalised group, MUT endeavoured to promote knowledge and build capacity within the university campus by adopting the NACOSA 2012 MSM/LGBTI programme. This suggests that the university aims to promote enabling environments for a positive health system where marginalised groups such as the LGBTI and MSM community can get access to sexual health services without fear of violation on their basic human rights.

Voluntary HIV/AIDS counselling and Testing (VCT): The University provides pre and post HIV/AIDS counselling to students and staff. In other words, MUT makes provision for VCT as an essential point to assist students and staff to know their HIV status and to make sound sexual decisions live.

4.7 SWOT analysis on HIV/AIDS programmes implemented at DUT, MUT, UKZN and

UNIZULU in relation to Interactive communication, BCC and the Health Belief Model.

The current SWOT analysis is intended to identify existing competencies and gaps within the HIV/AIDS programmes for HIV/AIDS education implemented in the four HEIs selected for this study. The HIV/AIDS programmes implemented in the selected HEIs for the current study plays a vital role in mitigating the spread of HIV/AIDS among the university community. The SWOT analysis describes the strengths, weaknesses, opportunities, and threats of the HIV/AIDS programmes as shown in Figure 4.2.

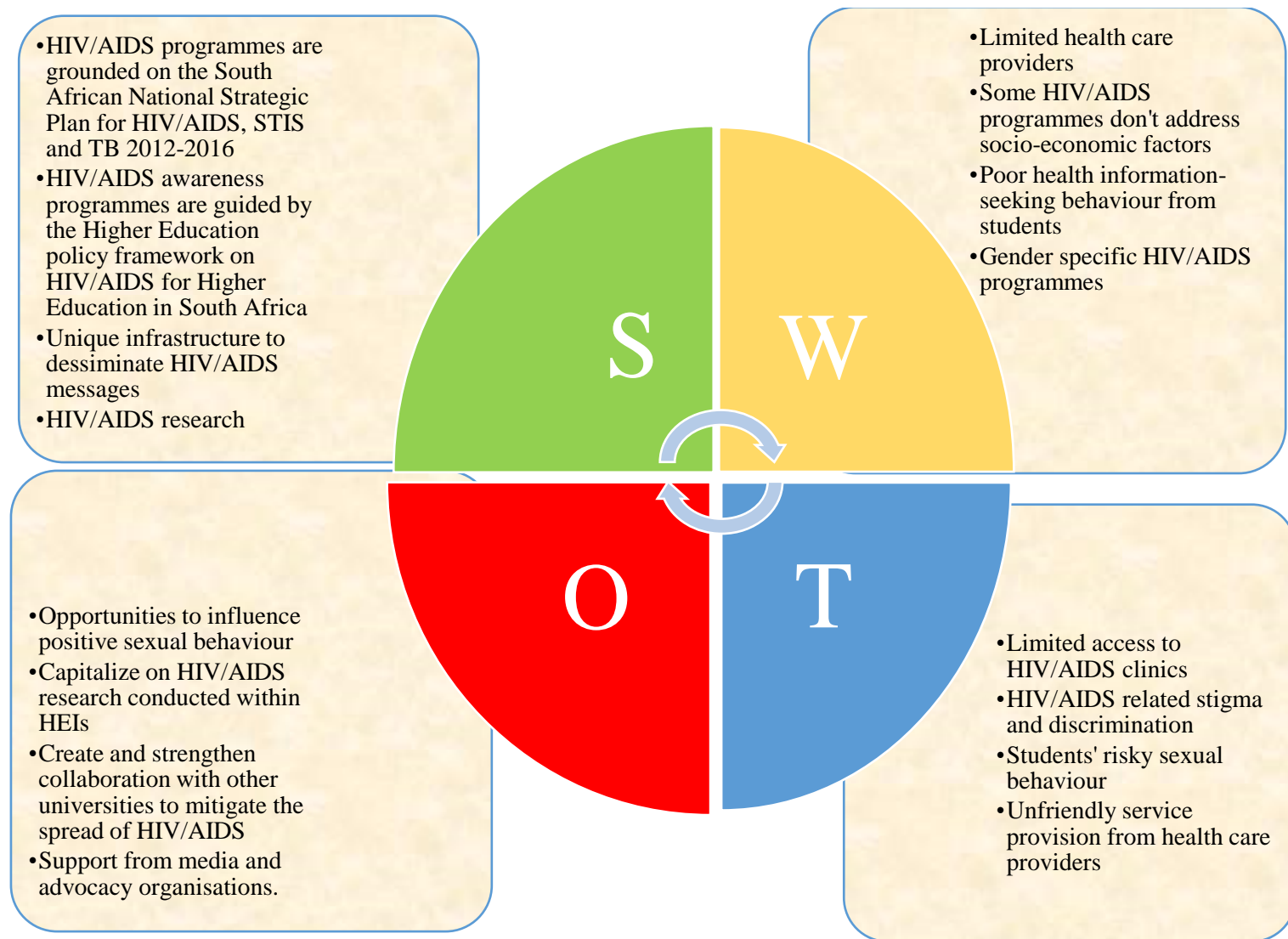


Figure 4. 2: SWOT analysis for HIV/AIDS programmes in HEIs

4.7.1 Discussion of key factors under each element of the SWOT analysis

Strengths

HIV/AIDS programmes implemented in the four selected universities for this study, have shown many strengths in mitigating the spread of HIV/AIDS among the university community. With the implementation of the South African National Strategic Plan (NSP) for HIV/AIDS, STIs and TB 2012-2016, HIV/AIDS programmes implemented in HEIs refers to recent scientific advances in HIV/AIDS treatment, care and support, and behavioural and social interventions to reduce new HIV infections and to advance treatment of HIV/AIDS. It is therefore important that HIV/AIDS programmes implemented in HEIs be grounded on updated scientific evidence and research. This is supported by earlier studies conducted on HIV/AIDS programmes among young people that report that in order for HIV/AIDS programmes to be effective, “action to prevent HIV/AIDS transmission among young people should be theory and evidence based” (Aarø, Flisher, Kaaya, Onya, Fuglesang, Klepp and Schaalma 2006: 518). HIV/AIDS programmes in HEIs are also guided by the HEAIDS policy framework on HIV/AIDS for Higher Education in South Africa.

The HEAIDS policy framework on HIV/AIDS for Higher Education acknowledges that the higher education institutions relationship with society goes beyond teaching, learning, and research. In other words, the relations of HEIs and the society are given effect by the inclusion of community consultation and engagement. According to the Southern African Regional Universities Association (2008: 14) the advantage of having an HIV/AIDS policy is that it represents the institution’s commitment to institutionalise HIV/AIDS. Based on the aforementioned, HEIs HIV/AIDS programmes are capable of addressing social and structural barriers that increase vulnerability of HIV/AIDS among the university community.

The HEAIDS policy framework also acknowledges that HIV/AIDS treatment, care and support must be accessible and affordable to all university students and staff (HEAIDS 2012). In addition, HIV/AIDS programmes implemented at the selected universities for this study strikes an important balance between services that support the connection to and the retention of HIV/AIDS care such as peer pressure programmes, substance abuse treatment services and services that address social factors that are usually overlooked such as HIV/AIDS related stigma and discrimination.

Weaknesses

Although the strengths of the HIV/AIDS programmes implemented in the four selected HEIs for this study are substantial, some areas of concern and problems inevitably persist. First, university clinics do not have enough health care providers to cater for students' health needs. While it is notable that HEIs are making progress in addressing HIV/AIDS within university campuses, it is essential for university clinics to consider the impact of social processes on biomedical HIV/AIDS prevention programmes. This view is supported by findings from a study conducted on voluntary medical male circumcision in Kwa Zulu- Natal. The data highlights that men often see VMMC as a challenge to their masculinity. Traditional masculinities have shown to hinder men's access to HIV/AIDS services and it has been identified as the main cause of young men's self-exclusion from VMMC uptake (HEARD 2016). This suggests that the VMMC programme often fail to engage young men who might be at risk of contracting HIV/AIDS, and this can be attributed to the failure to take into account the multifaceted social processes that influence the public reception of such HIV/AIDS prevention techniques.

Second, some HIV/AIDS programmes highlight mitigating the spread of HIV/AIDS but fail to elaborate on how socio-economic factors that drive the spread of HIV/AIDS will be addressed. The absence of strategic plans to address socio-economic drivers of HIV/AIDS among university students makes it challenging to mitigate the spread of HIV/AIDS within this community. Thirdly, some HIV/AIDS programmes are unknown and lack identity, and because of poor health information seeking behaviour from students some programmes become less effective. Therefore, it is important for student services to use communication tools that are accessible to all students when addressing HIV/AIDS related issues.

Fourthly, while it is critical to implement HIV/AIDS programmes that are specifically tailored for marginalised groups such as the LGBTI community, student support services should not overlook some issues that could benefit other members of the university community. Thus, it is strongly encouraged that all HIV/AIDS programmes are designed to address HIV/AIDS needs of all students regardless of gender or sexual orientation.

Opportunities

The opportunities highlighted here reflect the external environment in which the HIV/AIDS strategies are situated. There is an opportunity for innovative HIV/AIDS programmes such as theatre, radio, and social media to influence positive sexual behaviour among students. A study

conducted in Kenya on “The influence of television adverts on sexual behaviour and contraceptive use among the youth in public universities in Nairobi” revealed that television adverts had an impact on students’ sexual behaviour attitude towards sex (Thuita 2015: xii). This suggests that there is an opportunity for the aforementioned youth friendly platforms to fill key knowledge gaps among students and the university community at large. HIV/AIDS research collaborations between universities can be a potential tool to ignite interest among university staff and students to support HIV/AIDS care and prevention efforts. There is an increasing awareness of HIV/AIDS by the media (such as electronic, print and social media) and advocacy organisations such as TAC. Student support services should therefore use these platforms to engage with students in order to promote HIV/AIDS awareness and wellness.

Threats

Despite significant increases in the number of students living with HIV/AIDS, there is still limited access to campus clinics at HEIs (Higher Education HIV/AIDS Programme 2010: 2). Shortage of campus clinics could worsen the potential to mitigate the spread of HIV/AIDS among students as access to HIV/AIDS care and prevention is limited. Although provision of free HIV/AIDS services on campus clinics is a critical tool in expanding access to HIV/AIDS care and treatment, bad attitude from health care providers remains a substantial challenge to accessing HIV/AIDS care (HEAIDS 2010: VXII). It is important for student support services to train health care providers on youth friendly provision of HIV/AIDS care. Similarly, HIV/AIDS related stigma and discrimination threatens access to effective HIV/AIDS care and treatment in HEIs. The major threat, however, remains students’ risky sexual behaviour.

It is clear that the selected HEIs for the study are committed to responding to the HIV/AIDS epidemic. The HIV/AIDS communication programmes implemented highlight efforts of mitigating the spread of HIV/AIDS within the university community. The universities have adopted various approaches to create a dynamic, two-way exchange of HIV/AIDS information. It is notable that communication is a critical instrument in HIV/AIDS education and awareness.

For analysing the communication strategies for HIV/AIDS education by student support services in the four selected HEIs, the study was theoretically supported by two complementary theoretical viewpoints: The interactive communication model and the Health- belief model.

4.8 Communication tools for HIV/AIDS education: the Interactive model of communication

The interactive communication model highlights that health communication affects personal, interpersonal, and social systems. However, a significant feature in the interactive communication process is between the communicator and the recipient (Williams 2001: 26). An interactive communication model was used to identify factors that hinder the encoding and decoding process between student services and students. The model of interactive communication below, highlighted in Figure 4.3 by Mersham and Skinner (2002: 10) provides a framework of the interactive communication process between the sender and the receiver.

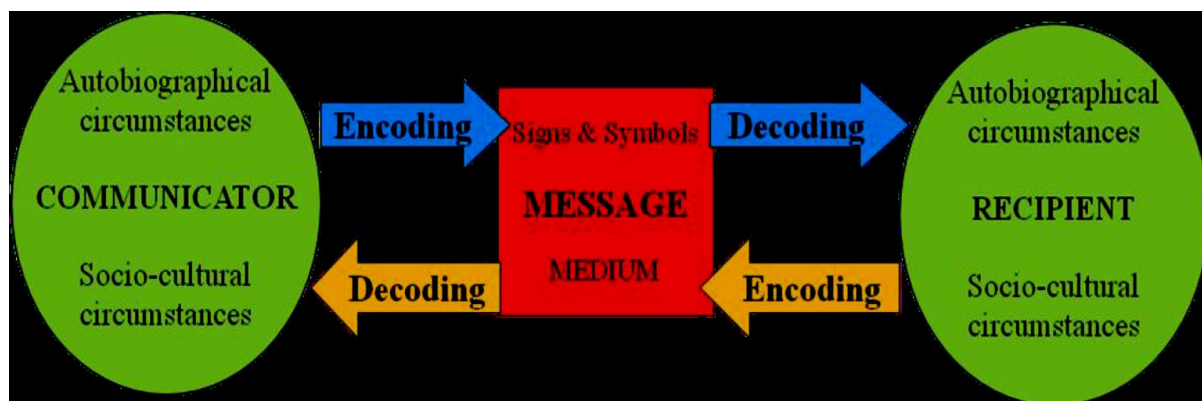


Figure 4. 3: A model of interactive communication (Source: Mersham and Skinner, 2002: 10)

The study describes how elements in the interactive communication model share meaning of messages communicated. The model illustrates how the communicator encodes a message according to their socio-cultural background and autobiographical make-up. The message is then sent to the recipient through a medium. The recipient then decodes the message according to their socio-cultural and autobiographical make-up. The interactive communication model further illustrates how active both participants are during the communication process and how they can have an effect on one another as seen in Figure 4.3.

4.8.1 Elements in the Interactive Model of Communication

Communicator: a communicator is the person who initiates the process by intentionally forming a purposeful message that he/she attempts to express to the recipient (Dominick 2011: 4). The communicator encodes message according to their socio-cultural and autobiographical

background. A sociocultural context refers to the awareness of circumstances that surrounds an individual and the influence of social and cultural factors that affect their behaviour (Park 2015: 2). This suggests that the communicator develops self-meaning within social contexts and develops his/her identity by interacting with external circumstances. In relation to this study, student support services disseminate HIV/AIDS messages based on their social and cultural realities. It can be argued that student support services construct HIV/AIDS messages within a social context that is shaped by their social identity and socio-cultural structures.

Encoding: Encoding refers to the formation of messages and the understanding and interpretation of these messages by the receiver is called decoding (Mpeli 2005: 34). Stuart Hall postulates that the dynamic formulation rather than the inactive reception of meaning is a socially constructed process, and in order to completely thoroughly comprehend the complexities rooted in a text, the whole communication process needs to be well-thought-out (Hall 1996: 441). This suggests that within a diverse social and cultural framework various meanings can be generated out of a single text that does not link directly to the encoded meaning anticipated by the sender and the decoded meaning that reaches the receiver.

In keeping with this study, this model should aid in understanding the preferred interpretation of the HIV/AIDS messages encoded by student services at universities in KwaZulu-Natal and the interpretation of these messages by students. This model will grant the analysis of this study a chance to take into account the complex structure of the encoding process and to determine if the students had interpreted the message in a way the student services had intended for it to be received.

Message: a message is the meaning content that is encoded by the communicator (Dominick 2011: 4). In the context of this study, the message is the HIV/AIDS intervention programmes that student support services implement to mitigate the spread of HIV/AIDS within the university community.

The medium: The medium is the link between the communicator and the receiver. The medium is a physical means by which the messages are disseminated between participants in the communication process. Technological and electronic means of communication such as radio, television, pamphlets, and social media are all mediums of communication. It can be argued that various mediums of communication can influence the way in which recipients receive and interpret the message. For example, HIV/AIDS campaigns such as condom distribution and HIV/AIDS

testing held on campus are more likely to persuade students to take immediate action against HIV/AIDS infection by getting tested and using condoms, as compared to a radio broadcast that is encouraging students to visit the campus clinic to get tested for HIV/AIDS and to use condoms. In essence, the student support services should prioritise on communication mediums that make HIV/AIDS services more accessible to students.

Recipient: The recipient is the target of the message. The recipient's identity is also profoundly shaped by their socio-cultural realities. In relation to this study, university students translate and interpret HIV/AIDS messages into a form that has eventual meaning for them.

Decoding: Is the process of receiving, understanding, and interpreting the encoded message by the recipient. Through his synthesis of understanding the complexities of the encoding and decoding process, Stuart Hall identified three "hypothetical positions" from which decoding of a message might be made (Hall 1996). The three hypothetical positions disclose the various ways in which a recipient can interpret a message, whether they hold a dominant, negotiated, or oppositional position in their decoding position. The three hypothetical positions are discussed below in detail:

The dominant hegemonic position – According to Procter (2004: 69), in this position the receiver decodes the message according to the codes permitted by the encoding procedure that supersedes cultural orders. In relation to this study, the dominant position will show the preferred communication tools to disseminate HIV/AIDS education by students. The main objective of implementing institutional responses to the HIV/AIDS epidemic in higher education institutions is to mitigate the spread of HIV/AIDS in universities and to educate the higher education community about HIV/AIDS prevention, care, and support. This position of interpretation will uncover whether the HIV/AIDS communication tools used by student services have a positive impact on students' sexual behaviour and if they are responsive to the objectives of the HIV/AIDS programme.

The negotiated position- This position is contrary to the dominant hegemonic position. In this position the receiver has the potential to determine that HIV/AIDS communication tools used to educate students about HIV/AIDS are not relevant or applicable to them, opposing the dominant (obvious) codes (Procter 2004: 69). In the context of this study, the negotiated position of interpretation will enrich the findings of this study by bringing to the surface other possible meanings from the HIV/AIDS education programmes. In other words, students can have a

“general” interpretation of the HIV/AIDS messages disseminated through various communication tools, but it does not mean that students will embrace the message; instead they will negotiate and apply various perspectives before they accept the message as it is. This is confirmed by Hall (1996) that there are numerous factors that contribute to the manner in which a recipient decodes a message such as the social setting of the receiver, various codes, abilities and experiences they have encountered.

The oppositional position- In this position the recipient identifies the dominant codes and opposes them (Procter 2004: 69). In relation to this study, the oppositional position will help identify students who do not agree with the HIV/AIDS messages communicated. This position should bring an analysis to whether the content of the HIV/AIDS message communicated has an impact on behaviour change. Within this study there could be students who feel they are not at risk of contracting HIV/AIDS and therefore they cannot relate to the messages communicated.

The aforementioned hypothetical positions highlight the significance of active interpretation. Hall’s hypothetical positions illustrate that the receiver’s decoding may not follow the same logic the sender had encoded (Hall 1996). This suggests that it is likely that the message encoded does not relate with the decoded message. It can therefore be argued that for a message to be meaningful, the receiver should be an active part of the message encoded. This means that the sender should take into account structural differences in which individuals (receiver) live. In other words, the sender must understand the cultural and socio-economic aspect of the receiver. In the context of this study, student services should tailor HIV/AIDS programmes that all students can relate to regardless of cultural background and socio-economic position. According to Hall (1996), the process of decoding a meaningful message should be within the confines of understanding ones culture. This suggests that there is a direct link between structure of the culture, in which an individual lives and how they understand encoded messages.

The interactive model assisted the researcher to analyse how student services use communication tools to disseminate HIV/AIDS information to students in a university setting. This model enabled the researcher to explore how the message communicated by student services is received and how feedback from students is encoded to the sender (student services). This will also enable the researcher to understand various factors that can influence the meaning that is conveyed and interpreted. Stuart Hall’s encoding and decoding process accounts for the different interpretations

that students have about HIV/AIDS communication strategies used by student services. This creates an understanding that a message intended at a particular audience can be interpreted and understood in several ways, apart from what it was intended for. In relation to this study, the influence of the interactive model in bringing about behavioural change among students was thoroughly assessed.

4.8.2 Behaviour change communication

Behavioural change communication (BCC) is an interactive process with communities or institutions to develop tailored messages and approaches using a variety of communication channels to develop positive behaviours; promote and sustain individual, community and societal behaviour change; and maintain appropriate behaviours (Kaufman, Rimal, Carrasco, Fajobi, Soko, Limaye and Mkandawire 2014: 46). Behaviour change communication is usually incorporated in health programmes to disseminate tailored messages and an environment that is conducive that motivates individuals and communities to make positive health behaviour change (Briscoe and Aboud 2012: 612).

Before individuals and communities can reduce their level of risk or change their behaviours, they must first understand basic facts about HIV/AIDS, adopt key attitudes, learn a set of skills, and be given access to appropriate product and services. They must also perceive their environment as supporting behavioural change and the maintenance of safe behaviours, as well as being supportive of seeking appropriate treatment for prevention, care, and support.

In South Africa, HIV/AIDS behaviour change communication is centred on the National Strategic Plan (NSP) (AVERT 2016b). The current National Strategic Plan 2017-2022 is aligned with the UNAIDS vision of “zero new HIV infections, zero discrimination and zero HIV/AIDS related deaths”(UNAIDS 2011). Although the majority of South African behaviour change programmes are primarily targeted at young people, recent literature records high HIV incidences among young people (Mulwo 2009; Mutinta 2014; Shisana *et al.* 2014). Growing evidence associate the unprecedented spread of HIV/AIDS among young people with risky sexual behaviour.

Due to the different and interrelated roles of behaviour change communication, an effective behaviour change communication can (Family Health International Institute for HIV/AIDS 2002: 5):

Improve knowledge accumulation: BCC can ensure that people are well informed about HIV/AIDS in a language they can understand and through visuals. Student support services at universities can use BCC to inform students about HIV/AIDS in a language they can relate to and understand.

Encourage community dialogue: BCC can stimulate HIV/AIDS dialogue at a local and national level. As a result these dialogues address underlying factors that exacerbate the spread of the HIV/AIDS epidemic. BCC can also encourage conversation of healthcare seeking behaviour for prevention, care, and support. Student support services should prioritise student programmes such as peer education to create a platform for students to interact with each other about HIV/AIDS issues and other sexual reproductive health matters.

Support essential behaviour change: BCC can influence proper attitudinal changes, for instance, perceived personal of HIV infection and attitude towards HIV/AIDS treatment and care. BCC can be used to change students' perception about their susceptibility to HIV/AIDS and to know where to seek HIV/AIDS care and support.

Reduce stigma and discrimination: BCC can address HIV/AIDS related stigma and discrimination. In a university setting, BCC can be used as a tool to address issues of stigma and discrimination towards people living with HIV/AIDS.

Generate a demand for information and services: BCC can make individuals and communities to demand HIV/AIDS related information and adequate services. Through continuous promotions and awareness campaigns, student services at university can create a culture of seeking information about HIV/AIDS among students.

Advocate: BCC can direct policy makers towards effective interventions to mitigate the HIV/AIDS epidemic.

Promote services for prevention, care, and support: BCC can promote HIV/AIDS related services such as VCT, family planning and condom distribution.

Improve skills and sense of self-efficacy: BCC programs can reinforce new skills and behaviours, such as safe sex practices and regular HIV testing. Student services in HEIs should use health communication to educate students about risky sexual behaviours. Through health communication

programmes students can lessen their chances of being infected with HIV/AIDS by practicing safe sexual activities.

Based on the aforementioned views, it can be argued that behaviour change communication can be used to empower university students to be agents of change by promoting dialogue, shared knowledge, and collective action to fight the HIV/AIDS epidemic.

4.9 Understanding students' preventative health-care actions: The Health-Belief Model

In the 1950s psychological models were designed by public health researchers such as (Hochbaum, Rosenstock and Kegels 1952; Rosenstock 1974) in order to improve the effectiveness of health education programmes (Conner and Norman 2005: 45). During the early 1950s, the US public health service was centred on disease prevention rather than treatment of disease. Therefore, the public health concern for complications related to patient's symptoms and adherence to medical treatment was minor. Key philosophers who formulated the health belief-model were more concerned about the prevalent failure of individuals to participate in preventative health measures. Various demographic variables such as socio-economic status, ethnicity, gender and age were commonly linked with preventative health behaviours and utilisation of health services (Rosenstock 1974: 328). However, these demographic variables could not be modified through health education.

The Health-Belief Model (HBM) was developed by Rosenstock and colleagues in the 1950s. The HBM was developed to help comprehend why people use or did not use preventative services provided by public health departments. In addition, this model advanced to address lifestyle behaviours such as risky sexual behaviour. Over four decades, HBM has been commonly used to explain health-related behaviour. The HBM model is influenced and shaped by two learning theories namely: the stimulus-response theory (Thorndike 1898; Watson 1925; Hull 1943) and the cognitive theory (Lewin 1936; Köhler 1957). The forthcoming analysis derived from the confluence of the learning theories will examine how these two theories contributed to understanding behaviour and shaping contemporary HBM.

Scholars such as Hull (1943) and Watson (1925) who formulated the Stimulus-Response (SR) theory consider learning as an outcome of an event ("reinforcement") which lessens physiological drives that stimulate behaviour (Rosenstock, Strecher and Becker 1994: 6). Skinner (1938)

advanced the concept of behaviour by formulating a commonly accepted hypothesis that demonstrates that the frequent occurrence of behaviour is determined by its consequences or reinforcements. Skinner (1938) argues that the link between behaviour and the imminent consequence is sufficient to upsurge the probability of repetition of behaviour. Such behaviours are called operants; they function on the environment to enforce change resulting in reward or reinforcement. In this perspective, psychological reasoning or thinking are not required to explain behaviour (Rosenstock, Strecher and Becker 1994: 6).

Early cognitive theorists such as Lewin, Dembo, Festinger and Sears (1944) accentuated the role of subjective hypotheses or anticipations held by the perceiver. In his view, Lewin (1948) argues that it is the world of the observer that determines what the subject will and will not do. Thus, behaviour is a function of the subjective value of an outcome and of the perceiver's expectation that a certain act will accomplish that outcome. Such constructions are called "value expectancy" theories (Rosenstock, Strecher and Becker 1994: 6). According to Rosenstock, Strecher and Becker (1994: 6) psychological processes such as reasoning, thinking or hypothesising are important elements of all cognitive theories.

The HBM is known as a value-expectancy theory. Following the reformulation of the value-expectancy concepts in the context of health-related behaviours, the subsequent translations were noted (Rosenstock, Strecher and Becker 1994: 6):

- The need to evade sickness or to be in good health (value);
- In addition, the belief that a certain health act available to a person would stop infection (expectation).

Furthermore, expectancy was described as the perceiver's evaluation of personal susceptibility to and severity of a disease, and of the probability of being capable to lessen the threat of the illness through personal action (Rosenstock, Strecher and Becker 1994: 6).

The HBM attempts to predict health-related behaviour within a belief context. Philosophers such as Hochbaum, Rosenstock and Kegels (1952) advanced the interpretation of the HBM model by dividing three classes of factors that health-related behaviour depends on:

- The existence of adequate motives to make health problems important and noticeable.

- The certainty of being vulnerable to a life threatening disease or to the ramification of the disease or condition. This is usually called perceived threat.

The belief that taking preventative measure against the threat of a particular illness or health condition would be beneficial in minimising the sequel of that disease and in a more cost effective way. Cost refers to any obstacles that will hinder the perceiver from following the health recommendations; it comprises of, but is not limited to, financial costs.

Over the years since the development of the HBM, contribution of key philosophers such as Janz and Becker (1984), Becker (1974), Kirscht (1974), Rosenstock (1974) have shaped the emergence of the health belief model and have helped to expand and simplify the model in order to understand screening behaviours and preventative actions to illness or health condition. According to Salmon and Atkin (2003: 455), in the health belief model, the communication is primarily centred on influencing a range of beliefs concerning the personal possibility of each outcome, attitudinal and behavioural responses are dependent upon each persons' assessment of these outcomes. Therefore, the HBM model was developed in an attempt to predict an individual's reaction to preventative health care, highlighting the importance of giving the patient autonomy over his/her health problems (Northouse and Northouse 1992: 13).

In their synthesis of expanding and simplifying the health belief model, DiClemente and Peterson (1994: 8) argue that individuals are more likely to take action or control ill-health circumstances if they consider themselves vulnerable to the condition. They will also make an effort to get help if they believe that a course of action at their disposal would benefit them by reducing either their vulnerability to or the harshness of the condition. On the other hand, Rosenstock, Strecher and Becker (1994) identified key components of the health belief model. These key descriptors are discussed in detail below:

Perceived susceptibility- this element refers to the individual's perception of the risk associated with contracting or experiencing ill-health conditions. The subjective perception of disease infection varies extensively. Those who have low chances of acquiring the disease deny the susceptibility to the disease. Individuals in a moderate group acknowledge their vulnerability to the disease and those who are extremely vulnerable to the illness feel there is peril that they are more likely to experience. In terms of medically established infection, this dimension has been improved to include acceptance of the diagnosis and subjective estimates of vulnerability.

Perceived severity- this refers to the beliefs an individual holds concerning the severity of a disease and the effects a particular illness would have on their state of affairs. These special effects can be seen from a viewpoint the complications would bring; for example, disability, pain, discomfort, and financial loss. It is therefore imperative to consider emotional and financial burdens when considering the severity of an illness or situation.

Perceived benefits of taking action - it is believed that a personal acceptance of susceptibility to a disease makes an individual to take action towards that disease. However, the action that an individual takes depends upon beliefs regarding the efficacy of various available methods to reduce the threat of the disease.

Perceived barriers- It is noted that an individual may decide not to take action even though the benefits of taking action are beneficial. This is usually due to barriers. These are potential negative elements regarding the treatment, or preventative measures, which hinder an individual from taking action such as high cost medication, inconvenience to access treatment or discomfort. These characteristics may act as impediments to taking the desired action.

Cues to action- One's subjective perception of the level of vulnerability and severity produces a force to act. Thus, benefits without perceived barriers create a pathway of action. However, it may require a "cue to action" for the preferred behaviour to take place.

In addition, Rensburg (1997: 229) highlights two components of the health -belief model that focus on communication. These are the cues to action and the modifying factors. The cues to action consist of all methods of communication that encourages people to take health action, while the modifying factors refer to psychological, sociological, and demographic factors that influence an individual to obey health-promoting behaviour. The "cues to action" also refer to the process of finding factual and relevant health information and the role of health information in decision making. Recent studies have examined the HBM constructs and safe-sex behaviour.

4.9.1 The Health Belief Model and HIV/AIDS communication

From the foregoing analysis, it is clear that the health belief model has been used to determine the direct relationship between beliefs and behaviours related to health, and also identifying mitigation measures (Glanz, Rimer and Viswanath 2008). The HBM provides a framework for understanding the potential influence on students' decision to utilise university health care clinics.

The HBM will provide a framework for understanding factors at individual level (students) that influence their decisions to use campus clinics and HIV/AIDS services provided by student services. Although the model provides the context for understanding influential factors for students' decision making with regard to utilisation of university health care clinics, it does not examine the factors functioning beyond the individual level such as the role of community and health systems.

It can be argued that the values a student hold towards HIV/AIDS education campaigns implemented by student services can influence their behaviour and attitude towards the message. In other words, a student will take action towards a perceived severity of a particular health problem only if they personally feel susceptible to the health problem. Although the model provides framework to predict individual's health related behaviour by accounting for individual differences in beliefs and attitude, the model fails to address socio-environmental factors that influence individual's decision on the use of health care services.

4.10 Integrating the Interactive Model of Communication, Behaviour Change Communication and the Health Belief Model for HIV/AIDS communication strategies in HEIs

The transmission of HIV/AIDS is mainly attributed on human behaviour related to sexuality and substance use (Srivastava and Moreland 2012: 230). Communication has been identified as a key component in disseminating information that may prevent risky sexual behaviour and publicising HIV/AIDS awareness that can lead to the reduction of HIV/AIDS related stigma (Stangl *et al.* 2013: 12). It is notable that HIV/AIDS programmes implemented in HEIs are directed towards changing risky sexual behaviour among university students.

Thus, the primary purpose of integrating the interactive model of communication, behaviour change communication and the health belief model in this study is to analyse the pivotal role that the aforementioned models play in making successful communication strategies that shape students' perceptions of HIV/AIDS and behaviour change (see figure 4.4). In addition, the interactive model of communication, behaviour change communication and the health belief model will shed light on the significance of combining various communication tools to achieve effective message. It can be argued that aforementioned models can play a major role in behaviour change for effective communication for HIV/AIDS education among university students.

