Exploring postgraduate university students' perceptions regarding the role of culture in the transmission, prevention and treatment of HIV and AIDS in Gauteng

A research report on a study project presented to

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PLAGIARISM DECLARATION

I, Tapiwa Crystal Mutsa Chimonyo, hereby declare that this research report is my own original work. I have correctly referenced all the sources utilised from other scholars and such work. This research report has not been submitted previously for any degree or examination purpose at any other institution.

Tapiwa C. M. Chimonyo Date

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1.1 Introduction

Globally, the spread of the HIV and AIDS epidemic has been an issue of utmost concern over the years. The prevalence rate of HIV and AIDS in South Africa is of serious concern as it has more people infected than any other country in the world. TBFACTS.ORG (2017) states that by mid-2017, 12. 6% of the South African population; which is approximately 7.06 million people tested HIV positive. The percentage of people who had HIV and AIDS in the year 2015 is 18.2% (Avert, 2016). This shows that the number of people who are infected has never decreased even though the government (South Africa) invested 1.5 billion (USD) in 2015 to fight the pandemic (Avert, 2017b). Over the years, significant amounts of financial resources, through research and development, have been channeled into the development of strategies on how the prevention and treatment of HIV and AIDS can become more successful, efficient and effective (Avert, 2017b).

Approximately 19.1 billion United States Dollars was attributed to the fight against HIV and AIDS in 2016, which was raised by the international community Avert (2017b). This was however insufficient as in 2011, the Political Declaration of HIV and AIDS had initially called for the need to raise between 22 and 24 billion United States Dollars. In each country worldwide, the fight against HIV and AIDS is funded both by the international community as well as domestically. In South Africa, a budget for HIV and AIDS prevention and treatment strategies and programs is also done (Avert, 2017a). Some of these strategies in South Africa include female and male condom use, practicing safer sex and or abstaining from sex, attainment of accurate knowledge about HIV and AIDS, HIV testing and counseling, as well as treatment methods such as Prevention of Mother to Child Treatment (PMTCT) as well as taking ART especially and most importantly while in the AIDS stage (Sovran, 2013). Many debates worldwide are surrounded by the effects of culture on the efficiency of a number of development initiatives including the prevention and treatment of HIV and AIDS in Africa (Ferguson, 1990).Within the African context, there are a number of factors that are believed to affect the effectiveness of HIV and AIDS prevention and treatment strategies, and these include poverty, lack of education and culture (Mondal & Shitan, 2013).

Culture is an important factor in the transmission, treatment and prevention of HIV and AIDS in Africa, as it is a major determinant in a number of behavior issues in Africa (Mofolo, 2010). There are a number of behaviors and cultural practices that are often associated with

the spread of HIV and AIDS and the inefficiency of prevention and treatment strategies that have been implemented over the years. These cultural beliefs and practices include Female Genital Mutilation (FGM), male circumcision, polygamy, gender inequality; such as patriarchy and the superiority of males, attitudes on condom use; especially the female condom, denial of the virus and its causes, and instead attributing it to witchcraft; among many (Molofo, 2010; Brown, Trujllo & Macintyre 2001).

It is argued that some cultural practices contradict a number of programmatic interventions which are presented to people during HIV and AIDS education and awareness campaigns. Culture is an important factor that should be considered and understood, and in fact, made central in the prevention and treatment of HIV and AIDS (Airhihenbuwa & Webster, 2004). Youths, transgender people, sex workers, people who inject drugs and women are the Key Affected Populations (KAPs). This means that they are at a higher risk of contracting HIV and AIDS, as well as that they are the populations with the highest recorded numbers of HIV infection than any other group in South Africa and abroad (Avert, 2017e). This research will focus on one Key Affected Population (KAP) – youths. This group is in a lot of cases highly sexually active, with a number of youths also engaging in unprotected sexual relations with multiple partners (Avert, 2017e).

1.2 Statement of the problem and rationale for the study

Every year, billions of United States Dollars are directed towards HIV and AIDS prevention and treatment strategies that have been implemented in and around the world, the majority of this being in Africa. This is alluded to the prevalence of high numbers of new cases of HIV and also the high numbers of people already living with HIV and AIDS or have passed away from HIV and AIDS related illnesses, such as Tuberculosis (TB) (Avert, 2017a). However, the number of people infected and dying of this epidemic is still very high, especially in Southern Africa, even though there is more knowledge of and surrounding the HIV virus. A number of reasons have been attributed to this fact, one of the popular explanations or reason being that of culture. Culture, especially African views and belief systems, is viewed negatively in a number of realms, including in HIV and AIDS development. It is argued that a number of cultural norms, beliefs and practices are responsible for increasing the infection rates and also reducing the effectiveness of a number of prevention and treatment strategies that have over years been put in place to try and battle this pandemic (Brown, Trujllo & Macintyre, 2001). This therefore implies that some African cultures are in a way

retrogressive and, thus, are in need of change to facilitate constructive progress toward addressing the HIV epidemic in Africa (Ferguson, 1990).

South Africa is one of the countries with the highest statistics profile in HIV in the whole world, with over 7 million people recorded living with HIV, more than 270000 of them being newly infected and 110000 deaths being recorded from HIV and AIDS related illnesses in 2016 (Avert, 2017a). Regardless of South Africa having the best and most HIV and AIDS prevention and treatment programs such as Antiretroviral treatment (ART) and HIV testing and counseling (HTC) worldwide, it is still high up on the countries with the highest recorded HIV and AIDS cases not only in Africa but globally (Avert, 2017a).

South Africa is a country found in the extreme South of the African continent. It is a very culturally and ethnically diverse country boasting of many different cultures and 11 official languages; thus it is fondly known as the 'rainbow nation'. The black population in South Africa mainly stem from 4 ethnic groups namely; the Nguni (Zulu, Xhosa, Ndebele and Swazi), Sotho, Shangaan-Tsonga and Venda. The white population is mainly Afrikaans and the rest from British and European decent; the other minority groups being the Coloured, Asian and the Indian populations. (SA Venues, 2017). Each of these groups has their different beliefs and practices that unite them and influence their perceptions and behavior (Mofolo, 2010). These diverse cultural and traditional practices and beliefs in many cases can cause complications in attempting to come up with strategies that will work and agree with and consider all the different cultural practices that may not have the same beliefs (Molofo, 2010).

While there is extensive literature on different strategies and prevention programmes for HIV and AIDS in South Africa, there seem to be a gap in terms of research that looks at the role of culture in the prevention and treatment of HIV and AIDS in Gauteng. It is therefore against this backdrop that looking at the rich cultural background of South Africa, the need exists to explore and understand the role played by culture in the prevention and treatment of HIV and AIDS in South Africa. It was anticipated that this study would contribute to the body of knowledge in the area of HIV and AIDS among university students, with an emphasis on the cultural influence on the prevention, treatment and transmission of HIV and AIDS. It was also hoped that the study may influence policy makers and administrators in providing an environment that enables mitigation measures to be implemented on the spread of HIV and AIDS among university students. In addition, the study envisaged creating opportunities for

decision makers to advocate for or against cultural practices that promote the well-being of everyone.

The major research question was:

What are the perceptions of university students regarding the role of culture in the prevention and treatment of HIV and AIDS in Gauteng in South Africa?

The primary aim of the study was:

To explore the perceptions of university students regarding the role of culture in the prevention and treatment of HIV and AIDS in Gauteng in South Africa

1.3 Definition of key terms

1.3.1 Culture

Culture can be 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" (Mofolo, 2010, p. 2).

1.3.2 HIV and AIDS

HIV is an acronym that stands for Human Immunodeficiency Virus (Poku, 2002). This virus is one that affects only humans and is transmitted when bodily fluids such as blood, semen and vaginal discharge; containing sufficient amounts of the virus in them, of an HIV positive person have access to a HIV negative individual's bloodstream. When someone is infected by the HI Virus, the person is said to ne HIV positive

AIDS stands for Acquired Immune Deficiency Syndrome. This describes the acquiring of the virus from another human, the depletion of the immune system and the collective of infections that attack the HIV positive person as a result. AIDS is the progression of HIV where one's immune system is very weak and allows opportunistic diseases such as Tuberculosis to attack the HIV positive individual, which can be fatal if not treated (Poku, 2002). HIV and AIDS have no cure. However, HIV and AIDS can be both prevented.

1.3.3 Perception

A perception can be defined as "the process by which organisms interpret and organize sensation to produce a meaningful experience of the world" (Pickens, 2005, p. 52). This research aims to simply explore what University students think about HIV and AIDS and culture.

1.3.4 Prevention

Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health (2003) define prevention simply as the "keeping of something (such as an illness or injury) from happening". HIV and AIDS prevention strategies therefore simply are the methods that are in place in order to try and keep someone from becoming infected with HIV.

1.3.5 Treatment

Treatment is defined as "the use of an agent, procedure or regiment, such as a drug, surgery, or exercise, in an attempt to cure or mitigate a disease, a condition or injury" (The American Heritage Medical Dictionary, 2007). HIV and AIDS treatment speaks to methods of trying to reduce the effects of HIV and AIDS as well as try maintain a healthy body and life.

1.4 Overview of the research design and methodology

The study employed a qualitative research design or approach which allowed a deep understanding of each of the participant's experiences (Creswell, 2013). All of the participants selected were postgraduate university students studying in Pretoria and Johannesburg chosen using the purposive sampling technique. A person-centred theoretical framework was used, focusing on personal, individual experiences as you explore their experiences. The research design that was used was the narrative design, using one on one, semi-structured interviews. The data collected was audio-tape recorded; with the consent of each participant and transcribed, as well as analysed thematically. This allowed the researcher to draw up conclusions regarding HIV and AIDS and Culture in South Africa as well as come up with some recommendations moving forward in the fight against the HIV and AIDS pandemic in Africa.

1.5 Limitations of the study

Whilst the study is aimed to be as comprehensive as possible, the limitations experienced related to:

- The stigma associated with certain HIV and AIDS perceptions which may have limited the full and honest participation of respondents. Participants also may have been dishonest or omitted important information due to them feeling embarrassed or due to fear of being discovered.
- Because the research instrument involved direct contact between the facilitator and participants, the reliability of the findings could therefore have been compromised. This is because the participant might have been tempted to give the facilitator the answers they thought the facilitator would've wanted to hear.

A comprehensive explanation to the participants of the importance and potential benefits of the study and also assurance that privacy and confidentiality will be maintained helped to mitigate these limitations**.**

1.6 Organization of the report

This chapter provided the introduction to the study as well as the orientation to the study. Chapter Two focuses on the review of the necessary and related literature surrounding HIV and AIDS as well as the concept of culture in relation to the prevention, treatment and transmission of the HIV and AIDS pandemic. Chapter Three of the report describes the research design and methodology that was used in the study. Chapter four presents the analysis and discussion of data collected during the study. The final chapter, Chapter Five describes the main findings, conclusions and some recommendations that emerged from the research.

CHAPTER TWO: REVIEW OF THE LITERATURE AND THEORETICAL FRAMEWORK

2.1 Introduction

The great impact of HIV and AIDS on people's lives, especially young people, has over the last two decades been the subject of discussion in several regional and international forums (Avert, 2017e). This chapter seeks to review assertions from these forums and other scholars on the subject matter of HIV and AIDS treatment and prevention and the role of Culture. A thorough background on the concept of HIV and AIDS was reviewed to begin with. The chapter also reviews the concept of Culture and some cultural practices and beliefs in Africa, including South Africa, that affect the transmission, prevention and treatment of HIV and AIDS within developing countries. In addition, an account of the different HIV and AIDS prevention and treatment strategies is also discussed. The chapter concludes by discussion the theoretical framework which underpinned the study. The chapter concludes by showing the important role education plays a role in the development of HIV and AIDS; especially where culture is concerned.

2.2 Definition and overview of HIV and AIDS

HIV is an acronym that stands for Human Immunodeficiency Virus (Poku, 2002. As the acronym suggest, this is a virus that affects only its human host, living in its human host's bodily fluids including semen, vaginal fluids, blood, sweat and saliva. These bodily fluids however contain the virus in different quantities; some being high viral loads and others low viral loads. High viral loads are the bodily fluids which have a large concentration of white blood cells such as blood, vaginal fluids and semen. Low viral loads are mainly excretory fluids, which include saliva, sweat and tears which have a low concentration of white blood cells (Poku, 2002). When HIV is transmitted, high viral load bodily fluids of an HIV positive person; which have sufficient amounts of the virus in them, have access to the bloodstream of an HIV negative individual. This could be in many ways including through unprotected sexual activity; which is the most common way worldwide, in sharing sharp objects such as blades and injections; especially during risky behavior such as drug use, as well as from mother to child during child birth (WHO, 2004).