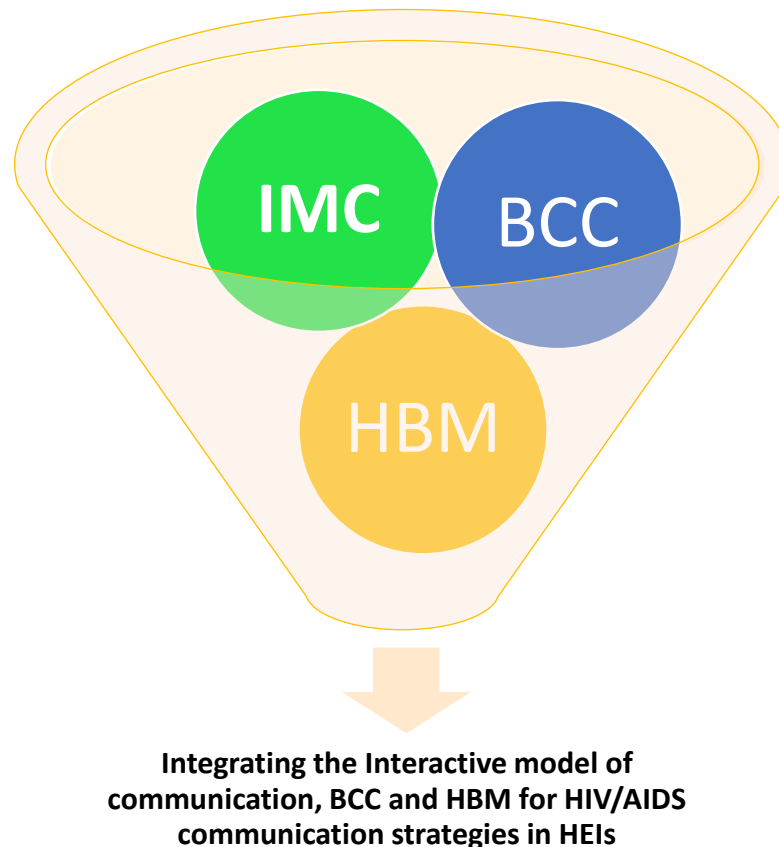


Figure 4. 4: Integrating the Interactive model of communication (IMC), BCC and HBM (Source: Field Data, 2017)

The interactive model of communication is a communication process of creating meaning between the sender and the receiver through expression and interpretation of message (Cleary 2004: 2). It is reasonable to suggest that the interactive model of communication is the most effective means in influencing safe sex behaviour among university students because the content of the message constructed by student support services is more harmonised with the university culture and traditions. This means that the message communicated has been tailored in a manner that will address sensitive issues of sexual behaviour among students without offending any individual or minority group. Thus, for sustained awareness on HIV/AIDS among university students it requires student support services at HEIs and students to be active participants in the communication process for behaviour change particularly in HIV/AIDS prevention campaigns.

Despite the potential effectiveness of the interactive model of communication, there are some weaknesses in the approach. First, feedback is not simultaneous and can therefore take time.

Second, the communication process cannot be regarded as dynamic as it predicts communication to follow the same pattern or way. Therefore, to overcome the weaknesses in the interactive model of communication, the Health Belief Model and Behaviour Change Communication play a vital role in influencing positive behaviour change among university students.

Firstly, BCC campaigns encourage dialogue among students to address key drivers of HIV/AIDS. For example peer education programmes encourage students to engage in dialogue on HIV/AIDS prevention and to take preventive measures against HIV/AIDS infection. Secondly, BCC plays a vital role in promoting HIV/AIDS related services such as VCT through mass media that can reach a large population with diverse demographic profiles. The importance of using mass media to disseminate information is to reinforce the message particularly HIV/AIDS related information.

With HBM centred on value expectancy theory (Melkote and Steeves 2001: 132), that postulates that individuals will take preventative measures (risk-reduction behaviours) when they are vulnerable to a disease (self-perception of risk) and acknowledges the consequences as severe; students are more likely to take preventive actions in reducing the threat of contracting HIV/AIDS. For example, when students are informed that condoms can be used for dual protection against HIV/AIDS, STIs, and pregnancy, students are more likely to take condoms when they are distributed on campus because the perceived benefit of condom use is sufficient to overcome perceived severity and perceived barriers.

In essence, the interactive model of communication, BCC and HBM complement each other in the development of effective communication strategies for HIV/AIDS prevention and care.

4.11 Conclusion

In this chapter, the theoretical framework presented enabled the researcher to understand several factors that influence students' reception to HIV/AIDS programmes implemented by student services at HEIs. The use of the interactive model of communication enabled the researcher to comprehend thoroughly the encoding and decoding process. The role of BCC in health communication was explored to determine if tailored messages about HIV/AIDS can motivate students to make positive health behaviour change. The health belief model enabled the exploration of students' perceived benefits, and obstacles can impact their behaviour, insights, and attitudes.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 Introduction

This chapter expounds the research methodology and methods that were employed in the study. Examining the variables related to HIV/AIDS programmes in HEIs and the contribution of these variables to the analysis of communication tools for HIV/AIDS education by student services at universities in KwaZulu-Natal required a vigorous research approach that is firmly embedded in both qualitative and quantitative epistemology. This is important in order to ensure that study population (students and health care providers) in this study are given the opportunity to share their objective views on the phenomena under investigation. The chapter begins by outlining the research philosophy, research design and the research frame that was employed in the study. The two phases through which data was collected are thoroughly discussed. In concluding, the chapter reviews the validity and reliability strategies used to generate data and important ethical issues relating to the study are highlighted.

5.2 Research Philosophy

Paradigms have an essential role in science. The origin of the term paradigm is stated in Thomas Kuhn's book titled "The structure of scientific revolution" where he states that paradigms define *"the practices that define a scientific discipline at a certain point in time"* (Kuhn 1970: 23). He further suggests that paradigms are distinct and culturally based (Kuhn 1970). Neuman (2011: 94) describes a paradigm as a whole system of thinking. To be more specific, a paradigm would consist of the recognised theories, methods, traditions, frame of reference, body of research, and it could be viewed as a framework for reflection and understanding (Babbie 2010: 33; Creswell 2014: 19). Therefore the study will use objective methods rather than use subjective measurements through reflection, perception, or instinct.

Kinash (2006: 1) argues that paradigms are characterised by power relationships and action implications. Michel Foucault's theory (1972-1977) elucidates the concept of paradigms at great length. Foucault's theory on paradigms is based on the "mindsets of the age" (Kinash 2006: 1). Foucault argues that these mindsets come from active participation in conversational interactions of individuals and they are particular to a time and location context. They are socially oriented

rather than individual based (Kinash 2006: 1). Foucault (1972) postulates that the mindsets develop as a result of our daily interactions with other people, and our mindsets determine how we interact and build relationships with other people (Kinash 2006: 1).

In relation to this study, Foucault's concept of the "mindsets of the age" is useful for the analysis of the communication tools used by student services at universities in KwaZulu-Natal. The study will analyse the HIV/AIDS communication tools that universities have implemented within university campuses. One component of the "mindsets of the age" in relation to this study is that most students believe they are not at risk of contracting HIV/AIDS. As a result students tend to engage in risky sexual behaviour without using preventative health measures. A Foucauldian perspective of power relationships and action implications allows for the analysis of how HIV/AIDS messages are created as discourses and how students interpret these messages.

5.2.1 Ontology

Ontology is the study of being, in other words, the nature of existence and what constitutes reality (Gray 2013: 19). De Vos, Delport, Fouché and Strydom (2011: 309) postulate that ontology is the reflection of reality of the social world. It is a common belief that human beings construct their own reality through the subjective meaning of their own personal encounters, which are more likely to be complex (Creswell 2014: 13). Subjective ontology assumes that our insights are what shape reality and a subjective ontology perceives facts as culturally and historically positioned (O'Gorman and MacIntosh 2014: 57).

In relation to this study, it is believed that students and health care providers within universities have multiple realities with regard to communication tools used for HIV/AIDS education. And as these realities are complex, the participants were more likely to create their own reality through subjective meaning of their experiences (Creswell 2009: 8). Taking into account that the study population is at liberty to construct their own reality, it was important for the researcher to use research approaches that would permit and accommodate the complexities and subjectivity of the participants' reality (Creswell 2014: 36).

5.2.2 Epistemology

Epistemology is concerned with what is regarded as knowledge and how these knowledge assertions are justified, based on the relationship between the researcher and the study participants (Creswell 2014: 21). Neuman (2011: 93) describes epistemology as the issue of how we know the world around us or what makes a claim about the world true. Furthermore, Neuman (2011: 93) argues that the process of acquiring knowledge about the world is rooted and embedded in our ontological assumptions. Epistemology includes active participation in knowledge production and what scientific knowledge looks like once it has been produced (Neuman 2011: 93).

Paltridge and Phakiti (2015: 18) argue that knowledge can be observed in one of two ways. Knowledge can be viewed from a positivist paradigm which assumes an objectivist stance towards research inquiry. In this manner, the positivists must eliminate their influence from the research setting and distance themselves from their object of research inquiry so that they can determine an accurate correspondence between their observations and this reality. Alternatively, the constructivist paradigm takes a subjective position that attempts to know things are inherently and unavoidably subjective (Paltridge and Phakiti 2015: 18).

In view of the different options of viewing knowledge, this study adopted the positivist and the constructionism epistemological positions in order to constitute reliable knowledge relating to communication tools for HIV/AIDS education in HEIs in KwaZulu-Natal.

5.2.2.1 Positivism

This study adopted a positivist approach as reliable data was derived through quantitative analysis of phenomena observed. Morris (2006: 3) postulates that a positivist researcher upholds that it is possible to keep a distant, detached, neutral, and non-interactive position. A position such as this would allow the researcher to take up a role of an objective analyst, making disconnected interpretations about the data that have been collected in an apparently value-free manner (Morris 2006: 3). Here, the researcher is not influenced by the subject neither is the researcher affected or affects the subject of the research. This notion supported by Neuman (2011: 95) that positivist researchers choose precise quantitative data and usually use surveys, self-completion questionnaires and statistics. They seek rigorous, detailed measures and objective research. With regard to the undertaken study, self-completion questionnaires were used to advance knowledge

on HIV/AIDS strategies within a positivist framework. The researcher distributed a self-administered questionnaire to the sampled university students at four HEIs in KwaZulu-Natal province, and she assumed the role of observer of phenomena in a natural setting.

Although the scientific method of data collection based on the positivist paradigm was useful to answer important questions about the effectiveness of communication tools employed by student services at HEIs in KwaZulu-Natal, the quantitative method of gathering data could not explore the detailed views and perspectives of health care providers and their personal experience with the implementation of communication tools for HIV/AIDS education and the adoption of the interactive model of communication in bringing about behaviour change among students. This led the researcher to consider an alternative frame of reference which is constructionism.

5.2.2.2 Constructionism

Constructionism criticises the positivist belief that there is an objective truth (Sekaran and Bougie 2016: 28). Paltridge and Phakiti (2015: 16) regard constructionism as a research philosophy that perceives social realities (such as culture, institutions, morals, and cultural objects) as multiple and reliant on: who is involved, the nature of the study, and the context of the study. In other words, reality is seen as a social construction. Sekaran and Bougie (2016: 29) iterate that constructionism accentuates how individuals construct knowledge, it studies people's perspectives on various issues, and how people get to these accounts. Constructionists are primarily interested in how people's insights and opinions of reality result from interactions with others and the context within which they occur (Sekaran and Bougie 2016: 29).

In relation to this study, the semi-structured interviews conducted with health care providers are consistent with the constructivist paradigm, in that the interviews were aimed at understanding phenomena from the health care providers' perspective. The interviews conducted with health care providers yielded insight and understanding of communication tools used to disseminate HIV/AIDS message to university students.

5.2.2.3 Methodology

Methodological assumptions addresses a manner in which data will be obtained from participants (Botma, Greeff, Mulaudzi and Wright 2010: 288). Furthermore, Botma *et al.* (2010: 289) postulate that methodology describes the process taken by the researcher in conducting the

research. Paltridge and Phakiti (2015: 19) argue that positivists carry out their research by describing and controlling variables and influencing the research setting. In experimental research, researchers vary the independent variable under various conditions to test its effect. Study participants are randomly assigned to different conditions to avoid subjective selection by the researcher and to minimise the impact of other variables that might coexist during the experimental study (Paltridge and Phakiti 2015: 19).

In the present study, a pilot study was conducted among 10 university students to validate the questionnaire before using it in the main study. In contrast, the constructivist paradigm embraces a non-experimental, non-manipulative set of research procedures comprising of techniques associated with participant observation and in-depth interviews (Paltridge and Phakiti 2015: 19). As ontology within the constructivism paradigm is manifold, subjective and mentally constructed by individuals, the researcher had to bring into line the how data will be collected from the participants. Thus, the epistemological paradigm guided the researcher in choosing an appropriate method to share the truth to the outside world. It is based on this understanding of the subjectivity of epistemology and the dynamics of realities that the researcher decided to use in-depth interviews for health care providers at HEIs in KwaZulu-Natal as a method of data collection.

5.3 Research design

Research designs are forms of inquiry within qualitative, quantitative, and mixed methods approaches that gives specific guidance for procedures in research design (Creswell 2015: 44). Sekaran and Bougie (2016: 95) defines a research design as a blueprint or plan for the collection, measurement, and analysis of data, created to answer your research questions.

For the purpose of this study, the researcher will employ a convergent parallel mixed methods design involving a questionnaire and in-depth interviews to collect data and to gain insight into the phenomena under investigation. Creswell (2015: 43) describes convergent parallel mixed design as a type of mixed methods design where the researcher combines quantitative and qualitative data in order to give an inclusive analysis of the research problem. In this design, the researcher usually collects both qualitative and quantitative data concurrently and then integrates the data in the interpretation of the entire results (Creswell 2015: 44). In this study, the researcher merged the quantitative results that produced trends and relationships between communication tools for HIV/AIDS communication and behaviour change among university students, with the

qualitative findings that provided an in-depth personal perspectives of health care providers in order to produce a complete understanding of the communication tools employed for HIV/AIDS education by student services at universities in KwaZulu-Natal. This view is supported by Creswell (2015: 37) that combining quantitative and qualitative research approaches enables the researcher to gain multiple perspectives of a research problem from several angles.

This study was conducted in two phases: the initial phase consisted of a survey using self-administered questionnaire involving 474 students from four universities in the KwaZulu-Natal province. The second phase involved in-depth interviews with 24 health care providers (6 from each university). Figure 5.1 shows a diagram of a convergent design that was used in this study.

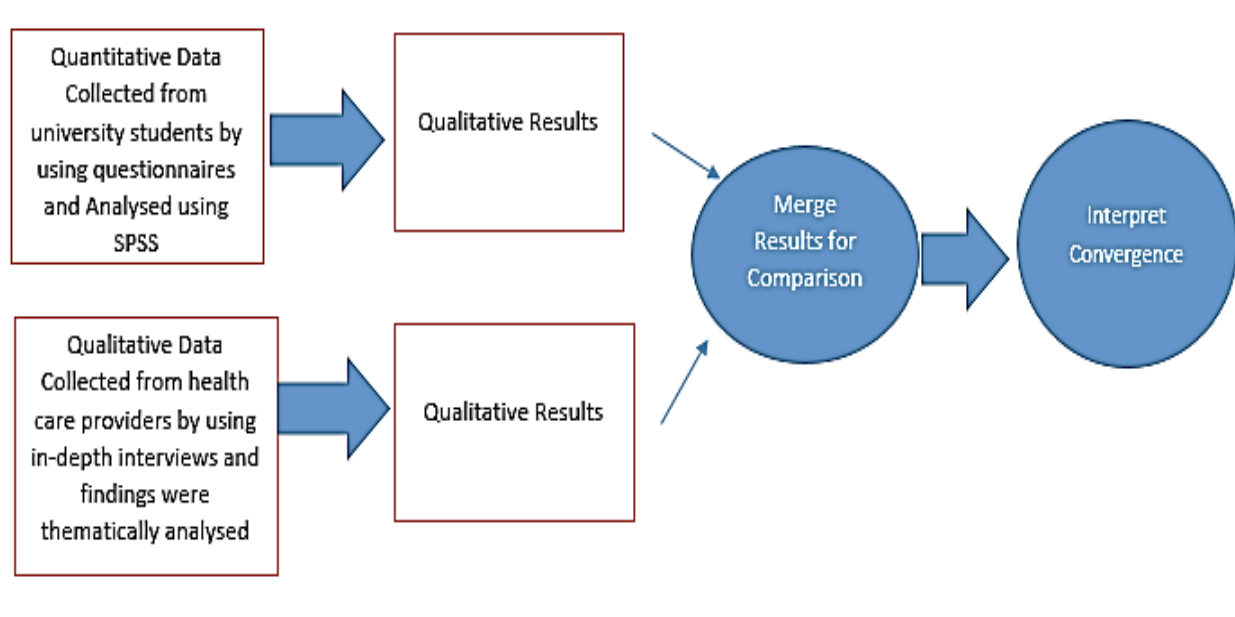


Figure 5. 1: Convergent parallel design (Source: Creswell, 2015: 56)

5.3.1 Mixed methods approach

Creswell (2014: 32) defines mixed methods research as an “approach to inquiry involving collecting both quantitative and data, integrating the two forms of data, using distinct designs that may involve philosophical assumptions and theoretical framework”. Furthermore, Creswell (2015: 2) posits that the primary notion of this approach is that the researcher integrates numerical trends (quantitative data) with stories and personal experiences (qualitative data), this strong combination provides a better understanding of the research phenomena than either data alone. This view is supported by Sekaran and Bougie (2016: 106) that the core aim of the mixed methods

approach is to answer research questions that cannot be addressed by using quantitative or qualitative approaches alone.

The mix methods research approach is centred around collecting data, analysing and mixing both quantitative and qualitative data in a single study or series of studies (Sekaran and Bougie 2016: 106). Leedy and Ormrod (2012: 29) describe quantitative research as a correlation among two or more phenomena which involves designs that are either descriptive or experimental. On the other hand, qualitative methods are usually used to understand the nature of a problem (Sekaran and Bougie 2016: 106).

In this study, students' questionnaires were administered to 474 university students at DUT, MUT, UKZN, and UNIZULU to generate quantitative data. Open-ended interviews were conducted with 6 health care providers from each university for acquisition of qualitative data. The two sets of data were analysed separately and later merged to give a multiple perspective of the problem under investigation.

5.4 Target Population

Polit and Beck (2012: 273) define a population as people who have similar characteristics or behave in a particular manner. According to Sekaran and Bougie (2016: 236) a population refers to a large group of people, events, or things of interest for which the researcher wants to make inferences.

In the current study, the study population comprised university students and health care providers from DUT, MUT, UKZN, and UNIZULU. Because of the large number of students involved in this study, the researcher selected full-time university students, health care providers at four public universities in KZN to produce more reliable results. In this study full-time students are defined as those who attend lectures, tutorials, and laboratory at all campuses for learning. Undergraduate students include those studying degrees, diplomas and certificates, and postgraduates are defined as those studying honours/Btech, masters and doctoral degrees. Health care providers consist of counsellors and nurses; HIV/AIDS managers were also interviewed.

5.5 Sample Size determination and distribution

Sekaran and Bougie (2016: 237) define a sample as a subset of the population. Neuman (2014: 246) elaborates that a sample is a small set of cases a researcher chooses from a large number of

people and generalises to the population. In this study, a formula that determined the students' sample size whilst estimating proportion of the outcome variable from the target population was used to determine the desired sample size. According Kothari (2014: 167) the sample size determination formula is applicable at a specific level of precision at 95% confidence level and where the population size is known. In addition, Sekaran and Bougie (2016: 258) argue that precision signifies how “*close we estimate the population parameter based on the sample statistic, confidence denotes how certain we are that our estimates will really hold true for the population*”. Thus, in this study the sample size was based on precision of 0.05 and a 95% confidence level. The sample size was calculated as follows (Kothari 2014: 167) :

$$n = \frac{N}{1 + N(e^2)}$$

Where by:

n - Sample size

N - Known study population

e - Level of precision

In relation to the study, N = 37,010 university students from four universities and level of precision (e) which is +/- 0.05 of the true value from this study.

$$n = \frac{37010}{1 + 37010(0.05^2)}$$

$$n = \frac{37010}{1 + 92.525}$$

$$n = \frac{37010}{93.525}$$

n = 395 university students

n = 395 students + (20% non-response rate x 395 students)

n = 395 students + 79 students

n = 474 students

Based on the aforementioned formula, the minimum desired sample for this study was 395 university students. To compensate for non-response during the data collection, the researcher increased the sample size by 20%. According to Morton, Bandara, Robinson and Carr (2012: 108), the non-response rate for survey ranges between 20% – 30%. For this study, 20% non-response rate was used considering time and financial constraints. The sample size was distributed proportionally among the four universities for data collection purposes. The faculty with the highest number of students was sampled for this study. The proportion of the sample size for each university is based on the proportion of each university population. Table 5.1 presents how the student sample size was distributed during the collection of data.

Table 5.1: Sample size distribution among universities students (Source: Field data, 2017)

Institution	Faculty	Population size	Proportion of the students per school	Sample size distribution per university
Durban University of Technology	Management Science	6500	0,18	83
Mangosuthu University of Technology	Engineering	8510	0,23	109
University of KwaZulu- Natal	Humanities	16 000	0,43	205
University of Zululand	Arts	6000	0,16	77
Total population		37 010	1,00	474

For the qualitative phase of the study, in-depth interviews were conducted with 24 key informants from the four selected universities. The interviews explored the health care providers' expertise and professional experience with communication strategies for HIV/AIDS education in HEIs, a purposive sampling method was used to identify health care providers. Table 5.2 presents how health care providers' sample size was distributed during data collection.

Table 5.2: Sample distribution among health care providers (Source: Field data, 2017)

Name of University	HIV/AIDS counsellors	HIV/AIDS programme manager	Nurses
Durban University of Technology	3	1	2
University of KwaZulu-Natal	3	1	2
University of Zululand	3	1	2

Mangosuthu University Technology	3	1	2
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5.6 Sampling procedure

The process of identifying the relevant individuals, objects, or events as representatives for the whole population is called sampling (Sekaran and Bougie 2016: 235). In addition, Neuman (2014: 246) posits that when we sample, we identify some cases to study in detail, and then we use what we have learned from them to understand a much larger set of cases. There are two types of sampling, probability sampling in which the elements in the population have equal chance of being selected as a sample subject (Sekaran and Bougie 2016: 240), and non-probability sampling, the elements do not have a known or predetermined chance of being selected as subjects (Sekaran and Bougie 2016: 240).

This study used both probability and non-probability sampling techniques to recruit the respondents. The selection of the public universities in KwaZulu-Natal was purely based on convenience sampling. This is a non-probability sampling technique where information is collected from key participants composed of those chosen because they are easily available (Gorard 2013: 84). The researcher selected four public universities in KwaZulu-Natal because public universities host a large number of students. Accordingly, this makes access to university students cost effective for the researcher to collect data. In each university, the researcher chose the faculty with highest enrolled students to ensure that the sample reflected the diverse population of each university.

Stratified random sampling was used to recruit university students. This is a sampling technique where the target population is divided into two or more natural and homogenous sub groups using a predetermined characteristic or criterion. Then the sample is selected randomly from the sub groups either proportionally or using equal allocation of the participants (Creswell and Poth 2017: 195). For selection of students in each university, the researcher divided the student population into two subgroups based on sex (male and female). Under each sub group, half of the sample size for each university was selected randomly. This sampling technique was appropriate because of

the heterogeneity of the selected public universities. The researcher took into account the demographics of each university and the multicultural aspect of each university campus comprising of African students, Indians, Coloured and Whites; students from SADEC (Southern African Development Community) countries, non-SADEC, and other continents (Europe, Asia, America).

For health care workers, purposive sampling was used to select key participants. The study targeted health care providers who work specifically in HIV/AIDs units within campus clinics. Any other health care provider who was affiliated to the clinics was not included in the study. These include receptionists, record keepers, and field workers who work at university campus clinics.

5.7 Variable identification and description

Sekaran and Bougie (2016: 72) describe a variable as anything that can take on differing or varying values. This research used two types of variables, namely independent variables and dependent variables. Using the study objectives, the researcher generated a set of variables to guide the formulation of the data collection instruments as shown in Table 5.2

5.7.1 Dependent Variables

The dependent variable is the variable of primary interest to the researcher. The main aim of the researcher is to understand and identify the dependent variable, or to describe its variability, or predict it (Sekaran and Bougie 2016: 73). In other words, a dependent variable is the main variable that lends itself for investigation as a viable factor (Sekaran and Bougie 2016: 73). In this study, behaviour change has been identified as a dependent variable. The researcher hypothesised that students' sexual behaviour change depended on the communication strategies for HIV/AIDS education employed in universities.

5.7.2 Independent Variables

An independent variable is one that influences the dependent variable in either a positive or negative way (Sekaran and Bougie 2016: 74). In this study, the following four independent variables were identified, namely, HIV/AIDS Communication strategies, HIV/AIDS Communication tools, Interaction between student support services and students in HIV/AIDS communication, Students' decision making processes, and behaviour regarding HIV/AIDS. These broad variables (independent) were further broken down into specific variables to support the

design of the data collection instruments as shown in Table 5.3. Another set of independent variables considered in the study were demographic variables that could influence behaviour change communication such as sex, University, race, age, religion, year of study, and nationality.

Table 5.3: Variable identified under each specific objective (Source: Field data, 2017)

Study objective	Broad variables	Specific variables
To examine HIV/AIDS communication strategies used by HEIs for student support services	Communication strategies (Independent Variable)	Existing policies and preventive measures(around HIV communication) Feedback on their impact to students behaviour change
To analyse the communication tools used by student services for HIV/AIDS at various HEIs.	HIV communication tools(Independent Variable)	Types of the communication tools/methods Location of dissemination Information dissemination methods Content of the communication(HIV messaging)
To analyse the extent to which the interactive model is applied by student services at various HEIs.	Application of interactive model of communication(in dependent Variable)	Student participation in communication(passively or actively involved) Hypothetical position (then and now) Perception of the risks to HIV by the students Feedback on effectiveness of the communication tools and strategies
To determine the influence of the interactive model in bringing about behavioural change among students.	Behaviour change among students (dependent Variable)	Frequent of visit to VCT/Counselling/treatment centres Safe sex practices(Use of condoms(male and female condoms),negotiation skills, being

		faithful to your partner & reduced number of partner) Seek treatment for Sexually transmitted infections
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5.8 Data collection methods and tools

Distribution of survey was the main data collection method used in the study. The measuring instrument used are self-administered questionnaires that consisted of closed-ended questions and nominal five point Likert scale questions ranging from 1 (Strongly disagree) to 5 (Strongly agree). An interview guide with open-ended questions was used to conduct interviews with health care providers from the four HEIs selected.

5.8.1 Self- administered Questionnaire

A self-administered questionnaire was used as a data collection tool to collect data from university students. The questionnaire had both closed and Likert scale questions. The preference for a self-administered questionnaire was based on the fact that students can complete them without help. It was also a cheaper and quicker method while reaching out to a larger sample. The questionnaire was designed to be completed anonymously by the respondents. The questionnaire was constructed in alignment with the study objectives.

The questions posed in the questionnaire were useful to gather information on the communication strategies used for HIV/AIDS education by student services at universities in KwaZulu-Natal. The questionnaire was categorised into five themes arranged in five sections (see Appendix G). Section A (question 1-5) was based on demographic data of the respondents; Section B (question 6-) elicited information on participants' knowledge of HIV/AIDS communication strategies employed in HEIs; Section C (question) examined participants' preferred tools of communication with regard to HIV/AIDS education; Section D (question) analysed participants' understanding of HIV/AIDS messages and examined contextual factors that shaped the meaning-making process in relation to HIV/AIDS education; Section E (question) examined participants' self-seeking behaviour based on the HIV/AIDS messages communicated by student services.

5.8.2 Semi- structured interviews

Gray (2014: 382) describes an interview as a verbal exchange in which the researcher attempts to acquire information and gain an understanding of the respondent. In this study, in-depth interviewing using semi-structured format was used to collect data from key informants. Gray (2014: 382) postulates that, the use of semi-structured interviews permits the researcher to “probe” for more information where the participant is requested to clarify what they have said. In other words, this phenomenological approach is concerned with the meaning that participants ascribe to phenomena (Gray 2014: 382).

The researcher used an interview guide (see Appendix F) constructed around issues central to the research question. In this study, interviews were conducted face to face with 3 HIV/AIDS counsellors, 2 nurses and 1 HIV/AIDS project manager per university. The researcher approached various divisions that provide health care services to students and suitable candidates were identified to participate in the study. An interview guide was used to assist the researcher to explore new questions as they unfold during the interview. Interviews took 30 to 40 minutes. In order to allow an in-depth examination of issues relating to the research question, the researcher used transition and probing during the interviews to allow the conversation to flow smoothly. The researcher asked questions such as “*Can you elaborate more on that...*”; “*, Can you give an example of this...*”; “*To reinforce what you have said, do you mean....*.” This facilitated generation of more data from participants and probing was used to stimulate more information after an initial question.

5.9 Data collection procedure and recruitment process

The researcher sought permission from the four selected HEIS for this study to collect data among university students and health care providers. After permission was granted from the selected universities, the researcher initiated a recruitment process of research assistants. The research assistants were key in mobilising and conducting the interviews with students; a recruitment process begun through developing selection criteria, seeking for potential candidates through referrals from some of the PhD students who had already conducted their data collection using the research assistants. The identified candidates were subjected to the criteria and four most qualified candidates were selected. The researcher also developed a training guideline for the research assistants and the contents of the training manual included data collection methods, ethical

considerations, code of conducts during data collection, data quality assurance, and selection of the students. After this preparation, the researcher conducted a day training with research assistants to prepare them for data collection.

After the research training, the researcher and research assistants proceeded to visit the four universities for data collection exercise. The researcher was responsible for conducting interviews with health care providers and research assistants facilitated the distribution of questionnaires among students. At each university, at least three tutorial fellows were identified to support the research assistants in mobilising the students and selection of the students' respondents. An initial meeting was held between researcher, research assistants and tutorial fellows to ensure that there is common understanding on the data collection process in that university. This process was repeated at each university. Using the appropriate sampling technique described in section 5.6, the right sample size of the students and health care providers were recruited. Direct recruitment of students was used to approach students from each university. An information letter describing the aims and objectives of the study was given or read to study subjects prior to signing consent forms. All participants were presented with consent forms prior to the enrolment of the study (see appendix H). Questionnaires were distributed to the students to fill within a period of 20- 30 minutes and submit them back to the research assistants. The questionnaires were distributed at lecture rooms after lectures were concluded. Only those who signed the consent form were eligible to complete the questionnaires.

For the health care providers, appointments were done with health care providers through a formal email and follow-up calls were made to remind health care providers about the research interview. Interviews were conducted in quiet environments to provide a confidential atmosphere where informants could give sensitive information. Permission to audio-tape the interviews was included in the consent forms. Interviews were conducted by the researcher to ensure that accurate information was supplied by the study subjects. The interviews followed the extended conversation approach in which the interviewer raised the questions and follows the approach that the respondent wants to undertake in their response, whilst using probes to bring them back to the key issues of the topic. This approach ensured that the participants' unique perceptions are gathered without necessarily losing focus of the study objectives. Thus, the interview questions were not necessarily similar, even though a standardised interview guide was used. A Dictaphone was used

in all the interviews which was transcribed and attached as appendices to this dissertation. Semi-structured interviews, transcribed data, and pretested questionnaires were used to ensure reliability.

5.10 Pretesting

The questionnaire was pretested prior to distribution. Ten university students from DUT in the Faculty of Accounting and Informatics were asked to critique the questionnaire and comment on the clarity and appropriateness of the questions. Pretesting was therefore used to ensure the questionnaire clarity, readability, and coherence. The feedback from pretesting was incorporated and amendments were made to the final version of the questionnaire.

5.11 Reliability and validity

Validity is a test of how well an instrument measures the particular concept it is intended to measure and reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring (Sekaran and Bougie 2013: 225). Plano Clark and Cresswell (2011:201) argue that because of the complexity of mixed method research, validating findings become even more important, as the mixed methods approach involves combining complementary strengths and non-overlapping weaknesses. In keeping with the above, this research relied on triangulation to address the issue of validity and reliability. Validity was ensured through pre-testing the questionnaire. Ten university students in the Faculty of Accounting and Informatics from the Durban University of Technology were selected for pre-testing the questionnaire. Secondary data such as HIV/AIDS policies and official reports were used to ensure validity and reliability.

Interviews were conducted by the researcher to ensure that accurate information is supplied by the subjects and to avoid interviewers who might cheat by filling out fictitious answers on the interview guide. The interviews followed the extended conversation approach in which the interviewer raised the questions and followed the approach that the respondent wants to undertake in their response, whilst using probes to bring them back to the key issues of the topic. This approach ensured that the participants' unique perceptions are gathered without necessarily losing focus of the study objectives. Thus, the interview questions were not necessarily similar, even though a standardised interview guide was used. A Dictaphone was used in all the interviews which were transcribed and findings presented in this dissertation. Semi-structured interviews, transcribed data, and pre-tested questionnaires were used to ensure reliability.

5.12 Data analysis, presentation and interpretation

The quantitative data was generated from the student's questionnaires. Before conducting the data analysis, raw data from the students' questionnaire was checked by the researcher to ensure that all the questionnaires submitted were filled in correctly. The data was further entered into a Statistical Package for Social Sciences (SPSS) version 21 to aid the statistical data analysis.

For quantitative data collected from the students, most of the data was categorical. The frequency distribution and proportion were used as descriptive statistics. This was done to establish the distribution of data among the students in the four public universities by generating trends and patterns of each variable in the students' population. According to Kothari and Garg (2014: 32), the frequency distributions displays the frequency of various outcomes of all the variables within the sample. In addition, proportion is viewed as numbers in comparative relation to a whole.

For the purposes of this study, the proportion was used in form of percentages within the frequency tables. The chi-square (χ^2) test of independence was used to test how the communication strategies, communication tools, and interactive model influenced the behaviour changes among the students in public universities in Kwa Zulu Natal province at a 0.05 significance level. The Chi Square test is whether two nominal variables were related (dependent on each other) or independent (Creswell, Klassen, Plano Clark and Smith 2016: 275). The analysed data was presented using frequency tables, contingency tables, graphs, and charts. This presentation aided the interpretation and the discussion of findings as indicated in section.

From the interviews conducted with key informants, the generated qualitative data was transcribed and analysed manually. Qualitative data was analysed thematically based on the various study themes. The objectives formed the primary themes of summarising the data, assisted in establishing the patterns in the data, and assisted in the discussion of findings.

5.13 Ethical consideration

Neuman (2014: 145) postulates that ethical issues are the concerns, problems, and struggles that arise over a correct way to conduct research. In other words, ethics defines what is or is not appropriate to do in terms of morality issues involved in research (Neuman 2014: 145). Permission was sought from DUT, MUT, UKZN, and UNIZULU to conduct the study. In this study, the researcher observed the following morality issues:

5.13.1 Anonymity and confidentiality

The main ethical consideration of this study is confidentiality and anonymity of all information retrieved from the data collection. All respondents would be protected from public disclosure and the most confidentiality would be honoured at all times. No personal information was recorded in this study. Respondents were assured that all information provided will only be used for the purpose of the study. However the processed data (Thesis) will be made available to anyone interested in the findings of the study. Tapes were transcribed and all paper sheets are to be stored in a locked cabinet for a period of 5 years after the completion of the study and then shredded. All electronic data were entered into a password-protected folder on a CD to be stored for a period of 5 years before being destroyed.

5.13.2 Voluntary participation

The structured interview schedules and questionnaires completed by participants at DUT, MUT, UKZN, and UNIZULU were taken to respective units by the researcher and research assistants on days of data collection. Of importance was the information that participating in the study is voluntary, and that study subjects are allowed to withdraw their participation at any time during the study with no negative repercussions on their side.

5.13.3 Informed consent

Before participants could sign consent to participate, the researcher outlined the purpose of the research as well as its main features including potential output of the study. Participants were informed that there were no direct benefits to them and no incentives for participating in the study. Permission to audio-tape was included in the consent forms given to health care providers. Participants were informed about the interview process and that probing questions may be asked to explore further their responses.

5.14 Conclusion

This chapter covered critical aspects of the research methodology applied in this study. Research paradigms were explained and linked to the study. The primary goal of this chapter was to describe the research approaches used to collect and analyse data. The chapter defined the research design adopted in the study, study population and the sample size was clearly described. In addition, the sampling method used was presented and reasons for selecting any method were given. The ethical

consideration and the measures to ensure reliability and validity of results were followed and discussed in this chapter.

CHAPTER SIX

DATA ANALYSIS AND FINDINGS

6.1 Introduction

This chapter presents the results and discusses the findings obtained from the quantitative and qualitative components of this study. The initial part of this chapter focuses on data obtained from questionnaires involving 423 university students, drawn from the four public universities, namely, DUT, UKZN, MUT, and UNIZULU selected for participation in the study. Results derived from the student questionnaires were discussed through the study objectives. The data collected from the questionnaires was analysed using SPSS version 24.0. Quantitative results present descriptive statistics using frequency and contingency tables, pie charts, graphs and discussions.

Part two of the chapter presents the qualitative results from the interviews conducted with health care providers at DUT, UKZN, MUT, and UNIZULU. Data was analysed through thematic analysis. The results obtained from the interviews are presented using thematic analysis (TA). Clarke and Braun (2013:6) define thematic analysis as a “method for identifying and analysing and reporting patterns in qualitative data”. Thematic analysis is designed to categorise, and expounds data in rich detail (Clarke and Braun, 2013: 6).

The following themes were identified during data collection and analysis:

- 1) Experiences of health care providers in health communication in HEIs;
- 2) HIV/AIDS communication strategies and campaign planning;
- 3) HIV/AIDS related stigma among university students; and
- 4) Evaluation of HIV/AIDS programmes implemented in HEIs.

Data obtained from the questionnaires and interviews was analysed to address communication tools employed for HIV/AIDS education by student services at universities in KwaZulu-Natal. The presentation and discussion of data collected from study participants follows below.

6.2 Presentation of quantitative analysis: Questionnaire

The research instrument used to collect data from university students is a questionnaire that consisted of 32 items. The questionnaire was divided into five sections. The first section explored the demographic information of the participants. This was followed by questions based on

HIV/AIDS communication strategies. The third section of the questionnaire explored the tools of HIV/AIDS communication, with the aim of understanding which tools are more effective in disseminating HIV/AIDS messages to students. The fourth section was based on the interactive model of communication and finally, the fifth section explored how HIV/AIDS messages interpreted by students lead to a change in sexual behaviour.

6.2.1 Demographic information of university students

This section describes the demographic characteristics of the student population involved in this study. The researcher sought to determine the age of the study participants to establish if age was a factor influencing students' engagement in HIV/AIDS related activities.

6.2.1.1 Age distribution of university students

Figure 6.1 highlights the age distribution of the university students.

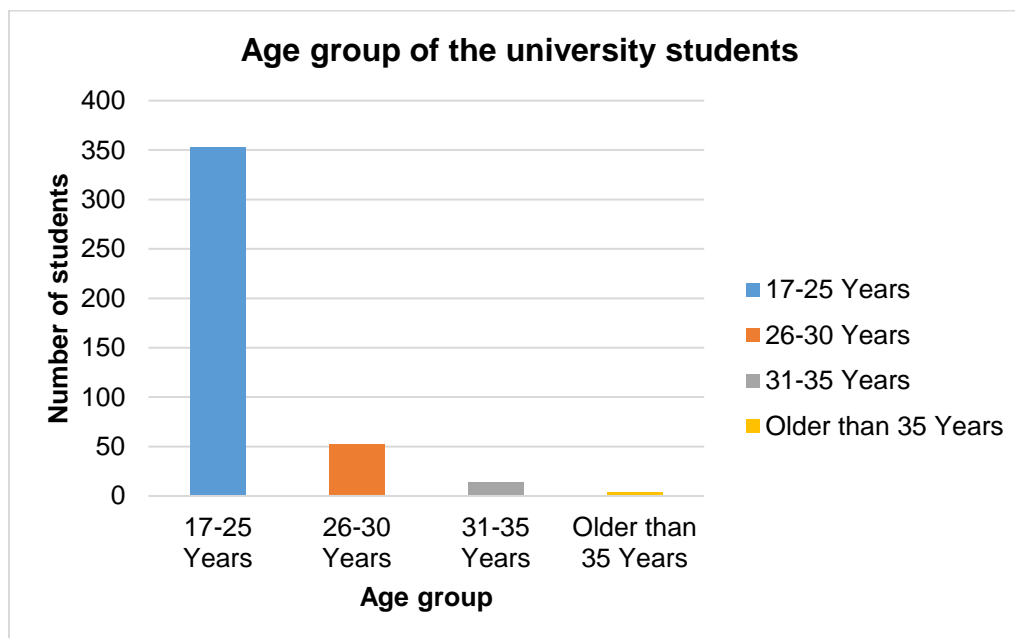


Figure 6. 1: Age distribution (Source: Field data, 2017)

The percentage of participants within the 17-25 age group was approximately (83.5%). Participants over the age of 35 were reported to be at (0.9%) as shown in Figure 6.1. The outcome of these results reveals that the majority of university students are at the prime of their lives. Contemporary literature reviewed in this study highlighted that young people aged between 15-24 accounts for 12% of people infected with HIV/AIDS in KwaZulu-Natal (SANAC 2014: 5). This

suggests that students who fall within the 17-25 age group selected for this study are more likely to be infected with HIV/AIDS. This is an important statistic as it highlights that higher education institutions are constituted by young people who are disproportionately affected by HIV/AIDS. This is consistent with the findings from the study conducted by the Human Science Research Council (HSRC) that found that the median age of first sexual encounter among adolescents in South Africa is at 15 years (Human Sciences Research Council 2013).

6.2.1.2 Gender distribution

Table 6.1 indicates the gender distribution of the students who participated in the study.

Table 6.1: Gender of the university students (Source: Field data, 2017)

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	211	49,9	49,9	49,9
Male	212	50,1	50,1	100
Total	423	100	100	

Table 6.1 reveals the gender of the university students. Approximately 49.9% (n=211) are females and 50.1% (n=212) are males. The outcome of these results shows that there is a gender balance in consumption and reception of HIV/AIDS related messages.

6.2.1.3 Racial composition

The racial composition of the university students is highlighted in Table 6.2.

Table 6.2: Racial composition (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Black	369	87.2	87.2	87.2
	Coloured	11	2.6	2.6	89.8
	Indian or Asian	35	8.3	8.3	98.1
	Other	8	1.9	1.9	100.0
	Total	423	100.0	100.0	

Table 6.2 highlights the racial distribution of university students and, presents a higher percentage (87.2%) of black students. This is followed by 8.3% of Indian or Asian students and 2.6% of coloured students. The remaining (1.9%) are students from other racial groups. These results illustrate that there is a racial imbalance at higher education institutions in KwaZulu-Natal. This racial composition is significant to the study due to the confluence of racial inequalities and HIV/AIDS in South Africa. It can be argued that since the majority of the participants are black, they are the racial group mainly affected by the HIV/AIDS epidemic. These results also support the notion that high HIV/AIDS prevalence have been recorded where many black South Africans live (Cain *et al.* 2013: 1).

This can be attributed to the poor response and confused policy developments to address the HIV/AIDS epidemic during the apartheid government (Van Dyk 2012: 9). In addition, the unequal distribution of resources, poverty and racial segregation have influenced the spread of the epidemic mainly in disadvantaged communities and marginalised groups (Fourie 2006: 51). It is arguable that black students continue to bear the burden of the HIV/AIDS epidemic due to socio-political, cultural, and economic factors that influence the patterns and severity of the epidemic within university campuses and their local communities.

6.2.1.4 Level of education

Figure 6.2 indicates the level of education of the university students.

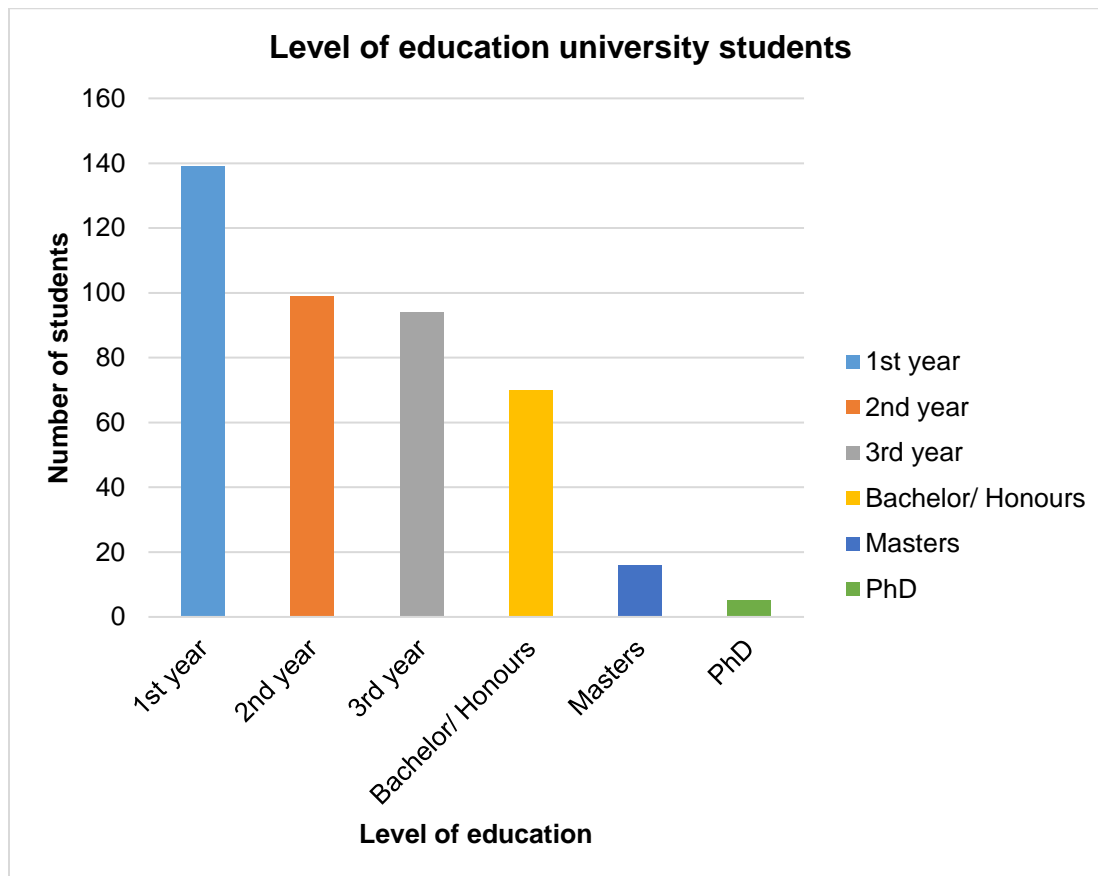


Figure 6. 2: Students' level of education (Source: Field data, 2017)

Figure 6.2 reflects that most of the university students are still in their first year of study. It was considered crucial to determine qualifications of the study participants, because the level of education has direct proportionality to the thorough comprehension of HIV/AIDS messages communicated by student services and the influence of student health decisions especially HIV/AIDS related issues. Results pertaining to level of education shows that 32.9% of the total participants are first year students, 23.4% are second year students and 22.2% being third year students. Approximately 16.5% of the respondents are enrolled for their Bachelor's honours degree or BTech, with 3.8% doing their master's degree and 1.2% at PhD level.

The results pertaining to level of education are in line with the White Paper for post-school education and training which aims to increase student enrolments to 1.6 million by 2030 (South

Africa 2013: 15). However, it can be said that with more students being enrolled in higher education institutions, universities are at risk as they house a large number of young people at their prime years of sexual activity. Nonetheless Kelly (2001: 4) believes that universities can be used as conducive environments for imparting skills and knowledge, empowerment and accurate HIV/AIDS information through education . Education has been identified as a social vaccine for prevention, care and management of HIV/AIDS (Association of African Universities 2010: 5). This therefore suggests that universities have the potential of reaching out to a larger portion of young people through education.

6.2.2 HIV/AIDS communication strategies

This section analysed the HIV/AIDS communication strategies that university students prefer. The section examined the channels that students access for HIV/AIDS related information. O'Sullivan *et al.* (2003: 141) postulate that communication channels are “modes of transmission that allow messages to be transmitted between the sender and receiver”.

6.2.2.1 HIV/AIDS prevention strategies

In order to determine HIV/AIDS prevention strategies preferred by university students, students were asked to select between workshops and discussion groups, theoretical approaches, traditional games and interactive approaches or other strategies. The purpose of this inquiry was to understand the prevention strategies through which students prefer receiving messages relating to HIV/AIDS.

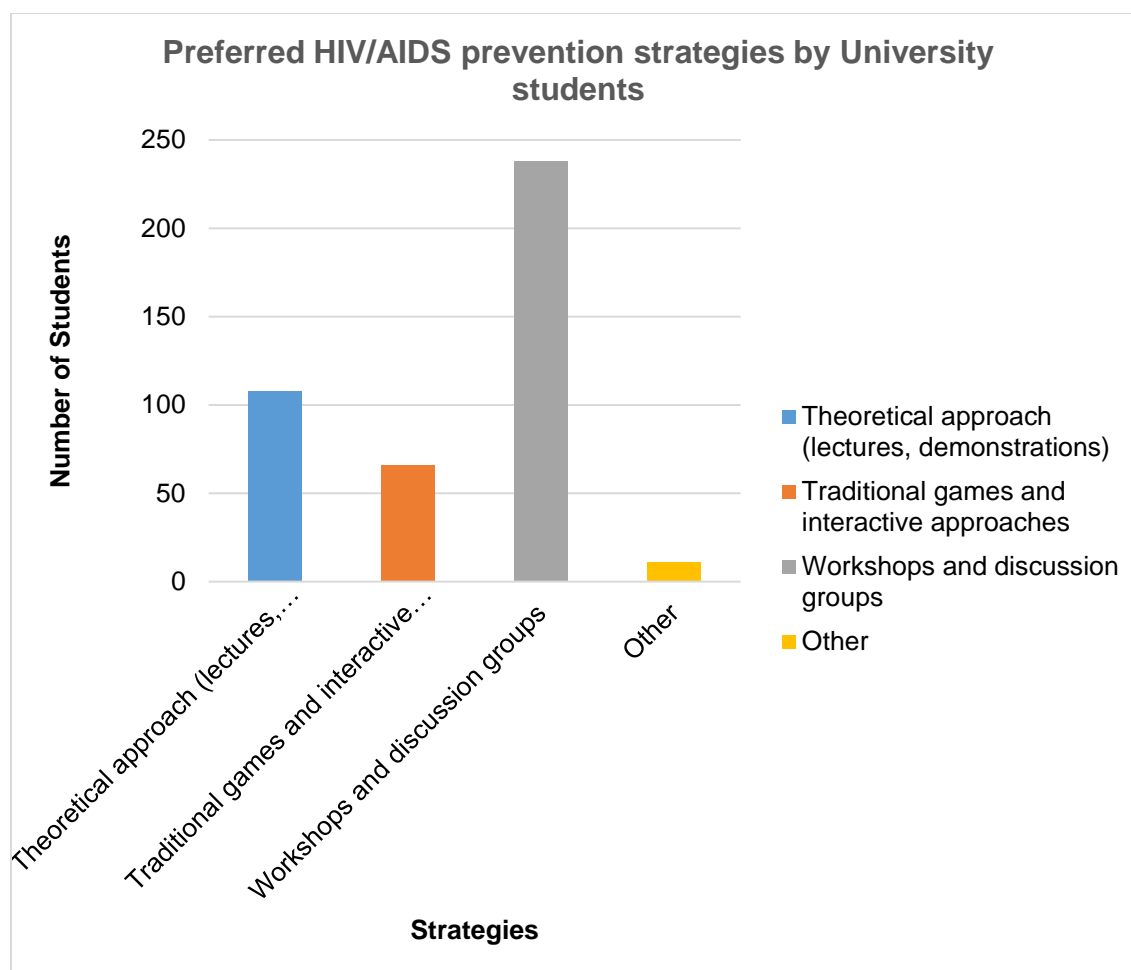


Figure 6. 3: Preferred HIV/AIDS prevention strategies by university students (Source: Field data, 2017)

The results of this inquiry showed that a vast majority (56.3%) of the university students prefer attending workshops and discussion groups to access HIV/AIDS information as highlighted in Figure 6.3. This is followed by theoretical approaches (25.5%), traditional games (15.6%), and other strategies (2.6%). These results resonate with the findings of the study conducted by the ACU among 35 universities in the sub-Saharan region.

The results of the study revealed that lecturers use their own approaches such as group discussions and debates to disseminate HIV/AIDS information (Association of African Universities 2010). This suggests that workshops and discussion groups are more effective in creating awareness of HIV/AIDS among university students. This can be attributed to the interpersonal setup of the prevention strategies. According to O'Sullivan *et al.* (2003: 11), strategic communication should

be participatory in order to encourage members of the intended audience to take part in the communication process.

It was also interesting to note that most of the university students in this study who selected traditional games and interactive approaches as preferred HIV/AIDS prevention strategies are from rural-based institutions such as University of Zululand and Mangosuthu University of Technology. Considering a large number of the students from the aforementioned universities are from the local rural communities, it is suffice to say that the students relate more to the traditional games and interactive approaches as agents of behaviour change because they are culturally defined and participatory. Similarly, Uwah (2013) states that a cultural approach provides an opportunity to improve effectiveness of HIV/AIDS strategies and to develop a sense of trust of the local community through sensitive approaches of participation and engagement.

6.2.2.2 Preventative programs most useful in addressing HIV/AIDS

University students were asked to indicate which preventative programs they find most useful in addressing HIV/AIDS.

Table 6.3: Preventative Programmes (Source: Field data, 2017)

		Frequency	Percent	Valid Percent
Valid	Education on HIV/AIDs	176	41.6	41.6
	HIV/AIDs workshops and lectures	96	22.7	22.7
	Mobile HIV/AIDS campaigns	62	14.7	14.7
	Others	89	21.0	21.0
	Total	423	100.0	100.0

Table 6.3 highlights that a significant number of students (41.6%) reported education on HIV/AIDS as a preventative program they find most useful in addressing HIV/AIDS. This is followed by HIV/AIDS workshop and lectures (22.7%), other preventative programs such as peer education sessions (21.0%) and mobile HIV/AIDS campaigns (14.7%). These findings support the notion that HIV/AIDS education is a crucial tool for HIV/AIDS prevention. HIV/AIDS is about providing HIV/AIDS related information to people and teaching them how to put it to use (Fighting AIDS Continuously Together 2016).

6.2.2.3 HIV/AIDS messages tailored to accommodate the multicultural aspect of the student community

In order to understand the meaning of HIV/AIDS messages encoded by student support services, students were asked to indicate whether HIV/AIDS messages at their universities are tailored to accommodate the multicultural aspect of the student community.

Table 6.4: HIV/AIDS messages tailored to accommodate the multicultural aspect of the student community (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	97	22.9	22.9	22.9
	Yes	326	77.1	77.1	100.0
	Total	423	100.0	100.0	

Results in table 6.4 illustrate that a vast majority of the respondents (77.1%) indicated that HIV/AIDS messages communicated by student services cater for the multicultural makeup of the student community whereas (22.9%) of the respondents indicated that HIV/AIDS messages are not tailored to accommodate the multicultural component of the student community.

6.2.2.4 Cultural influence on student sexual behaviour

Students were asked to indicate whether culture influences their sexual behaviour. Table 6.5 indicates the results of this inquiry.

Table 6.5: Cultural influence on student sexual behaviour (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	153	36.2	36.2	36.2
	Yes	270	63.8	63.8	100.0
	Total	423	100.0	100.0	

Results summarised in Table 6.5 highlights that approximately 63.8% of the respondents indicated that culture influences student sexual behaviour, while 36.2% indicated that culture does not influence student sexual behaviour. These results resonates with a previous study conducted by Sallar (2009: 85) that cultural practices associated with high HIV/AIDS prevalence among young

people include multiple concurrent partners, gender inequalities, refusal to wear condom during sexual intercourse and substance abuse. Taking into account that the majority of participants in this study are black students, it is arguable that the students' autobiographical and socio-cultural circumstances are shaped by traditional and cultural practices.

According to the constructs of the Interactive Model of Communication, the recipient's identity is greatly shaped by their socio-cultural realities (Mersham and Skinner 2002). This suggests that 77.1% of the university students who indicated that culture influences student sexual behaviour still view sexual behaviour as a social than a biological phenomenon. In other words, sexual behaviour is culturally defined. Conversely, Somma and Bodiang (2003: 10) articulated that previously, HIV/AIDS prevention strategies failed to bring about positive behaviour change where sexuality is concerned because conventional HIV/AIDS campaigns failed to recognise that behaviour patterns are not influenced by individual patterns but rather they are entrenched in cultural norms that are inherited. This view underlines the potential significance of addressing HIV/AIDS within a cultural approach in order to understand the culturally-specific HIV/AIDS transmission.

In the context of this study, culturally specific HIV/AIDS transmission among university students includes male dominance which is rooted in cultural attributes, gender relations, and norms. This view is supported by findings from a study conducted by HEAIDS which reported that poor students who struggle to meet their basic needs engage in transactional sex where they have little power to negotiate safer sex because of the male dominated sexual relations they find themselves in. This trend has been identified particularly among female students who are vulnerable to being lured into relationships with older men and wealthier sexual partners (Higher Education HIV/AIDS Programme 2010).

The power dynamics of students being in intergenerational relationships aggravate their vulnerability to HIV/AIDS infection because of their inability to negotiate safer sex. For female students, virginity testing can be a significant cultural factor in influencing abstinence. This understanding is in line with the notion that culture can be used positively as an agent of positive sexual behaviour. However, empirical data derived from interviews with health care providers in this study revealed that female students engage in other sexual activities such as anal sex and thigh sex in pursuit of virginity preservation as it shall be discussed in the subsequent section. These

results highlights that cultural construction of sexuality aggravates the spread of HIV/AIDS among female students.

6.2.2.5 Cultural approaches for HIV/AIDS prevention and care

Students were asked about their perception on whether universities should use cultural approaches for HIV/AIDS prevention and care. Table 6.6 demonstrates their responses.

Table 6.6: Cultural approaches for HIV/AIDS prevention and care (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	136	32.2	32.2	32.2
	Yes	287	67.8	67.8	100.0
	Total	423	100.0	100.0	

A majority of the respondents (67.8%) agreed that cultural approaches for HIV/AIDS should be implemented at universities whereas the remaining (32.3%) stated that there is no need to put in place cultural approaches in HIV/AIDS care and treatment at universities. This high statistic of 67.8% elaborates that there is a need for appropriate cultural approaches in universities for HIV/AIDS care and treatment. Similarly, a study by Paul, Ayo and Ekundayo (2014: 2688) confirms that effort to implement prevention programmes in African universities have been severely limited by socio-cultural and socio-economic constrains in addressing HIV/AIDS. Table 6.6 summarises the findings of this inquiry.

6.2.3 Tools of HIV/AIDS communication

O'Sullivan *et al.* (2003) define tools of communication as tactics used to relay a message through a channel.

6.2.3.1 Channels of communication that attract students to HIV/AIDS messages

Based on the aforementioned definition, university students were presented with a list of communication tools used to disseminate HIV/AIDS messages, and were asked to select their preferred tools of HIV/AIDS communication. The primary goal of this inquiry was to address the second objective of the study which is to analyse the communication tools used by student services for HIV/AIDS education at various HEIs as stated in chapter one of the study. This inquiry sought to understand the communication channels and tools that contribute to the effectiveness of HIV/AIDS messages and to determine the accessibility of these tools to the student population.

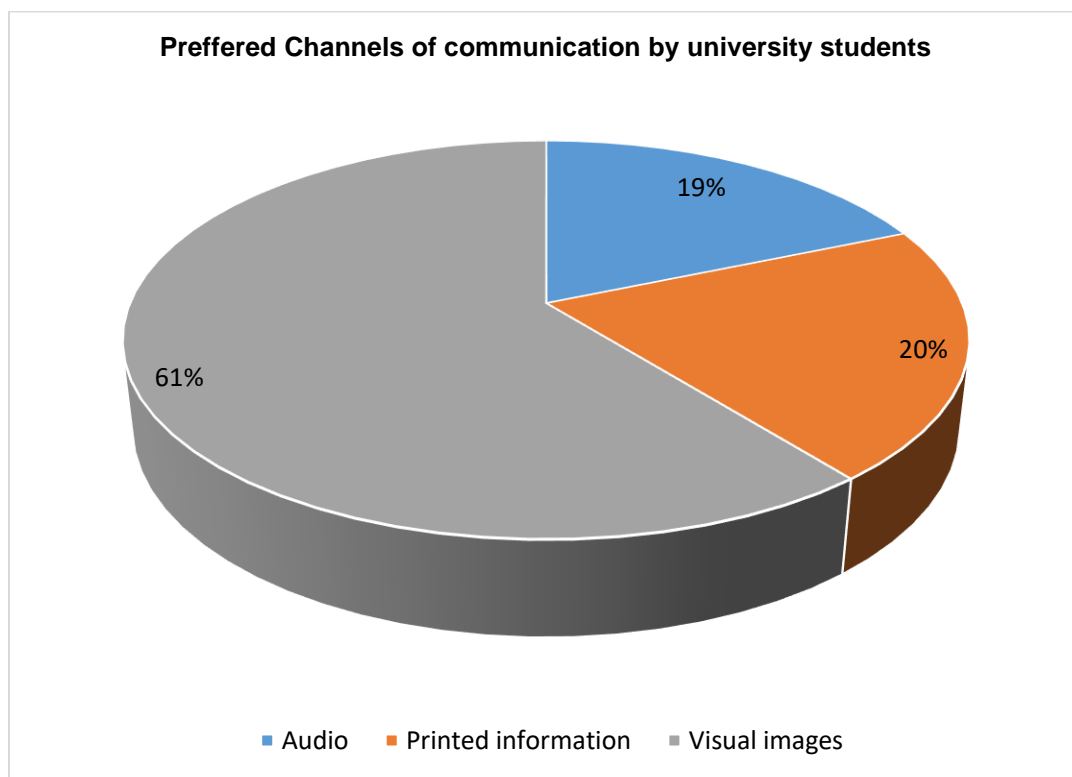


Figure 6. 4: Preferred channels of communication amongst university students (Source: Field data, 2017)

The results of this inquiry as highlighted in Figure 6.4 illustrate that a majority of 61% of the respondents prefer visual images, this was followed by print information (20%) and (19%) audio. These findings do not come as a surprise as the majority of respondents in the study belong to the 17 to 25 age group. This is considered a generation that has grown up with easy access to digital information and communication technologies. These results resonate with the findings from a

study conducted by SARUA (2007: 17) which reports that many higher education institutions use information, education and communication (IEC) to educate students about HIV/AIDS.

6.2.3.2 HIV/AIDS campaigns

Participants were asked if HIV/AIDS campaigns disseminate messages they can relate to. The objective of this inquiry was to determine whether key issues relating to HIV/AIDS affecting the student population is being addressed in HIV/AIDS communication campaigns. Table 6.7 summarises the results of this inquiry.

Table 6.7: Number of students that relate to HIV/AIDS communication campaigns
(Source: Field data, 2017)

Frequency	Percent	Valid Percent	Cumulative Percent
68	16.1	16.1	16.1
355	83.9	83.9	100.0
423	100.0	100.0	

The majority of the participants (83.9%) indicated that they can relate to the messages disseminated through HIV/AIDS campaigns whereas a few (16%) stated that they do not relate to the messages conveyed during HIV/AIDS campaigns. Results summarised in Table 6.7 demonstrate that the HIV/AIDS mitigation programmes implemented by HEAIDS in HEIs are effective in relaying relatable HIV/AIDS messages. As discussed in chapter three of this study, such programmes include HIV/AIDS awareness campaigns, condom distribution, Voluntary Counselling and Testing (VCT) campaigns and peer education groups (HEAIDS 2015). It is evident that the series of prevention programmes implemented in HEIs have been categorised to address various factors that aggravate the spread of the HIV/AIDS epidemic such as the modes of HIV/AIDS transmission within the student community, key populations affected, and the structural factors that may worsen HIV/AIDS prevalence.

This suggests that the simultaneous use of complementary behavioural, biomedical, and structural prevention approaches is making a sustained impact on HIV/AIDS incidence rates within the student community. This indicate that the education sector is contributing meaningfully to the national response by implementing such programmes that are aligned with the specific objectives and interventions of the National Strategic Plan on HIV,TB and STIs 2017-2022.

However, previous literature confirms that although young people aged 15-24 can precisely identify various approaches of preventing HIV/AIDS transmission, the enhancement of awareness campaigns and accurate knowledge about HIV/AIDS remain poor (UNAIDS 2013). This validates the view of Shisana *et al.* (2014) that accurate HIV/AIDS knowledge is not a predictor of behavioural change although HIV/AIDS knowledge is a precondition for change. Conversely, it is arguable that although students can relate to HIV/AIDS messages conveyed during HIV/AIDS communication campaigns, students lack the ability to exercise the messages when making health related decisions.

A key element in the Interactive Model of Communication is the decoding of messages from the sender. Mersham and Skinner (2002: 10) describe decoding as a process of receiving, understanding and interpreting the encoded messages by the recipient. Stuart Hall refers to three hypothetical positions in which an individual can interpret a message. Hall argues that an individual can hold a dominant, negotiated or oppositional position in their decoding position (Hall 1996). Based on these positions proposed by Hall (1996), it can be argued that university students interpret HIV/AIDS communication campaigns from an oppositional reading where the recipient identifies the dominant codes and opposes them. This seems to explain that although students may relate to HIV/AIDS communication campaigns, students oppose the messages by engaging in risky sexual behaviour.

6.2.3.3 Entertainment-education campaigns on HIV/AIDS

O'Sullivan *et al.* (2003: 153) identifies Entertainment Education (EE) as a critical strategic communication tool. According to Govender (2013: 1) Entertainment Education is a “strategic and theoretically informed process of developing educational messages using a range of media platforms to facilitate a desired behaviour or social change”. In addition, Singhal (2013: 3) posits that EE interventions encourage the audience by making use of role models to share information, increase knowledge and create attitude for positive social change. It is based on this background

that this study investigated students' perception on whether HIV/AIDS campaigns are educational and entertaining.

Table 6.8: Educational and entertaining campaigns (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	113	26.7	26.7	26.7
	Yes	310	73.3	73.3	100.0
	Total	423	100.0	100.0	

As highlighted in Table 6.8, the findings of this inquiry reveals that a majority of the students (73.3%) find HIV/AIDS campaigns educational and entertaining, while a low of 26.7% indicated that they don't find HIV/AIDS campaigns educational and entertaining. The results summarised in Table 6.8 suggest that HIV/AIDS campaigns implemented at university campuses are more participatory as university students find them educational and entertaining. This further demonstrates that students find educational and entertainment campaigns more likely to have an impact on students' health choices particularly with regard to HIV/AIDS related issues.