After high viral load bodily fluids containing the HI Virus come in contact with the bloodstream of another individual, the virus begins to completely attack and destroy the white

blood cells of the individuals blood (Poku, 2002), taking with it some of this individual's DNA; transforming it and integrating it with the virus to change its characteristics; all in an attempt to disguise itself from other white blood cells that will try and fight the virus away and protect the body. This is ultimately what has and is making it hard to find a cure for HIV and AIDS (Marks, 2002). Furthermore, the HI Virus goes on to multiply itself at an incredibly rapid pace, allowing the Virus to destroy more and more white blood cells, resulting in the depletion of the newly infected individual's CD4 count; which can simply be described as the amount of white blood cells per measure of blood (World Health Organization, 2004). This results in the weakening their immune system; which is responsible for the body's ability to fight of any other infections when this happens, the weakening immune system gives rise to the high probability of Opportunistic infections attacking the individuals and these include Tuberculosis and Candidiasis, commonly known as thrush (World Health Organization, 2004). When an individual gets infected with 2 or more of these Opportunistic Infections (OIs), or an individual's CD4 count drops below 200, they progress from being HIV positive to being in the AIDS stage. AIDS stands for Acquired Immune Deficiency Syndrome. This basically means that after acquiring the virus from another human who is HIV positive, the depletion of one's blood cells weakens the immune system, eventually depleting them and allowing for a collective of Opportunistic Infections; thus AIDS is the progression of HIV (Poku, 2002). It is in this stage where individuals are especially advised to take Antiretroviral drugs (ARVs) (Chimonyo, 2015).

Having said all this, it is important to note that even though most literature clearly states that HIV and AIDS are not the same thing, neither should they be used as interchangeable terms, this is the case in most everyday life conversations. This is shown in a statement by Stolley and Glass (2009, p. 3), "for many people, HIV and AIDS are the same thing; they are interchangeable terms for seemingly the same condition". The only commonality between HIV and AIDS is that both conditions involve the initial infection which is the HI Virus. It should be noted also that this common mistake and misunderstanding is not only seen between uneducated or regular people that are not part of the medical profession, but in fact this confusion is even seen among people in and around people employed in the medical realm that should seemingly know better as well as in literature related to the field of medicine (Davis, 2017).

HIV and AIDS were discovered first in the United States of America about three decades ago before spreading worldwide (United Nations, 2003). From that time until present day;

worldwide, a vast amount of resources; both financial and human capital and cognitive efforts have been committed to the fight against this deadly pandemic, at both individual country level as well as globally as a collective (Avert, 2016). Furthermore, the importance of eradicating the HIV and AIDS pandemic was emphasized when in 2000, global leaders made this apparent in making it one of the major areas in human development under the United Nation's Millennium Development Goals (MDGs) agenda (World Health Organization, 215). The MDGs were set up with the aim of combating different development issues in developing countries worldwide; ranging from poverty, health issues and environmental sustainability issues by the year 2015 (United Nations; 2015; Chimonyo, 2015).

Throughout the three decades have passed since HIV and AIDS was discovered, it has become more accepted, understood and discussed among people worldwide; unlike the initial fear, denial and misunderstanding surrounding HIV and AIDS (Mbonu, van den Borne & De Vries, 2009). More people have come to accept the existence of HIV and AIDS due to education and awareness of what the pandemic is, how the Human Immuno Virus is transmitted, how to prevent oneself from getting the Virus as well as how HIV and AIDS related illnesses can be treated to ensure that HIV positive people can live a healthy and satisfying long life (Mbonu, van den Borne & De Vries, 2009). Although stigma and discrimination towards people infected and affected by HIV and AIDS still is a big problem, through further education and awareness of HIV and AIDS transmission, prevention and treatment it is more understood and accepted among the populations worldwide, regardless of race, culture or religion (Mbonu, van den Borne & De Vries, 2009).

2.3 HIV and AIDS Pandemic in Africa

Statistics have shown that Sub-Saharan Africa ranks top of the list of the regions with the highest rates of infection as well as deaths from HIV related illnesses worldwide; in 2014 recording an alarming total of 25,8 million HIV positive individuals (World Health Organization, 2015). Of these it has been discovered that about 70% of new infections recorded worldwide comprise or can be attributed to individuals aged between 16 and 49 years old (Goliber, 2002), majority of these being also females (World Health Organization, 2015). This is due to a number of factors including poverty and lack of education as well as other socioeconomic factors influence in a lot of cases by cultural beliefs, norms, values and practices (Mondal, & Shitan, 2013; Chimonyo, 2015).

South Africa is one of the countries with the highest statistics profile in HIV in the whole world, with over 7million people recorded living with HIV, more than 270000 of them being newly infected and 110000 deaths being recorded from HIV and AIDS related illnesses all in 2016 (Avert, 2017a). Regardless of South Africa having the best and most HIV and AIDS prevention and treatment programs such as Antiretroviral treatment (ART) and HIV testing and counselling (HTC) worldwide, it is still high up on the countries with the highest recorded HIV and AIDS cases not only in Africa but globally (Avert, 2017a). There are a number of factors that are believed to be the cause of this, one of them being culture.

The argument of culture being one of the contributing factors in the development of HIV and AIDS in Africa is of great interest and importance. A number of cultural beliefs, behaviours and practices are seen as negatively affecting the development of HIV and AIDS by either increasing the infection rates and or as reducing the effectiveness of a number of prevention and treatment strategies that have over years been implemented in Africa to try and win the battle against the spread of this pandemic (Brown, Trujllo & Macintyre, 2001). These include female genital mutilation, male circumcision, polygamy, gender inequality; such as patriarchy and the superiority of males, attitudes on condom use; especially the female condom, denial of the virus and its causes, and instead attributing it to witchcraft; among many; which will be discussed in detail in the following sections of this proposal (Molofo, 2010; Brown, Trujllo & Macintyre, 2001; Chimonyo, 2015).

2.4 HIV and AIDS prevention and treatment strategies

Billions of United States Dollars are each year directed towards the research and the implementation of a number of ways in which HIV and ADIS can be prevented or treated in Africa (Avert, 2017b). The South African Government emphasizes the importance of HIV and AIDS treatment in the country as its national plan to end this deadly pandemic is largely funded through its domestic resources for the running of its prevention and treatment programs (Avert, 2017a).

The HIV and AIDS prevention and treatment strategies that have been developed over the years include female and male condom use, practicing safer sex and or abstaining from sex, attainment of accurate knowledge about HIV and AIDS, HIV testing and counseling, as well as treatment methods such as Prevention of Mother to Child Treatment (PMTCT) as well as taking ARVs while in the AIDS stage (Sovran, 2013; Chimonyo; 2015).

2.4.1 HIV and AIDS prevention strategies

HIV prevention strategies can be described basically as methods or ways in which the transmission of HIV from an HIV positive person to an HIV negative person is blocked or kept from happening (Miller-Keane Encyclopaedia and Dictionary of Medicine, Nursing, and Allied Health, 2003). These strategies include female and male condom use, HIV testing and counseling (HTC), Pre-Exposure Prophylaxis treatment (PrEP) and Post-Exposure Prophylaxis (PEP) as well as abstaining from sex and knowledge and awareness of HIV and AIDS transmission, prevention and treatment (Chimonyo, 2015).

Condom use

A condom is "a thin piece of rubbery material that fits over a man's penis during sex" (Avert, 2017d). This definition of a condom is faulty in that it fails to recognize the existence of the female condom. There are two kinds of condoms; the male condom and the female condom (Avert, 2017c). A condom can thus rather be defined as a type of rubbery textured barrier worn either over the penis (Avert, 2017d) or worn internally by being inserted into the vagina (Marie Stopes South Africa, 2014) to prevent direct contact and the exchange of sexual bodily fluids that can result in pregnancy and the of STDs; including the HI Virus in HIV positive people (The World Health Report, 2004).

Condoms are made using mainly two types of materials; latex or polyurethane (non-latex). The polyurethane condoms specifically cater for latex sensitive or allergic people and is made in the form of a female condom (Avert, 2017d).

Similar to the condom is also the dental dam. This is a square piece of latex or silicone; sometimes flavored, that is also used as a barrier over sexual organs during oral sex (Brown, 2013).

Condom use is described as a method of practicing safer sex (World Health Organization, 2004). Condom use is a very popular method used by people in the prevention of unplanned pregnancies and transmission of a number of STDs. This is because the condom forms a barrier that doesn't permit the exchange of any bodily fluids from one partner to the next partner during any form of sexual activity. In the context of this study, it is in the prevention of HIV transmission (Bogart, Skinner, Weinhardt, Glasman, Sitzler & Kalichman, 2011).

This is however true only if the condoms are used correctly; which in turn makes their success rate in the prevention of unplanned pregnancy, HIV and other STD transmission very

high; almost 100% (Peltzer, 2000). In and around the world, condoms are very widely used and popular due to the fact that they are cost effective (Avert, 2017c); with a number of countries manufacturing and distributing free condoms. South Africa provides free male condoms called *Choice, as* well as female condoms called *Cupid* (Society for Family Health, 2017). These free male condoms now come in a variety of flavors for example grape and banana as well as different textures (ribbed) as well as different thicknesses (MacPhail & Campbell, 2001).

Condoms play a huge role in preventing HIV transmission not just in Africa but worldwide; through safer sex. Although condoms are mostly seen being used by adolescence and young adults (Maljaars, Gill, Smith, Gray, Dietrich, Gomez & Bekker, 2017), it is vital that emphasis is placed on the fact that condom use should not only be limited to this group of people; proven to be at high risk of contracting the HI Virus due to risky sexual behavior (premarital sex and numerous sexual partners over a short period of time). Condom use is important in practicing safer sex even in married couples; not limited to but especially in cases of extramarital sexual affairs (Dube, Nkomo & Khosa, 2017).

HIV testing and counseling

HIV Testing and Counseling (HTC) is as the name suggests; an HIV prevention method that includes the voluntary testing and counseling of people in order to make them aware of their HIV status and also teach the people tested how to either maintain their status as being HIV negative or how to continue to live a long and healthy life as an HIV positive person (Johnson, Dorrington & Moolla, 2017). HTC is also vital during antenatal care for pregnant women in order to start PMTCT if the pregnant woman in HIV positive. HTC is performed also in the event that a person is being treated for Opportunistic infections (OIs) as these usually develop due to the lowered immune system due to HIV infection and the progression to the AIDS stage (Johnson, Dorrington & Moolla, 2017). HTC is not only vital in PMTCT but for all HIV and AIDS prevention and treatment strategies to either commence or become effective.

In both PrEP and PEP for example, before these first line regiments are given, the people must be tested for HIV and this test must be negative in order to try and prevent infection. If however the HIV results come back HIV positive, the people are able to start the necessary treatment and or take the necessary precautions to reduce the possibility or transmitting the HI Virus to other people (AIDS Info, 2016).

The HTC campaign was in South Africa; launched in APRIL 2010 and later revitalized in 2013. HTC is encouraged in most South African universities and public hospitals and clinics by providing this important service free of charge (Avert, 2017a). The more people are tested, the more new HIV infection cases are recorded and treated, as soon as possible in order to effectively fight this HIV and AIDS pandemic.

PreP and PEP

PrEP is Pre-Exposure Prophylaxis treatment. As the name suggests, PrEP is given in the anticipation of possible near future risk of HI Virus acquisition to tested HIV negative people, including doctors and nurses (AIDS Info, 2016). PrEP is taken in order to try and block the possibility of HIV infection before an anticipated situation where the person could be at risk to be infected (Baggaley, Doherty, Ball, Ford & Hirnschall, 2015). This is taken as a 2 drug FDC pill and is only given to HIV negative people, and thus as a first line regiment treatment. It is vital that the people at risk take the PrEP treatment every day prior to the anticipated exposure period (AIDS Info, 2016). When PrEP was initially introduced, it was specifically for people in professions that had high risk of HIV infections such as doctors and nurses; and especially in situations such as war where there might not be enough time or resources to take the necessary precautions (Maljaars et al., 2017).