6.2.4 The Interactive Model of Communication

The interactive model of communication was used to identify factors that hinder the encoding and decoding process. Data presented in this section demonstrate integration of the interactive model of communication and the Health Belief Model. Previous literature confirms there are various socio-economic factors that influence the spread of HIV/AIDS among university students. A study by Mutinta and Govender (2012: 22) revealed that many university students from remote areas and same-sex schools are more likely to participate in risky sexual behaviour because they are naïve and succumb to peer pressure.

Similarly, findings from a study conducted by the Higher Education HIV/AIDS Programme (2010) revealed that lack of economic means has been identified as a key driver for sex in exchange for material possessions. Various forms of transactional sex among students include dating older men

in exchange for gifts and favours, having sex with lecturers for academic advancement, and students who have sex to afford tuition fees.

6.2.4.1 Socio-economic factors that influence the spread of HIV/AIDS

It is with the aforementioned background this study aimed to understand whether HIV/AIDS messages communicated by student services are addressing socio-economic factors that exacerbate the spread of HIV/AIDS within the student community. The aim of this question was to understand the contribution of HIV/AIDS messages in addressing socio-economic factors that influence the spread of HIV/AIDS among university students.

Table 6.9: Participants view on whether HIV/AIDS messages address socio-economic factors (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	172	40.7	40.7	40.7
	Yes	251	59.3	59.3	100.0
	Total	423	100.0	100.0	

It was evident from the responses as highlighted in Table 6.9 that two quarters of the population (59.3%) indicated that HIV/AIDS messages addresses socio-economic factors that influence the spread of HIV/AIDS among students whereas (40.7%) of the participants indicated that HIV/AIDS do not address HIV/AIDS socio-economic factors that drive the spread of the epidemic. The results summarised in Table 6.9 demonstrate that HIV/AIDS messages disseminated through HIV/AIDS campaigns are contributing meaningfully to socio-economic issues faced by university students. It is plausible to conclude that these messages encourage students to adopt safe sexual behaviours.

6.2.4.2 Impact of HIV/AIDS messages on student sexual behaviour

Behaviour change is a key component of HIV/AIDS prevention. In the context of the HIV/AIDS epidemic, Behaviour Change Communication remains the driving force for an effective HIV/AIDS response. Contemporary literature describe behaviour change communication as an interactive

process with individuals or groups to create tailored messages and approaches using various communication channels to develop positive behaviours; promote and sustain individual, community and societal behaviour change (Kaufman *et al.* 2014: 46).

In South Africa, behaviour change communication programmes are aligned to the National Strategic Plan (AVERT 2016b). It is worth noting that a majority of South African behaviour change programmes are primarily tailored for young people, however current literature archives high HIV incidences among the youth (Mulwo 2009; Mutinta 2014; Shisana *et al.* 2014). It is based on this background that this study attempted to establish whether exposure to HIV/AIDS messages improved participants' sexual behaviour in a positive way. This was achieved by asking study participants if HIV/AIDS message communicated through HIV/AIDS campaigns have a positive impact on their sexual behaviour.

Table 6. 10: Participant perception on whether HIV/AIDS messages impact positively on their sexual behaviour (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	90	21.3	21.3	21.3
	Yes	333	78.7	78.7	100.0
	Total	423	100.0	100.0	

As highlighted in Table 6.10, the results from this inquiry shows that the vast majority (78.7%) of the participants indicated that HIV/AIDS messages communicated through HIV/AIDS campaigns have a positive impact on their sexual behaviour whereas a low 21.3% of the participants noted that HIV/AIDS messages do not impact on their sexual behaviour. It is interesting to note that although a majority of the participants in this study indicated that HIV/AIDS messages have a positive impact on their sexual behaviour, these results appear to contradict literature reviewed in this study.

Literature reviewed in this study shows that the majority of students continue to face the greatest risk of HIV/AIDS infection because they continue to engage in risky sexual behaviour (Mulwo 2009; Higher Education HIV/AIDS Programme 2010; Human Sciences Research Council 2013; Mutinta, Govender, Gow and George 2013).

6.2.4.3 Location of the university campus clinic

University students were asked to indicate whether they know where the university campus clinic is located. Table 6.11 demonstrate their responses.

Table 6. 11: Number of participants who know where the campus clinic is located (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	60	14.2	14.2	14.2
	Yes	363	85.8	85.8	100.0
	Total	423	100.0	100.0	

It was interesting to note that the majority (85.8%) of the participants know where the health clinic is, while a low of (14.2%) indicated that they do not know where the health clinic is as shown in Table 6.11. This, perhaps, is due to the yearly activities conducted during orientation week for first year students, as it shall be explained in the subsequent section where health care providers highlighted that during orientation week they have awareness campaigns where they promote services offered at the health care clinic. Thus, due to this exposure of information many students know where the health care clinic is located. However, the statistical data captured in Table 6.11 is contrary to the view that knowing where to access health services leads to health seeking behaviour.

6.2.4.4 Clinic visits

In order to determine whether students make use of the services offered at their campus clinics, students were asked to indicate whether they have been to the university campus clinic. The results of this inquiry are summarised in Table 6.12.

Table 6. 12: Number of students who have been to the campus clinic (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	199	47.0	47.0	47.0
	Yes	224	53.0	53.0	100.0
	Total	423	100.0	100.0	

In comparison with data from Table 6.12, results from Table 6.11 demonstrate that although the majority (85.8%) of the participants know where the health clinic is, 47.0% of the participants have never been to the university campus clinic. These results summarised in Table 6.12 seem to suggest that the students either do not feel vulnerable to HIV/AIDS or they seek health services elsewhere. As it will be mentioned in the subsequent section where health care providers articulated that there is an alarming rate of non- attendance of post HIV/AIDS counselling and unintentional non-adherence of ARVs among students who test HIV positive during HIV/AIDS campaigns on campus, such as the First Things First campaign due to fear of being stigmatised.

The Health Belief Model (HBM), within which this analysis is conceived predict health-related behaviour within a belief context. In their attempt to simplify the HBM, DiClemente and Peterson (1994: 8) postulate that individuals are inclined to act towards or to control ill-health circumstances if they consider themselves susceptible to the condition. They will make an effort to access health related help if they believe that a course of action at their disposal would benefit them by reducing either their vulnerability or the severity of the condition. Based on the results from Table 6.12, it is plausible to conclude that study participants either do not feel vulnerable to any sexual health

problems or their poor health seeking behaviour is influenced by social factors such as fear of discrimination and stigmatisation.

6.2.4.5 Health seeking behaviour among university students

This study examined the health seeking behaviour among university students, in order to comprehend the impact of HIV/AIDS messages on student sexual behaviour. Study participants were asked if they have ever done an HIV test. The importance of knowing one's status cannot be overemphasised. Voluntary, Counselling and Testing (VCT) is a primary approach to mitigating the spread of the HIV/AIDS epidemic (World Health Organization 2003: 23). According to Baggaley (2001) VCT represents a mechanism for referral, care, treatment and support.

Table 6. 13: Participation in HIV/AIDS testing (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	120	28.4	28.4	28.4
	Yes	303	71.6	71.6	100.0
	Total	423	100.0	100.0	

Table 6.13 demonstrates that the majority (71.6%) of the students participated in HIV testing, while few (28.4%) indicated that they have never done a HIV test. It should be clarified that this inquiry was not based on testing for HIV/AIDS for the first time on campus but it was rather on being a first time tester. These results indicate that university students are keen to know their HIV status and to make sound health decisions. Taking into account that the age of sexual debut for the majority of university students is 15 (Human Sciences Research Council 2013), which coincides with the average age for the majority of participants in this study, this suggests that the majority of participants in this study who are sexually active know their HIV status.

The statistical data generated in Table 6.13 is aligned with goal two of the National Strategic Plan on HIV, STI and TB 2017-2022 which aims to decrease infection and death by making provision for treatment, care and adherence support for everyone (SANAC 2017b). This is embedded on the

UNAIDS 90-90-90 targets which provides that by 2020, 90% of people living with HIV/AIDS should know their status. Furthermore, these results showed that The First things First (HIV, STI/TB) campaign which is an HIV/AIDS mitigation programme by HEAIDS is making significant effort in mobilising students to know their status. The First things First campaign also contributes to goal two of the National Strategic Plan on HIV, STI, and TB 2017-2022.

6.2.4.6 Frequency of HIV/AIDS testing

The study attempted to establish the frequency of HIV/AIDS testing among university students. In order to achieve this, students were asked to indicate how often they go for an HIV test. As indicated in the letter of information in this study, participation in this study is voluntary and study participants are not obliged to answer every question.

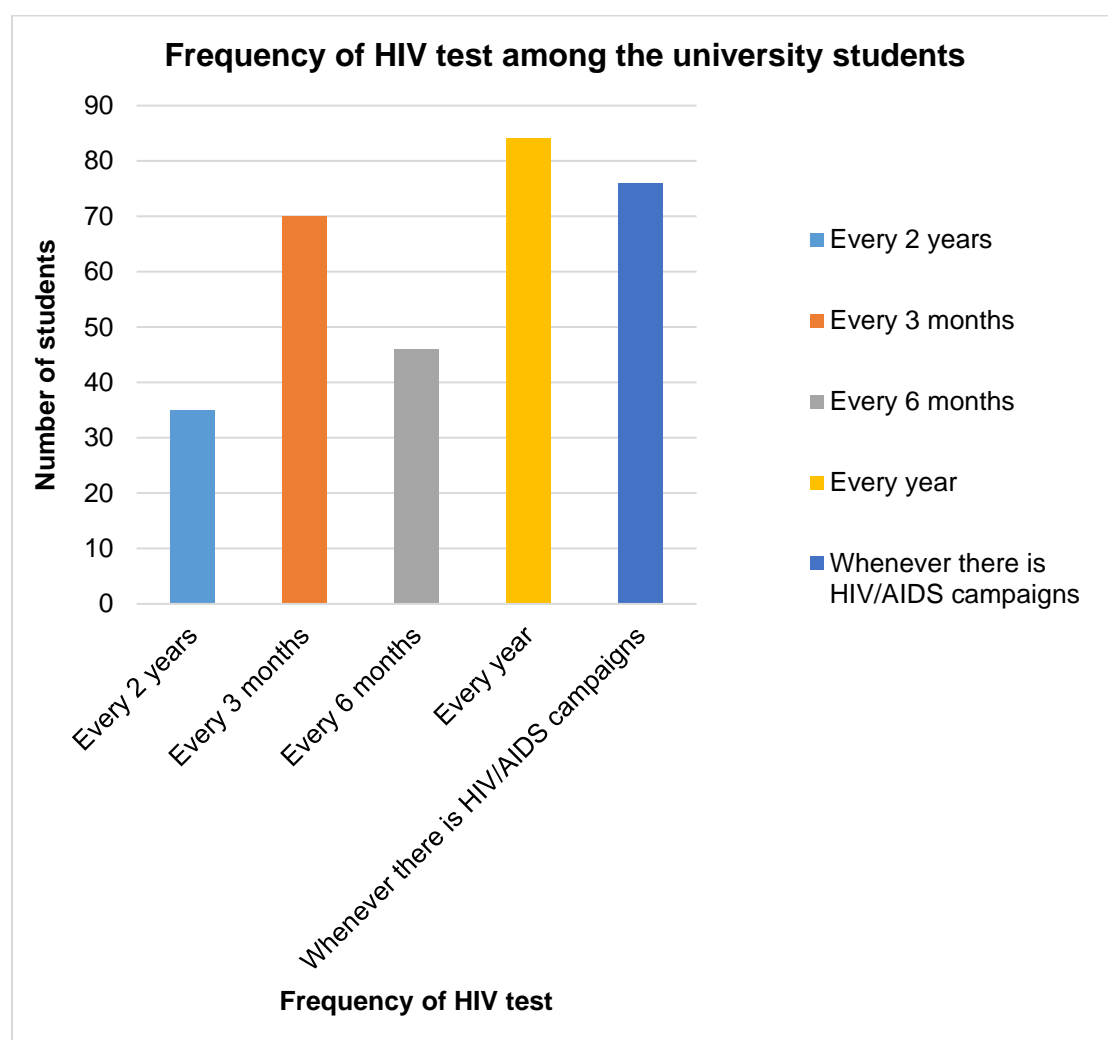


Figure 6. 5: Frequency of HIV testing among participants (Source: Field data, 2017)

As indicated in Figure 6.5 (26.5%) of the participants decided not to respond to this question. Nonetheless, 19.9% of the study participants indicated that they go for an HIV test every year, this is followed by 18.8% who indicated that they only test when there are HIV/AIDS campaigns. This suggests that HIV/AIDS campaigns are effective in mobilising university students to test for HIV and making provision for HIV/AIDS treatment, care, and support. HIV/AIDS treatment, care, and support are primary interventions to tackling the HIV/AIDS epidemic.

6.2.4.7 Provision of HIV/AIDS treatment, care and support

In order to determine the accessibility of HIV/AIDS treatment, care and support on campus, students were asked to indicate if they believed there is enough provision of HIV/AIDS treatment, care and support on campus or not. The objective of this question was to determine if university campus clinics are equipped to link students to treatment and care immediately after diagnosis.

Table 6. 14: Participants perception on HIV/AIDS treatment, care and support (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	139	32.9	32.9	32.9
	Yes	284	67.1	67.1	100.0
	Total	423	100.0	100.0	

Results from this inquiry indicates that the majority (67.1%) of the participants believe that there is enough provision of HIV/AIDS treatment, care and support whereas a low of (32.9%) indicated that there is enough provision of HIV/AIDS, treatment and care as highlighted in Table 6.14 .

6.2.4.8 Effort in promoting services offered at university campus clinics

In order to establish whether clinic services and HIV/AIDS messages communicated by university health care clinics reaches every student, participants were asked to indicate if the university health care clinic is making enough effort to make their services known to students and they were probed

as to which channel of communication they would prefer the clinic to use in communication with them. Table 6.15 summarised the results of this inquiry.

Table 6. 15: Participants’ perception on university clinic efforts in making their services known (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	175	41.4	41.4	41.4
	Yes	248	58.6	58.6	100.0
	Total	423	100.0	100.0	

Approximately 58.6% of participants indicated that university clinics are doing enough to make their services known to students, while 41.4% of participants indicated that the clinic is not doing enough to reach out to students. This can be due to the communication channels that campus clinics use to disseminate information. Mass media channels have shown effectiveness in reaching a larger audience within a short space.

6.2.4.9 Mass media channels

According to O'Sullivan *et al.* (2003: 141), mass media channels such as radio, television , film and social media are conduits of disseminating information to a larger audience within a short period of time. Social media is the latest trend that is shaping mass media. Smith, Wollan and Zhou (2011: 10) describe social media as an easy development, creation, distribution and usage of information and entertainment by an individual or a group of people.

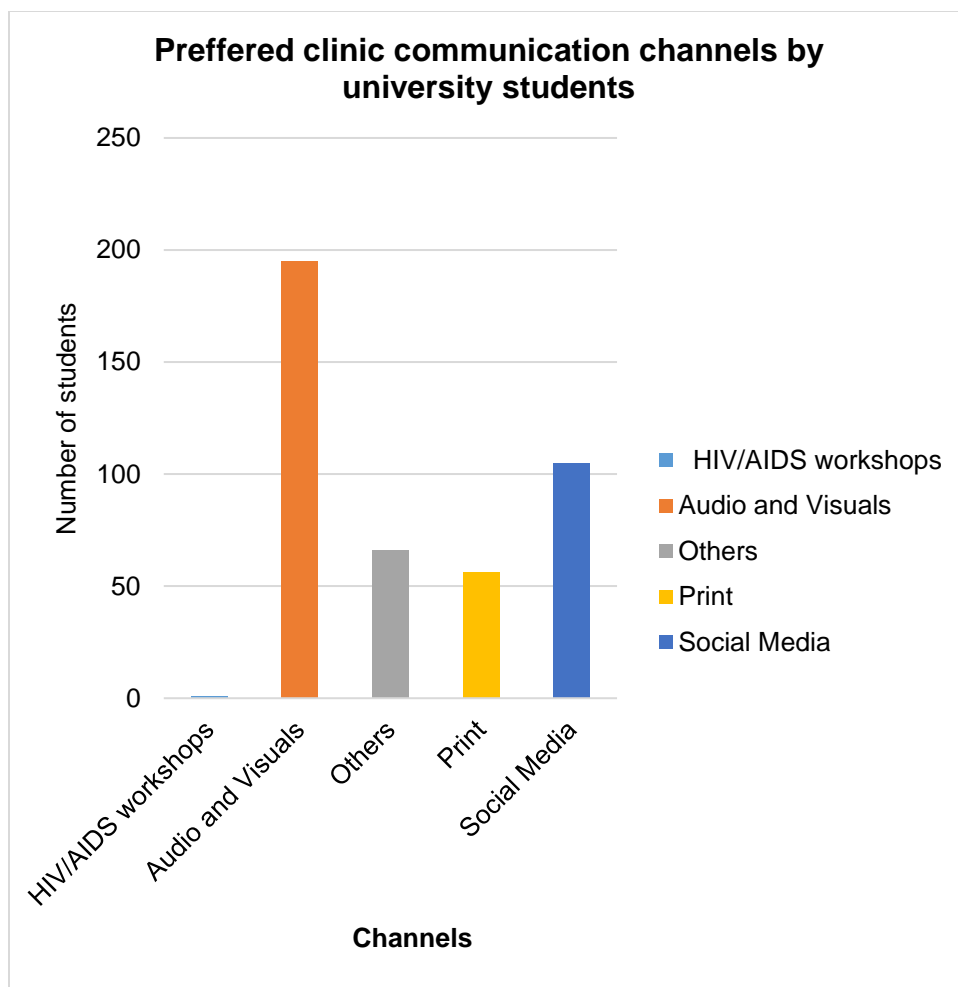


Figure 6. 6: Preferred channels of communication used by the campus clinic (Source: Field data, 2017)

Figure 6.6 indicate that participants (46.1%) in this study indicated that they prefer audio visual channels of communication such as radio, television and film to receive information from university health care clinics regarding their services, while 24.8% of the participants indicated that they prefer social media to receive service related information from campus clinics. It is interesting to note that the study participants still prefer conventional channels of communication as compared to social media which offers innovative ways of engaging in health related information.

It is worth noting that the preferred channels of communication selected by study participants are within the scope of health communication in HEIs as highlighted in chapter three of this study

6.2.4.10 Relationship between HIV/AIDS knowledge and HIV/AIDS testing

A chi square test was used to establish whether there was an association between how informed participants are about HIV/AIDS and if they have done an HIV/AIDS test.

Table 6. 16: Level of HIV/AIDS knowledge * HIV testing (Source: Field data, 2017)

			HIV testing		Total
			No	Yes	
Please indicate how informed you are about HIV/AIDS	Informed	Count	49	129	178
		% within Please indicate how informed you are about HIV/AIDS	27.5%	72.5%	100.0%
	Less informed	Count	20	22	42
		% within Please indicate how informed you are about HIV/AIDS	47.6%	52.4%	100.0%
	Not informed	Count	0	2	2
		% within Please indicate how informed you are about HIV/AIDS	.0%	100.0%	100.0%
	Well informed	Count	51	150	201
		% within Please indicate how informed you are about HIV/AIDS	25.4%	74.6%	100.0%
	Total		Count	120	303
			% within Please indicate how informed you are about HIV/AIDS	28.4%	71.6%

The results shows that there was a significant association (X^2 (3, n = 423) = 9.401, p = 0.024) between how informed the respondents were and the decision to go for an HIV test. This can be attributed to the South African government's efforts to fight the HIV/AIDS epidemic. Although the trajectory of the South African HIV/AIDS response is characterised by years of confused policy development, denialism, and controversial medical responses (Van Dyk 2012: 9), the South African government has mobilised resources to respond effectively to the HIV/AIDS epidemic.

A major breakthrough was in the development of the National Strategic Plan which is a plan on how the country will respond to the prevention and treatment of HIV/AIDS in South Africa (SANAC 2017a). In the higher education sector the Higher Education and Training HIV/AIDS programme (HEAIDS) is a national institute to promote and support HIV/AIDS mitigation programmes implemented at institutions of higher learning in South Africa (HEAIDS 2010).Based on this backdrop, it is therefore not surprising that participants who are informed about HIV/AIDS are more likely to go for an HIV test.

This is in line with the construct of the Health Belief Model (HBM) which is “perceived benefits of taking action” which is believed that a personal acceptance of vulnerability to an illness makes an individual to take action towards that disease. However, the action taken by the individual depends on the beliefs concerning efficacy of the methods to lessen the threat of the disease held by the individual (Rosenstock, Strecher and Becker 1994). This seems to suggest that participants who go for a HIV test believe that knowing their status reduces their chances of being infected with HIV/AIDS, as they are more likely to make sound health decisions.

6.2.5 Behaviour change communication among students

The Higher Education HIV/AIDS programme reports that many university students (73%) have engaged in sexual activity before matriculation and by each additional year a growing number of these students have sex (HEAIDS 2010: 3). Mutinta (2014: 148) is also of the view that an increasing number of students are likely to engage in early sexual debut during their period at university. Previous literature highlights that sexual debut has been noted as a key driver of HIV/AIDS (MacPhail *et al.* 2008; Pettifor *et al.* 2009; Shisana *et al.* 2014).

6.2.5.1 Number of students who are sexually active

Students were asked to indicate if they are sexually active. Table 6.17 summarised the results of this inquiry.

Table 6. 17: Number of students who are sexually active (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	123	29.1	29.1	29.1
	Yes	300	70.9	70.9	100.0
	Total	423	100.0	100.0	

Results from this study revealed that a vast majority (70.9%) of the participants are sexually active, whereas 29.1% indicated that they are not sexually active as highlighted in Table 6.17. This is not surprising as previous literature consulted in chapter four of this study revealed that a majority of university students are sexually active. Various factors have been noted to perpetuate sexual activity among students. These include lack of economic necessities, peer pressure and new found freedom (Mulwo, Tomaselli and Dalrymple 2009; Mutinta and Govender 2012).

6.2.5.2 Reasons for using protection

In order to determine whether students are engaging in safe sex practices, participants were asked to indicate why they use protection.

Table 6. 18: Reasons why students use protection (Source: Field data, 2017)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I don't want to disappoint my parents	44	10.4	10.4	10.4
	I don't want to get pregnant	41	9.7	9.7	20.1
	No answer	41	9.7	9.7	29.8
	Protecting against HIV/AIDs	297	70.2	70.2	100.0
	Total	423	100.0	100.0	

The results of this inquiry indicated that a vast majority (70.2%) of the participants use protection to protect themselves against HIV/AIDS as shown in Table 6.18. This shows that HIV/AIDS prevention programmes at university campuses have a positive impact on students' sexual behaviour. This can also be attributed to the cyclical relationship between HIV/AIDS and stigma. It can be argued that participants use protection in fear of being infected with HIV/AIDS which leads to fear of stigmatisation and discrimination. As it shall be discussed in the subsequent section, HIV/AIDS related stigma and discrimination is still rampant within university campuses. Although HIV/AIDS prevention is key to mitigating the spread of HIV/AIDS, HIV/AIDS infection should not be associated with fear and stigmatisation as this limits access to HIV/AIDS treatment and care.

6.2.5.3 Safe sex behaviour among university students

In 2010, the Higher Education HIV/AIDS programme reported that students were about 18 times more vulnerable to sexually transmitted infections such as gonorrhoea and about 10 times as likely to have syphilis as young people in the general population (Higher Education HIV/AIDS Programme 2010). Condom usage is one of the primary approaches to lessen chances of HIV/AIDS infection. According to Bekker *et al.* (2015: 73) adequate condom usage is a

behavioural intervention that pursue to reduce exposure to HIV/AIDS transmission. Considering that the majority of students are sexually active, this study attempted to establish the rate of safe sexual practices among university students. A chi square test revealed a significant relationship ($X^2(1, n = 423) = 138.469, p < 0.000$) between being sexually active and having unprotected sex.

Table 6. 19: Are you sexually active * Have you ever had unprotected sex (Source: Field data, 2017)

			Have you ever had unprotected sex		Total
			No	Yes	
Are you sexually active	No	Count	104	19	123
		% within Are you sexually active	84.6%	15.4%	100.0%
	Yes	Count	68	232	300
		% within Are you sexually active	22.7%	77.3%	100.0%
Total		Count	172	251	423
		% within Are you sexually active	40.7%	59.3%	100.0%

It was interesting to note that the majority (59.3%) of the participants have had unprotected sex. This can be attributed to the fact that the majority of the participants are first year students who tend to engage in risky sexual behaviour because they are naïve or they succumb to peer pressure (Mutinta and Govender 2012: 21).

6.2.5.4 Students' HIV/AIDS knowledge

The National Strategic Plan on HIV, STIs and TB 2017-2022 sets out strengthened prevention strategies that aim to halt the spread of HIV/AIDS transmission. Through prevention strategies that combine biomedical, structural and behavioural interventions the NSP aim to reduce new HIV/AIDS and STIs infections by accelerating prevention programmes (SANAC 2017b: 4). This study examined the perceptions of students' HIV/AIDS knowledge with regard to prevention strategies implemented on university campuses. In order to achieve this, students were presented with a number of questions that sought to ascertain the impact of prevention strategies on students' sexual behaviour and HIV/AIDS knowledge. The questions asked required participants to indicate whether they "Strongly Agree", "Agree", "Neither Agree nor Disagree", and "Strongly Disagree" or "Disagree".

Table 6. 20: Participants' HIV/AIDS knowledge (Source: Field data, 2017)

Statement	Participants' HIV/AIDS Knowledge									
	Strongly Agree		Agree		Neither Agree or Disagree		Disagree		Strongly Disagree	
	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
I know of where and how I can get HIV testing and counselling	175	41.4	158	37.4	25	5.9	64	15.1	1	.2
I am not ashamed to take condoms when placed	112	26.5	120	28.4	77	18.2	106	25.1	8	1.9

distributed on campus										
If I do HIV testing on campus people will discriminate against me	43	10.2	62	14.7	74	17.5	191	45.2	53	12.5
HIV/AIDS campaigns are a waste of time in HIV/AIDS interventions	33	7.8	42	9.9	40	9.5	228	53.9	80	18.9

Results emanating from this inquiry are summarised in Table 6.20. The inquiry established that 41.4% of the participants strongly agreed that they know where to go for HIV/AIDS testing and counselling. About 37.4% of the participants agreed with the statement, while 5.9% neither agreed nor disagreed, 15.1% disagreed, while a low of 0.2% strongly disagreed. Furthermore, stigma associated with condom usage was explored. About 28.4% agreed that they are not ashamed to take condoms when placed or distributed on campus. While 26.5% strongly agreed, 18.2% neither agreed nor disagreed, 25.1% disagreed, and 1.9% strongly disagreed. It is interesting to note that about half of the participants are not ashamed to take condoms when they are placed or distributed on campus. It is arguable that condom stigma on university campuses could be fuelling the spread of HIV/AIDS among students.

According to Stangl *et al.* (2013) HIV/AIDS related stigma and discrimination are key barriers to effective HIV/AIDS response. With HIV testing as a primary approach to mitigating the spread of HIV/AIDS on university campuses, participants were asked to indicate if they felt people will discriminate against them if they do HIV testing on campus. About 45.2% of the participants

disagreed with the statement, while 12.5% strongly disagreed, 10.2% strongly agreed, 17.5% neither agreed nor disagreed, and 14.7% agreed.

The results of this inquiry highlight that there is a need for intensified prevention programmes to overcome issues related to HIV/AIDS stigma. In terms of HIV/AIDS campaigns on campus, participants were asked if they perceive HIV/AIDS interventions as a waste of time. The majority of the participants (53.9%) disagreed, 18.9% strongly disagreed, 7.8% strongly agreed, 9.9% agreed and 9.5% neither agreed nor disagreed. This seems to suggest that HIV/AIDS interventions are having a desired impact on university students.

6.2.5.5 Perception of HIV/AIDS treatment, care and support services on campus

Understanding the impact of HIV/AIDS messages communicated by student support services at DUT, UKZN, MUT, and UNIZULU would not be complete without an in-depth analysis of students' perceptions on HIV/AIDS prevention, treatment and care at campus clinics. By using the interactive model of communication, the study sought to determine whether HIV/AIDS messages encoded by student services at universities are having a desired impact on students' sexual behaviour. The primary objective was generating a deeper understanding of the key drivers of HIV/AIDS within the student community and the communication tools used for HIV/AIDS education in order to influence positive sexual behaviour. In order to achieve this, students were presented with a list of questions relating to HIV/AIDS prevention, treatment, and care services on campus. Table 6.21 summarises results from this inquiry.

Table 6. 21: Participants perceptions of HIV/AIDS treatment, care and support services on campus (Source: Field data, 2017)

Statement	Participants perceptions of HIV/AIDS prevention, treatment and care services on campus									
	Strongly Agree		Agree		Neither Agree or Disagree		Disagree		Strongly Disagree	
	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
Overall I am satisfied with the health services at my university.	83	19.6	164	38.8	84	19.9	80	18.9	12	2.8
The clinic always inform students about health related issues especially HIV/AIDS	69	16.3	159	37.6	108	25.5	68	16.1	19	4.5
The university clinic is user friendly	67	15.8	167	39.5	114	27.0	65	15.4	10	2.4
It is easy to approach and confide in health	70	16.5	153	36.2	108	25.5	79	18.7	13	3.1

Statement	Participants perceptions of HIV/AIDS prevention, treatment and care services on campus									
	Strongly Agree		Agree		Neither Agree or Disagree		Disagree		Strongly Disagree	
	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
providers at my university										
HIV/AIDS is like any other disease or virus	53	12.5	143	33.8	68	16.1	121	28.6	38	9.0
Students should be encouraged to go for an HIV test every 3 months	162	38.3	168	39.7	53	12.5	36	8.5	4	0.9
The university clinic is doing enough to educate and inform students about HIV/AIDS	65	15.4	151	35.7	119	28.1	69	16.3	19	4.5
There is enough social support for HIV positive	43	10.2	144	34.0	156	36.9	65	15.4	15	3.5

Statement	Participants perceptions of HIV/AIDS prevention, treatment and care services on campus									
	Strongly Agree		Agree		Neither Agree or Disagree		Disagree		Strongly Disagree	
	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
students at my university										
There are still many misconceptions about HIV/AIDS among students	93	22.0	178	42.1	94	22.2	54	12.8	4	0.9
There is still a level of denial and secrecy about HIV/AIDS among students.	137	32.4	159	37.6	78	18.4	43	10.2	6	1.4

38.8% of the participants agree that they are satisfied with health services at their universities, while a low of 2.8% strongly disagree. These results highlight that more than half of the participants are satisfied with provision of health services at their universities. This seem to suggest that student services as a key element in the interactive communication process is providing efficient and effective health services to meet the social and behavioural health needs of university students. These results further illustrate that university students decode the messages sent by

student services by seeking and accessing health services offered on campus clinics. In order to determine the kind of information disseminated by university clinics to students, 37.6% agree that the clinic always informs students about health related issues particularly HIV/AIDS, while a low of 4.5% strongly disagree. This highlights the need for campus clinics to intensify communication tools and channels for HIV/AIDS education. Thus, the need to disseminate HIV/AIDS related messages consistently cannot be overemphasised.

Taking into account that the majority of the participants in this study are between the ages of 17 and 25 years, university clinics should be setup in a manner that is adolescent friendly. According to Gobind and Ukpere (2014: 346) the highest proportion (67.1%) of university students in South Africa in 2011 were 18 year olds at 67.1% and 55.1% were 19 year olds. The study examined the provision of youth friendly health services at campus clinics. Results from this inquiry indicate that (39.5%) of the participants agree that the university clinic is user-friendly. The rest of the participants (27.0%) stated that they neither agree nor disagree, 15.4% disagree, 15.8 strongly agree, while 2.4% strongly disagree.

These results indicate that in order for campus clinics to be fully utilised by university students, it is imperative to set up adolescent friendly standards in order to improve the quality of HIV/AIDS services at campus clinics. It can be argued that despite a wide provision of HIV/AIDS services on campus clinics, uptake of HIV/AIDS will remain low if social factors that prevent students from accessing HIV/AIDS services such as judgement and discrimination by health care providers are not addressed.

The interactive model of communication illustrates that the recipient decodes a message according to their socio-cultural background and autobiographical make-up (Mersham and Skinner 2002). It is important to note that the majority of participants in this study are black students and therefore coming from an African cultural background where the concept of parenthood relates to anyone above your age group, university students may be reluctant to seek health services as the majority of health care providers interviewed in this study are elderly. This presents a barrier to accessing youth-friendly health services.

To overcome this, university clinics should employ younger health professionals that students can relate to. In terms of confidentiality in healthcare, 36.2% agreed that it is easy to confide in health providers at their universities, while 3.1% strongly disagreed. These statistics demonstrate that a

significant number of the students are still not comfortable in confiding in health care providers. This raises concern, as confidentiality is an essential ethical health principle that university students should be assured of.