Post-Exposure Prophylaxis are given to people who may have been directly exposed to the HI Virus and are thus are at risk of acquiring the HI Virus. These are usually people that are victims of sexual crimes such as rape and sharing needles during drug use as well as people who may have been exposed to the Virus through their profession such as emergency paramedics and other medical staff (AIDS Info, 2016).

It is vital that these vulnerable people seek medical attention and have an HIV test done as soon as possible; 72hrs or less after exposure to the Virus. It is only when this test comes out negative that a 28 day PEP treatment is administered, again in the form of a FDC regimen, depending on whether the person is ARV naïve or not. It is vital for a test to be done 3 months after to determine whether the PEP treatment was successful; when the treatment will be stopped, or if it was unsuccessful, having an HIV positive result; where the person will start taking ARVs for an extended period on a higher or rather following regimen (AIDS Info, 2016).

In 2015, the South African Medicine Control Council was the first country in Africa to approve the use of PrEP (Avert, 2017a) in the form of 2 ARV drugs for whoever could afford

the treatment. This was feared to possibly result in reckless sexual behaviors, especially among adolescence and young adults. These fears were however reduced as research shows that there is no proof of the reduction of the number of people using condoms as an HIV and AIDS prevention strategy due to the expansion of PrEP treatment availability and access (Maljaars et al., 2017).

Abstinence from sex

One way of preventing HIV transmission is through abstaining from sexual activity, which is seen as a behavioural preventative method (Muula, 2006). By abstaining from sex, there is a lower chance that one will be infected by HIV through unprotected sex with an HIV positive partner (Mutema, 2013).

Abstinence is defined and understood differently, by different people due to different factors. Muula (2006) and Mokwena & Morabe (2016) simply describe abstinence as the avoidance or postponing of sexual activity; especially in young people. Abstinence can be said to depend also on the way an individual defines 'sex'. What sex is will define what avoiding sex will entail or include and exclude (Barnette & Parkhurst, 2005). Two such definitions view sex as solely vaginal penetration and the other view is sex is not merely the penetration of the vagina, but any opening in the body and anything that will lead that; which includes foreplay such as kissing and touching of oneself or of someone else. This means that for the former belief, abstinence will mean not having vaginal penetrative intercourse but leaving room for oral sex, anal sex and any other form of sexual activity. The latter is thus an extreme definition which entails complete avoidance of any form of activity that might lead to any form of sexual activity with oneself; masturbation, or which a partner (Planes, Gomez & Gras, 2009). On the other hand, some cultures see sex as a ritual, and thus abstinence is not always a choice or an option. For example, a widow is forced to have sex with a kinsman of her late husband, in a ritual cleansing, in order to make her 'normal' again and accepted in society. Another way sex is seen is in the practice of 'sex inheritance" where a widow is made to have sex with a kinsman for socioeconomic support and continuity of the bloodline and clan (Barnette & Parkhurst, 2005).

Mokwena & Morabe (2016) note that the concept of abstinence means different things to adolescents in rural areas and in urban areas, as well as among people of different cultures, ethnicities and genders for example in previous study, it was discovered that where females saw abstinence as a way of mainly preventing premarital pregnancy, males saw is mainly as a

way of protecting oneself from acquiring HIV and other STIs (Mokwena & Morabe, 2016). Furthermore, abstinence is said to be a concept that has, and continues to change over the different generations as the years go by (Hans & Kimberly 2011 in Mokwena & Morabe, 2016).

There are three main types of abstinence; namely primary abstinence, secondary abstinence and recent abstinence (Mokwena & Morabe, 2016). Primary abstinence is characterised by having no sexual experience at all and extreme rules such as not participating in any form of sexual activity at all and is thus sometimes known as 'virginity'. Secondary abstinence involves some sexual experience but none in the past year due to the desire to prevent HIV, other STIs and pregnancy. The last type, recent abstinence, is where an individual has not had sexual activity in the last 3 months; not as an informed decision, but due to having no opportunity to engage in sexual activity (Mokwena & Morabe, 2016). In a study done in Malawi, results also showed that some people preferred abstaining from sexual activity to using condoms due to the stigma and misinformation from different cultural norms and beliefs that come with condom use as an HIV prevention strategy (Muula, 2006).

In a lot of cases, abstinence carries a "religious and moral connotation" (Planes, Gomez & Gras, 2009, p. 2) as well as it being influenced also by traditions and culture; shaped by social standards set by families and communities. An example is the practise of virginity testing in some South African cultures. By doing this, young girls are forced to maintaining their virginity by abstaining from sexual activity, in turn reducing their chances of falling pregnant outside marriage and becoming infected with HIV and other STDs or actually spreading those (Mokwena & Morabe, 2016). Sovran (2013, p. 38) agrees with this fact by stating that "Identification with religious organisations and traditions that promote abstinence or monogamy, for example, could conceivably decrease the likelihood of participation in vulnerability-enhancing behaviours". A number of religions and cultures also believe that abstinence should not be a problem, neither should it be up for discussion as only married people have the right to engage in sexual activity for both reproductive reason and as a way of 'cementing' the union. Young and unmarried individuals should not be participating in any sexual activities at all (Muula, 2006).

On the other hand, abstinence as advised by culture, tradition and religion is also thought to possibly be ineffective on the ground due to the fact that sometimes, in an effort to keep people ignorant and obedient, people are either misinformed or do not receive information

that is important regarding sexual health which renders it ineffective to some extent in preventing HIV (Mokwena & Morabe, 2016). Abstinence is also argued to be inefficient as it doesn't account for the other ways of transmitting or acquiring the HI Virus, neither does it account for people already HIV positive directly, but secondarily where they would not acquire the virus but they could avoid transmitting or spreading it to either HIV negative people or another HIV positive person; which would give them a different variant due to reinfection (Muula, 2006). Abstinence is seen as being unacceptable by young people of this generation, deeming abstinence an old method that is inapplicable in the modern day where young people and unmarried people have rights and are more sexually liberated than years ago (Planes et al., 2009). This generation believes that rather than preaching abstaining from sex (protected or unprotected), providing correct and adequate knowledge on HIV and AIDS transmission, prevention and treatment is far more important, practical and efficient in this generation as it will equip people with the right information to make an informed and personal decision regarding participating in sexual activity (Mofolo, 2010; MacPhail & Campbell 2001).

Knowledge and awareness of HIV and AIDS transmission, prevention strategies and treatment methods

"UNAIDS (2000b) notes that general awareness of AIDS is no longer important in AIDS prevention but accurate knowledge of how HIV is transmitted is important" Akwara, Madisea, & Hinde, 2003, p. 392). This shows that it is not that people are not aware of the AIDS pandemic, but another problem is rather the question of how far accurate the information they have heard or come across is, if there is any truth at all in some instances (Chimonyo, 2015).

For one to be able to practice safe sex and prevent transmission of HIV or treat HIV and AIDS, it is vital that one has accurate and adequate knowledge on how HIV and AIDS develop. Accurate knowledge about HIV prevention could include how to choose and use barrier methods such as condoms properly, how to avoid risky situations that may lead to risky behaviour related to HIV transmission and etc. as well as how to treat HIV and AIDS as well as prevent your unborn child from becoming infected with the HI Virus (Vandemoortele & Delamonica, 2000). Education and awareness are vital when it comes to changing behaviours and perceptions of HIV and AIDS in individuals. This is because one is able to challenge certain beliefs, norms and values they are socialised to believe religiously and

culturally. Individuals are empowered to as the how, why, what, when etc. questions in order to discover the truth and make informed decisions regarding their lives (Vandemoortele & Delamonica, 2000). It is also vital that individuals and communities be empowered to participate and contribute to HIV and AIDS prevention and treatment strategies that they will more easily accept and agree with, accounting for their cultures and religious beliefs that will not contribute to risky behaviours that will lead to HIV and AIDS transmission (Harrison, Newell, Imrie & Hoddinott, 2010).

Both basic education and specifically HIV and AIDS education is important in the fight against the AIDS pandemic in Africa. It should also be noted that basic education is vital for an individual to understand and make sense of sexual education (Vandemoortele & Delamonica, 2000).

A lot of people in Africa find themselves in such hard socioeconomic situations that result in them using all means possible to be able to make some form of income, so that they can have a roof over their heads and can provide for themselves and their families the mere basic day to day needs; such as food, clean water and clothing. These poor populations are not able to afford education in most cases, meaning they have no professional qualifications and thus cannot get a formal job (Dzimnenani, 2007; Chimonyo, 2015). Among the severely affected by poverty are women who are in charge of a household, with no form of income. This gives rise to alternative ways of getting money, such a commercial sex, that do not need any education, skills or qualification, all to take care of themselves and their families (Dzimnenani, 2007; Chimonyo, 2015). Sex workers in many communities are blamed to the cause of HIV transmission (MacPhail & Campbell, 2001). Basic primary school education enables individuals to become literate and more employable. This in turn reduces the chances of people engaging in risky behavior in order to get money; such as female prostitution in order to make ends meet and become economically stable. Also, as more and more educational institutions have implemented programs that teach children about HIV and AIDS, the population of kids that do not go to school for the various reasons are unable to access this information, thus limiting their knowledge of HIV and AIDS to what they may hear from friends and what is believed by their parents and communities (MacPhail & Campbell, 2001; Chimonyo, 2015).

The education of the public on issues surrounding HIV and AIDS is a strategy that has been implemented in the effort to make people not only aware of this pandemic but have correct

information regarding this issue. This responsibility has been taken both government and NGOs; teaming up to provide accurate information to the public on what HIV and AIDS are, how the virus can be transmitted, what precautions to take against risking infection with HIV; such as safer sexual practices, and how HIV and AIDS has no cure, but can be treated and how. The education and awareness programs are implemented by governments and NGOS, and knowledge is imparted through formal and informal channels (Leclerc-Madlala, 2002; Chimonyo, 2015).

An example of informal HIV and AIDS education is through voluntary peer education, such as the 9 week HIV and AIDS education course offered by the University of Pretoria, at the Centre for the study of Sexuality, AIDS and Gender (MacPhail & Campbell, 2001). In the year 2000 in South Africa, government also implemented a strategy where a subject that is compulsory in public high schools called Life Orientation (LO) was added to each learner's other subjects (Avert, 2017a). Having both the regular teaching staff and students' peers teach student about safer sex and HIV and AIDS is found being problematic in a number of ways. One problem noted is that some teachers are shy and unable to explain and talk to the students freely and on the other hand peer educators in many instances lack authority and respect over and from their fellow peers (Harrison, Newell, Imrie & Hoddinott, 2010). Teaching staff also are criticized as lacking adequate training on the subject matter, more still that there is a shortage of them (Avert, 2017a).

The main age group targeted by this initiative is young adults in order to equip them with the right information so that they make careful and informed decisions regarding sex and HIV and AIDS when and if they decide to be sexually active. All these have contributed to the drop in HIV and AIDS cases and deaths seen from 2013 to 2014; from 60% to20% (Avert, 2017a).

Social media including television programs and the internet have also played an important role in the impartation of HIV and AIDS education and awareness around the world. As the world becomes more globalized and technologically advances, social media plays a huge role in the daily lives of majority of people worldwide (Avert, 2017a). This fact has been noted and used as an advantage in reaching out to people and spreading awareness about HIV and AIDS, how it's transmitted, prevented and treated. Social media not only provides a means to access to information and communicate, but also it protects the identities of anyone using these platforms to share knowledge and concerns or ask questions openly, reducing the risk

or probability and extent of being stigmatized and discriminated. Social media and technology also avail access that might not be there physically to populations in many geographical areas out of direct reach (Taggart, Grewe, Conserve, Gliwa, & Isler, 2015). Programs and films on the television and internet that aid this include MTV's Shuga, Soul City and Soul Buddy (Avert, 2017a).

However, there are some disadvantages of using social media as a strategy of HIV and AIDS education and awareness. The first disadvantage is the cost of using social media as well as the access to technology. Many of the populations affected and infected by HIV and AIDS are from the third world countries that are not as technologically advanced and have more people living in poverty that rich people (World Health Organization, 2015. Social media works using technology, this costs money and demands a device, such as a smart phone or a laptop, computer or tablet and also internet access requires money to purchase access as most areas do not have free access to Wi-Fi provided by some governments. Also, some platforms, such as Wikipedia and Facebook among many others, are not really regulated or peer reviewed to make sure the correct and safe information is shared among social media and internet users. This brings the risk of incorrect information being passed as well as misinformation on many aspects of HIV and AIDS (Taggart, Grewe, Conserve, Gliwa, & Isler, 2015).

All this means that due to inequality and poverty, only a small percentage of the populations most at risk of acquiring HIV are not able to use social media to their advantage to learn more about HIV and AIDS.

The people, now equipped with accurate information and knowledge regarding HIV and AIDS, are able to question some cultural beliefs and practices contributing to the spread in the deadly virus, allowing advocacy also in order to ensure practices such as female genital mutilation are stopped (Mofolo, 2010), and negotiate the safer practice of male circumcision by sterilizing of tools or using different ones for each initiate (Sovran, 2013). With knowledge on HIV and AIDS prevention methods, condoms are also seen as more than just a type of contraceptive, but as an important way of practicing safer sex with partners, regardless of the seriousness of the relationship (MacPhail & Campbell, 2001; Chimonyo, 2015).

Stigma and discrimination is believed to be a very big problem in healthcare. This is seen where fear of stigma and discrimination makes individuals needing care and treatment of

HIV and AIDS or related illnesses scared to come out and seek it (Deacon, 2006). This discrimination and stigma towards HIV and AIDS infected individuals can also be reduced with education on the matter at hand, resulting in the challenging and expulsion of myths such as the possibility of HIV infection by being touched by a HIV positive individual (Deacon, 2006).

However, the belief that openly talking about sex and sexually related topics is a taboo in many African communities, with parents also being naïve about the involvement of their adolescent children in sexual activities (MacPhail & Campbell, 2001; Chimonyo, 2015). This causes a huge problem especially because an individual's behaviors are shaped and guided by how they are socialized, in their families and communities. Family and community are also people that can be trusted to have an individual's interests at heart and would be responsible enough to impart correct and safe information to children and adults regarding HIV and AIDS transmission, treatment and prevention (Mutema, 2013). People are therefore left looking towards social media as well as formal and informal education to learn about HIV and AIDS as it isn't something openly discussed and talked about among lots of African families and communities.

Although many people believe that 'knowledge is power', this doesn't necessarily increase the extent of HIV prevention and treatment. This is because even with the correct information regarding HIV and AIDS, still, people engage in risky behavior. This may be due to ignorance, poverty and other socioeconomic factors as well as religious and cultural norms, values and beliefs (Dube, Nkomo & Khosa, 2017). Trinitapoli, (2009) as cited in Sovran, (2013, p. 38) support this fact by stating that "religious teachings may be detrimental by banning certain protective measures, such as condom use, or denying young people education about safe sex".

Dzimnenani supports this notion, however arguing about the relevance of the information in some extreme situations, in his statement that "it is not simply that information, education, and counseling activities are unlikely to reach the poor but that such messages are often irrelevant and inoperable given the reality of their lives" (Dzimnenani, 2007, p. 606). This means that a number of people that are involved in risky sexual behavior due to economic strain; poverty, do know the risk they are taking but they may have no other choice as they need to do whatever they can to make a living and afford sometimes the bare minimum day to day basic needs . For example, in the event that a customer paying for sexual favors insists

on not using a condom, this would result in the individual sex worker turning a blind eye to the knowledge of the risk involved in unprotected sex that they have (Dzimnenani, 2007; Chimonyo, 2015).

2.4.2 HIV and AIDS treatment strategies

HIV and AIDS treatment strategies involve methods in which someone who is already HIV positive can better their health and extend their life through the consumption of ARV drugs in different cases, in turn reducing their viral load and strengthening their immune system; thus reducing the probability of the development of Opportunistic Infections (Johnson et al., 2017). Someone who is HIV positive but not in the AIDS stage can also be prevented from that progression in a number of ways which focus on the treatment of HIV and suppression of viral load so that it doesn't further develop into the AIDS stage (Poku, 2002). HIV and AIDS treatment strategies include ART and PMTCT.

Antiretroviral Therapy (ART)

ART is the main form of HIV and AIDS treatment. This treatment involves the use of ARVs; which are drugs (WHO, 2016), in the form of a combination of three drugs in the form of one pill that aims to stop different, compressing the stages in the multiplication of the virus, in order to be able to fight it and in turn boost the immune system viral load (WHO, 2016). This is called Fixed Dose Combination (FDC) (The World Health Report, 2004). An ARV naïve person, that is, someone who has never taken any form of ARV treatment, would take this FDC as a first line regiment. On the other hand, a person who has been on ARVs before is not ARV naïve and thus would not take a first line regimen FDC but a second line regimen (AIDS Info, 2016). Antiretroviral drug treatment (ART) is taken in different instances due to the reason for taking them as a FDC containing either 2 or 3 drugs.

ART is given either as ARVs to an HIV positive person in the AIDS stage, to a pregnant HIV positive women to prevent transmission to the unborn child; Prevention of Mother to Child Treatment (PMTC), as Post-Exposure Prophylaxis (PEP) and Pre-Exposure Prophylaxis (PrEP) (AIDS Info, 2016). ART was formerly only given to patients in the AIDS stage; where someone's CD4 count was either less than or equal to 200 or someone had 2 or more Opportunistic Infections such as TB (Poku, 2002).

There has been very good progress in South Africa when it comes to ART. This method of HIV and AIDS treatment is now available to anyone diagnosed HIV positive. This is

regardless of the CD4 count or viral load and the presence of any Opportunistic Infections (Johnson et al., 2017). South Africa boasts of the largest ART program not only in Africa, but globally which also is funded mostly through domestic resources (Avert, 2017a).

Prevention of Mother to Child Treatment (PMTCT)

PMTC is the treatment given to either a pregnant woman and or a breastfeeding woman who has tested HIV positive; in an effort to prevent the mother from transmitting the HI Virus to the unborn child (WHO, 2016). Depending on whether the mother is ARV naïve or not, they are given either first line or second line regiment FDC which will contain a combination of 3 ARV drugs that will not affect the baby or the hormonal balance. HIV positive pregnant women are now advised to get on ART after being tested as early as possible in the pregnancy after finding out (AIDS Info, 2016). Although PMTCT is seen mostly as a woman's responsibility as they are the ones directly and immediately affected, there is emphasis currently on the fact that men should become involved in the promotion of PMTCT; Male Partner Involvement (MPI) (Matseke, Ruiter, Rodriguez, Peltzer, Setswe & Sifunda, 2017).

In South Africa, PMTCT is responsible for the reduction of child mortality rates due to HIV related illnesses, seeing 95% of HIV positive pregnant women on ART in 2015 (Avert, 2017a).

2.5 Cultural beliefs, practices and HIV and AIDS transmission, prevention and treatment

Culture can be 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" (Mofolo, 2010). Culture plays a large role in HIV transmission, as well as effectiveness of implemented HIV and AIDS prevention and treatment initiatives in Africa. This is seen mostly where a number of cultural beliefs and practices encourage a number of behaviors; which in turn increase the chances of HIV transmission and or the progression of HIV to AIDS (Chimonyo, 2015). There are a number of cultural norms, beliefs and practices that are associated with the transmission, prevention and treatment of HIV and AIDS in Africa. Some of these cultural norms, beliefs and practices are female genital mutilation, non-medical male circumcision, polygamy, gender inequality; such as patriarchy and the superiority of males, attitudes on condom use; especially the female condom, denial of the

virus and its causes, and instead attributing it to witchcraft; among many (Molofo, 2010; Brown, Trujllo & Macintyre, 2001; Chimonyo, 2015). These are seen mostly as having negative impacts on HIV and AIDS prevention and treatment strategies as they increase the risk of HIV infection and the development of AIDS, as well as the failure or inefficiency of treatment and prevention methods. This is because a number of things taught in HIV and AIDS education and awareness initiatives sometimes contradict some cultural norms, beliefs and practices (Brown, Trujllo, & Macintyre, 2001).

2.5.1 Female Genital Mutilation (FGM)

Female genital mutilation (FGM) is a practice that occurs in a number of African countries which include Ethiopia, Sudan, Somalia and Northern Kenya. FGM can be described as "the removal of part or all of the external female genitalia and/or injury to the female genital organs for cultural or other non-therapeutic reasons" (WHO Technical Working Group as cited in Mofolo, 2010, p. 3). This practice is performed on females from new born babies all the way up to girls that have reached adolescents (Chimonyo, 2015).

There are four types of female genital mutilation according to what the procedure entails. The first type is named *clitoridectomy*, where the hood of the clitoris is removed. The next type is the *partial removal of the labia minora and the clitoris*, which is the most common type of FGM in Africa. Another type "*known as infibulation*, involves the complete removal of the clitoris and labia minora, together with the inner surface of the labia majora" (Mofolo, 2010), going on to sew the opening together, leaving a small opening to allow the passing out of urine and menstruation blood. In the last type of female genital mutilation, the clitoris and genital area are burned in a process called *cauterizing*, also involving the insertion of substances in order to tighten the vagina. (Mofolo, 2010; Chimonyo, 2015).

There are a number of reasons given for the practice of FGM. It is seen as a rite of passage by young girls into womanhood. This is a compulsory procedure performed on a number of girls in the same age groups at the same time, usually in the bushes away from a village in order to be recognized in communities as a woman. Another reason is to ensure that a young woman is a virgin at marriage. This relates to the sewing up of the female labia, only to be cut open by a husband on the night they are married, with the belief that the process of sexual intercourse after the process is painful with little or no pleasure on the female's part; also reducing the probability of infidelity. It is however argued that these are excuses to control the females and their bodies, as seen even in the continual sewing and cutting open of the

vagina at the absence of their husbands over a long period of time and at their return (Mofolo, 2010; Chimonyo, 2015).

As a result of FGM, young ladies are left scared, with wounds that take long to heal, allowing for easy infection and continuous bleeding. Also, because the vagina is narrow and tight due to infibulation, sexual intercourse leaves their genital area braised and traumatized, allowing small tears; openings that easily can lead to HIV infection during sexual intercourse with a HIV positive partner (Mofolo, 2010; Chimonyo, 2015).

2.5.2 Non-medical Male Circumcision

Non-medical Male circumcision is another cultural practice, similar to female genital mutilation, however performed on males. Male circumcision can be defined as the "surgical removal of all or part of the foreskin of the penis, practiced as part of a religious ritual usually conducted shortly after birth or in childhood; as a medical procedure related to infections, injury or anomalies of the foreskin; or as part of a traditional ritual as an initiation into manhood" (Siegfried, Muller, Volmink, Deeks, Egger, Low, Weiss, Walker & Williamson, 2003, p. 1). In the cultural context, the procedure is done by a traditional practitioner, away in the mountains at an initiation school. It is done as a rite of passage of young boys into manhood, losing status and respect in some communities if not performed (Wilcken, Keil & Dick 2009; Chimonyo, 2015).

In some cases, it is of great importance, with individuals being captured by their brothers and fathers and being forced to get circumcised at their unwillingness to do so voluntarily. After the procedure, the initiates are not given any medication for pain or quick healing, but stay in the remote areas; the location of their initiation schools, where they are expected to heal naturally as they are taught about sexual health and how to be a man at their return to their community (Marck, 1997; Chimonyo, 2015).

Some cultures place great importance on the process of male circumcision being performed using single knife on all the initiates, without sterilizing the tool after every procedure, as in the Logoli tribe. This is the Nonmedical way of performing male circumcision; which is associated with HIV transmission if one of the initiates is HIV positive (Marck, 1997; Chimonyo, 2015).