As far as perceptions on HIV/AIDS were concerned, 33.8% of the participants agreed that HIV/AIDS is like any other disease or virus, whereas 9.0% strongly disagreed. This suggests that some students view HIV/AIDS as a threat to human development, while some students consider HIV/AIDS to be a manageable disease like any other virus. In terms of HIV testing, approximately 39.7% of the participants agreed that students should be encouraged to go for HIV testing every three months, while 0.9% strongly disagreed. This shows that a majority of the students consider HIV testing a critical element in HIV prevention. These results illustrate an increased knowledge of HIV/AIDS that students received from HIV/AIDS communication campaigns by student services.

According to Sarma and Oliveras (2013: 20) school-based HIV/AIDS education is generally used as an intervention approach for publicising information about HIV/AIDS especially among young people. As far as educating and informing students about HIV/AIDS, 35.7% of the participants agreed that the university clinic is doing enough to educate and inform students about HIV/AIDS, while 4.5% strongly disagreed. Participants' perceptions on social support for students living with HIV was sought, 36.9% of the participants neither agree nor disagree that there is enough support for HIV positive students at their university, 34.0% of the participants agree, 15.4% disagree, 10.2% strongly agree, 3.5% strongly disagree. The results of this inquiry seem to suggest that participants do not know of any support groups for students infected with HIV/AIDS. This is probably because they are not HIV positive or know anyone who is infected with the HI virus. Nonetheless, for universities to manage HIV/AIDS effectively, continuous support for people infected and affected by HIV/AIDS should be provided.

When questioned about the misconceptions about HIV/AIDS among students, 42.1% of the participants agreed that there are still misconceptions about HIV/AIDS among students, while 0.9% strongly disagreed. When questioned about denialism and secrecy about HIV/AIDS among students, 37.6% of the respondents agreed that there is still a level of denial and secrecy about HIV/AIDS among students, while 1.4% strongly disagreed.

This suggests that HIV/AIDS related stigma is still prevalent in institutions of higher learning. Thus, there is a need for more programmes to empower young people to accept and disclose their HIV status without fear of rejection or judgement. Since HIV/AIDS is still a threat to the health and human development of young people in South Africa, appropriate treatment, care, and support should be accelerated to meet the needs of all key populations regardless of race, gender, social status, and age.

The following section will analyse and present the qualitative data derived from interviews conducted with 24 health care providers at DUT, UKZN, MUT, and UNIZULU.

6.3 Presentation of qualitative analysis: Interviews

6.3.1 Introduction

This section of the chapter draws on the qualitative data attained from semi-structured interviews conducted with 24 health care providers from the four selected universities. The aim of this section is to present findings of health care providers' expertise and professional experience with communication strategies for HIV/AIDS education at HEIs.

6.3.2 The interview guide

The interview guide consisted of 11 questions and the following themes were identified in the data analysis as indicated below:

- Experience of health care providers in health communication
- HIV/AIDS communication strategies and campaign planning
- HIV/AIDS related stigma among university students
- Evaluation of HIV/AIDS programmes implemented in HEIs.

6.3.2.1 Experiences of health care providers in health communication

Through semi-structured interviews conducted with health care providers at DUT, UKZN, MUT, and UNIZULU, it was established that most health care providers are elderly women of African descent. In relation to question one of the interview guide (see Appendix F), data derived from the findings revealed that socio-cultural circumstances influence health care providers' experiences of working with HIV/AIDS services at university campus clinics. Findings show that across all the four universities, health care providers communicate HIV/AIDS messages based on the

sociocultural circumstances they are exposed to. These changing sociocultural circumstances include patterning of environmental circumstances such as social setting and culture that the health care provider lives in as indicated below:

“I have experienced negative and positive emotions when counselling students. I tend to be self-involved in students’ problems. Sometimes the student will test positive and tell you they have no one to support them”.

(Respondent 1, August 2017, interview)

The view of Respondent 1 was supported by Respondent 2, who pointed out that her personal journey of living with HIV/AIDS has shaped her perceptions on HIV/AIDS and how she communicates HIV/AIDS related issues. Respondent 2 had this to say:

“My personal journey with HIV has given me the strength to share HIV/AIDS information with young people. When students come to CHASU (Campus HIV/AIDS Support Unit) I treat them like my own. I share with them all the information they need to know about HIV/AIDS, condom usage, contraceptives all these things”.

(Respondent 2, August 2017, interview)

“Working with students have been a bit challenging because we need to keep up with the social trends that impact on the health communication process especially when you are dealing with university students”.

(Respondent 3, August 2017, interview)

The aforementioned experiences echoes Park (2015: 2) sentiments. Who states that the description of sociocultural context as the awareness of circumstances that an individual is exposed to and the influence of social and cultural dynamics that affect their behaviour. It is clear from the participants’ views that their autobiographical and socio-cultural circumstances influence how they communicate HIV/AIDS information to students. The aforementioned views encapsulates the reality that people’s perception of health, approaches to health promotion and treatment are shaped by their immediate physical and social settings. It can be argued that the sociocultural context in which the health care providers live in has an impact on the HIV/AIDS messages they

encode to students. In other words, their experiences affect the health communication process. This view is supported by Schiavo (2013: 6) who defines health communication as a:

“A multifaceted and multidisciplinary approach to reach different audience and share health-related information with the goal of influencing, engaging and supporting individuals, communities, health professionals, special groups, policy makers and the public to champion, introduce or sustain a behaviour, practice or policy that will ultimately improve health outcomes”.

It is interesting to note that Schiavo’s definition of health communication is along the same lines as the health care providers’ approach to HIV/AIDS communication. Schiavo (2013: 6) explains that health communication is a multi-focal method of disseminating health-related information with the aim of influencing, engaging and supporting individuals to change or sustain behaviour. To elaborate on the nexus between Schiavo’s definition of health communication and the health care providers’ approach to HIV/AIDS communication, it is evident that the health care providers’ use a contextualised interpersonal approach to communicate HIV/AIDS information to students.

It is noteworthy to highlight that the health care providers’ experiences are more likely to influence an effective health communication process between them and the students because of the interpersonal communication setting. It can be argued that this perspective is more likely to be effective in persuading positive sexual behaviour among students as compared to mass media communication channels. This suggests that the health care providers should use communication resources that students can relate to and communicate in a student-friendly language in order to enhance effective health communication.

6.3.2.1.1 Language and culture in HIV/AIDS messages

According to Street (2003: 65) a vital aspect in the health care context is the significance of linguistic resources in both the health care provider and patient health communication context. In other words, the communicator and recipient should have suitable linguistic competencies in the chosen verbal health communication context. Respondent 1 articulates how she identified appropriate language for health communication. She asserts that “slang” is a gateway to understanding students’ sexual behaviour.

“As a health care provider I have learned to speak their language. For example when we talk about unprotected sex with them you have to use words like “skhunu” or “brown”. Njee try and

adopt the language the use for sexual communication. So whatever you introduce to them or wanna say to them, use their language and then find a way to correct their language by highlighting the importance of understanding HIV/AIDS concepts”.

(Respondent 1, August 2017, interview)

The above statement reveals that there is a linguistic pattern for sexual communication among university students. This calls for health care providers to identify an appropriate language for health communication given the student demographic and the message to be communicated. This suggests that in order for HIV/AIDS interventions to be effective, there is need for evidence-based research to comprehend the language and context applicable and suitable for culturally relevant health communication within the student community. Healthy People (2010: 4) identified cultural competence as one of the attributes for effective health communication. This view is supported by Airhihenbuwa and Webster (2004: 5) that culture is the basis upon which health behaviour is articulated, defined and understood. A number of accounts elaborating the dynamics of culture and sexual communication within the student community are highlighted in the participants’ views below:

”We do have talks with them especially when it comes to culture. You see some take part KumKhosi woMhlanga (virginity testing), they are virgins some by choice and some not by choice but as a cultural practice. Then when they get to tertiary they meet friends who will be telling them how nice sex is. Then next thing you know they are dating.....but they do inform their boyfriends that they take part in virginity testing”.

(Respondent 2, August 2017, interview)

When asked how HIV/AIDS programmes cater for the multicultural aspect of the university?

Respondent 3 said, *“that they do have talks with students especially when it comes to culture. You see some take part KumKhosi woMhlanga (virginity testing), they are virgins some by choice and some not by choice but as a cultural practice. Then when they get to tertiary they meet friends who will be telling them how nice sex is. Then next thing you know they are dating.....kodwa (but) they do inform their boyfriends that bayahlolwa (they take part in virginity testing), now they’re going to have two options. Its either they lose their virginity or give their chocolate factory.”*

When questioned what is chocolate factory?

Respondent 3 said, *“uReverse (anal sex). So, what are they running from? She (female student) won’t get pregnant when she has anal sex plus she won’t lose her virginity. So she’s in a relationship. She is in a sexual relationship but she still partakes in virginity testing. Eventually the anus will erupt and if the guy has any infection she will be infected. And abanye (some) have thigh sex. And we always advise them to use condoms because if the skin peels she will be infected because the virus only needs entry point and that is entry point already. So if she is having thigh sex with an HIV positive partner she will be infected although there was no penetration”*.

A similar view is presented by respondent 4, who concurs that culture and health are intertwined:

“Our University is located in a rural area, so many of our students are from the local rural communities. As you know rural people still uphold traditional values and culture. The cultural practice of virginity testing is still valued and respected around here. The issue of abstinence has been promoted for ages at this university. We encourage our students to abstain but we also promote condom use and having one sexual partner”.

(Respondent 4, September 2017, interview)

The traditional practice of virginity testing seems to influence health behaviour among students. It is evident that virginity testing is embedded in Zulu culture. Health care providers highlighted that students engage in other sexual practices such as thigh sex as a way of avoiding intercourse. There seems to be a high regard for virginity testing as a cultural practice than a health issue. It is worth noting that the promotion of abstinence as a primary intervention to mitigating the spread of HIV/AIDS among university students has failed as data from the interview transcripts shows that students engage in other sexual practices just to avoid having penetrative sex. It is clear that students cannot maintain abstinence. In other words, HIV/AIDS communication interventions should focus more on addressing sex and sexuality within a local context that students are familiar with.

This highlights a breakdown in communication. Health communication within these institutions should be modified to fit the norms of the social context presented by the student community. This further illustrate that sex and sexuality are expressed through cultural rules and guidelines.

These findings validate Somma and Bodiang (2003: 10) notion that HIV/AIDS prevention campaigns have failed previously because conventional HIV/AIDS prevention efforts failed to identify that behaviour patterns are not influenced by individual behaviour but rather they are embedded in cultural norms. Uwah (2013: 141) attributes this to health promoters or facilitators possessing limited knowledge of the cultural norms of their target population.

The dynamics of culture and health may hinder university students from seeking accurate HIV/AIDS information. This is often related to the sensitive nature of some cultural practices. From a health vantage point, virginity testing also makes female students susceptible to the HIV/AIDS epidemic. For example, female students who have been sexually violated may be less keen to seek help for the fear of being stigmatised by their peers or families. This seems to suggest that communication strategies based on a cultural approach are an important component of HIV/AIDS prevention at universities. Resrucow *et al.* (2000: 272) emphasise that for health care programmes to attain cultural sensitivity, programme developers must incorporate explicit cultural factors such as language, tradition and the implicit indicators of culture such as morals, customs and beliefs.

A model on interactive communication incorporating components of the communication process was adopted in this study as a tool for understanding factors that hinder the encoding and decoding process between student services and students. The interactive model of communication by Mersham and Skinner (2002:10), described in chapter four identifies the communicator and the recipient as the key players of the communication process. The model bring awareness of how elements in the communication process influenced and how HIV/AIDS messages are encoded and decoded. In encoding/decoding, Stuart Hall argues that message formulation is a socially constructed process (Hall 1996: 441). This perspective argues that communication can only take place through social interaction. Mersham and Skinner refers to the communicator as the person who initiates the communication process (Mersham and Skinner 2002). The significance of this view is that the communicator (health care providers) can use their socio-cultural circumstances to influence the message being communicated. This includes utilising culturally sensitive approaches to communicate new behaviours in a manner that will enhance adoption whilst embracing cultural practices. Based on the data transcribed from the interviews conducted with

health care providers, it is evident that an individual's social setting influences their views and experiences on health issues.

6.3.2.2 HIV/AIDS communication strategies and campaign planning

For strategic communication to be effective, various channels of communication should be put in place. Communication strategies generally integrate interpersonal communication strategies, several media and community-based channels to produce a dynamic and reciprocal communication process (O'Sullivan *et al.* 2003: 11). In relation to question seven and eight of the interview guide (see annexure 6) findings from the interviews conducted with health care providers reveal that each university uses a different approach and tools to communicate HIV/AIDS messages to university students:

When asked what HIV/AIDS programmes/activities are currently implemented at this university?

Respondent one said, *“that we run health education here, when I speak of health education I mean we talk to students or whoever is in the clinic waiting area, this usually takes place at a larger campus because the waiting area is bigger. We do condom demonstration, both genders female and male condom demonstration, we also talk about STIs, we teach them how to spot symptoms of STIs and the importance of taking treatment because some will come to the clinic knowing already that they have STIs but when they consult with the nurse they don't mention that they have STIs because usually the nurse is elderly and as a result they are embarrassed to say anything”*.

When asked if there are particular days on which that these demonstrations are done?

Respondent one said, *“it depends on the number of people that are in the clinic waiting area. I mean you can't do a demonstration for two or three people. But usually in the mornings the waiting area gets full so that is when we do the demonstrations. Plus in our consultation rooms we have condoms and dildos to elaborate on how to use a condom and all those other issues. However, it is still a challenge to convince female students to use condoms.....Hhai angazi (I really don't know)”*.

Respondent two said;

“We do awareness campaigns. We also do residence talks where we visit students at night round about 6 or 7pm. We do educational talks with themeh eh so when we start we tell them who

we are and what we do as CHASO. What I usually do is I share my personal story.....I tell them that I have been living with HIV/AIDS for more than 15 years. Then you see after that.....they start showing interest, asking questions and so forth”.

The above views are supported by respondent three who points out that doing residence talks is a different approach that seems to be reaching out to students:

Interviewee: At university residences we have programmes that we do. These programmes address HIV testing....eh we also have sports day where students play soccer or whatever sport...you name them. Then we bring our gazebos to promote HIV testing.

When asked how often they visit the residence?

Respondent 3 said, “at res (residence) there are programmes depending on what is happening at the residence but there are activities that take place every weekend. Like Sunday programme where we do HIV testing, some Sundays we do debates, symposium or we just sit and talk. For instance there are residences that have peer groups like “Know my sister’s keeper” where female students gather and share challenges they encounter and we come up with solutions for these problems. Sometimes we invite professionals who can help us tackle that issue we addressing for that Sunday. Yah.....there’s a lot”.

Based on the views above, it is evident that health care providers use interpersonal channels to communicate HIV/AIDS messages with students residing on campus; however this suggests that students who reside outside campus are excluded from these sessions. Nonetheless, establishment of open lines of communication by health care providers will build a trust relationship with students. This interpersonal approach can influence students to seek health services on time and frequently. This resonates with O’Sullivan *et al.* (2003: 141) description of interpersonal channels as one-to-one communication such as provider to client communication and peer education sessions.

6.3.2.2.1 Peer education programmes

According to Mahat and Scoloveno (2010: 373) peer education programmes have been documented as one of the effective approaches to educate and empower young people, as they are more likely to be at ease receiving information from their peers. Crosnoe and McNeely (2008: 73)

add that peer influences are instrumental in how adolescents learn and behave, particularly in learning environments. Data collected from health care providers from the four selected universities revealed that peer education programmes are employed in the four universities and are led by university students preferably 1st or 2nd year students:

When asked what is the selection criteria to be in the peer education programme?

Respondent 1 said, *“we look at students, especially it could be the first years who are interested because we want someone who is going to commit some time into the programme because they need to do those sessions (educational sessions) with other students. First year, second year.....we tend to be reluctant in terms of the thirds years because they sometimes need to go for work integrated learning services, so we focusing on those 1st year, 2nd year students”*.

When asked whether there is a preferred gender or race?

Respondent 1 said, *“no, we try to balance the gender. Sometimes we find.... Like in any case more women than men. But when it comes to race, 95% of our peer educators are black students”*.

When asked how students are recruited?

Respondent 1 said, *“we create a poster and then we post it around campus and we also use the DUT pin board to advertise”*.

(Respondent 1, August 2017, Interview)

To elaborate on how peer education is instrumental in accommodating all sub-groups within the student population, Respondent 2 expressed this:

“We have peer education in all campuses at UKZN. We recruit peer educators in February and we recruit about 30 peer educators per campus, mostly black. Under peer education we do forums, we got women’s forums, we got men’s forum, we got abstinence forum, we got positive living forum and LGBTI forum. These forums.....eh eh we give them the platform....like maybe in the women’s forum they will talk about the women’s issues and then we do awareness campaigns which are focused more on women. Same thing with men’s forum, same thing with LGBTI. In fact we deal more with LGBTI group”.

(Respondent 2, August 2017, Interview)

This statement was supported by Respondent 3, who had this to say:

“We normally train our peer educators in March. We recruit 1st and 2nd years. We normally focus on undergraduates but we also consider postgraduates say maybe 10 of them. The reason we train them is because some of them are not knowledgeable about HIV/AIDS. We give them basic information on HIV/AIDS. In our trainings there are different topics that we focus on...like we will talk about substance abuse, gender based violence, STIs treatment and prevention. So after training them they then become members of peer educators. During the course of the year we run workshops, normally we call FPD (The Foundation for Professional Development) to train them or other external stakeholders to train them”.

(Respondent 3, August 2017, Interview)

From the questions, it was evident that peer education programmes are key frameworks to promote healthy sexual behaviours and to enhance students’ knowledge on HIV/AIDS in universities. It is worth noting that none of the health care providers mentioned using the Rutanang model for peer education in HEIs as their guideline for developing and implementing peer education programmes within their campuses. This raises a lot of questions as the Rutanang model for peer education in HEIs was adopted by HEAIDS as a standardised guideline for peer education in South African Higher Education Institutions.

As noted in chapter three of this study, the aim of the Rutanang model for peer education in HEIs is to put in place a standard of practice for peer education development so that it is not random but a process that all relevant stakeholders can identify with and relate to (HEAIDS 2006: 6). Nonetheless, the common use of peer education as a strategic response to HIV/AIDS in HEIs demonstrates how it has grown in popularity and practice with regard to HIV/AIDS prevention, care and support.

Peer education as a tool for behavioural change is underpinned by various well known behavioural theories, such as, the Social Learning Theory which posits that individuals serve as role models of human behaviour and that some individuals can be influential in eliciting behaviour change in certain people, based on the individuals’ value and construal system (Bandura 1989). In the context of peer education, peer educators must be reliable and credible to their peers in order to elicit behaviour change whilst serving as models of good behaviour.

Theory of Reasoned Action which is established in the field of social psychology defines the aspects and inputs in any specific behaviour. The theory asserts that the major influential factors for behavioural change is an individual's views on social norms or opinions about what people (significant others) do or think about a certain behaviour (Fishbein and Ajzen 1975). The Health Belief Model has contributed significantly to the development of peer education (Rosenstock, Strecher and Becker 1994).

The Health Belief Model posits that behaviour is an outcome of an individual's beliefs and expectations. In relation to this study, Findings from the interviews conducted revealed that peer education does not only focus on identifying effective behaviour to lessen vulnerability to HIV/AIDS but rather they use different platforms to educate and inform university students about accurate HIV/AIDS information, skills and support which are crucial components to overcome potential barriers to positive sexual behaviour.

It was also interesting to note that the majority of peer educators at the selected HEIs are mostly African students. Taking into account that the demographic makeup of these universities consists of Africans, Indians, Whites and Coloured students, it is plausible to conclude that the recruitment of mainly African students in peer education programmes contributes to the "racialising" of the epidemic. This suggests that the Indians, Whites and Coloured students consider themselves invulnerable to HIV/AIDS epidemic. This can be attributed to the racial separation that previously defined the South African society which resulted in unequal distribution of resources, abject poverty and gender inequality (Fourie 2006: 51).

The effects of racial discrimination is evident in this study, where the students' perception of "perceived severity" to HIV/AIDS is influenced by the racial group they belong to. In addition, the discourse of denialism propagated by former President Thabo Mbeki has contributed to the level of ignorance among university students where vulnerability to HIV/AIDS is classified according to race and social class. From the interviews, it is evident that most African students consider themselves more vulnerable to HIV/AIDS, hence enrolling in peer education programmes to improve self-knowledge and to serve as role models of good behaviour to their peers.

A further analysis also revealed that peer education programmes are aligned with the strategic objective 1 of the National Strategic Plan (NSP) which aims to address social and structural barriers that increase vulnerability to HIV, STIs and TB infections. The results of the interviews

conducted with health care providers showed that the scope of operation of peer education programmes include condom distribution, awareness campaigns, peer discussions and ongoing HIV/AIDS testing and counselling:

“We do HIV/AIDS counselling at testing. We promote condom usage.....eh we deal more with prevention. As you may know prevention is a broad thing, so it’s condom usage, promoting HIV counselling and medical male circumcision. We make arrangements for male students to come and register and we take them to the nearest hospital. Unfortunately we don’t do circumcision on campus but we mobilise the students to the nearest hospital to be circumcised. We also use the national calendar to run our activities, in February there is an STI and Condom week awareness during that week we do programmes and invite other external stakeholders to do screening of STIs and we educate them (students) about condom usage. In March it is TB (Tuberculosis), so we do awareness on TB. In April there is a health awareness day so we ask students to come for testing of HIV, STIs screening and to check high blood pressure level and diabetes. We do have our own customised awareness campaigns such as Imbizo yeMpilo which is under male’s forum. Imbizo yeMpilo promotes medical male circumcision and manhood among male students. What does it mean ukuba Indoda (to be a man)....yah issues like that.”

(Respondent 4, September 2017, interview)

A similar view is presented by Respondent 5:

“We currently run the First Things First Campaign, Know Your Status drive and the HCT drive. We also have pregnancy awareness and we also have health fair where students are invited to come measure their BMI (Body Mass Index). We also have tailored made forums such as Instika males network, Amajita and Brothers something something.....so they sit on certain days and we are invited to come and talk to them about HIV/AIDS and other related sexual issues. During our campaigns we usually have incentives such as t-shirts, USBs and water bottles to attract students”.

Respondent 6 further included that:

“Peer educators are key players in spreading information about HIV/AIDS and the awareness programmes we run on campus. We usually go to the foyer where lots of students gather and we do HIV/AIDS counselling and testing there. We sometimes have freebies to attract students but we are in the process of doing away with incentives because some students test only when we have

free things to give away. Students should know that they are not doing anyone a favour by knowing their HIV status. Our peer education programmes also accommodate marginalised groups such as MSM and the LGBTI community”.

(Respondent 6, August 2017, interview)

Respondent 7 also added that:

“We do outreach programmes. For instance last week we were at all university campuses. We were doing “Know your status drive” where we invite other outsiders like Ithemba laBantu, gay center.....you name them. We have incentives such as pens, vouchers, t-shirts and so on. However, sometimes we do these kind of campaigns without any freebies and when students see our gazebos they just come and test because some students are reluctant to come to the clinic because of the booking system so they always test when we have campaigns and HIV/AIDS drives. We do our drives every three months and we also follow the national health calendar. Like for instance in February we have STIs and condom week where we educate students about STIs and we promote condom usage. We also have pregnancy week. We do pregnancy aware by educating students about contraceptives and the importance of taking contraceptives and condom usage. We also encourage HIV testing”.

(Respondent 7, August 2017, interview)

It is interesting to note that university campus clinics are working with external stakeholders to combat the spread of HIV/AIDS in Higher Education institutions. Although education is seen as a pivotal tool to combat the spread of HIV/AIDS, it is evident from the findings that the scope of HIV/AIDS within HEIs needs a multi-sector approach to effectively respond to the impact of HIV/AIDS. This view is supported by Van Wyk, Pieterse and Otaala (2006: 2) that institutional response should pursue an understanding of factors that perpetuate the spread of the HIV/AIDS epidemic whilst collaborating with the local community, national policies and regional policies.

Literature presented in chapter two of this study highlights civil society as a key player in the South African Aids community. The TAC (Treatment Action Campaign) has been instrumental in promoting and advocating for the rights of those infected with HIV/AIDS (Vorster 2015: 6). This campaign has shaped the government’s response to HIV/AIDS including the Higher Education

sector. This shows the commitment of civil society in fighting the HIV/AIDS epidemic in all sectors of society.

In terms of prevention programmes, the findings from the interviews suggests that the four universities selected in the study have intensified their communication approaches by combining behavioural, biomedical, and structural interventions in their peer education programmes. This is strikingly consistent with the Policy and Strategic Framework on HIV/AIDS for Higher Education 2012 which is aligned with the 2012-2016 National Strategic Plan for HIV, STIs and TB as highlighted in chapter 3 of this study. The aim of the Policy and Strategic Framework on HIV/AIDS for Higher Education is to facilitate an in-depth, comprehensive, strategic and united sector response to HIV/AIDS. It is noteworthy that the four universities have peer support groups that are tailored to identify and address socio-cultural factors that exacerbate the spread of HIV/AIDS within the student community.

The concept of combination preventions has been strongly promoted and supported by the Joint United Nations Programme on HIV/AIDS (UNAIDS). UNAIDS (2010: 10) describes combination prevention as an intervention that take into consideration factors specific to each setting such as local cultural norms and traditions and the standard of the infrastructure. Based on the findings from the interviews, it is evident that various prevention efforts have been put in place to tackle the socio-cultural and economic factors that drive the epidemic particularly among marginalised groups.

6.3.2.3 HIV/AIDS related stigma and discrimination as a key obstacle to HIV/AIDS communication

Stigma and discrimination associated with HIV/AIDS has been identified as major barriers to effective response to the HIV/AIDS epidemic (Stangl *et al.* 2013). HIV stigma and discrimination remains a primary goal of the National Strategic Plan (NSP). Goal four of the National Strategic Plan aims to make provision of comprehensive, tailored-made and targeted interventions that will reach out to all key and vulnerable populations (SANAC 2017b: 4). This suggest that HIV/AIDS-related stigma is one of the key factors that undermine prevention efforts to fight the spread of HIV/AIDS. Findings from the interviews conducted with health care providers revealed that HIV/AIDS related stigma and discrimination persist within universities:

“You know we have a challenge with students who test positive and then default. They don’t adhere to treatment. Sometimes we take initiative and follow up with them and then they will tellOh no I am taking medication from my home clinic. The problem is we don’t offer ARVs on campus, students are referred to the nearest public clinic or hospital. Some will tell you ukuthi (that) they will not be able to get medication because the appointed time at the clinic they are referred to clashes with their lectures. So if the lecturer notice a pattern of absenteeism, they will start asking questions about my whereabouts. Lecturers will also want to know why the student is always absent on certain days of the month and that will put pressure on the student to disclose their status untimely. So what I do, I always seek permission from students to fetch the pills on their behalf. So it is a win-win situation. The student didn’t miss classes and they get their medication”.

(Respondent 1, September 2017, interview)

Similarly, Respondent 2 points out that she has noticed a pattern of students’ reluctance to receive HIV/AIDS treatment on campus:

“When we do HIV/AIDS testing on campus we offer pre and post counselling. Some students who test positive will tell youI will get my ARVs from my home clinic because I am comfortable getting my treatment from there. So you never know if they are really going or not because you can’t force them to take medication from the campus clinic. And funny thing is they spend more time here at school than home. But I always emphasise to them that they must take their time to accept their status before they can disclose to anyone. And I always push indaba ye (the issue of) ongoing counselling”.

(Respondent 2, August 2017, interview)

This view is supported by respondent 3 who reports that the issue of stigma is something students still struggle with:

“Kahle kahle (actually) I believe that the issue of stigma is a lack of knowledge and ignorance because we have taught educated a lot about HIV/AIDS. Wherever you go they talk about HIV/AIDS. Here CHASO we emphasise the issue of health education. We try to change students’ negative attitude towards HIV/AIDS. We also promote support services because some of the students will say stuff like oh I saw her going to CHASO, so they think maybe you (student) are positive. So we are trying to break that stigma attached to CHASO. When we do educational talks

we always emphasise that CHASO doesn't deal with HIV positive people only. You know we had a case of a student who struggled with accepting her HIV status..... always crying, we tried to encourage her and to be there for her. I tried giving examples about me and how I am living happily with the virus in my body.

(Respondent 3, August 2017, interview)

Findings from the interviews with health care providers maintain that HIV/AIDS related stigma poses a serious threat to prevention efforts targeted at university students living with HIV/AIDS. Stangl *et al.* (2013) have associated HIV/AIDS related stigma to lack of interest in biomedical prevention approaches such as refusal to HIV testing, poor adherence to ART and non-disclosure to family and friends. The interview data illustrates that HIV/AIDS related stigma is common within university campuses. The high level of stigma suggests that communication messages from the student support services have failed to influence any meaningful change in students' social behaviour. This highlights that there is an urgent need to strengthen HIV/AIDS messages that address factors associated with HIV/AIDS related stigma.

One of the key elements in the interactive model of communication is the message communicated. Dominick (2011: 4) defines a message as the meaning content that is encoded by the communicator. This suggests that health care providers should construct HIV/AIDS messages objectively and anticipate students' imagined response to the messages communicated. The way health communicators express HIV/AIDS messages forms an important part of the interaction process. The encoded messages of HIV/AIDS at DUT, MUT, UKZN, and UNIZULU are centred on HIV/AIDS prevention, care and support (see case description of the selected universities in Chapter Four of this study). Data transcribed from the interviews indicate that although HIV/AIDS related stigma is addressed through social groups among students, health information encoded by health care promoters might not influence students' behaviour change because of the information environment and the communication resources used to send the message. Additionally, the interactive model of communication highlights that the recipient decodes a message from their autobiographical and socio-cultural circumstances. It can be argued that the university culture and the social class and religion that students' belong to influences their perceptions and interpretation of HIV/AIDS messages.

This highlights the need to better understand the reasons that make students reluctant to disclose their HIV status given the fact that there are various HIV/AIDS communication strategies implemented within HEIs. This implies that there is need for a paradigm shift in HIV/AIDS communication practices in universities. However, the proliferation of comprehensive, tailored and targeted HIV/AIDS interventions to reach key and vulnerable populations in universities represents a paradigm shift in the way MSM and homosexuals were perceived previously:

“We have a forum that deals with key populations here on campus. But when we do workshops we involve everyone so that they can understand what is MSM and LGBTI. We also do campaigns that focus mainly on key populations. But you know before it was hard for other students to accommodate MSM and the LGBTI community. For example, we have peer educators that deal with key and vulnerable population and every time they have to say something some of the students will start making funny faces. But now there is so much change, even at university residence we see there is a huge difference. We do talks there to educate them (students) about MSM and LGBTI. We encourage them to ask anything they want”.

(Respondent 4, August 2017, interview)

“The fact that we have a forum that caters for them shows that they have the university’s support. They are so free on campus even when they come to test you can tell that they are free. They don’t stigmatize themselves and as a result they make the environment friendly for anyone who is still struggling with self-acceptance. We have comprehensive HIV/AIDS services tailored for them and this is one of the prevention efforts we are making to minimize risk of exposure to HIV/AIDS”.

(Respondent 5, August 2017, interview)

The aforementioned findings resonates with the expansion of institutional response by HEAIDS in Higher Education institutions. HEAIDS aims to promote an environment that is conducive to provide comprehensive prevention, treatment, care and support services for MSM and LGBTI persons (HEAIDS 2015). It is interesting to note that students tend to change their perceptions of key populations once they receive accurate and factual information about key and vulnerable populations. This suggests that students construct their own reality based on their social surroundings that is influenced by their cultural, religious and social values. Therefore, it is reasonable to suggest that their behaviour is manifested based on these values. In other words,

their social aspects form a critical component of the stigmatisation process. Based on the findings, it is evident that HIV/AIDS education bridges the gap between ignorance and effective HIV/AIDS messages that minimise stigma. This confirms that HIV/AIDS education is an effective tool to eradicate HIV/AIDS related stigma and discrimination in Higher Education institutions.

6.3.2.4 Evaluation of HIV/AIDS programmes implemented in HEIs

A key component in any communication strategy is an evaluation plan. According to O'Sullivan *et al.* (2003: 195) explains that an evaluation plan is a communication strategy that serves the purpose of being informed on the effectiveness of the implementation activities as stated in the objectives of the strategy. When asked about the evaluation methods used to determine if the implementation activities outlined in the strategic plan are effective, health care providers responded as follows:

(Respondent 1)

“To see that the programmes we run are effective, we can tell by the stats (statistics) that we come back with from our campaigns. A large number of students come and test even without incentives. Say for example if we do an awareness campaign on dual protection on campus, the next day the clinic will be full. The stats (statistics) that we do after the programme always indicate that our campaigns are effective. The response is overwhelming. Well that is the only way we measure the impact of our programmes. Sometimes we have eh eh..... Surveys where we ask questions about the programme and where we are lacking as a clinic”.