2.5.3 Polygamy

The next cultural practice in a number of African countries is polygamy. It can be described as the practice of having more than one spouse at a time openly, with some instances where the first wife of a man actually helps him in finding a suitable second wife, as in Uganda (Dzimnenani, 2007). Male polygamy, which is when a man has more than one wife at the same time, is in many cultures acceptable, as long as he pays dowry or lobola for them, a perfect example of a polygamist being the Swaziland King, who in 2000 had more than a dozen wives (Dzimnenani, 2007). It is believed that "men cannot do without sex" (Akwara et al., 2003, p. 386), and thus if they are not satisfied sexually by their current wife or wives, they may take another one, which is also an advantage in the absence of one, where the sexual needs of the man can still be met (Dzimnenani, 2007). Polygamy is also seen as a sign of wealth, prestige and status in some communities, as well as a sign of manliness (Leclerc-Madlala, 2002), with a man in a monogamous marriage being teased as being a 'bachelor' (Dzimnenani, 2007). This is because only a rich man is able to pay for a number of women's bride price, usually in the form of cows. However, the opposite of this is true in the situation of a female polygamist. Such a woman is seen as being promiscuity and is discriminated against; shunned and judged as being irresponsible and unacceptable (Akwara et al., 2003; Chimonyo, 2015).

Polygamy practiced in faithfulness between an HIV negative man and his HIV negative wives has no direct risk in spreading HIV. However, in the event that one of the partners is HIV positive, unknown to the rest, together with belief that condoms are not necessary to use in steady relationships and among married people, this will result in all partners involved being infected with the HI Virus (Sovran, 2013).

However, efforts are being put into adopting the culture of 'monogamy' in an attempt to curb the spread and transmission of HIV and AIDS. Culturally in a lot of instances, polygamy is encouraged which contradicts the strategy of encouraging monogamy, which is seen by many cultures in Africa as being a Western value. However, efforts are being made to encourage monogamy. An example of this is a strategy called the "O icheke-Break the chain campaign led by National AIDS Coordinating Agency (2009)" (Chilisa, Mohiemang, Mpeta, Malinga, Ntshwarang, Koyabe, & Heeren, 2016, p. 564) in Botswana. Cultures that encourage monogamy have a positive and influential role in HIV and AIDS transmission, prevention and treatment by reducing the possibility of the spreading or acquiring of HIV and AIDS due to promiscuity and polygamy.

Also, at the death of a young woman's husband, probably due to HIV and AIDS related illnesses, but unknown to the public, a ritual of cleansing is preformed, believed to chase away the spirit of the deceased. This involves the hired spirit cleanser having unprotected sex with the widow. This cleanser is usually a 'professional' who has and still performs this ritual on many other widows, who might have infected him with the virus, which he in turn, infects the unknowing widows too. In the event that the deceased man was a polygamist, these results in multiple rituals cleansing being done on each of his wives, usually one after the other, increasing the probability of multiple infection by the same person within a short period of time (Sovran, 2013; Chimonyo, 2015).

2.5.4 Gender roles in society

Culturally, there are different gender roles in a community. From young ages, boys and girls are socialized to know where they stand in society and what their duties are, including the power relations or dynamics towards each other (Mofolo, 2010; Chimonyo, 2015).

A man is responsible for working and providing for his family's needs. He is the head of the house, having power over his wife (Albertym, 2003) and the ultimate say in a number of issues, including sexual behavior. A woman on the other hand is seen as a nurturer, whose role is to take care of her children and family and submit completely to her husband and having no power to negotiate or control of many issues, especially regarding sexual activity (Mofolo, 2010). Her role is to provide sexual fulfillment to her husband, and thus has no right to deny him this right (Albertym, 2003), nor suggest or negotiate safer sexual practices such as condom use (World Health Organization, 2004; Chimonyo, 2015).

The inability of a woman to negotiate safer sex puts her at risk of becoming infected with HIV from her husband who may for example be a migrant worker engaging in unprotected sex at the mines as he is away for work (Marks, 2002), especially because she has no power to question his sexual behaviours or status in order to protect herself (Bunnell, Mermin & De Cock, 2006; Chimonyo, 2015). This is true especially in the case where they are married. Introducing or suggesting using condoms is not only awkward but causes a lot of arguments and possible divorce due to the belief that there is mistrust and suspicion of infidelity. Divorced women in many cultures are looked down upon and shunned in society and are a poverty risk as in many families the husband would've been the main or sole breadwinner of the family. This further deters a lot of women from suggesting using condoms with their partners (Dube, Nkomo & Khosa, 2017). Such an expectation in a lot of cultures renders a

lot of women compliant when it comes to unprotected sex (Peltzer, 2000) and unable to protect themselves from HIV and AIDS, regardless of whether they have the necessary knowledge.

2.5.5 Cultural beliefs surrounding causes of HIV AND AIDS

There are a number of beliefs in different communities surrounding what the causes of HIV and AIDS are. These beliefs range from the real cause of HIV and AIDS being spiritual in nature, conspiracy theories; for example that the virus was created in a laboratory by white people and in lastly, in some cases, denial of the existence of the epidemic and misinformation about the transmission of the virus (vanDyk, 2001).

Like Former President Thabo Mbeki, lots of people also believe that the cause of AIDS is not a viral infection (The Guardian, 2008). Some people believe that supernatural activity is the cause of HIV and AIDS. Two main explanations are provided to support these views and beliefs. The first one is that HIV and AIDS is the result of being bewitched (vanDyk, 2001). This can be due to jealousy on the good fortune of another. Also, it is believed that HIV and AIDS can result from a curse by the spirits and ancestors, as a sign of disapproval of something or as revenge or some form of punishment on severe wrong doing, rendering for example the use of condoms as useless in trying to prevent HIV transmission (vanDyk, 2001; Chimonyo, 2015).

Another explanation from a group in Namibia is that God infects people with HIV and AIDS, whether as a punishment or just because that is the path he has decided for your life, believing that nothing can be done to prevent or treat this epidemic as God had the final say (Bogart, Skinner, Weinhardt, Glasman, Sitzler & Kalichman, 2011). Beliefs like this result in seeking of alternative ways to try and treat or cure the infection, such as seeking traditional medication from traditional healers, some going for up to months after being diagnosed with the virus such as seen in a case in KwaZulu Natal, South Africa (World Health Organization, 2004), in turn giving the virus more time to kill your immune system, increasing the number of people developing AIDS in a short period (World Health Organization, 2004; Chimonyo, 2015).

A conspiracy theory exists as to how HIV and AIDS originated. This is the theory that HIV and AIDS was manufactured, in a scientific laboratory, by white people, with the intention of killing large populations of black people; in order to eventually completely eliminate the

black race (Bogart & Thorburn, 2005). This strong racial conspiracy belief stems from historical occurrences such as Apartheid in South Africa, slave trade to the western countries, and the Zimbabwean Chimurenga Liberation Struggle, where the brutality and violence against black people by white people was openly shown. At the attaining of Independence, these actions of hatred and suppression could not be openly shown as power was retained to the black populations. HIV and AIDS is then believed by some to be a plan made white-former colonizers to eliminate black people in order to retain power and the lost resources. This conspiracy theory continues to believe that there is in fact a cure for HIV and AIDS, but, it is being withheld by top government officials (Bogart & Thorburn, 2005). This in turn causes mistrust among people of their government official, what they say or any strategies they may implement, resulting in the disregards of risk warnings encouraging safer sex practices such as condom use (Chimonyo, 2015).

2.5.6 Perceptions and beliefs about condoms

Over the years, studies have shown that there is a very strong relationship between what people believe about HIV and AIDS and the use of safer sex methods of infection prevention, therefore, negative beliefs on the use, relevance and effectiveness of for examples condom use will reduce the probability of condom use (Akwara et al., 2003; Chimonyo, 2015).

The use of condoms in prevention of pregnancy and prevention of transmission of STIs and STDs, including HIV and AIDS; is seen in different ways. In some African cultures, due to misinformation and wrong beliefs about how HIV and AIDS is caused, the probability of using condoms to ensure safer sexual activities is low. This is because condoms are thus seen as irrelevant, for example where beliefs are high that witchcraft is the cause of HIV and AIDS infection. This then to them may seem like a condom cannot prevent supernatural happenings (Bogart et al., 2011; Chimonyo, 2015).

Another belief is that condoms use is in fact are what cause HIV infection. A literal explanation of this stems from conspiracy theories of white former colonizers determined to wipe out the black population in Africa, thus infecting the lubricant in the inside of a condom with the HI Virus. Another explanation is that the white condom producers make tiny holes in the condoms before donating them to Africa, meaning there barrier they are meant to provide is broken, thus unreliability of them as a HIV and AIDS prevention method (Bogart et al., 2011). Another indirect connotation is that the distribution of condoms in actual fact encourages sexual activity, which in turn increasing the risk of HIV infection, as condoms are

not 100% effective, as in the case of incorrect use, leading to them breaking (Akwara et al., 2003; Chimonyo, 2015).

Popularly, some people believe that a condom reduces the level of pleasure during sexual intercourse, giving the reason to not using a condom as with a popular saying in many countries, such as Malawi being "you cannot feel the sweetness of a sweet if you consume it with the wrapper" (Muula, 2006, p. 23).

Many people also claim that not only are condoms unpleasant to use and to buy, but also that they change the mood. Stopping, or rather pausing foreplay during sexual intercourse in order to wear a condom correctly before any form of penetration takes place is said to disrupt the whole mood and thus many people would rather not pause to do this and go ahead and have unprotected sex (Peltzer, 2000). This argument can be said to be a mere excuse as it is true only in the case of male condoms. This is because a male condom cannot be worn beforehand, but rather when the penis is erect and before penetration. In the case of female condoms; due to the way they are manufactured, the female condom can be inserted up to 3 hours before the actual sexual act that is being anticipated (Marie Stopes South Africa, 2014).

People, in some cases, have not used condoms during sexual intercourse, attributing the reason as being that condoms are expensive and inaccessible. This view still is popular because there is negative connotation against the free condoms provided by government, saying they smell bad and do not come in sizes, need therefore arising to buy the more expensive brands, which may come flavored and with size, such as durex and lovers plus. Young people may also say that condoms are inaccessible, even though provided for free at health institutions such as clinics and hospitals, due to the discrimination of especially young people engaging in sexual activity (MacPhail & Campbell, 2001).

Condom use is also believed to be only necessary when engaging in casual sex. In serious or steady relationships, the use of condoms or suggestion to use condoms is seen as the result of lack trust in your partner or that you do not love them, as well as infidelity (Leclerc- Madlala, 2002).

Lastly, in extreme cases where there is denial of a virus causing HIV infection and probably eventually AIDS, there is belief that sexual activity therefore doesn't lead to infection, thus condoms are useless (The Guardian, 2008).

2.6 Education as a factor influencing perceptions on culture and HIV and AIDS

As this research seeks to explore the perceptions of university students, the important concept of higher tertiary education comes up. University students are students who have reached a higher level of tertiary education (Voffal, 2011). Over the years, as one becomes more educated, a number of perceptions that one has learned in the past, due to socialization will in most cases change (Campbell& MacPhail, 2002). As you learn more there is a tendency to question former perceptions and beliefs in a number of aspects of one's life, especially social life. Education thus plays a very big role in the perceptions that I expect to discover in the research.

Areas and or countries as whole with low adult illiteracy rates tend to have higher recorded HIV rates. This goes on to reiterate the fact that education does in fact play a big role in how HIV and AIDS transmission, prevention and treatment (Gregson, Waddell & Chandiwana, 2001). In lot of African cultures, HIV and AIDS and any talk of sex or sexuality are seen as a taboo; something not talked about openly. Knowledge and or awareness of HIV and AIDS transmission, prevention or treatment is therefore not learnt by children through their families and or communities, but rather in schools and educational institutions through a number of programs, from as early as primary school (Leclerc-Madlala, 2002). This then means that in cases like this, if one has no access to educational institutions due to either; poverty or other resources, their knowledge surrounding HIV and AIDS may be minimal, or in extreme rural poor locations close to nothing, with the exception of the general knowledge of what HIV and AIDS is (MacPhail & Campbell, 2001).