Contrary to this view, respondent 2 expressed that they don't have a proper evaluation plan in place to evaluate the effectiveness of HIV/AIDS activities:

“Eish....haha (laughs) you see our evaluation, I will be honest it is very poor. But we always have evaluation papers when we run our campaigns where students are encourage to give feedback. They is no identification required so students are encouraged to write anything, suggestions or comments. That's what we take into account to improve our services. We also have another one online, it is based on HIV/AIDS knowledge and attitudes, campaigns. But we don't have a proper evaluation plan”.

(Respondent 2, August 2017, interview)

Respondent 3 added that:

“When we HIV/AIDS testing the stats (statistics) inform us if we have first-time testers or repeaters. So when we see a lot of first time testers we know that our messages have penetrated a different segment of the student population. But we don’t really have a lot of first time testers because most of them get tested from high school. We define a first time tester as someone who is testing for the first time in their life. I have also noticed that male students are usually repeaters as compared to their female counter parts. But we have more female students testing for HIV than male students”.

Empirical evidence emerging from the interviews revealed that university campus clinics do not have a proper system to evaluate the effectiveness of the HIV/AIDS programmes implemented to change risky sexual behaviour among students. However, the use of surveys seem to be a common tool of measurement used by health care providers to determine the quality of services they offer to students. The fact that some students voluntarily get tested for HIV/AIDS without expecting any incentives could suggest that students take the HIV/AIDS seriously. This could also mean that HIV/AIDS messages communicated by campus clinics are effective in reaching the desired population and communicating a message that students resonate with. The process of receiving, understanding and interpreting a message from the sender is called decoding (Hall 1996).

Hall (1996) outlines three theoretical positions that an audience can understand and interpret a message; the dominant hegemonic position occurs when the recipient of the message receives and accepts the message as it is. Hall describes the negotiated position as an indecisive stance which is a mixture of adaptive and oppositional features, while he perceives the oppositional position as the position the recipient understands, interprets a message and opposes it (Hall 1980). This indicates that students who tested voluntarily without expectation of any incentive, receive and interpret HIV/AIDS messages from a dominant hegemonic position. This could be because students still consider themselves vulnerable to the HIV/AIDS epidemic.

Drawing on the Health Belief Model, the model posits that perceived susceptibility leads to perceived benefits of taking action. In other words, when an individual is vulnerable to a disease or illness they are more likely to take actions that lead to prevention of the disease. Thus, it is plausible to conclude that students voluntarily initiate HIV/AIDS testing because they engage in risky sexual behaviours. Consequently, the vulnerability of these students leads to health seeking

behaviour which may give an impression that HIV/AIDS messages communicated by university campus clinics are effective.

The emphasis on male students being repeaters of HIV/AIDS testing could be attributed to the fact that most male students undergo medical male circumcision which HIV/AIDS testing is a prerequisite of getting circumcised. This can also be attributed to the fact that Voluntary Medical Male Circumcision (VMMC) at University of Zululand is performed on campus through DramAide, which employ community mobilisers to conduct VMMC activities including men-to-men sessions, condom distributions and HIV/AIDS testing as compared to DUT, MUT, and UKZN where male students who want to be circumcised are mobilised to the nearest clinics or hospitals (see chapter four of this study). It is evident that the accessibility of HIV/AIDS related services creates demand for service provision.

It can be argued that the reason there are more female students undergoing Voluntary Counselling and Testing (VCT) is due to the biological factors that make women vulnerable to HIV/AIDS such as transactional sex, inability to negotiate condom use, multiple concurrent sexual partners and poverty. This widely acknowledged notion is supported by Leclerc-Madlala, Simbayi and Cloete (2009) that socio-cultural factors such as dire economic circumstances, chasing modernity and gender inequality make women vulnerable to HIV/AIDS. As a result female students tend to relate more with HIV/AIDS messages that alerts them of preventative measures to avoid being infected with HIV/AIDS. Therefore, conscientisation leads to health seeking behaviour which results in effective HIV/AIDS communication messages.

6.4 Comparative analysis of quantitative and qualitative findings

This section compares key findings obtained from the student questionnaires and interviews conducted with health care providers. The study compares and contrasts results emanating from the quantitative and qualitative data sets in the interest of addressing the study objectives as follows:

Objective 1: To examine HIV/AIDS communication strategies used by HEIs for student support services.

Results emanating from the quantitative and qualitative data provide a strong support that HIV/AIDS prevention strategies implemented at the four universities selected for this study are

participatory in nature. A majority (56.3%) of the university students prefer attending workshops and discussion groups to access HIV/AIDS information as highlighted in Figure 6.3 This statistic is supported by views articulated by health care providers who assert that university students tend to engage more in HIV/AIDS prevention strategies that are student oriented. Results from the interviews also shows that HEIs have HIV/AIDS prevention programmes that are tailored to address students' health needs. This data points to a strong relationship between student-oriented programmes and the likelihood that students might participate in HIV/AIDS prevention strategies when they can relate to them. Table 6.4 shows that a vast majority (77.1%) of the students acknowledged that HIV/AIDS messages communicated by student services are tailored to accommodate the multicultural aspect of the student community. However, a different view emerging from the interviews conducted with health care providers indicated that some students, particularly female students from rural areas continue to engage in risky sexual behaviour such as engaging in anal and thigh sex in an effort to preserve their virginity. Health care providers articulated that some of the students who partake in traditional practices such as virginity testing become vulnerable to HIV/AIDS infection due to social and peer pressure. Students are caught between sexual experimentation and preserving socio-cultural practices. This contrast in response highlights a need to assess whether social and demographic factors that exacerbate the spread of HIV/AIDS are addressed in HIV/AIDS messages. On the other hand, results in Table 6.5 indicate that 63.8% of the students believe that culture influences sexual behaviour. Although the aforementioned result does not indicate if this is a positive or negative influence, the interview data shows that rural based institutions namely UNIZULU and MUT tend to promote abstinence as a prevention strategy for HIV/AIDS. It is arguable that the social construction of sexuality and sex orientation among university students leads student services to implement HIV/AIDS prevention strategies that are shaped by social and cultural factors. This view is supported by Kreuter and McClure (2004: 440) that in order to achieve cultural sensitivity a strategy should improve message prominence by grounding the intervention content in the context, experiences beliefs and norms of the target population.

Objective 2: To analyse the communication tools used by student services at various HEIs

61% of the students indicated that visual images draws them to HIV/AIDS messages. These results are not surprising as the interview data indicate that health care providers use materials such as

images, videos, presentations and infographics to disseminate HIV/AIDS information. Results presented in Table 6.7 indicate that 83.9% of the students agreed that HIV/AIDS campaigns disseminate messages that they can relate to. This is consistent with the results from the interviews where the majority of health care providers reported that they make an effort to communicate with students in a language they are most familiar with and concepts they can relate to. This data points to a strong relationship between contextual HIV/AIDS messages and better reception of HIV/AIDS messages by university students. Students were asked to indicate whether HIV/AIDS campaigns are educational and entertaining. A majority of 73.3% agreed that HIV/AIDS campaigns are educational and entertaining. Similarly, a majority of the health care providers articulated that they have incorporated HIV/AIDS campaigns with other student activities such as sports activities, debates and other recreational activities that students find enjoyable. This implies that there is a link between HIV/AIDS and entertainment education.

Study objective 3: To analyse the extent to which the interactive model is applied by student services at various HEIs

Most (78.7%) of the students indicated that HIV/AIDS messages communicated through HIV/AIDS campaigns have a positive impact on their sexual behaviour. This can be attributed to the multifaceted HIV/AIDS approaches employed in HEIs to mitigate the spread of HIV/AIDS among students. The interview data shows that health care providers use approaches such as peer education programmes, support groups and entertainment education to disseminate HIV/AIDS messages. Results in Table 6.11 are associated to students' awareness of where the clinic is located.

A vast majority (85.8%) of the students know where the campus clinic is located. On the contrary, only 53% of the students have been to the campus clinic. This can be due to environmental stigma as health care providers have indicated that many students do not adhere to HIV/AIDS treatment and support due to fear of being discriminated and judged by their peers and families. The lack of association between knowing where the campus clinic is and visiting the campus clinic may be related to structural factors such as HIV/AIDS stigma and discrimination that creates a barrier to HIV/AIDS prevention, treatment, care and support.

Nonetheless, a majority (71.6%) of the students have tested for HIV. This can be attributed to HIV/AIDS testing campaigns that are conducted within university campuses. Similarly, most students indicated that they are well informed about HIV/AIDS. The results points to a strong

relationship between HIV/AIDS knowledge and testing for HIV/AIDS. The underlying assumption in relating how informed students are about HIV/AIDS to HIV/AIDS testing is that when students are informed about HIV/AIDS they will be more likely to engage in safe sex practices and make sound health decisions.

Objective 4: To determine the influence of the interactive model in bringing about behavioural change among students

A majority (70.9%) of the students indicated that they are sexually active, while 70.2% indicated that the main reason they use protection is to protect themselves against HIV/AIDS. These results are supported by the health care providers' emphasis on the promotion of condom usage on university campuses. Interview data revealed that the promotion of Voluntary Counselling and Training and the promotion of condom usage have encouraged students to engage in safe sexual practices.

Health care providers expressed that this is shown by the number of students who visit the clinic the day after hosting HIV/AIDS testing and condom usage campaigns on campus. Thus, this shows a close relationship between HIV/AIDS campaigns and health seeking behaviour among university students although this behaviour is not consistent as highlighted in Table 6.12. This highlights that there is an ongoing need to investigate why there is poor adherence to health seeking behaviour among university students.

6.5 Conclusion

This chapter focused on the results obtained from data analysis in terms of analysing communication tools for HIV/AIDS education by student services at universities, in KwaZulu-Natal. The research findings presented in this chapter indicate that students prefer workshops and discussion groups as HIV/AIDS prevention strategies. Conversely, a comparatively small number of students selected peer education sessions as a preventative programme they find useful in addressing HIV/AIDS regardless of health care providers acknowledging peer education as a primary approach to mitigating the spread of HIV/AIDS and disseminating HIV/AIDS information among university students.

Furthermore, the majority of the students' indicated that HIV/AIDS messages are tailored to accommodate the multicultural aspect of the student community. However, data emerging from

interviews with health care providers cited culture as a barrier to effective HIV/AIDS response within the student community. Thus, there is a need for student services to invoke the primacy of culture in HIV/AIDS communication strategies in HEIs.

Results of the study indicate that students draw more to HIV/AIDS messages when visual images are used as channels of communication. Furthermore, the majority of the students indicated that they can relate to HIV/AIDS campaigns on campus. It is plausible to conclude that student services employ youth friendly communication programmes as positive strategic tools to help university students to make sound health decisions. Consistent with the Health Belief Model that perceived benefits of action is believed a personal acceptance of vulnerability to infection makes an individual to take action towards that disease.

Findings emerging from this study indicate that although a majority of the students know where the campus health clinic is located, many of the participants have never been to the campus clinic to seek health related services. These findings seem to validate the perception that HIV/AIDS related stigma is still a major threat to health seeking behaviour among young people. In addition, the poor health seeking behaviour among students is worrying as previous literature has noted that university students tend to engage in risky sexual behaviours. The study established that the majority of the participants are sexually active and the main reason for using condoms is to protect against HIV/AIDS. This does not come as a surprise as condom usage has been shown to be a sustainable approach preventing the spread of HIV/AIDS and STIs.

The Interactive Model of Communication demonstrates that there are major obstacles that hinder the encoding and decoding process between health care providers and university students. A majority of the students expressed that they are not comfortable confiding in health care providers. This seem to suggest that there is no client-provider confidentiality within campus clinics. In addition, an inquiry on whether HIV/AIDS messages address socio-economic factors that exacerbate the spread of HIV/AIDS revealed that 40.7% of the participants indicated that HIV/AIDS messages do not address socio-economic drivers of HIV/AIDS. This highlights the need for new approaches to address key drivers of HIV/AIDS within the student community. Thus, in order for students to interpret HIV/AIDS messages as intended by student services, approaches to HIV/AIDS prevention should be tailored to address the HIV/AIDS issues within the local context.

The next chapter will discuss how the findings contributed to the analysis of communication tools employed for HIV/AIDS education by student services at universities in KwaZulu-Natal. Drawing on the summary of findings, the study will be concluded, and recommendations will be made.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

Chapter one of this study focused on the introduction, the problem statement, objectives of the study and concluded with definitions of key terms.

Chapter Two presented global statistics of HIV/AIDS, the trajectory of the HIV/AIDS epidemic and the modes of HIV/AIDS transmission. The literature also concentrated on public policy interventions in addressing HIV/AIDS in South Africa. The chapter further explored the HIV/AIDS response from the civil society organisations and the higher education sector. The chapter concluded by highlighting triumphs and failures of HIV/AIDS in South Africa.

Chapter Three provided regional responses to the HIV/AIDS epidemic in the higher education sector. The policy framework on HIV/AIDS for Higher Education in South Africa was analysed and the chapter concluded by examining good practice programmes by HEAIDS.

Chapter Four explored the components of strategic communication plan. The chapter analysed the role of health communication in HIV/AIDS and provided a case description of HEIs selected in the study. The chapter provided a discussion on the interactive model of communication, the Health Belief Model, and behaviour change communication. The chapter concluded with a SWOT analysis on HIV/AIDS programmes implemented at the four universities.

Chapter Five addressed the research methodology employed in the study. The chapter presented the research design, description of the research population and sampling methods.

Chapter Six provided the results emanating from the study and interpretation of the findings.

Recommendations were made in an effort to enhance communication tools for HIV/AIDS education at higher education institutions. In addition, the limitations of the study and the conceptual contribution of the study will be presented.

7.2 Overview of the study

The purpose of this study was to analyse communication tools employed for HIV/AIDS education by student services at universities in KwaZulu-Natal. The aim was accomplished through the following objectives:

- 1) To examine HIV/AIDS communication strategies used by HEIs for student support services.
- 2) To analyse the communication tools used by student services for HIV/AIDS at various HEIs.
- 3) To analyse the extent to which the interactive model is applied by student services at various HEIs.
- 4) To determine the influence of the interactive model in bringing about behavioural change among students.
- 5) To provide recommendations to improve and strengthen HIV/AIDS education in university settings.

To address the aforementioned objectives, comprehensive literature regarding communication tools for HIV/AIDS education by student services at HEIs was sourced to provide a background to the relationship between communication tools for HIV/AIDS education and student sexual behaviour. To accomplish the aim of the research, the study employed a qualitative and quantitative research design to generate an understanding of the subject under investigation. Questionnaires were distributed among 423 university students at four public universities in KwaZulu-Natal. In-depth interviews were conducted with 24 health care providers at campus clinics based at the four selected universities for this study. Interviews were tape-recorded, transcribed, and analysed.

The findings emerging from the study are discussed according to the five objectives of the study.

7.3 Summary of the key Findings

Objective 1: To examine HIV/AIDS communication strategies used by HEIs for student support services

The results of this objective revealed that the majority of the university students prefer workshops and discussion groups as prevention strategies for HIV/AIDS. The findings illustrated that by participating in HIV/AIDS workshops and discussion groups, university students may contribute to optimising the benefits of HIV/AIDS prevention strategies on campus in relation to mitigating the spread of HIV/AIDS among university students. Furthermore, the university students indicated that they find education on HIV/AIDS as a useful preventative programme in addressing HIV/AIDS.

These results demonstrate that university students find education on HIV/AIDS a useful tool for understanding the HIV/AIDS epidemic and factors that aggravate the vulnerability of HIV/AIDS infection. Although knowledge alone is not sufficient to change behaviour, it is plausible to conclude that HIV/AIDS education addresses socio-cultural issues that exacerbate the spread of HIV/AIDS among university students by provision of skills and information that generate new behaviour and attitudes to reduce HIV/AIDS related risk. In other words, HIV/AIDS education creates a context in which university students can understand and debate about the HIV/AIDS epidemic. With regard to culture-centred HIV/AIDS approaches, the majority of the university students suggested that universities should employ cultural approaches for HIV/AIDS prevention and care.

Given these findings, it is evident that the HIV/AIDS epidemic requires a multi-dimensional response. Thus, in order to deal with all aspects of the HIV/AIDS epidemic within the student community HIV/AIDS prevention efforts should be tailored to the students' population beliefs, attitudes, and value systems. In this respect, this approach meets the goals of the NSP for HIV/AIDS, STIs and TB 2017-2022 of intensifying prevention programmes in order to reduce new HIV/AIDS infections. The students indicated that culture influences student sexual behaviour. It is clear from the findings that culturally appropriate strategies should be prioritised as HIV/AIDS prevention efforts in order to address cultural determinants that influence the spread of HIV/AIDS among students including students' characteristics, lifestyle, and beliefs.

Objective 2: To analyse the communication tools used by student services for HIV/AIDS at various HEIs

According to the findings, the students indicated visual images draw their attention to HIV/AIDS messages, whilst a few students mentioned that print information draws them to a message. This

can be attributed to students' interest in visual images as compared to reading text. This highlights the importance of promoting HIV/AIDS awareness through visual communication. Further analysis demonstrates that the majority of the students indicated that they can relate to HIV/AIDS campaigns.

Health care providers' efforts of using languages that students can understand in order to make HIV/AIDS messages clear could be identified as a contributing factor to effective HIV/AIDS campaigns. Health care providers also mentioned that they do demonstrations of condom usage, public speaking at clinic waiting areas to elaborate on prevention methods for HIV/AIDS. Based on these findings, it is reasonable to conclude that university students relate more to visual and action-oriented prevention strategies. In addition, the findings revealed that a high number of the students find HIV/AIDS campaigns educational and entertaining. The findings indicated that HIV/AIDS messages have been encapsulated in communication tools that students find educational and entertaining.

Objective 3: To analyse the extent to which the interactive model applied by student services at various HEIs

The findings of this objective revealed that most of the university students found that HIV/AIDS messages addressed socio-economic factors that aggravates the spread of HIV/AIDS among students, whilst some students indicated that HIV/AIDS do not address socio-economic factors that influence the spread of HIV/AIDS among university students. It is clear that socio-economic factors are a major contributing factor to the spread of HIV/AIDS among university students (see chapter four). This implies that HIV/ADS strategies have not thoroughly dealt with socio-economic factors that influence the spread of HIV/AIDS among students.

Most students argued that HIV/AIDS communicated through HIV/AIDS campaigns had a positive impact on their sexual behaviour. This implies that university students are less likely to partake in risky sexual activities; however, previous studies on student sexual behaviour indicated that university students continue to be vulnerable to HIV infection due to risky sexual behaviours. The study established that although most students know where the health clinic is, many students have never been to the campus clinic.

Health care providers identified HIV/AIDS related stigma as a major contributing factor to poor medication adherence and clinic visits. The study findings indicate that the majority of the students have done an HIV test. This can be attributed to HIV/AIDS awareness campaigns set out to maximise opportunities for testing for HIV on campus. The majority of the students indicated that they are well informed about HIV/AIDS. Although most students are well informed about HIV/AIDS, this is not a prerequisite of safe sexual behaviour.

Objective 4: To determine the influence of the interactive model in bringing about behavioural change among students

According to the findings of this objective, the majority of the students were sexually active whilst most of the students used condoms to protect against HIV/AIDS. These findings demonstrate that students engage in safe sexual practices to protect themselves from transmission of HIV/AIDS and STIs. The empirical evidence emanating from the study finding illustrates the impact of behaviour change strategies on student sexual behaviour in bringing about positive behaviour change among university students. Nevertheless, some university students have indicated that they have engaged in unprotected sex. These findings demonstrate that regardless of high levels of awareness or knowledge regarding HIV/AIDS, some students will continue to engage in risky sexual activities due to their perceived sense of invulnerability towards HIV/AIDS.

7.4 Conceptual contribution of the study: Proposed four step approach to effective HIV/AIDS communication.

Young people remain susceptible to HIV/AIDS in the developing world. In South Africa, young people continue to be disproportionately affected by the HIV/AIDS epidemic despite the development of HIV/AIDS strategies that facilitate the provision of HIV/AIDS prevention, treatment, and care. The alarming rate of HIV/AIDS infection among young people has driven scholars to investigate the impact of prevention initiatives implemented to halt the spread of HIV/AIDS, particularly among young people (Parker *et al.* 2007; Mulwo, Tomaselli and Dalrymple 2009; Higher Education HIV/AIDS Programme 2010; Mutinta and Govender 2012; Brown, Sales and DiClemente 2014; Bekker *et al.* 2015).

Scholars have probed further to understand the links between HIV/AIDS, youth and knowledge, attitude and practice. The primary goal of these inquiries was to comprehend thoroughly why young people continue to engage in risky sexual behaviours despite widespread knowledge of

HIV/AIDS. Recent studies have focused on the social context of HIV/AIDS, narrative interpretations of HIV/AIDS and interpretation of HIV/AIDS mass media messages.

This study also contributed to our understanding of health communication in HIV/AIDS discourse on how students' interpretation of HIV/AIDS messages based on their autobiographical and socio-cultural circumstances contribute to positive sexual behaviour. The study combines the interactive model of communication, the health belief model and behaviour change communication to analyse the key role the aforementioned concepts play in producing effective communication strategies that shape students' interpretation of HIV/AIDS messages, their perception of HIV/AIDS, and the response of university students to HIV/AIDS prevention messages.

The findings of the study demonstrated that students' reception and interpretation of HIV/AIDS messages are engulfed in their autobiographical and socio-cultural circumstances such as suitable linguistic competencies, status quo, power relations and social relations. Due to these contextual factors, students' reception and interpretation of HIV/AIDS messages is usually aligned with social meanings of HIV/AIDS rather than individual perceptions of HIV/AIDS. This complicated the encoding and decoding process of HIV/AIDS communication as it is assumed that university students have high levels of knowledge on HIV/AIDS and can make sound health decisions without the influence of negative social and environmental factors.

Thus, this study has illustrated that in order for HIV/AIDS communication strategies to be effective in influencing positive sexual behaviour among university students, the autobiographical and socio-cultural circumstances from which students interpret and understand HIV/AIDS messages should be assessed. Findings in this study have demonstrated that although students have high levels of HIV/AIDS knowledge, students' reception of HIV/AIDS messages is influenced by cultural, social, and economic factors. It is therefore crucial for health care providers to assess the socio-cultural, economic, and environmental factors that influence the interpretation of HIV/AIDS messages among university students in terms of race, gender, and sexual orientation.

Based on the aforementioned, the researcher proposes the connected-four step approach to effective HIV/AIDS communication in HEIs. The four step approach is based on the research findings of this study. The four step approach demonstrates how each component of the

connected-four step approach to effective HIV/AIDS communication is different but interrelated. Each segment of the four step approach is valuable to the HIV/AIDS communication process but not superior to any. The primary goal of the connected four step approach is to create a flow of communication through HIV/AIDS communication channels in order to determine individual and social structures associated with students' sexual behaviour. This will assist in developing HIV/AIDS communication programmes that are locally relevant and contextually appropriate (see Figure 7.1).



Figure 7. 1: Proposed four step approach to effective HIV/AIDS communication (Source: Field data, 2017)

The components of the connected four-step approach to effective HIV/AIDS communication in HEIs are discussed as follows:

7.4.1 Self-awareness programmes

The first step in the connected four step approach to effective HIV/AIDS programmes is to implement self-awareness programmes. The researcher is of the view that for communication to be effective the sender and the receiver should be aware of who they are. It is through self-awareness that individuals are able to understand themselves and other people. Self-awareness programmes will assist students to reflect on their backgrounds, social patterns and self-value. The purpose of implementing self-awareness programmes is to enable students to learn self-affirming behaviour and self-motivation skills. When students understand themselves as individuals they are more likely to make sound decisions. The self-awareness programme will encourage students to raise fundamental questions on the way they behave, why they behave that way, how and what should be done to change behaviour that is threatening to their self-concept.

7.4.2 Assessment of external factors

The second step is to assess external factors that influence the spread of HIV/AIDS among university students. The HIV/AIDS epidemiology demonstrates that transmission of the virus is driven by external factors including socio-cultural, economic, environmental, and political factors. The findings of this study revealed that socio-cultural and economic factors remain common threats to effective HIV/AIDS communication among university students. It is therefore imperative for student services to conduct an in-depth assessment of external factors that exacerbate the spread of HIV/AIDS among university students before developing HIV/AIDS communication strategies for the student community. The assessment of the external factors will enable student services to develop HIV/AIDS communication strategies that are augmented to attend to the external factors that influence risky sexual behaviour among university students. This will enhance sustainability for positive sexual behaviour among university students.

7.4.3 Contextualised HIV/AIDS programmes

The third step is to develop and implement HIV/AIDS communication programmes that are tailored to the local context, based on the outcome of the assessment of the external factors that drive the spread of the HIV/AIDS epidemic among university students. These include

interventions that will strengthen human, financial, social, and environmental capital. For example, preventing transactional sex by providing economic support for students in dire economic circumstances, and mainstreaming HIV/AIDS in all student activities.

7.4.4 Monitoring and Evaluation of HIV/AIDS programmes

The fourth step is the monitoring and evaluation of HIV/AIDS programmes. The monitoring and evaluation system should be tailored to suit the level of the epidemic within each university. The monitoring and evaluation system should be aligned with the National Strategic Plan of HIV/AIDS, STIs, and TB to show the impact of HIV/AIDS interventions in the higher education sector. This will indicate the contribution of the higher education sector to the national response to HIV/AIDS.

7.5 Limitations of the study

This study was only conducted at four public universities in KwaZulu-Natal, which is an epicentre of the HIV/AIDS epidemic in South Africa. Due to time and financial constraints the study did not allow for the inclusion of other public universities in South Africa. Thus, the findings presented in this study may only be relevant to public universities in KwaZulu-Natal. Consequently, the results cannot be generalised to public universities in other provinces in South Africa.

7.6 Recommendations from this study

This study analysed communication tools employed for HIV/AIDS education by student services at universities in KwaZulu-Natal. Based on the findings in this study, the following recommendations are made:

- 1) HIV/AIDS communication tools should be tailored to the specific needs of the student population. This implies assessing the social, cultural, economic, and environmental determinants of HIV/AIDS in order to maximise effective HIV/AIDS communication.
- 2) HIV/AIDS communication tools should be reviewed annually based on students' feedback and experiences.
- 3) University clinics should be located within reach of university students and employ young qualified health care providers that university students can relate to.
- 4) Health care providers should forge partnerships with the Small Enterprise Development Agency (SEDA) or other youth employment agencies to create employment opportunities

for students in dire economic circumstances who resort to transactional sex or prostitution for survival.

- 5) Health care providers should consider collaborating with Information Technology (IT) students to create a mobile App to enable students to do online consultation with health care providers without the fear of being stigmatised or discriminated against.

7.7 Recommendations for future areas of research

The limitation outlined in this study gives rise to future research suggestions. A study focusing on public universities in other provinces in South Africa could be conducted. The study could focus on one particular HIV/AIDS communication tool in order to determine students' interpretation and reception of the communication tool used for HIV/AIDS communication.

This study could be expanded by doing a comparison study of HIV/AIDS communication tools employed by student services in other SADC countries.

Based on the research findings, the majority of participants in the study were black. Taking into account the demographic makeup of universities in South Africa, future studies could also focus on critical race theory as a tool for understanding poor engagement of HIV/AIDS communication programmes among racial minority populations in HEIs.

7.8 Conclusion

University students continue to face high risk of HIV/AIDS infection due to risky sexual behaviours. Drawing from the Interactive Model of Communication, the study aimed to link students' reception of HIV/AIDS messages communicated by student services to their sexual behaviour. This study has indicated that there are various barriers such as socio-cultural and economic factors, which hinder the effectiveness of HIV/AIDS communication messages in HEIs. It is worth noting that barriers to HIV/AIDS prevention, care, and treatment are interrelated.

Based on the study findings, it can be concluded although HIV/AIDS programmes implemented in higher education institutions have started to address the impact of HIV/AIDS among university students; it is still a challenge to persuade students to practice positive sexual behaviour. Consequently, HIV/AIDS continues to be a threat to students' human development. Thus, student services should put in place a multidisciplinary approach that foster human development through

economic empowerment by forging partnerships with youth development agencies and other private donors.

REFERENCES

- Aarø, L. E., Flisher, A. J., Kaaya, S., Onya, H., Fuglesang, M., Klepp, K.-I. and Schaalma, H. 2006. Promoting sexual and reproductive health in early adolescence in South Africa and Tanzania: Development of a theory-and evidence-based intervention programme. *Scandinavian Journal of Public Health*, 34 (2): 150-158.
- Abdool Karim , B. C. 2010. The evolving HIV epidemic: overview of the book. In: Abdool Karim S and Abdool Karim Q ed. *HIV/AIDS in South Africa*. Cape Town: Creda Communications.
- African National Congress. 1994. *The Reconstruction and Development Programme: a policy framework*. Johannesburg, South Africa: Umanyano Publications.
- AIDS Consortium. 2013. *The AIDS Consortium NPC Annual Report*. Pretoria: Hay's Print. Available: [http://www.aidsconsortium.org.za/docs/AC%20Annual%20Reports/AIDS%20Consortium%20Annual%20Report%202013%20\(web%20download\).pdf](http://www.aidsconsortium.org.za/docs/AC%20Annual%20Reports/AIDS%20Consortium%20Annual%20Report%202013%20(web%20download).pdf). (Accessed 09 March 2016).
- Airhihenbuwa, C. O. and Webster, J. D. 2004. Culture and African contexts of HIV/AIDS prevention, care and support: original article. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance*, 1 (1): 4-13.
- Amos, E. 2009. An Analysis of Students' Responses to VCT Messages at KwaZulu-Natal University. MA. Dissertation, Unpublished. Durban: University of KwaZulu-Natal.
- Anon. 2012. Migrant laborers, spouses and the spread of HIV/AIDS in Rural Mozambique: Why do migrants' spouses get infected by HIV? . 4.
- Arndt, C. and Lewis, J. D. 2000. The macro implications of HIV/AIDS in South Africa: a preliminary assessment. *South African Journal of Economics*, 68 (5): 380-392.
- Arndt, C. and Lewis, J. D. 2001. The HIV/AIDS pandemic in South Africa: Sectoral impacts and unemployment. *Journal of International Development*, 13 (4): 427-449.
- Asante, K. O. 2013. HIV/AIDS knowledge and uptake of HIV counselling and testing among undergraduate private university students in Accra, Ghana. *Reprod Health*, 10 (1): 17.
- Association of African Universities. 2007. *HIV and AIDS and Higher Education in Africa: A Review of Best Practice Models and Trends*. Association of African Universities.
- Association of African Universities. 2010. *The response of higher education to the HIV and AIDS epidemic: A synthesis of four sub-regional surveys in sub-Saharan Africa*. Ghana: Available: http://www.aau.org/sites/default/files/hiv_aids_synthesis_report.pdf. (Accessed 15- August- 2016).

Association of Commonwealth Universities. 2002. *ACU's responses to the HIV/AIDS pandemic*. Available: http://www.acu.ac.uk/key_strengths/HIV/AIDS (Accessed 04 May 2010).

Ateka, G. K. 2001. Factors in HIV/AIDS transmission in sub-Saharan Africa. *Bulletin of the World Health Organization*, 79 (12): 1168-1168.

AVERT. 2012. *South African HIV/AIDS statistics*. Available: <http://www.avert.org/south-africa-hiv-aids-statistics.htm>. (Accessed 13- May- 2015).

AVERT. 2016a. *HIV prevention programme overview*. Available: <http://www.avert.org/professionals/hiv-programming/prevention/overview> (Accessed 23-09-2016).

AVERT. 2016b. *HIV prevention programmes in South Africa*. Available: <http://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/south-africa> (Accessed 22-09-2016).

AVERT. 2017. *Science of HIV/AIDS*. Available: <https://www.avert.org/professionals/hiv-science> (Accessed 24-March-2017).

Babbie, E. 2010. *The Practice of Social Research* Wadsworth Cengage Learning. *International Edition*,

Baggaley, R. 2001. The impact of voluntary counselling and testing: a global review of the benefits and challenges.

Ball-Rokeach, S. J. 1998. A theory of media power and a theory of media use: Different stories, questions, and ways of thinking. *Mass Communication and Society*, 1 (1-2): 5-40.

Bandura, A. 1989. Human agency in social cognitive theory. *American psychologist*, 44 (9): 1175.

Becker, M. H. 1974. *The health belief model and personal health behavior*. Slack.

Bekker, L.-G., Johnson, L., Cowan, F., Overs, C., Besada, D., Hillier, S. and Cates, W. 2015. Combination HIV prevention for female sex workers: what is the evidence? *The Lancet*, 385 (9962): 72-87.

Beshers, S. C. 2008. Where are the guys in peer education? A survey of peer education programs related to adolescent sexual health in New York State. *American Journal of Sexuality Education*, 3 (3): 277-294.

Bodibe, K. 2015. *Counting progress on AIDS response*. Available: <http://www.csa.za.org/blog/item/151-counting-progress-on-aids-response?tmpl=component&print=1> (Accessed 08/08/2016).

Boone, C. and Batsell, J. 2001. Politics and AIDS in Africa: Research agendas in political science and international relations. *Africa Today*, 48 (2): 3-33.

Botma, Y., Greeff, M., Mulaudzi, F. and Wright, S. 2010. Research in health sciences. *Cape Town: Heinemann*,

Breier, M. 2010. Dropout or stop out at the University of the Western Cape. *Student retention and graduate destination: Higher education and labour market access and success*: 53-65.