However, research has shown that in some cases risky sexual behaviour of people is not due to not being aware or educated in the aspects surrounding HIV and AIDS transmission, prevention and treatment (Campbell& MacPhail, 2002). One reason is rather through peer pressure and unequal power relations. It in a way implies that due to knowledge and awareness on HIV and AIDS prevention and treatment, people are becoming more sexually liberated and practicing even more risky sexual behaviour, knowing that there is treatment for HIV and AIDS related sicknesses (Leclerc-Madlala, 2002). Another reason attributed to this is that a number of people that are involved in risky sexual behaviour may do so due to economic strain; poverty. In some cases, it is not because they do know the risk they are taking but they may have no other choice as they need to do whatever they can to make a living and afford sometimes the bare minimum day-to-day basic needs (Dzimnenani, 2007). An example of this is if one resorted to sex work due to poverty. Even though they may know

the risks of unprotected sex in leading to possible HIV transmission, if the paying customer refuses to use a condom as a HIV transmission preventative measure, due to desperation, the sex worker will have no choice but to obey in order to make a living (Dzimnenani, 2007).

2.7 HIV and AIDS, Culture, Education and Social Development

"Social development is a process of planned social change designed to promote the well-being of the population as a whole in conjunction with a dynamic process of economic development" (Midgel, 1995, p. 25)". Simply put, social development can therefore be described as the betterment of people in all aspects; physically, emotionally, economically, psychologically and mentally.

Sustainable development thus can be described as when the current development satisfies the needs of the populations carefully so that future generations may also have their needs met successfully and efficiently (World Commission on Environment and Development, 1987) as cited in Midgley, 1995). This means the ability of the different needs of the population currently are satisfied in a way that does not waste resources and protects the environment, to ensure that the populations in the years to come can in turn have their needs met.

Sustainable social development can thus be described as a process of development for all, rather than distorted development where by one aspect, for example the economy in a country, is doing well and growing when on the other hand, social growth is either stagnant or shrinking, with poverty rising and some populations being at a higher risk of HIV and AIDS due to for example, lack of education and awareness. Sustainable social development aims to do more than ensure a person's basic needs are met; it aims to encourage and empower people to do better for themselves and grow individually (Midgley, 1995). It also recognizes the importance of indigenous knowledge, cultures and traditions, as well as the abilities of the specific population needing to develop, creating a sense of ownership and encouraging participation and acceptance of HIV and AIDS awareness and educational initiatives to reduce transmission and encourage prevention and treatment; which all result in increased effectiveness and sustainability of these initiatives in the fight against HIV and AIDS in Africa (Chambers, 1994). Emphasis is placed on social development for all, regardless of race, gender, and nationality etc., not only in developing countries but worldwide as seen in the Sustainable Development Goals (ICSU, ISSC, 2015).

The eradication of HIV and AIDS for an HIV free world is therefore an important part of social development. This proposed research goes in line with this; as understanding the perceptions surrounding Culture and HIV and AIDS among university students will help increase the efficiency and effectiveness of prevention and treatment strategies for the possibility of an HIV and AIDS free world in future generations.

2.8 Theoretical framework

Theories are crafted to predict, explain and understand phenomena. Often-times, theories tend to challenge and extend existing knowledge within the limits of critical bounding assumptions. A theoretical framework is the basic structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists (Grobler & Schenck, 2009). Theory seeks to help explain, if not then possibly predict the phenomena that we experience and occur in the world. In qualitative research, researchers use theory as means of explaining behaviour and attitudes (Creswell, 2003). The theory used to guide this study was that of social cognitive theory. "The rationale behind cognitive theory is that the affects and behaviours of human beings are largely determined by the way in which they structure their world" (Lesser & Pope, 2007, p. 60). This basically informs us that the way in which people think result in the emotions that they experience (Lesser & Pope, 2007). Sheafor and Horejsi (2006) identify this theory as cognitive-behavioural theory due to their interpretation of how the cognition of individuals produces thoughts, which thereafter results in emotions and behaviours that are exerted into the world. This is because it is believed that how people think has a strong influence on their emotional reaction as well as how they then behave (Sheafor & Horejsi, 2006) It is emphasized that, in this theory, the motivation and regulation of human behavior is due to the exercise of self-influence. Future responses to events are believed to be motivated and regulated by the cognitive representation of what occurs in the present. Therefore the actions and behaviors of individuals are due to the cognitive processes of the events that have taken place or are happening in the present (Bandura, 1991). .

Person-centred approach

The theoretical framework the researcher used in this study was the Person-Centred Approach. This approach deals with the self or identity of a person, group or community. It looks at those experiences that the client cannot allow into his or her conscious mind, because the experiences threaten the clients perception of who he or she is (the clients self)" (Grobler

& Schenck, 2009). According Carl Roger; who developed the approach, it is very important for the facilitator or researcher to be very understanding as well to accept the participants and their views, values and perceptions with no judgment, whether or not they agree with the participants. This is because the facilitator is in this case seeking information and knowledge that is personal and thus only the participants can know and relate what they perceive (Grobler & Schenck, 2009). The Person-Centred Approach draws from a number of propositions or assumptions. One of the assumptions speaks to one's experiences and perceptions being personal and thus can only discovered through inquiry of one party and answering or sharing of another. The second recognizes that experiences, beliefs or perceptions of the same phenomenon, in this case the role of culture in HIV and AIDS, can differ from person to person; hence they are unique. The last two assumptions speak to the fact that an individual's behaviour and values depend on their experiences and perceptions; which in a number of cases they are socialized by, as they interact with their different societies (environment) (Grobler & Schenck, 2009). In this case, the perceptions the students have on the role of culture in HIV and AIDS is determined both by the way they are socialized culturally, as well as their education and knowledge on HIV and AIDS.

2.9 Chapter summary

In this chapter, the researcher provided an overview of the HIV and AIDS pandemic both as a global issue and in South Africa. The chapter also provided HIV prevention and treatment strategies, followed by an integration of the concepts of HIV and AIDS and culture. Furthermore, cultural practises and beliefs affecting HIV transmission, prevention and treatment were discussed. Education as a factor influencing perceptions on HIV and AIDS and culture is explained. The chapter is concluded with the theoretical framework used in the study. The next chapter discusses the methodology of the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used in the study. It begins with the research question, aim and objectives of the study. It also describes the research approach, design, population and sampling procedures, the research instrument and pretesting of the instrument. In addition, explanations are made of how the data was collected and analysed. The chapter concludes by stating the limitations as well as the ethical considerations that were considered during the study.

3.2 Research questions

The major research question was:

What are the perceptions of university students regarding the role of culture in the prevention and treatment of HIV and AIDS in Gauteng in South Africa?

3.2.1 Research aim and objectives

3.2.2 Primary aim

The main aim of the study was to explore the perceptions of university students regarding the role of culture in the prevention and treatment of HIV and AIDS in Gauteng in South Africa.

3.2.3 Secondary objectives

The objectives of the study were:

- To explore university students' knowledge about the transmission, prevention and treatment strategies of HIV and AIDS in Gauteng.
- To elicit the views of university students on the role, if any, that cultural norms, practices and beliefs play in HIV and AIDS transmission, prevention and treatment in Gauteng.
- To investigate if the exposure to formal education has any influence on university students' views regarding the role of culture in HIV and AIDS transmission, prevention and treatment in Gauteng.

3.3 Research approach and design

The research approach that was used was qualitative in nature. A qualitative approach is defined as "exploring and understanding the meanings individuals or groups ascribe to a social or human problem" (Creswell, 2009, p.4). Qualitative studies take into account the lived experiences of phenomena and they allow for in-depth understanding of the phenomena (Sun, 2009). A qualitative approach maintains that each individual is important and unique. Therefore only they (individuals) can convey their individual thoughts and perceptions of a phenomenon; which can be very different regarding the same phenomenon (Creswell, 2009; Grobler & Schenck, 2009). In this instance, different participants may perceive the role of culture in issues surrounding HIV and AIDS differently. The qualitative approach seeks to contextualise rather than to generalise thus it is not interested in statistics and numerical findings, but thick descriptions and understanding how and why things happen instead (Creswell, 2009). It recognises that the most important thing is to gain knowledge from the participants instead of the facilitator giving out their thoughts or perceptions.

It is vital that the researcher selects the correct design which will aid the study to meet the set aims and objectives and in turn reach the study goal (Fouché & Schurink, 2011). The research design used was the case study design. It has "the ability to adapt to a wide range of methodological framework such as life history, phenomenology, grounded theory and ethnographic research" (Fouché & Schurink, 2011, p. 320). A case study design emphasizes the important lessons that can be learnt or important information that can be gathered from a single case. This also shows the value of the specific meaning each case or person puts in certain situations and contexts; forming their opinions and perceptions (Fouché & Schurink, 2011). "Rigorous qualitative case studies afford researchers opportunities to explore or describe a phenomenon in context using a variety of data sources" (Baxter & Jack, 2008, p. 543). Because the case study design requires in-depth descriptions and explanations; using personal and intimate data collection methods such as interviews, it is vital that the researcher gains the confidence and trust of the participants as well as their formal consent (Fouché & Schurink, 2011).

There are 3 main types of case study research designs, namely exploratory, explanatory and collective case studies. The type of case study design that is chosen depends on what the purpose of the study is as well as what the research question is (Yin, 2003 as cited in Baxter & Jack, 2008). In choosing the type of case study design, the researcher needs to consider if they are aiming to "describe a case, explore a case, or compare between cases" (Baxter &

Jack, 2008, p. 547). The type of case study used in this study was exploratory in nature. Yin (2003) states that the exploratory case study is used "to explore those situations in which the intervention being evaluated has no clear, single set of outcomes" (as cited in Baxter & Jack, 2008, p. 548). An explorative case study is also favored in studies where there is more than one case; in this case the perceptions of more than one participant, which the researcher sought to explore (Baxter & Jack, 2008). Although the case study chosen was mainly exploratory, due to the fact that qualitative research demands thick descriptions, the design has some characteristics that may be put under descriptive case studies. Fouché and Schurink (2011) support this view as they explain that on the ground or in practice, it is difficult to stick to exclusively one type of case study as their values may in many cases overlap. The exploratory case study design assisted the researcher in exploring and understanding each of the 7 participant's unique perceptions on what role culture plays in the transmission, prevention and treatment of HIV and AIDS in Gauteng.

3.4 Research population and sampling procedures

The research population can be defined as "an entire group about which some information is required to be ascertained" (Banerjee & Chaudhury, 2010, p. 66). The population is chosen in an attempt to specify the participant pool in which to choose a sample from in order to explore their perceptions. The perceptions that the studies explored are those of postgraduate University students, these are therefore the population group. This population was chosen based on the assumptions that postgraduate University students are mature and old enough to have adequate knowledge on HIV and AIDS as well as some cultural beliefs, values and norms that affect HIV and AIDS. Also, because these students come from different backgrounds with different cultural beliefs and norms about different phenomenon; including sexual practices and HIV and AIDS, it was assumed that a broad understanding will be solicited due to the different opinions and perceptions that arose.

A sample is a smaller group selected from the population as a representation and it "comprises elements or a subset of the population considered for actual inclusion in the study, or it can be viewed as a subset of measurements drawn from a population in which we are interested" (Strydom, 2011, p. 223-234). The exact participants the researcher attained information from are postgraduate University students in Pretoria (University of Pretoria) and Johannesburg (The University of Witwatersrand). Johannesburg and Pretoria are found in the heart of South Africa; in the Gauteng province. These are the biggest and most populated

cities, boasting of a number of the biggest universities in the country; including the University of Witwatersrand and the University of Pretoria (SA Venues, 2017). Postgraduate students from all over South Africa; coming from different backgrounds and races migrate to Gauteng for their tertiary education. The researcher chose this population as it was representative of postgraduate University students in South Africa coming from different social and cultural backgrounds. This sample was chosen also due to the geographical and financial factors that allowed convenient access to the participants as the researcher was based in Pretoria. A small sample size of 7 participants was chosen in order to allow for more in depth interviews from each participant; where the researcher was able to probe and get a deeper meaning from each participant as advised by the case study design (Fouché & Schurink, 2011).

3.4.1 Sampling procedure

There are many types of sampling techniques in qualitative research including purposive, theoretical, deviant, sequential, snowballing, key informant and volunteer sampling. This study used the purposive sampling technique (Strydom & Delport, 2011). Purposive sampling is "also known as judgment sampling, typical cases are sought and selected for the study" (Strydom & Delport, 2011, p. 392). Purposive sampling can simply put as the calculated selection of specific participants for a study based on the researchers assumption that the selected sample will provide the date the researcher seeks to collect. This judgment based selection of participants was based entirely on the researcher's assumption that postgraduate University students in Johannesburg and Pretoria are representative of the population of postgraduate University students in South Africa and will probably have information on HIV and AIDS transmission, prevention and treatment as well as culture and how it may affect the development of this pandemic.

A total of 7 participants were purposively selected to participate in the interviews; which lasted between 20-30 minutes each. It is important to have a criterion when selecting the sample using purposive sampling (Strydom & Delport, 2011). The criterion for selecting the participants was that:

1. The participants had to all be university postgraduate students
2. The participants had to have been registered either the University of Witwatersrand or The University of Pretoria
3. The participants had to be between the ages of 21years old and 30years old.

4. Participants must also have been willing and available to participate in the research

3.5 Research Instrumentation

A research instrument can basically be described as a tool that is used to collect as much data as possible from each participant and with as much detail as possible. This study utilized a semi-structured interview schedule as the research tool. This allowed the researcher to "gain a detailed picture of a participant's beliefs about, or perceptions or accounts of, a particular topic" (Greef, 2011, p. 351), which in this case are their perceptions on the role of culture on HIV and AIDS prevention and treatment. The researcher made sure that about 90% of the time they are simply listening to the responses of the participants to the posed questions, one at a time. These questions were in a semi-structured interview schedule which included both close and open ended questions which allowed there to be flexibility as they were not set strictly, and they also allowed clarification between both the researcher and participant where there was a misunderstanding or ambiguity. These are just some of the characteristics of the semi-structured interview schedule (Greef, 2011).

3.5.1 Pretesting the research instrument

Before data collection, it was vital to pre-test the research instrument to be used; in this case, the interview schedule. This is when the interview schedule is tested, in the form of an interview with a participant who fits the sample criteria for the actual research in order for the researcher to check the appropriateness and relevance of the questions in an effort to address the problem statement and the main goal and objectives of the study (Christensen, Johnson & Turner, 2015). Conducting a pretest allows for the researcher to familiarize themselves with the procedure they will take in the actual research, as well as to discover any problems with the questions themselves, or the questioning technique in the effort to address any confusion or any other weaknesses brought out through the pretest (de Vos & Strydom, 2011). After conducting the pretest, the interview schedule may be adjusted where necessary for use during data collection to ensure the trustworthiness of the data collected (Creswell, 2003). Participant's identities will be protected by the use of pseudonyms. These will keep the identities of participants safe and private (Creswell, 2009).

Following the pretest, some of the questions according to the interview schedule had to be slightly edited to allow clarity in the way the questions were asked so that participants would not get confused. Below are the questions that were edited:

- The researcher had previously referred to HIV and AIDS as 'HIV/ (or) AIDS' and corrected this as this could have led participants to assume that HIV and AIDS were the same thing and thus could be used as interchange terms

2.) WHAT IS HIV/AIDS? This question was changed to

What is HIV and AIDS?

- The researcher also removed question 11 as it was a repetition of the previous question which might have then confused the participants as they would've already answered the question.

11.) What connection do you see between HIV/AIDS and Culture? This question was removed as it was a repetition of question number 10.

10.) If yes, what cultural values, norms, beliefs and practices do you perceive to be connected to HIV/AIDS?

3.6 Data collection

After the research instrument was selected and tested, data collection began. This can basically be described as data gathering, where the researcher attains data from the participants through different methods (Strydom, 2011). This was done in the form of one to one face to face interviews, allowing direct contact with the participants. The researcher conducted one-on-one face to face interviews in locations that were comfortable, accessible and convenient for the participants. It was also vital to ensure that the participants felt safe in the interview locations; ensuring privacy and a calm quiet interview site. This in most cases involved the researcher traveling around Pretoria and Johannesburg in university areas to find participants meeting the set criteria.

Before the start of the interviews, the researcher explained to each of the participants the purpose of the interview and value of their participation in the interview and study. The interviews were audiotaped. This was so that the data could be recorded and used later on in its analysis when compiling the research report. Audiotape recording made sure that the data collected was stored safely and was reported correctly, ensuring the credibility of the data and findings reported (Strydom, 2011). All the interviews were conducted in English and lasted approximately between 20-30 minutes depending on how long the responses of each participant were after probing by the researcher. All the interviews were audiotape recorded; these recordings saved to be used during data analysis (Strydom, 2011).

3.7 Data analysis

The data analysis stage of research is the most important part in the compiling of the report. Thematic data analysis was used in this study. Thematic data analysis is a qualitative data analysis method "used to analyze classifications and present themes (patterns) that relate to the data (Boyatzis, 1998). It "illustrates the data in great detail and deals with diverse subjects via interpretations" (as cited in Alhojailan, 2012, p. 40). It is vital in interpreting raw data to understand it and make sense of it and groups it into certain frequently rising information in themes. Replicated data coming up in different interviews is linked. As the data is interpreted and reduced to the most important points highlighted in the transcripts, categories are developed and together with themes; are supported by literature (Schrink, Fouché & de Vos, 2011). The researcher also utilized direct quotations from the interviewees to present the data.

Data analysis involves bringing meaning and interpreting the large amount of data collected and recorded during the interview (de Vos, Strydom, Fouché & Delport, 2011).

This process involved extracting the vital data in the form of direct quotes from the participants in each interview (Schrink, Fouché & de Vos, 2011). Data analysis is described by Schrink, Fouché & de Vos (2011, p. 398) as "mess, ambiguous and time consuming. It doesn't proceed in a linear fashion". In analyzing the data, the researcher went back and forth between the audio recording and the report writing, as well as back to the literature reviewed in supporting and explaining the findings.

3.7.1 Themes and sub-themes

A theme can be described as basically bringing meaning to a pattern realized in analyzing data. Tesch (1990) explains that themes are used by researchers in ordered to categorize the common points and perceptions that emerge in the collected data. "If the themes are grouped, they can be said to be in a category" (Tesch, 1990, pg. 138). The themes that emerge can further be divided into subthemes which basically breakdown the entire theme to make it easier to understand as well as present.

3.7.2 Steps in thematic analysis

There are many different steps used in analyzing data thematically. To analyze the data collected for this particular study, the researcher used the steps advised by Terre Blanche, Durrheim and Painter (2006). These steps are as follows:

Step1: To begin with, after consent was attained by the researcher to audiotape record the interviews. The researcher had to familiarize herself with the recorded data by taking notes and transcribing each of the interviews in order to start brainstorming and start noting possible themes and repeated or similar responses to questions asked by the researcher (Terre Blanche, Durrheim & Painter, 2006).

Step2: The second step involved the development of the themes, in line with the objectives set. These were developed using the transcribed data that was collected, and in analyzing it coming up with labels and categories used to group the data. At this stage, the researcher had started noting the similarities and regularities in the participants' interviews, therefore realizing patterns (Terre Blanche et al.., 2006).

Step3: The third step according to (Terre Blanche et al., 2006) involves the coding of data. After thoroughly reading through each transcript repeatedly, the researcher used color to code the similar ideas, aligned to each objective, in each of the seven transcripts. Each color represented a similar view across all the 7 transcripts.

Step4: The fourth and final step recognized by Terre Blanche et al., (2006) involves the interpretation of the themes and subthemes developed and noted. This is the most important stage in thematic data analysis as well as in qualitative research as a whole; generally. This step sees meaning given to the different themes and subthemes developed. Interpreting the data also includes supporting as well as contradicting the interpretations provided by the researcher with the use of literature found in chapter two of the report.

3.8 Trustworthiness

Trustworthiness is a term used in qualitative research similar or equivalent to the concepts of validity and reliability in quantitative research. Due to the intimacy of the one-on-one face to face interview, it is vital that the participants feel safe and open during the interview and trust the researcher. This will ensure that the participants will be truthful and will answer all the questions honestly (Shenton, 2004). There are four main measures of trustworthiness namely credibility (internal validity), transferability (external validity), dependability (reliability) and confirmability (objectivity) according to Guba (Shenton, 2004).

Credibility

Credibility is the first and most important measure of trustworthiness. It speaks mainly to internal validity; that is, does it measure what it is in actual fact intended to measure?

Credibility focuses on the value of the truth and how accurate descriptions and data collected is (Krefting, 1991). Credibility emphasizes the importance of the findings from participants will match up in reality. This measure is vital as it directly is responsible for the conclusions developed after analyzing the data and impacts the necessity of the recommendations (Shenton, 2004). The researcher ensured credibility throughout the study by using research strategies that have been used in the past, in similar research as it has been shown to be correct. By making sure the participants are comfortable in their surroundings and knowing that privacy and confidentiality will be upheld, the participants were able to speak freely and be open and honest. Lastly, by emphasizing that their participation is voluntary and they may stop the interview or may refuse to answer a question they may not be comfortable with, participants are encouraged to be honest and true as their participation would indicate their interest and willingness to participate and provide the researcher with accurate data.

Transferability

The second measure of trustworthiness is transferability. This measure speaks to external validity. Will the findings and processes be true to other studies? How applicable is the study in different contexts in order to make generalizations to a wider sample or to the population; from the sample chose (Krefting, 1991). Transferability seeks to measure if the study is or will be compatible to other similar studies. Because of how small samples in qualitative research are, it is extremely difficult to ensure or demonstrate this and measure how transferable the data and processes used is. Also, because the findings are true to a specific context, time, group and setting, transferability becomes difficult to show (Shenton, 2004). It should also be noted that measuring and ensuring transferability is more important for someone who will in future use the study and findings in supporting and defending their future arguments in the same or related field (Krefting, 1991). The researcher tried to ensure that the study and its findings were transferable by giving a good and thorough description of the context of HIV and AIDS from the global level to the African context and narrower to the South African context. Importance of the inclusion criterion is also emphasized in the contextualizing of the study.

Dependability

The third measure of trustworthiness is termed dependability in the qualitative research context. This measure speaks to what would be termed reliability in quantitative research, it

deals with the consistency. If the context of the study was changed but the process and methods used remained the same, if the study was repeated in a different context, would the results be consistent (Krefting, 1991). Dependability depends on credibility. If there is no credibility, one cannot depend on the findings of the research. The research process should be as detailed as possible to allow the repetition of the study, resulting in measuring how dependable the study is deemed (Shenton ,2004). It should be however noted that there is somewhat a contradiction because qualitative date emphasizes the importance of personal experiences and detailed specific data; the importance of uniqueness of situations and realities and the variability often associated with qualitative research approaches (Kefting, 1991). The researcher attempted to ensure that the data and study was dependable by giving detailed descriptions of the methodology and research design, step by step. Also, in the reporting of findings, the researcher used a number of direct quotations from the transcripts of all the interviews separately in order to give accurate information. All this will help to demonstrate the dependability.

Confirmability

The last measure of trustworthiness is confirmability. This measure speaks to specifically objectivity or neutrality (Krefting, 1991). Because qualitative research involves direct human contact between the researcher and participant, human error is something that should be accounted for and attempted to be reduced because 'researcher bias is inevitable'. Confirmability highly depends on the skills and management of the researcher's perceptions and views. Triangulation is necessary in order to reduce the effect of investigator bias (Shenton, 2004). The researcher tried to ensure that trustworthiness was confirmable by fully explaining and giving thick descriptions and reasoning for every aspect of the methodology and research design. Relevant literature was also reviewed in an attempt to support claims and conclusions and recommendations suggested and made by the researcher.

3.9 Ethical considerations

In any research that involves human beings; ethical issues are of great importance and should be considered. "The term ethics implies preferences that influence behaviour in human relations, conforming to a code of principles, the rules of conduct, the responsibility of the researcher and the standards of conduct of a given profession" (Strydom, 2011, p. 114).

Avoidance of harm

It is the responsibility of the facilitator to be sensible and make sure they warn participants in advance of any potential harm and protect the them from any harm, physically and emotionally by all possible means (Strydom, 2011). If there is the possibility of harm, the participants should be made aware of this risk in order for them to make an informed decision when they agree to participate as well as be made aware of their right to at any time withdraw from the study in the event of discomfort (Strydom, 2011). The researcher made sure of the above by asking questions sensitively, as well as upholding confidentiality and privacy by refraining from using their actual names or any identifying information that will expose their identities as well as conduct the interviews in a safe and comfortable environment where there is privacy and no one else is listening of watching the interview.