Briscoe, C. and Aboud, F. 2012. Behaviour change communication targeting four health behaviours in developing countries: a review of change techniques. *Social science & medicine*, 75 (4): 612-621.

Brothers For Life. 2015. *About Brothers for Life*. Available: <http://www.brothersforlife.org/> (Accessed 06-July-2015).

Brown, J. L., Sales, J. M. and DiClemente, R. J. 2014. Combination HIV prevention interventions: the potential of integrated behavioral and biomedical approaches. *Current HIV/AIDS Reports*, 11 (4): 363-375.

Buchere, D. 2009. *Kenya: universities commit to fight HIV/AIDS*. Available: <http://www.universityworldnews.com/article.php?story=20091127123954948> (Accessed 9-November-2016).

Cain, D., Pitpitan, E. V., Eaton, L., Carey, K. B., Carey, M. P., Mehlomakulu, V., Harel, O., Simbayi, L. C., Mwaba, K. and Kalichman, S. C. 2013. Collective efficacy and HIV prevention in South African townships. *Journal of community health*, 38 (5): 885-893.

Campus Sex. 2014. *Safer sex practices*. Available: <http://campussex.co.za/> (Accessed 07-July-2015).

Cardey, S., Garforth, C., Govender, E. and Dyll-Myklebust, L. 2013. Entertainment education theory and practice in HIV/AIDS communication: A South Africa/United Kingdom comparison. *Critical Arts*, 27 (3): 288-310.

Castle, M. A., Fischer, B and Roos J. 2008. *Good Practice HIV/AIDS prevention strategies for Public Higher Education Institutions (HEIs) in South Africa*. Pretoria: 15-October-2015).

Cheluget, B., Baltazar, G., Orege, P., Ibrahim, M., Marum, L. and Stover, J. 2006. Evidence for population level declines in adult HIV prevalence in Kenya. *Sexually transmitted infections*, 82 (suppl 1): i21-i26.

Chetty, D. 2000. *Institutionalising the response to HIV/AIDS in the South African university sector: a SAUVCA analysis*. SAUVCA Pretoria.

Chirowodza, A., Lane, T., Fritz, K., Humphries, H., Khumalo-Sakutukwa, G., Van Rooyen, H., Timbe, A., Morin, S. and Chingono, A. 2015. Understanding and addressing socio-cultural barriers to medical male circumcision in traditionally non-circumcising rural communities in sub-Saharan Africa.

Chokwe, J., Naidoo, L., Manana, P., Mbatha, B. and Muchengetwa, S. 2013. An Investigation into the Institutional Response of South African Public Universities to HIV/AIDS. *Mediterranean Journal of Social Sciences*, 4 (13): 727.

Cleary, S. 2004. *The communication handbook: A student guide to effective communication*. Juta and Company Ltd.

Coates, T. J., Richter, L. and Caceres, C. 2008. Behavioural strategies to reduce HIV transmission: how to make them work better. *The Lancet*, 372 (9639): 669-684.

Conner, M. and Norman, P. 2005. *Predicting health behaviour*. McGraw-Hill Education (UK).

Coovadia, H., Jewkes, R., Barron, P., Sanders, D. and McIntyre, D. 2009. The health and health system of South Africa: historical roots of current public health challenges. *The Lancet*, 374 (9692): 817-834.

Creswell, J. and Clark, P. 2011. *Designing and conducting mixed methods research*. London Sage.

Creswell, J., Klassen, A., Plano Clark, V. and Smith, K. 2016. Best practices for mixed methods research in health sciences. Bethesda, MD: National Institutes of Health, Office of Behavioral and Social Sciences Research; 2011. <https://obssr.od.nih.gov/training/mixed-methods-research/>. Accessed, 21

Creswell, J. W. 2009. *Editorial: Mapping the field of mixed methods research*: SAGE Publications Sage CA: Los Angeles, CA.

Creswell, J. W. 2014. *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Creswell, J. W. 2015. *A concise introduction to mixed methods research*. Sage Publications.

Creswell, J. W. and Poth, C. N. 2017. *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Crosnoe, R. and McNeely, C. 2008. Peer relations, adolescent behavior, and public health research and practice. *Family & Community Health*, 31: S71-S80.

Crush, J. 2011. *Migration-induced HIV and AIDS in rural Mozambique and Swaziland*. African Books Collective.

De Vos, A., Delport, C., Fouché, C. and Strydom, H. 2011. *Research at grass roots: A primer for the social science and human professions*: Van Schaik Publishers.

De Vreede, C., Warner, A. and Pitter, R. 2014. Facilitating Youth to Take Sustainability Actions: The Potential of Peer Education. *The Journal of Environmental Education*, 45 (1): 37-56.

Deane, N. 2005. The political history of AIDS treatment. *HIV/AIDS in South Africa*: 538-547.

DeFleur, M. and Rokeach, S. 1994. *Mass Communication Theory*: London: Sage Publications.

Dell. 2010. *South Africa: less HIV in universities than nationally issue*. Available: <http://www.universityworldnews.com/article.php?story=20100409204852226> (Accessed 11- April-2015).

Denis, P. and Becker, C. 2006. The HIV/AIDS epidemic in sub-Saharan Africa in a historical perspective.

Department of Health. Department of Health. 2003. *The South African National Voluntary Counselling and Testing (VCT) HIV prevention and care strategy*. Pretoria: Available: http://sanac.org.za/resources/doc_download/2-department-of-health-hct-policy-guidelines. (Accessed 10-October-2015).

Desai, B., Parmar, R., Kosambiya, J., Solanky, P., Prajapati, S. and Kantharia, S. 2012. ASSESSMENT OF KNOWLEDGE AND SKILLS OF COUNSELLING AMONG LINK WORKERS OF LINK WORKERS'SCHEME FOR HIV/AIDS IN RURAL AREAS OF SURAT DISTRICT. *National Journal of Community Medicine*, 3 (2)

Deutsch, C. and Swartz, S. 2002. *Rutanang. Learning from one another*: Pretoria: Department of Health.

DiClemente, R. J. 1991. Predictors of HIV-preventive sexual behavior in a high-risk adolescent population: The influence of perceived peer norms and sexual communication on incarcerated adolescents' consistent use of condoms. *Journal of Adolescent Health*, 12 (5): 385-390.

DiClemente, R. J. and Peterson, J. L. 1994. *Preventing AIDS: Theories and methods of behavioral interventions*. Springer Science & Business Media.

Die Burger. 1990. Available: www.media24.com (Accessed 21- May-2015).

Dominick, R. 2011. *The dynamics of mass communication: Media in Transit*. 11th ed. New York: McGraw Hill.

Dubula, V. and Heywood, M. 2011. A decade of fighting for our lives. *UN Chronicle* vol. 48, no. 1, 30-31. Available: <http://unchronicle.un.org/article/decade-fighting-our-lives>. (Accessed 08-March-2016).

Durban University of Technology. 2016. *About us*. Available: www.dut.ac.za (Accessed 16-09-2016).

eThekweni Municipality. 2015. *First Things First HIV campaign launched at MUT*. Available: http://www.durban.gov.za/Resource_Centre/new2/Pages/%E2%80%98First-Things-First%E2%80%99-HIV-campaign-launched-at-MUT.aspx (Accessed 06-July-2015).

Evensen, J. V. and Stokke, K. 2010. United against HIV/AIDS? Politics of local governance in HIV/AIDS treatment in Lusikisiki, South Africa. *Journal of Southern African Studies*, 36 (1): 151-167.

Ezeh, A. 2015. Leadership and health in Africa. *The Lancet*, 385 (9983): 2141.

Family Health International Institute for HIV/AIDS. 2002. *Behaviour Change Communication for HIV/AIDS*. Arlington: USAID. Available: <http://www.hivpolicy.org/Library/HPP000533.pdf> (Accessed 23/06/2016).

Faria, N. R., Rambaut, A., Suchard, M. A., Baele, G., Bedford, T., Ward, M. J., Tatem, A. J., Sousa, J. D., Arinaminpathy, N. and Pépin, J. 2014. The early spread and epidemic ignition of HIV-1 in human populations. *Science*, 346 (6205): 56-61.

Fighting AIDS Continuously Together. 2016. *Why HIV/AIDS education*. Available: <http://www.factlv.org/education.htm> (Accessed 21-November-2016).

Fishbein, M. and Ajzen, I. 1975. *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley, 6

Foucault, M. 1972. Orders of discourse. *Information (International Social Science Council)*, 10 (2): 7-30.

Foundation for Professional Development. 2010. *Voluntary, Counselling and Testing at University of Limpopo*. Available: <http://www.foundation.co.za/> (Accessed 12-August-2017).

Fourie, P. 2006. *The Political management of HIV and AIDS in South Africa: one burden too many?* New York: Palgrave Macmillan.

Fourie, P. and Meyer, M. 2010. *The politics of AIDS denialism: South Africa's failure to respond*. Ashgate Publishing, Ltd.

Galloway, M. 2000. South African National AIDS Council (SANAC) launched. *AIDS Bulletin*, 9 (1)

Garrity, M. 2007. Keys to Effective Development in South Africa. *Macalester Abroad: Research and Writing from Off-campus Study*, 1 (1): 2.

German missions in South Africa. 2015. *Future Beats for HIV/AIDS awareness*. Available: http://www.southafrica.diplo.de/Vertretung/suedafrika/en/_pr/_Embassy/2015/2nd_Q/06-Future-Beats-HIV.html (Accessed 06-July-2015).

Gibbs, K. A. 2005. Teaching student nurses to be culturally safe: can it be done? *Journal of Transcultural Nursing*, 16 (4): 356-360.

Glanz, K., Rimer, B. K. and Viswanath, K. 2008. *Health behavior and health education: theory, research, and practice*. John Wiley & Sons.

Gobind, J. and Ukpere, W. I. 2014. Evaluating HIV/AIDS programme within South African universities. *Mediterranean Journal of Social Sciences*, 5 (3): 346.

Gonani, A., Makuti, M., Macheso, A., Shongwe, S., Kinoti, S. and Ndyabangi, B. 2005. The impact of HIV/AIDS on the health workforce in Malawi. *Ministry of Health, Malawi*,

Gorard, S. 2013. *Research design: Creating robust approaches for the social sciences*. Sage.

Gouws, E. and Cuchi, P. 2012. Focusing the HIV response through estimating the major modes of HIV transmission: a multi-country analysis. *Sexually transmitted infections*, 88 (Suppl 2): i76-i85.

Govender, E. 2013. Education- Entertainment in Africa. *African Communication Research* 6(1): 147. Available: http://ccms.ukzn.ac.za/Libraries/staff-documents/ACR_vol_6_No_1_1.sflb.ashx (Accessed 05-June-2017).

Graber, D. A. and Dunaway, J. 2014. *Mass media and American politics*. Cq Press.

Gray, D. E. 2013. *Doing research in the real world*. Sage.

Gray, D. E. 2014. *Doing research in the real world*. 3rd ed. California: Sage.

Gray, R. H., Serwadda, D., Kigozi, G., Nalugoda, F. and Wawer, M. J. 2006. Uganda's HIV prevention success: The role of sexual behavior change and the national response. Commentary on Green et al.(2006). *AIDS and Behavior*, 10 (4): 347-350.

Grebe, E. 2011. The Treatment Action Campaign's struggle for AIDS treatment in South Africa: coalition-building through networks. *Journal of Southern African Studies*, 37 (4): 849-868.

Grundlingh, L. 2001. Government responses to HIV/AIDS in South Africa as reported in the media, 1983–1994. *South African Historical Journal*, 45 (1): 124-153.

Hall, S. 1980. Encoding/decoding. *Culture, media, language*: 128-138.

Hall, S. 1996. New ethnicities. *Stuart Hall: Critical dialogues in cultural studies*: 441-449.

HEAIDS. 2004. *HIV and AIDS audit: Interventions in South African higher education* Pretoria: Department of Education.

HEAIDS. 2006. *Peer education project report*. Pretoria: Available: <http://www.hesa.org.za> (Accessed 23-September-2015).

HEAIDS. 2010. *HIV/AIDS prevention good practice- strategies for public higher education institution in South Africa*. Pretoria: 13-October- 2015).

HEAIDS. 2012. *Policy and Strategies Framework on HIV/AIDS for Higher Education*. Pretoria: HEAIDS. Available: http://heids.org.za/site/assets/files/1246/policy_and_strategic_framework_on_hiv_and_aids_for_higher_education.pdf. (Accessed 16-09-2016).

HEAIDS. 2015. *HEAIDS history, vision and mission*. Available: <http://heids.org.za/>. (Accessed 04-July-2015).

Health24. 2014. *Sociocultural aspects of HIV/AIDS*. Available: <http://www.health24.com/Medical/HIV-AIDS/The-South-African-culture/Sociocultural-aspects-of-HIVAIDS-20120721> (Accessed 26- April-2016).

Healthy People. 2010. *Health communication*. Available: <http://www.healthypeople.gov/2010/Document/pdf/Volume1/11HealthCom.pdf>. (Accessed 06- June-2016).

HEARD. 2016. *Why do HIV prevention programmes fail to reach at risk men?* Available: <http://www.heard.org.za/news-post/why-do-hiv-prevention-programmes-fail-to-reach-at-risk-men/> (Accessed 01-May-2017).

Hellandendu, J. M. a. 2012. Contributory factors to the spread of HIV/AIDS and its impacts in sub-Saharan African countries. *European Scientific Journal*, 8 (14)

HESA. 2007. *Case studies in mainstreaming: integrating HIV/AIDS realities into South African higher education curricula*. Pretoria: Available: <file:///H:/Chapter%20three%20literature/Curriculum%20Integration%20Book%20TEXT.pdf> (Accessed 28- November- 2016).

Heywood, M. 2005. *The price of denial*. SA National NGO Coalition and Interfund.

Heywood, M. 2009. South Africa's treatment action campaign: combining law and social mobilization to realize the right to health. *Journal of Human Rights Practice*, 1 (1): 14-36.

Higher Education HIV/AIDS Programme. 2010. *HIV prevalence and Related factors: Higher Education Sector Study, South Africa, 2008-2009*.

HIV/AIDS care. 2012. *HIV/AIDS information*. Available: <http://www.hivaidscare.com/hivtransmission.php?acode=na> (Accessed 13-May-2013).

Hochbaum, G., Rosenstock, I. and Kegels, S. 1952. Health belief model. *United States Public Health Service*,

Houghton, R., Kemp, G. and Pattison, D. 2013. *Communication Strategy: a best practice guide for developing communication campaign*. London: PRCA. Available: file:///H:/Communication%20strategies/CommunicationsStrategyGuide.pdf (Accessed 28-May-2017).

Hull, C. 1943. *Principles of behavior*. New York: Appleton-Century-Crofts.

Human Sciences Research Council. 2013. *Civil society activism in accessing health care in South Africa*. Available: <http://www.hsrc.ac.za/en/research-data/ktree-doc/13805> (Accessed 24-June-2015).

Innovative Pharmaceutical Association South Africa. 2012. *First Things First- get tested*. Available: <http://ipasa.co.za/first-things-first/>. (Accessed 06-July-2015).

Ileri, A. M., Tumuti, D. W., Mathuvi, P. N., Njagi, J. M., Piero, N., Gatumu, H. N., Njagi, A. and Karugu, N. I. 2012. Sources of VCT Information and Reasons for Use or Non Use of VCT Services by Young People in Selected Rural Locations in Kenya.

Janz, N. K. and Becker, M. H. 1984. The health belief model: A decade later. *Health Education & Behavior*, 11 (1): 1-47.

Joachim, M., Sinclair, M. 2013. *Reflection on ministerial leadership: HIV/AIDS policy reform in South Africa*. Harvard University: School of Public Health. 08/08/2016).

John Hopkins: centre for communication programs. 2017. *Social and behaviour change communication*. Available: <https://ccp.jhu.edu/social-behavior-change-communication/> (Accessed 10-December -2017).

Johnson, L. and Budlender, D. 2002. HIV risk factors: a review of the demographic, socio-economic, biomedical and behavioural determinants of HIV prevalence in South Africa.

Johnson, L. and Dorrington, R. 2002. The demographic and epidemiological impact of HIV/AIDS treatment and prevention programmes: an evaluation based on the ASSA2000 model. In: *Proceedings of Demographic Association of Southern Africa Conference*. 27.

Joint United Nations Programme on HIV/AIDS. 2012. *Global Report 2012: UNAIDS Report on the Global AIDS Epidemic*. UN.

Kahn, T. 2014. Condom use falls in South Africa as HIV/AIDS fear declines survey. *BDlive*: 9.

Kalichman, S. C. and Simbayi, L. 2004. Traditional beliefs about the cause of AIDS and AIDS-related stigma in South Africa. *AIDS care*, 16 (5): 572-580.

Karim, S. A. and Karim, Q. A. 2010. *HIV/Aids in South Africa*. Cambridge University Press.

Kaufman, M. R., Rimal, R. N., Carrasco, M., Fajobi, O., Soko, A., Limaye, R. and Mkandawire, G. 2014. Using social and behavior change communication to increase HIV testing and condom use: the Malawi BRIDGE Project. *AIDS care*, 26 (sup1): S46-S49.

Kelly, K. 2001. *Bambisanani: Community orientation to HIV/AIDS prevention, care and support*. Center for AIDS Development, Research and Evaluation.

Kelly, M. J. 2000. *The encounter between HIV/AIDS and education*. UNESCO Sub-Regional Office for Southern Africa South Africa.

Kenya National Bureau Statistics. 2015. *Health Survey 2014: key indicators*. Available: <http://dhsprogram.com/pubs/pdf/PR55/PR55.pdf> (Accessed 14- September - 2016).

Kinash, S. 2006. Paradigms, methodology & methods. *Bond University: Australia*. Retrieved October, 5: 2011.

Kirscht, J. P. 1974. The health belief model and illness behavior. *Health Education & Behavior*, 2 (4): 387-408.

Köhler, W. 1957. The Mentality of Apes. 1925. *KöhlerThe Mentality of Apes1925*,

Kondlo, K. M. and Maserumule, M. H. 2010. *The Zuma administration: critical challenges*. HSRC Press.

Kothari, C. R. 2014. *Research methodology: Methods and techniques*. Delhi: New Age International.

Kothari, C. R. and Garg, G. 2014. *Research methodolgy*. 3rd ed. New Delhi: New Age International Publishers.

Kreuter, M. and McClure, S. 2004. *The role of culture in health communication: annual review of public health*.

Kuhn, T. S. 1970. BOOK AND FILM REVIEWS: Revolutionary View of the History of Science: The Structure of Scientific Revolutions. *The Physics Teacher*, 8 (2): 96-98.

Leclerc-Madlala, S., Simbayi, L. C. and Cloete, A. 2009. The sociocultural aspects of HIV/AIDS in South Africa. In: *HIV/AIDS in South Africa 25 Years On*. Springer, 13-25.

Leclerc-Madlala, S. 1997. Infect one, infect all: Zulu youth response to the AIDS epidemic in South Africa. *Medical Anthropology*, 17 (4): 363-380.

Leedy, P. D. and Ormrod, J. E. 2012. *Practical research: planning and design*. 10th ed. England: Pearson.

Levinsohn, J., McLaren, Z. M., Shisana, O. and Zuma, K. 2013. HIV status and labor market participation in South Africa. *Review of Economics and Statistics*, 95 (1): 98-108.

Lewin, K. 1936. *Principles of Topological Psychology*, Nueva York.

Lewin, K. 1948. *Resolving social conflicts: selected papers on group dynamics [1935-1946]*. Harper.

Lewin, K., Dembo, T., Festinger, L. and Sears, P. S. 1944. Level of aspiration.

Lewthwaite, P. and Wilkins, E. 2009. Natural history of HIV/AIDS. *Medicine*, 37 (7): 333-337.

Lindley, L. L., Coleman, J. D., Gaddist, B. W. and White, J. 2010. Informing faith-based HIV/AIDS interventions: HIV-related knowledge and stigmatizing attitudes at Project FAITH churches in South Carolina. *Public Health Reports*, 125 (1_suppl): 12-20.

Lurie, M. 2005. Population movement and the spread of HIV in Southern Africa. *HIV/AIDS in South Africa*: 298-312.

Lurie, M. 2010. Population movement and the spread of HIV in southern Africa. In: Abdool Karim S, A. K. Q. ed. *HIV/AIDS in South Africa*. Cape Town: Creda Communications, 298- 318.

Lurie, M. N., Williams, B. G., Zuma, K., Mkaya-Mwamburi, D., Garnett, G. P., Sweat, M. D., Gittelsohn, J. and Karim, S. S. 2003. Who infects whom? HIV-1 concordance and discordance among migrant and non-migrant couples in South Africa. *Aids*, 17 (15): 2245-2252.

MacPhail, C. L., Pettifor, A., Coates, T. and Rees, H. 2008. "You must do the test to know your status": attitudes to HIV voluntary counseling and testing for adolescents among South African youth and parents. *Health Education & Behavior*, 35 (1): 87-104.

- Mahat, G. and Scoloveno, M. A. 2010. HIV peer education: Relationships between adolescents' HIV/AIDS knowledge and self-efficacy. *Journal of HIV/AIDS & Social Services*, 9 (4): 371-384.
- Makalela, L. 2015. Narrative interpretation of HIV/AIDS messages: the effects of storytelling prompts among rural university students. *Critical Arts*, 29 (3): 400-418.
- Mangosuthu University of Technology. 2016. *HIV/AIDS services*. Available: <http://www.mut.ac.za/>. (Accessed 16-09-2016).
- Marais, H. 2001. *South Africa: Limits to change: The political economy of transition*. Palgrave Macmillan.
- Martin, K. and Alexander, P. 2001. Responses to HIV/AIDS IN South Africa's tertiary institutions: Policy, practice and shortcomings. In: *Proceedings of AIDS in Context conference held by the History Workshop, University of the Witwatersrand, April*.
- Matsumoto, D. and Juang, L. 2016. *Culture and psychology*. Nelson Education.
- Mavhandu-Mudzusi, A., Netshandama, V. and Risenga, P. 2014. Challenges of HIV/AIDS education in a South African rural-based university. *African Journal for Physical, Health Education, Recreation and Dance*, 1 (1): 188-201.
- Mbali, M. 2003. HIV/AIDS policy-making in post-apartheid South Africa. In: *State of the Nation: South Africa*. 312-329.
- Mbengo, F., Ngirande, H., Ndou, N. and Mavundla, T. 2014. Strategies to Boost the Uptake of Voluntary Counselling and Testing (VCT) by University Students. *Mediterranean Journal of Social Sciences*, 5 (15): 458.
- McIntyre, D. and Klugman, B. 2003. The human face of decentralisation and integration of health services: experience from South Africa. *Reproductive health matters*, 11 (21): 108-119.
- McNeil, J. *A history of official government HIV/AIDS policy in South Africa*. (online). 2012. South African history online, . Available: Article<http://www.sahistory.org.za/topic/history-official-government-hiv-aids-policy-south-africa>. (Accessed 19- March-2015).
- Meiberg, A. E., Bos, A. E., Onya, H. E. and Schaalma, H. P. 2008. Fear of stigmatization as barrier to voluntary HIV counselling and testing in South Africa.
- Melkote, S. R. and Steeves, H. L. 2001. *Communication for development in the Third World: Theory and practice for empowerment*. Sage.
- Mersham, G. and Skinner, C. 2002. *Disaster Management: a guide to issues management and crisis Communication*: Cape Town: Oxford University Press Southern Africa.

Mhone, G. C. and Edigheji, O. 2003. *Governance in the new South Africa: The challenges of globalisation*. Juta and Company Ltd.

Missiroli, A., Anderson, J., Gaub, F., Popescu, N. and Wilkins, J. 2016. *Strategic communication: East and South*. France: EU Institute for Security Studies. Available: <http://www.iss.europa.eu> (Accessed 27-May-2017).

Morris, T. 2006. *Social work research methods: four alternative paradigms*. Sage.

Morton, S., Bandara, D. K., Robinson, E. M. and Carr, P. E. A. 2012. In the 21st century, what is an acceptable response rate? *Australian and New Zealand journal of public health*, 36 (2): 106-108.

Mpeli, M. 2005. A Reception Analysis of Soul City Beyond South Africa: The case of Choose Life in Lesotho. UNIVERSITY OF KWAZULU-NATAL.

Mukotsanjera, V. 2008. HIV/AIDS domestic financing in South Africa. *Cape Town: IDASA*,

Mulwo, A. 2009. An analysis of students' responses to ABC and VCT messages at three Universities in KwaZulu-Natal Province. *Unpublished doctoral dissertation*). University of KwaZulu-Natal, Durban,

Mulwo, A. K., Tomaselli, K. G. and Dalrymple, L. 2009. Condom brands, perceptions of condom efficacy and HIV prevention among university students in KwaZulu-Natal, South Africa. *African Journal of AIDS Research*, 8 (3): 311-320.

Mutinta, G. 2014. Multiple Sexual Partnerships and their Underlying Risk Influences at the University of KwaZulu-Natal. *J Hum Ecol*, 46 (2): 147-155.

Mutinta, G. and Govender, K. 2012. The Socio-environmental Determinants of Students' Sexual Risk Behaviour and HIV Prevention at the University of KwaZulu-Natal. *Journal of Human Ecology*, 38 (1): 17-29.

Mutinta, G., Govender, K., Gow, J. and George, G. 2013. An Investigation on Students' Risky Sexual Behavior at KwaZulu-Natal University, Durban, South Africa. *American Journal of Sexuality Education*, 8 (3): 121-139.

NACOSA. 1994. *A National AIDS plan for South Africa, 1994- 1999*. Available: <http://www.nacosa.org.za/>. (Accessed 21-May-2015).

National AIDS control. 2006. *HIV/AIDS counselling training modules*. New Delhi: 13- October-2015).

Nattrass, N. 2004. *The moral economy of AIDS in South Africa*. Cambridge University Press.

Neuman, L. 2011. *Social Research Methods: qualitative and quantitative approaches*. Boston: Pearson.

Neuman, L. W. 2014. *Social research methods: Qualitative and quantitative approaches*. London: Pearson.

Northouse, P. G. and Northouse, L. L. 1992. *Health communication: Strategies for health professionals*. Appleton and Lange.

Nxumalo, K., Okeke, C. and Mammen, K. 2014. Cultural Beliefs and Practices towards HIV/AIDS amongst High School Learners in Swaziland.

O'Gorman, K. D. and MacIntosh, R. 2014. *Research methods for business and management*. Goodfellow Publishers Limited.

O'Sullivan, G. A., Yonkler, J. A., Morgan, W. and Merritt, A. P. 2003. *A field guide to designing a health communication strategy*. Baltimore: John Hopkins School of Public Health. Available: <file:///H:/Communication%20strategies/A%20Field%20Guide%20to%20Designing%20Health%20Comm%20Strategy.pdf> (Accessed 27-May-2017).

Odhiambo-Otieno, G. W. 2005. Evaluation criteria for district health management information systems: lessons from the Ministry of Health, Kenya. *International journal of medical informatics*, 74 (1): 31-38.

Olley, B., Seedat, S. and Stein, D. 2004. Self-disclosure of HIV serostatus in recently diagnosed patients with HIV in South Africa. *African journal of reproductive health*: 71-76.

Omoyeni, S. T., Akinyemi, A. I. and Fatusi, A. 2014. Adolescents and HIV-related behaviour in Nigeria: does knowledge of HIV/AIDS promote protective sexual behaviour among sexually active adolescents? *Etude de la Population Africaine*, 27 (2): 331.

Oppong, A. K. and Oti-Boadi, M. 2013. HIV/AIDS knowledge among undergraduate university students: implications for health education programs in Ghana. *African health sciences*, 13 (2): 270-277.

Paltridge, B. and Phakiti, A. eds. 2015. *Research methods in applied linguistics: A practical resource*. London: Bloomsbury Publishing.

Park, H. 2015. Learning Identity A Sociocultural Perspective.

Parker, W., Makhubele, B., Ntlabati, P. and Connolly, C. 2007. Concurrent sexual partnerships amongst young adults in South Africa. Challenges for HIV prevention communication.

Paul, B., Ayo, A. S. and Ekundayo, O. S. 2014. Influence of HIV testing on knowledge of HIV/AIDS prevention practices and transmission among undergraduate youths in North-West University, Mafikeng. *Gender & Behaviour*, 12 (2): 6286.

Pearson, J. C., Nelson, P. E., Titsworth, S. and Harter, L. 2013. *Human communication*. 5th edition ed. McGraw-Hill New York, NY.

Pearson, V. and Culver, C. 2016. *Writing a communication strategy*. London: Available: **Error! Hyperlink reference not valid.** (Accessed 22-May-2017).

Pelser, A. 2004. Health, environment and development in South Africa. *Health and Health Care in South Africa. Pretoria: Van Schaik*, 171: 214.

Pettifor, A., O'Brien, K., MacPhail, C., Miller, W. C. and Rees, H. 2009. Early coital debut and associated HIV risk factors among young women and men in South Africa. *International Perspectives on Sexual and Reproductive Health*: 82-90.

Polit, D. F. and Beck, C. T. 2012. *Nursing research: Generating and assessing evidence for nursing practice*. 9th ed. Philadelphia: Lippincott Williams & Wilkins.

Procter, J. 2004. *Stuart Hall*. Routledge.

Putzel, J. 2003. *Institutionalising an emergency response: HIV/AIDS and governance in Uganda and Senegal*. London School of Economy and Political Science, Department for Internat. Development.

Quintero Johnson, J. M., Harrison, K. and Quick, B. L. 2013. Understanding the effectiveness of the entertainment-education strategy: An investigation of how audience involvement, message processing, and message design influence health information recall. *Journal of health communication*, 18 (2): 160-178.

Reitzes, M. 2009. *The impact of democracy on development: the case of South Africa*. Research Report 120. <http://www.cps.org.za/cps%20pdf/RR120.pdf>. (Accessed 07 June 2013).

Rensburg, R. a. K. D. 2011. Aspects of health. In: Tomaselli, K. a. C., C. ed. *Development and public health communication*. Cape Town: Pearson.

Rensburg, R. and Krige, D. 2011. Aspects of health communication. *Development and Public Health Communication. Cape Town, South Africa, Pearson*,

Rensburg, R. S. 1997. *Introduction to communication: communication planning and management*. Cape Town: Juta

Resrucow, K., Soler, R., Braithwaite, R., Ahluwalia, J. and Butler, J. 2000. Cultural sensitivity in substance use prevention. *Journal of community psychology*, 23 (3): 271-290.

Robins, S. and Von Lieres, B. 2004. Remaking citizenship, unmaking marginalization: the treatment action campaign in post-apartheid South Africa. *Canadian Journal of African Studies/La Revue canadienne des études africaines*, 38 (3): 575-586.

Rosenstock, I. M. 1974. Historical origins of the health belief model. *Health Education & Behavior*, 2 (4): 328-335.

Rosenstock, I. M., Strecher, V. J. and Becker, M. H. 1994. The health belief model and HIV risk behavior change. In: *Preventing AIDS*. Springer, 5-24.

Rugalema, G. and Khanye, V. 2002. Mainstreaming HIV/AIDS in the education systems in sub-Saharan Africa: Some preliminary insights. *Perspectives in Education*, 20 (2)

Sallar, A. M. 2009. Correlates of misperceptions in HIV knowledge and attitude towards People Living With HIV/AIDS (PLWHAs) among in-school and outof-school adolescents in Ghana. *African health sciences*, 9 (2)

Salmon, C. T. and Atkin, C. 2003. Using media campaigns for health promotion. *Handbook of health communication*: 449-472.

SANAC. 2010. *National Strategic Plan 2007-2011: mid-tern review* Pretoria: SANAC.

SANAC. 2014. *Global AIDS response progress report*. Pretoria: Available: <http://sanac.org.za/> (Accessed 23-October-2017).

SANAC. 2016. *About SANAC*. Pretoria: Available: <http://sanac.org.za/>. (Accessed 07-March-2016).

SANAC. 2017a. *Draft of the South African National Strategic Plan on HIV/AIDS, TB and STIs 2017-2022*. Pretoria: Available: <http://nsp.sanac.org.za/wp-content/uploads/2017/02/RSA-NSP-2017-2022.-30-Jan.-Steering-Committee-review.pdf> (Accessed 26-June-2017).

SANAC. 2017b. *Let our actions count: South Africa's National Strategic Plan on HIV, TB and STIs 2017-2022*. Pretoria: Hatfield: Available: www.sanac.org.za (Accessed 17-October-2017).

Sarma, H. and Oliveras, E. 2013. Implementing HIV/AIDS education: impact of teachers' training on HIV/AIDS education in Bangladesh. *Journal of Health, Population and Nutrition*, 31 (1): 20.

SARUA. 2007. *HIV/AIDS: An action guide for higher education institutions in the SADC region* Johannesburg, South Africa: SARUA. Available: <http://www.sarua.org/?q=publications/hiv-aids-action-guide-higher-education-institutions-sadc-region> (Accessed 15- August- 2016).

Schiavo, R. 2013. *Health communication: From theory to practice*. John Wiley & Sons.

Schneider, H., Blaauw, D., Gilson, L., Chabikuli, N. and Goudge, J. 2006. Health systems and access to antiretroviral drugs for HIV in Southern Africa: service delivery and human resources challenges. *Reproductive health matters*, 14 (27): 12-23.

Schneider, H. and Gilson, L. 1999. The impact of free maternal health care in South Africa.

Schüklenk, U. 2004. Professional responsibilities of biomedical scientists in public discourse. *Journal of medical ethics*, 30 (1): 53-60.

Sekaran, U. and Bougie, R. 2013. *Research methods for business: A skill-building approach* .[e-book]: Wiley & Sons. <http://www.wiley.com/college>.

Sekaran, U. and Bougie, R. J. 2016. *Research methods for business: A skill building approach*. John Wiley & Sons.

Servaes, J. and Malikhaio, P. 2012. Advocacy communication for peacebuilding. *Development in Practice*, 22 (2): 229-243.

Sharp, P. M. and Hahn, B. H. 2011. Origins of HIV and the AIDS pandemic. *Cold Spring Harbor perspectives in medicine*, 1 (1): a006841.

Shisana, O. 2005. *South African national HIV prevalence, HIV incidence, behaviour and communication survey, 2005*. HSRC press.

Shisana, O., Rehle, T., Simbayi, L., Zuma, K. and Jooste, S. 2009. South African national HIV prevalence incidence behaviour and communication survey 2008: a turning tide among teenagers?

Shisana, O., Rehle, T., Simbayi, L., Zuma, K., Jooste, S., Zungu, N., Labadarios, D., Onoya, D., Davids, A. and Ramlogan, S. 2014. South African national HIV prevalence, incidence and behaviour survey, 2012. *Cape Town*,

Singhal, A. 2013. Introduction: Fairy tales to digital games: the rising tide of entertainment education. *Critical Arts*, 27 (1): 1-8.

Skinner, B. 1938. *The Behavior of Organisms* (Appleton-Century-Crofts, New York). *Spaulding, WD, Storms, L., Goodrich, V., and Sullivan, M.(1986), Applications of experimental psychopathology in psychiatric rehabilitation. Schizophrenia Bulletin*, 12: 560577.

Smith, N., Wollan, R. and Zhou, C. 2011. The social media management handbook. *Accenture*, 4 (9): 10.

Somma, D. and Bodiang, K. 2003. The cultural approach to HIV/AIDS prevention. *Swiss Agency for Development and Cooperation/Swiss Centre for International Health, Geneva, Swiss Tropical Institute*,

South Africa. 2008. *An overview of youth policy*. Pretoria: Available: <https://www.google.co.za/search?dcr=0&source=hp&ei=AOYSWuzgD8mgUdP-kPAN&btnG=Search&q=National+Youth+Policy+2008#> (Accessed 12-August-2016).

South Africa. Department of Education. 2009. *Guidelines for Development and Implementation of Institutional HIV/AIDS Policies*. Pretoria: HEAIDS,. Available: <http://www.heads.org.za> (Accessed

South Africa. Department of Education. 2013. *White paper for post-school education and training*. 37229. Pretoria: Government printers. Available: <http://www.gpwonline.co.za> (Accessed 11-August-2015).

South Africa. 2015. *Millennium Development Goals- Country Report 2015*. Available: http://www.statssa.gov.za/MDG/MDG_Country%20Report_Final30Sep2015.pdf (Accessed 25th April 2016).

South Africa. Department of Health. 2000. *National Strategic Plan 2000-2005*. Pretoria: Available: http://data.unaids.org/topics/nsp-library/nsp-africa/nsp_south_africa_2000-2005_en.pdf. (Accessed 26-February- 2016).

South Africa. Department of Health. 2007. *HIV/AIDS and STIs strategic plan for South Africa 2007-2011*. Pretoria: Available: http://data.unaids.org/pub/ExternalDocument/2007/20070604_sa_nsp_final_en.pdf. (Accessed 29-02-1016).

South Africa. Department of Health. 2012. *National Strategic Plan on HIV, STIs and TB 2012-2016*. Available: <http://www.thepresidency.gov.za/MediaLib/Downloads/Home/Publications/SANACCallforNominations/A5summary12-12.pdf> (Accessed 03-June-2014).

South Africa. Department of Higher Education. 2001. *National Plan for Higher Education in South Africa*. Pretoria: Available: <http://www.education.gov.za/LinkClick.aspx?fileticket=umHqDeAFo4A%3D&tabid=188&mid=498>. (Accessed

South African National AIDS Council. Department of Health. 2014. *National Strategic Plan of 2012-2016*. Pretoria: Available: http://www.sanac.org.za/resources/doc_download/106-sanac-progress-report-on-the-national-strategic-plan-for-hiv-tb-and-stis-2012-2016. (Accessed 03-March-2016).

Southern African Regional Universities Association. 2008. *HIV & AIDS An Action Guide for Higher Education Institutions in the SADC Region*. Available: http://www.sarua.org/files/publications/HIV_AIDS_full.pdf (Accessed 02/ 05/2017).

Srivastava, J. and Moreland, J. J. 2012. Diffusion of innovations: Communication evolution and influences. *The Communication Review*, 15 (4): 294-312.

Stangl, A., Go, V., Zelaya, C., Brady, L., Nyblade, L. and Stackpool-Moore, L. 2010. Enabling the scale-up of efforts to reduce HIV stigma and discrimination: a new framework to inform program implementation and measurement. In: *Proceedings of Poster presented at: XVIII International AIDS Conference*.

Stangl, A. L., Lloyd, J. K., Brady, L. M., Holland, C. E. and Baral, S. 2013. A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *Journal of the International AIDS Society*, 16 (3)

Statistics South Africa. 2013. *Mid-year population estimates*. Pretoria: Available: <https://www.statssa.gov.za/publications/P0302/P03022013.pdf> (Accessed 23-June-2014).

Stent, A. 2008. Reading the Sowetan's Mediation of the Public's Response to the Jacob Zuma Rape Trial: A Critical Discourse Analysis. Rhodes University.

Street, B. 2003. What's "new" in New Literacy Studies? Critical approaches to literacy in theory and practice. *Current issues in comparative education*, 5 (2): 77-91.

Szekeres, G., Coates, T. J. and Ehrhardt, A. A. 2008. Leadership development and HIV/AIDS. *AIDS (London, England)*, 22 (Suppl 2): S19.

Terhemba, A. 2007. Combating HIV/AIDS epidemic in Nigeria: Responses from National Open University of Nigeria (NOUN). *The International Review of Research in Open and Distributed Learning*, 8 (3)

The AIDS Consortium. 2015. *About the AIDS Consortium*. Available: <http://www.aidsconsortium.org.za/>. (Accessed 12-September-2015).

The AIDS Foundation. 2016. *The AIDS foundation appraoch*. Available: <http://www.aids.org.za/>. (Accessed 08/08/ 2016).

The Health Compass. 2016. *How to do audience segmentation*. Available: <http://www.thehealthcompass.org/how-to-guides/how-do-audience-segmentation> (Accessed 29-05-2017).

Thorndike, E. 1898. Some experiments on animal intelligence. *Science*: 818-824.

Thuita, J. N. 2015. The influence of television adverts on sexual behaviour and contraceptive use among the youth in public universities in Kenya: a case study of the university of Nairobi students. University of Nairobi.

Tomaselli, K. G. 2006. *(De-)mediatising Southern Africa: HIV/AIDS, Poverty and the State*.

Tomaselli, K. G. and Chasi, C. 2011. *Development and public health communication*. Pearson Cape Town.

Treatment Action Campaign. 2009. HIV is not in recession. In: *Proceedings of 4th Southern African AIDS Conference*. Durban, Available: <http://www.tac.org.za/> (Accessed 20-June-2015).

Treatment Action Campaign. 2016. *About us*. Available: <http://www.tac.org.za/> (Accessed 8 March 2016).

Tubbs, S. 2012. *Human communication: Principles and contexts*. McGraw-Hill Higher Education.

Ugandan AIDS Commission. 2016. *Student leaders equipped to equip peers with HIV/AIDS message*. Available: <http://www.aidsuganda.org/resource-center/documentation/165-student-leadership> (Accessed 09-November-2016).

UNAIDS. 2010. *Combination HIV prevention: Tailoring, coordinating biomedical, behavioural and structural strategies to reduce new HIV infections*. Available: http://files.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/20111110_JC2007_Combination_Prevention_paper_en.pdf (Accessed 23-09-2016).

UNAIDS. 2011. *South Africa launches its new National Strategic Plan on HIV, STIs and TB, 2012-2016*. Available: <http://www.unaids.org/en/resources/presscentre/featurestories/2011/december/20111220sansp/> (Accessed 22-09-2016).

UNAIDS. 2013. *Report on the global HIV/AIDS epidemic*. Geneva: UNAIDS.

UNAIDS. 2014. *90-90-90 An ambitious treatment target to help end the AIDS epidemic*. Geneva: Available: http://www.unaids.org/sites/default/files/media_asset/90-90-90_en_0.pdf (Accessed 12-May-2015).

UNAIDS. 2015. *Fact Sheet: 2014 Statistics*. Geneva: Available: <http://www.unaids.org/en/resources/campaigns/HowAIDSchangedeverything/factsheet>. (Accessed 21-April-2016).

UNAIDS. 2016a. *AIDS Info*. Available: <http://aidsinfo.unaids.org/> (Accessed 12-April-2017).

UNAIDS. 2016b. *Fact sheet-latest statistics on the status of the AIDS epidemic*. Geneva: Available: www.unaids.org/en/resources/fact-sheet (Accessed 16-12-2017).

UNAIDS. 2016c. *UNAIDS Prevention Gap Report*. Geneva:

UNAIDS, U. N. P. o. H. A. 2009. *AIDS epidemic update December 2009*. Geneva: UNAIDS

UNESCO. 2011. *UNESCO's Strategy for HIV/AIDS*. France: Available: <http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Beirut/pdf/UNESCO%20HIV%20strategy.pdf> (Accessed 09-November-2016).

University of Kwazulu- Natal. 2016. *HIV/AIDS services*. Available: <http://www.ukzn.ac.za/> (Accessed 16-September- 2016).

University of Zululand. 2016. *HIV/AIDS services*. Available: <http://www.unizulu.ac.za/>. (Accessed 16-09-2016).

Uwah, C. 2013. The role of culture in effective HIV/AIDS communication by theatre in South Africa. *SAHARA-J*., 10 (3-4): 140-149.

Van Dyk, A. 2012. *HIV and AIDS Education, Care and Counselling: a multidisciplinary approach*. Cape Town: Pearson Education.

Van Dyk, A. C. and Van Dyk, P. J. 2003. "What is the point of knowing?": Psychosocial barriers to HIV/AIDS Voluntary Counselling and Testing programmes in South Africa. *South African Journal of Psychology*, 33 (2): 118-125.

Van Rensburg, H. and Ngwena, C. 2001. Health and health care in South Africa against an African background. *The Blackwell companion to medical sociology*: 365-391.

Van Wyk, B., Pieterse, J. and Otaala, B. 2006. Institutional responses to HIV/AIDS from institutions of higher education in the Southern African Development Community. *Pretoria: SARUA*,

Vember, H. F. 2013. An Evaluation of the Influence of HIV/AIDS Peer Education Programme at a Higher Institution in the Western Cape. University of Stellenbosch.

Venter, A. 2003. *Government & Politics in the New South Africa*. Van Schaik Publishers.

Venter, W. F. 2007. The South African National Strategic Plan: what does it mean for our health system? *Southern African Journal of HIV Medicine*: 8-11.

Visser, M. J. 2007. HIV/AIDS prevention through peer education and support in secondary schools in South Africa: original article. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance*, 4 (3): 678-694.

Vorster, J. M. 2015. The possible contribution of civil society in the moral edification of South African society: The example of the 'United Democratic Front' and the 'Treatment Action Campaign' (1983-2014). *HTS Theological Studies*, 71 (3): 1-8.

Waisbord, S. 2014. The strategic politics of participatory communication. In: Wilkins, K., Tufte, Thomas., and Obregon, Rafael, ed. *The handbook of development communication and social change*. Oxford: Wiley Blackwell, 147-167.

- Watson, G. 1925. *The measurement of fair-mindedness*. Teachers College, Columbia University.
- Wawer, M., Gray, R., Serwadda, D., Namukwaya, Z., Makumbi, F., Sewankambo, N., Li, X., Lutalo, T., Nalugoda, F. and Quinn, T. 2005. Declines in HIV prevalence in Uganda: not as simple as ABC. In: *Proceedings of Unpublished data presented at 12th Conference on Retroviruses and Opportunistic Infections, Boston, MA.* 22-25.
- Webb, D. 1997. *HIV and AIDS in Africa*. Pluto Press.
- Weiler, J. M. and Martin-Weiler, C. J. 2012. Addressing HIV/AIDS Education: A Look at Teacher Preparedness in Ghana. *Journal of International Social Studies*, 2 (1): 14-25.
- West, R. L. and Turner, L. H. 2006. *Introducing communication theory: Analysis and application*. McGraw-Hill Humanities/Social Sciences/Languages.
- Wilkins, K. G. 2014. Advocacy communication. *The handbook of development communication and social change*: 57-71.
- Williams, L. A. 2001. Imogene King's interacting systems theory: Application in emergency and rural nursing. *Online Journal of Rural Nursing and Health Care*, 2 (1): 25-30.
- Wirth, W., Hofer, M. and Schramm, H. 2012. Beyond pleasure: Exploring the eudaimonic entertainment experience. *Human Communication Research*, 38 (4): 406-428.
- World Health Organization. 1999. *Partners in life skills*. Geneva: Available: www.who/mnh/mhp/99.2, (Accessed 15-October-2015).
- World Health Organization. 2001. Strategic alliances: The role of civil society in health. *Civil Society Initiative, Discussion Paper*, 1
- World Health Organization. 2003. HIV testing and Counselling: the gateway to treatment, care and support. *Geneva: WHO*,
- World Health Organization. 2013. Global HIV/AIDS response: Epidemic Update and Health Sector Progress towards Universal Access. Progress Report 2011. Geneva: World Health Organization, 2011. *whqlibdoc.who.int/publications/2011/9789241502986_eng.pdf*. Last accessed on, 25
- World Health Organization. 2016. *Millennium Development Goals*. Available: http://www.who.int/topics/millennium_development_goals/about/en/ (Accessed 26- April-2016).
- World Health Organization and Joint United Nations Programme on HIV/AIDS. 2011. *Global report: UNAIDS report on the global AIDS epidemic 2010*. Who Publications.

Worobey, M., Telfer, P., Souquière, S., Hunter, M., Coleman, C. A., Metzger, M. J., Reed, P., Makuwa, M., Hearn, G. and Honarvar, S. 2010. Island biogeography reveals the deep history of SIV. *Science*, 329 (5998): 1487-1487.

Wouters, E., Van Rensburg, H. and Meulemans, H. 2010. The National Strategic Plan of South Africa: what are the prospects of success after the repeated failure of previous AIDS policy? *Health policy and planning*, 25 (3): 171-185.

ZAZI-Know your strength. 2013. *New campaign calls on South Africa's women and girls to "Zazi"*. Available: <http://www.zazi.org.za/>. (Accessed 07-July-2015).

Zimbabwe National Statistic Agency. 2013. *Demographic and Health Survey*. Harare, Zimbabwe: Available: <http://dhsprogram.com/pubs/pdf/FR254/FR254.pdf> (Accessed 12- September 2016).

APPENDICES

Appendix A: DUT Permission Letter



*Directorate for Research and Postgraduate Support
Durban University of Technology
Tromso Annexe, Steve Biko Campus
P.O. Box 1334, Durban 4000
Tel.: 031-3732576/7
Fax: 031-3732946
E-mail: moyos@dut.ac.za*

17th March 2016

Ms Lentsu Nchabeleng
c/o Faculty of Management Sciences
Durban University of Technology

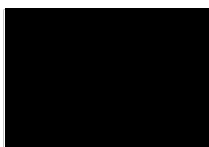
Dear Ms Nchabeleng

PERMISSION TO CONDUCT RESEARCH AT THE DUT

Your email correspondence in respect of the above refers. I am pleased to inform you that the Institutional Research Committee (IRC) has granted full permission for you to conduct your research "An analysis of communication tools for HIV/AIDS education by student services at universities in KwaZulu- Natal" at the Durban University of Technology.

We would be grateful if a summary of your key research findings can be submitted to the IRC on completion of your studies.

Kindest regards.
Yours sincerely



PROF. S. MOYO
DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT

Appendix B: UKZN Permission Letter



5 June 2015

Ms Ncheno Vinkie Lentsu Nchabeleng
Faculty of Management Science
Department of Public Management & Economics
Durban University of Technology
Email: nchabelengl@gmail.com

Dear Ms Nchabeleng

RE: PERMISSION TO CONDUCT RESEARCH

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

"An analysis of communication tools for HIV/AIDS education by student services at universities in KwaZulu-Natal".

It is noted that you will be constituting your sample by randomly approaching and handing out questionnaires to students as well as to conduct interviews with health care professionals at UKZN.

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

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

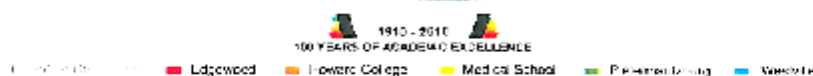
You are not authorized to contact staff and students using 'Microsoft Outlook' address book.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely,

MR B POO
REGISTRAR (ACTING)

Office of the Registrar
Postal Address: Private Bag X64001, Durban, South Africa
Telephone: +27 (0) 31 260 8003/2206 Facsimile: +27 (0) 31 260 7824/2204 Email: registrar@ukzn.ac.za
Website: www.ukzn.ac.za



Appendix C: Unizulu Permission Letter



University of Zululand, Private Bag X1001, KwaDlangezwa, 3886

W: www.unizulu.ac.za

T: +27 35 902 8887 F: +27 86 618 7707 E: MangeleS@unizulu.ac.za

Deputy Vice-Chancellor: Research and Innovation Office

Ms N.V.L. Nchabeleng
Faculty of Management Science
Durban University of Technology

Per email: nchabelengl@gmail.com

23 March 2016

Dear Ms Nchabeleng

REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT UNIZULU "AN ANALYSIS OF COMMUNICATION TOOLS FOR HIV/AIDS EDUCATION BY STUDENT SERVICES AT UNIVERSITIES IN KWAZULU NATAL"

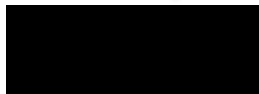
Your letter to me, dated 01 March 2015, refers.

I hereby grant approval for you to conduct part of your research at UNIZULU, as per the methodologies stated in your research proposal and in terms of the data collection instruments that you have submitted. I note also that the Durban University of Technology, Institutional Research Ethics Committee has issued an ethical clearance certificate and having read the documentation, I am happy to accept that certificate.

You may use this letter as authorization when you approach the appropriate persons. Please note that permission is based on the documentation that you have submitted. Should you revise your research instruments, or use additional instruments, you must submit those to us as well.

I wish you well in your research.

Yours sincerely,



Professor Nokuthula Kunene
Chairperson: University of Zululand Research Ethics Committee

CC: Mr. D Van Rensburg- Registrar

RESTRUCTURED FOR RELEVANCE

Appendix D: MUT Permission Letter



19 October, 2015

Ms. N.V.L. Nchabeleng

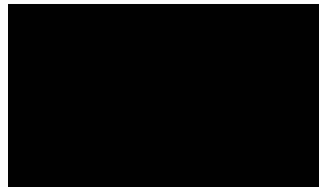
Ms. Nchabeleng

It is my pleasure to inform you that permission to conduct survey titled: *"An analysis of communication tools for HIV/AIDS education by student services at universities in KwaZulu-Natal."* amongst MUT staff members and students has been granted.

Permission to conduct the survey is granted on the condition that any changes to the project must be brought to the attention of the MUT Research Ethics Committee as soon as possible.

Good luck with your research.

Yours faithfully,



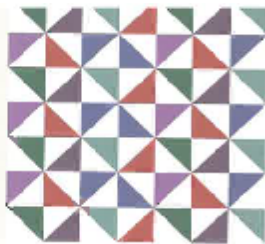
Dr. Anette Mienie

Director: Research

031 9077334/7450

anette@muf.ac.za

Appendix E: DUT Institutional Research Ethics Committee Approval Letter



Institutional Research Ethics Committee
Research and Postgraduate Support Division
2nd Floor, Jeremy Court
Gate 1, Steve Biko Campus
Durban University of Technology

P.O. Box 1324, Durban, South Africa, 4001

Tel: 031 373 2375
Email: irec@dut.ac.za
http://www.dut.ac.za/courses/institutions/_research_ethics
www.dut.ac.za

11 August 2017

IREC Reference Number: **REC 48/15**

Ms N Y L Nchabeleng
Box 451
Apel
0739

Dear Ms Nchabeleng

An analysis of communication tools for HIV/AIDS education by student services at universities in KwaZulu-Natal

The Institutional Research Ethics Committee acknowledges receipt of your final data collection tool for review.

We are pleased to inform you that the questionnaire has been approved. Kindly ensure that participants used for the pilot study are not part of the main study.

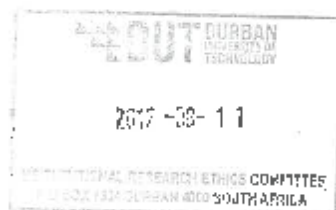
In addition, the IREC acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Yours Sincerely,



Professor J K Adam
Chairperson: IREC



Appendix F: Health Care Providers Interview Guide

HEALTH CARE PROVIDERS INTERVIEW GUIDE

SECTION A: INTRODUCTION

Take time to introduce yourself and explain the purpose of the study. Allow the key informant to ask questions for clarification. Ask for the verbal consent/fill the consent form before conducting the interview.

SECTION B: BACKGROUND OF HEALTH CARE PROVIDER

Designation of the health care worker.....

Name of the university.....

Name of the division.....

Sex of the health care worker.....

Age of the health worker.....

Date of interview:

SECTION C: QUESTIONS

1. What are your experiences working at the university clinic particularly with HIV/AIDS services
2. How do you establish relationship and dialogue with students who visit the campus clinic?
3. What do you think are the barriers of HIV/AIDS communication channels and effectiveness of HIV/AIDS services?
4. Are you involved in HIV/AIDS campaign planning?
5. What do you take into consideration when communicating HIV/AIDS programmes?
6. How do HIV/AIDS programmes cater for the multicultural aspect of the university?
7. What programs are currently implemented to educate students about HIV/AIDS and contraception and what types of prevention activities do you provide?
8. Which communication tools are being used to communicate HIV/AIDS information with students and how do you encourage students to engage in this process?
9. From your perspective as a health care provider, what is the impact of the programmes on students?
10. How does the clinic deal with challenges of stigma especially among students?
11. How do you monitor and evaluate communication tools used for HIV/AIDS education?

GIVE THANKS AFTER THE INTERVIEW

Appendix G: Student Questionnaire

STUDENT QUESTIONNAIRE

My name is **NTHENO LENTSU NCHABELENG**, a student from Durban University of Technology – Faculty of Public Management. I’m pursuing a PhD in Public Administration and I would like to seek your consent to complete this research questionnaire on how HIV/AIDS communication tools influence student behaviour to seek HIV/AIDS care, treatment and support from university’s campus clinics.

Serial No.....

Name of the University.....

Date.....

SECTION A: BACKGROUND INFORMATION

Please answer the following questions by crossing (X) in the appropriate block in the space provided.

1. Age group

☐ 17-25years ☐ 26 – 30 years ☐ 31 – 35 years ☐ Older than 35

2. Gender

☐ Male ☐ Female

3. Ethnicity

☐ Black ☐ Coloured ☐ Indian or Asians ☐ Others (specify.....)

4. Country of Origin

☐ South Africa
☐ Zimbabwe
☐ Democratic Republican of Congo
☐ Nigeria
☐ Ghana
☐ Others (Specify.....)

5. Level of Education

☐ 1st year
☐ 2nd year
☐ 3rd year
☐ Bachelor/ Honours
☐ Masters
☐ PhD

SECTION B: HIV/AIDS COMMUNICATION STRATEGIES

6. Which type of HIV/AIDS prevention strategies do you prefer?
- ☐ Workshops and discussion groups
- ☐ Theoretical approach (lectures, demonstrations)
- ☐ Traditional games and interactive approaches
- ☐ Others (Specify.....)
7. In which aspect of addressing HIV/AIDS do you find preventative programs most useful?
- ☐ Education on HIV/AIDs
- ☐ HIV/AIDs workshops and lectures
- ☐ Posters and flyers
- ☐ Mobile HIV/AIDS campaigns
- ☐ Peer educations sessions
- ☐ Others (Specify.....)
8. Taking into account the demographic makeup of each university, do you think HIV/AIDS messages are tailored to accommodate the multicultural aspect of the student community?
- ☐ Yes ☐ No
9. Do you think culture influences student sexual behaviour?
- ☐ Yes ☐ No
10. Do you think universities should use cultural approaches for HIV/AIDS prevention and care?
- ☐ Yes ☐ No

SECTION C: TOOLS OF HIV/AIDS COMMUNICATION

11. Of the following channels of communication: posters, billboards, leaflets and information booklet, radio, what draws you to the message?
- ☐ Visual images ☐ Printed information ☐ Audio
12. How do you prefer HIV/AIDS messages to be disseminated
- ☐ Audio Visual ☐ Print and Visual ☐ Audio only ☐ Print only
13. Do you think HIV/AIDS campaigns relates messages that students understand?
- ☐ Yes ☐ No
14. Do you think HIV/AIDS campaigns are educational and entertaining?
- ☐ Yes ☐ No

SECTION D: INTERACTIVE MODEL OF COMMUNICATION

15. Do you think the HIV/AIDS message disseminated by student services addresses socio-economic factors that influence the spread of HIV/AIDS among students?

☐ Yes ☐ No

16. Do you think the HIV/AIDS messages communicated through HIV/AIDS campaigns have a positive impact on your sexual behavior?

☐ Yes ☐ No

17. Do you know where the University health care clinic is?

☐ Yes ☐ No

18. Have you been to the University health care clinic?

☐ Yes ☐ No

19. Have you ever done an HIV test? If not, please move question 22

☐ Yes ☐ No

20. How often do you go for an HIV test?

☐ Every 3 months

☐ Every 6 Months

☐ Every year

☐ Every 2 years

☐ Whenever there is HIV/AIDS campaigns

21. Did you receive HIV/AIDS counselling before taking the test?

☐ Yes ☐ No

22. Do you think there is enough provision for HIV/AIDS treatment, care and support for students on campus?

☐ Yes ☐ No

23. Do you think the clinic is making enough effort to make their services known to students?

☐ Yes ☐ No

24. Which channel of communication would you prefer the clinic to communicate with you regarding their services? Please tick the appropriate box

Communication channel	
Audio and Visuals	Television
	Radio
	Film
	Theatre
Print	Pamphlets
	Posters
	Flyers
Social Media	Facebook
	Twitter
	Blog
	YouTube
	Podcasts
	Instagram
Others	Peer education sessions
	HIV/AIDS workshops

25. Please indicate how informed you are about HIV/AIDS

☐ Informed ☐ Well informed ☐ Less informed ☐ Not informed

SECTION E: BEHAVIOUR CHANGE AMONG STUDENTS

26. Are you sexually active?

☐ Yes ☐ No

27. What is the most important reason you use protection?

- ☐ I don't want to get pregnant
☐ Protecting against HIV/AIDs
☐ don't want to disappoint my parents

28. Do you ever have to negotiate safe sex with your partner?

☐ Yes ☐ No

29. Have you ever had unprotected sex?

☐ Yes ☐ No

30. Please indicate if you agree or disagree with the following statement (Where SD – Strongly Disagree,

D- Disagree, NAD -Neither Agree nor Disagree, A – Agree and SA – Strongly Agree)

Questions	SD	D	NAD	A	SA
I know of where and how I can get HIV testing and counselling					
I am not ashamed to take condoms when placed distributed on campus					

If I do HIV testing on campus people will discriminate against me					
HIV/AIDS campaigns are a waste of time in HIV/AIDS interventions					

31. Please indicate if you agree or disagree with the following statement ((Where SD – Strongly Disagree, D- Disagree, NAD -Neither Agree nor Disagree, A – Agree and SA – Strongly Agree)

Questions	SD	D	NAD	A	SA
Overall I am satisfied with the health services at my university.					
The clinic always inform students about health related issues especially HIV/AIDS					
The university clinic is user-friendly					
It's easy to approach and confide in health providers at my university					
HIV/AIDS is like any other disease or virus					
Students should be encouraged to go for an HIV test every 3 months					
The university clinic is doing enough to educate and inform students about HIV/AIDS?					
There is enough social support for HIV positive students at my university					
There are still many misconceptions about HIV/AIDS among students					
There is still a level of denial and secrecy about HIV/AIDS among students.					

32. What should be done differently to encourage students to use campus clinics particularly for HIV/AIDS related services?

.....

.....

.....

.....

Appendix H: Letter of Information and Consent



LETTER OF INFORMATION

Title of the Research Study: An analysis of communication strategies for HIV/AIDS education employed by student services at universities in KwaZulu-Natal.

Principal Investigator/s/researcher: (Lentsu Nchabeleng, Master's)

Co-Investigator/s/supervisor/s: (Renitha Rampersad, D.PHIL; Nirmala Dorosamy, D.ADMIN)

Brief Introduction and Purpose of the Study:

The South African higher education sector is affected fundamentally by the HIV/AIDS pandemic. A recent study by HEAIDS noted that one in four students in South Africa is infected with HIV/AIDS (HEAIDS 2010: 6). HIV/AIDS poses a major threat to human welfare and development progress. Universities have a special responsibility for the development of human resources, they are crucial agents of change and providers of leadership that they should be at the forefront in developing deeper understandings of HIV/AIDS and programmes to mitigate the impact of the epidemic (Kelly 2002: 5). However, to date limited research has focused on reviewing communication strategies for HIV/AIDS education in universities. Therefore the aim of this study is to analyse communication strategies for HIV/AIDS education employed by student services at universities in KZN.

Outline of the Procedures:

Participation in this study is voluntary. If you decide to participate in this study you will be asked to give informed consent by signing this form before you participate in the study. The questionnaire/ interview will take 30-40 minutes at a mutually agreed upon location. With your permission this interview will be audio-recorded to facilitated collection of information and transcribed for analysis.

Risks or Discomforts to the Participant:

There are no known or anticipated risks to you as a participant in this study.

Benefits:

Once the study is complete an article will be published.

Reason/s why the Participant May Be Withdrawn from the Study:

You may decide to withdraw from this study at any time without giving any explanation and this will not result in any negative consequences or loss.

Remuneration:

You will not be paid for participating in this study

Costs of the Study: Non

Confidentiality:



CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, by Lentsu Ntheno Nchabeleng, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: _____,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant	Date	Time	Signature	/	Right
Thumbprint					

I, Ntheno Lentsu Nchabeleng herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Ntheno Nchabeleng		
Full Name of Researcher	Date	Signature

Full Name of Witness (If applicable)	Date	Signature

Full Name of Legal Guardian (If applicable)	Date
	Signature

Please note the following:

Research details must be provided in a clear, simple and culturally appropriate manner and prospective participants should be helped to arrive at an informed decision by use of appropriate language (grade 10 level - use Flesch Reading Ease Scores on Microsoft Word), selecting of a non-threatening environment for interaction and the availability of peer counseling (Department of Health, 2004)

If the potential participant is unable to read/illiterate, then a right thumb print is required and an impartial witness, who is literate and knows the participant e.g. parent, sibling, friend, pastor, etc. should verify in writing, duly signed that informed verbal consent was obtained (Department of Health, 2004).

If anyone makes a mistake completing this document e.g. wrong date or spelling mistake a new document has to be completed. The incomplete original document has to be kept in the participant file and not thrown away and copies thereof must be issued to the participant.

References:

Department of Health: 2004. *Ethics in Health Research: Principles, Structures and Processes*

<http://www.doh.gov.za/docs/factsheets/guidelines/ethnics/>

Department of Health. 2006. *South African Good Clinical Practice Guidelines*. 2nd Ed. Available at:

http://www.nhrec.org.za/?page_id=14

Appendix I: Editor's Letter



Barbara Mutula
Associate Member

Membership number: MLT001
Membership year: March 2017 to February 2018

078 643 9029
kabangebarbara@gmail.com

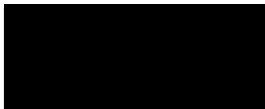
www.editors.org.za

20 January 2018

TO WHOM IT MAY CONCERN

This is to confirm that the dissertation written by Lentsu Nchabeleng, titled '**An Analysis of Communication Tools Employed for HIV/AIDS Education by Student Support Services at Universities In KwaZulu-Natal**' was copy edited for layout (including numbering, pagination, heading format, justification of figures and tables), grammar, spelling and punctuation by the undersigned. The document was subsequently proofread and a number of additional corrections were advised.

The undersigned takes no responsibility for corrections/amendments not carried out in the final copy submitted for examination purposes.



Mrs. Barbara L. Mutula-Kabange

Copy Editor, Proof reader
*BEd (UBotswana), BSc Hons Psychology,
MEd Educational Psychology (UKZN)*