Voluntary participation

It should be made clear to the participants that their participation is voluntary and they can at any point of the research process decide to drop out for any personal reasons or refuse to answer any questions they are not comfortable with, and this will not be held against them (Strydom, 2011). Participants were made aware of this information in the information sheet.

Informed consent

Another important condition in ethics is that the facilitator needs to have physical informed consent; in the form of a signed consent form, from each of the participants, both agreeing to participate and allowing the facilitator to record and possibly publish the information the participants give them (Strydom, 2011). It is vital that participants are told all the information regarding the research, the purpose and expected results in order for them to give consent and agree to participate as an informed decision (Strydom, 2011). The researcher ensured this by first of all going through the participant information sheet with each participant, making them aware of what was required from them as well as their rights. Participants were each given a consent form both for their participation and for their consent to audio tape the interview. Before commencing the interview the researcher collected the signed physical forms and kept them safely away.

Privacy, confidentiality and anonymity

Privacy, anonymity and confidentiality are vital throughout the research. The facilitator needs to assure the participants that the discussions during the interviews will be recorded without privacy being compromised (Strydom, 2011). The participants have the right to refuse the

recording or publishing of information they are not comfortable disclosing. Confidentiality speaks to ensuring that the participant can trust the researcher to use the information given in a correct and ethical manner and as discussed before giving consent to the interview (Christensen et al., 2015). I ensured this by making sure that as stated in the Participant information sheet, the only person who will have access to the audio recordings and other information collected; besides myself, is my supervisor. Anonymity speaks to trying to make sure that the identity of each participant is hidden in order to reduce the possibility to trace information back to them which may be harmful (Christensen et al., 2015). It is the most difficult consideration to ensure as complete anonymity is not possible, given the fact that interviews will be face to face (Strydom, 2011). However, I made sure that no names or other personal identifying information is used or recorded; such as names and surnames, cell phone numbers etc. I instead assign a different code to each participant in order to protect their identity.

3.10Limitations to the study

Whilst the study aimed to be as comprehensive as possible, the limitations experienced related to:

- The stigma associated with certain HIV and AIDS perceptions which may have limited the full and honest participation of respondents. Participants also may have been dishonest or omitted important information due to them feeling embarrassed or due to fear of being discovered.

- Because the research instrument involved direct contact between the facilitator and participants, the reliability of the findings could therefore have been compromised. This was because the participant might have been tempted to give the facilitator the answers they thought the facilitator would’ve wanted to hear.

3.11 Delimitations to the study

A comprehensive explanation to the participants of the importance and potential benefits of the study and also assurance that privacy and confidentiality will be maintained helped to mitigate these limitations. It is therefore vital that trust is established between the facilitator and the participant as well as a sense of dependency (Strydom, 2011, Creswell, 2009, & Grobler & Schenck, 2009).

3.12 Chapter summary

This chapter provided a thick description of the research design and methodology used in conducting the study. This included the research approach, the population and sample; as well as the sampling procedure and research instrument. The researcher also discussed the pretesting of the instrument as well as the process of data collection. The data analysis is discussed, in this case focusing on thematic data analysis; and steps to catty it out are also described. The summary concludes bringing in the important concept of ‘trustworthiness’ and by discussing the important ethical standards and procedure to be considered as well as the limitations and delimitations of the study.

CHAPTER FOUR: PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter presents and discusses the findings of the study. To analyse participants' demographic information, simple descriptive statistics was used, while qualitative data were analysed using thematic analysis method. Findings of the study are discussed in relation to the study objectives and the limitations inherent in the research design and analysis. All the themes are supported by participants' direct quotations.

4.2 Demographic profile of participants

Table 4.1 Profile of participants (N=7)

Participants' Pseudo-names	**Gender**	**Age**	**Nationality**	**Race**	**Cultural Identity**
P1	Female	26	Congolese	Black	Kasai
P2	Female	23	Zimbabwean	Black	Shona
P3	Female	23	Zambian	Black	Uncertain
P4	Male	22	South African	Caucasian	Afrikaans
P5	Male	23	Kenyan	Black	Kikuyu Kamba
P6	Female	23	Zimbabwean	Black	Shona Manyika
P7	Female	25	Tanzanian and South African	Coloured	N/A

Below is a discussion of the tabulated information in the above table (Table 4.1)

Table 4.1 above summarizes the demographic profile of the participants that were selected for the study. A total of 7 post-graduate students from Johannesburg and Pretoria were

selected. Of the 7 participants, 5 were female and 2 were male. The participants were all between the ages of 23 and 26 years old. The participants were all African; 2 being Zimbabwean (both Shona), 1 Kenyan (Kikuyu Kamba), 1 Tanzanian (N/A), 1 South African (Afrikaans), 1 Zambian (Uncertain) and 1 Congolese (Kasai). All the participants understood and spoke English fluently as their second languages, after their native languages. There were more female participants who participated in the study and opened up about the subject matter of HIV and AIDS and culture. Also, having participants from different racial and cultural backgrounds was a welcome move as different participants were able to share more about their different experiences, based on their cultural backgrounds and their socialization.

Table 4.2 Summary of themes and sub themes emerging in the study

Objective	**Theme**	**Quotation marks**
Knowledge about what HIV and AIDS was and the difference between the two	Inadequate knowledge	*"mmmm not really, I just see it as one thing yah"* *"from my understanding HIV and AIDS is basically an uhm disease that uhm stops you from doing a lot of things like uhm it kills you *laughs*in terms of like what I was explaining, in terms of gender and what not, AIDS would be one of the reasons why people are not allowed to mix and mingle".* *"But in everyday normal conversations people don't make a distinction between the two. When you say AIDS or HIV you are basically saying the same thing. So I'm conscious of the fact that it's different things but in speaking it's just HIV and AIDS. So sometimes you just say AIDS or HIV".*
	Adequate knowledge	*"Well, HIV is a Virus and then after it has manifested probably that's when it becomes AIDS which is I think an immunodeficiency syndrome. So one is a lighter version of the*

		other. So AIDS is probably at its peak where its forward and where you probably can't control it anymore" *"mmm I think it's connected but its two different things. Like if it's happening in your body its two different things, it's not like you can't generalize HIV to be AIDS and you can't generalise AIDS to be HIV. They are very different. How they like affect your body are different. It's different. Your HIV is uhm still controllable. It manage your diet, manage your lifestyle, leave some habits like smoking and drinking, it's manageable. You can have pills to to you know. But when its AIDS it's a bit more down the lane and you can't, it can't be stopped as readily as HIV and usually when its gone to AIDS your body starts wasting and you start not responding to medication, you're your organs start failing, that kind of thing. So AIDS becomes more of a threat to your life than HIV. When you have HIV, even if the viral load is is still high, they can work towards lowering it but when its AIDS it's usually, there's something some people never come back from yah"* *"uhm they are different because HIV is the virus and AIDS is uhm the disease, it's like the final stage of HIV. But in everyday normal conversations people don't make a distinction between the two"* *"AIDS is the later stages of HIV when it becomes really serious and that's yeah that's like the later stages of HIV, but usually people*

		just end up with HIV and not necessarily AIDS so it like one leads to the other"
How HIV is transmitted, the prevention and treatment methods	Inadequate knowledge about the name of HIV management medication	*"I know that there's certain medicine AIDS suffers take; well people affected with AIDS"* *"not necessarily a treatment but like pills that at least keep you alive and going for a while"*
	Inadequate knowledge and understanding	*"I think the biggest one which anyone would go for first is sexually. And then in the past probably through birth but recently I think it's changed its not as much birth. And then sometimes I think through surgical processes or through negligence when you're just, let's say doing drugs and you just are uhm using the same needle type of thing"* *"well through different channels but the most common one is uhm sexually and uhm yah I guess there's other instances where it could be by birth from mother to child or I don't know other instances with needles and the like especially in drug abuse"* *"umm I know of two. And that is using condoms and the second will be abstinence form sex. Hmm maybe there is a third one just keep yourself safe from any contact with blood maybe wear gloves of your working with someone who is sick. Of you are doing CPR, it depends though, if there is blood involved or bodily fluids try protecting yourself with gloves or any*

		other form of protection" *"okay so with regards to prevention uhm practicing safe sex, the use of condoms uhm yeah for safe sex is condoms and not sharing sharp objects like razor blades and needles. If u use one it will have to be exclusively for yourself as well as if a mother is HIV positive it is advised not to breast feed the child and to also go for anti natal care that she should be helped not to pass it on to the children"* *"OK well we can start with just don't have sex"* *"well there's ARVs and I guess there are the mostly available around most clinics I believe"* *"I know that there's certain medicine AIDS suffers take; well people affected with AIDS"* *"Uhm treatment. Well you have your ARVs that kinda just uhm reduce the effects of it I could say"* *"I know of Anti retro viral drugs which basically aim to increase your cd4 cells so that you can be able to fight off diseases more. I know there is cure yet"* *"umm I am only aware of ARVs which is the medication that you go on once you have contracted HIV. I think it just suppresses your CD4 count or it just keeps it at a level, so it does cure it but it just tries and maintains it"*
	Adequate knowledge and understanding	*"from what I've studied again its by direct blood contact and intercourse without protection. So like your blood transfusion so like obviously a*

		person, someone with HIV. It's usually rare cases because they usually test the blood before you uhm you have your transfusion. And uhm you can get it from cuts. Uhm like sharing razor blades and uhm knives. Those are the general ones, even like I was saying there's just sex, sex that's the biggest thing" *"uhm transmission is like well I know it's mainly through body fluids like uhm semen and all those fluids from females too and blood as well as from some rare cases I hear from breast milk, mother to child. Those are the main"* *"they are quite a few ways I am aware of how you can contract HIV. Umm one is through contact with blood. The other is through sexual intercourse or getting in contact with bodily fluids, whether it's semen, or as mother breast milk, also mother to child infection. Also maybe through sharing of syringes by using drugs"* *" I've been reading a lot about it like do you know how they've been doing research on medicines that could stop you from getting HIV before getting exposed to it. So let's say for example for sex workers there a now pills that they can take before they have sexual encounters with people since they are my sure if they are HIV positive or not. And then basically there's the normal ones like using condoms when having sex. Like there's female condoms and there's male condoms and that would be preventative. Or you just abstain basically prevention uhm for sex that would be*

		protection; condoms. uhm I also know for instances like for example of you are raped there's a pill that can be given to you or something like that so it basically attacks it at its first stage of inception or who know what. And then uhm I think as well when giving birth I think there's a I don't really knowhow but there's a method that doctors use to ensure that and I think they give some sort of medication so that the baby can also fights the disease when it's in the tummy" *"It's just don't go there. Keep away from it! But you know if you can't then you have your uhm condoms uhm uhm you know you know there's the dental dam. Basically just preventive measures for sexual activities. Be it dental dams or gloves because like you know for example oral pleasuring and stuff and if you have cuts you know there's bodily fluids and you make contact then boom. So uhm yah just all those preventive measures and those and uhm what else what else and uhm what else what else uhm preventative"* *"well I've heard there's a pill you can take or whatever that uhm if you take it within 24hrs; like women who get raped are given within 24hrs and somehow they don't get the virus"*
Attaining knowledge about HIV and AIDS transmission,	Through Parents and Community members	*"So in my family specifically uhm my parents don't really discuss this much, I think it's a Congolese thing. They don't like dwell too much into these issues cause there I think it's more of a taboo".*

prevention and treatment		*"I guess well with family I think they always think uhm I know about this through college and stuff like that so they find no real reason why they should sit me down for that'.* *"in my home we are very open about this discussions and umm and from the clinic when you go hey tested, they tend to give you a consultation session and they tell you about these things".* *"uhm I think its talked about, but its talked about positively when you are not HIV positive like its different from if to u are HIV positive. Like if you are not I think your parents will tell you the basics of don't sleep around, please uhm look after yourself if you are going to have sex use protection or don't be sleeping around with so many people. Maybe have one partner that type of thing. They'll tell you it like like like actually, it's not like they tell you about right in the open like my child let's sit down let's talk about HIV and AIDS. No they don't do that but if you are HIV positive I think it gets talked about socially in a very negative way. It almost seems as you are getting shunned and people won't talk to you about it. They talk rather in the background".*
	Social Media	*"uhm adverts, TV, flyers around, posters, yah"* *"then uhm from the Internet definitely. That's where uhm what was my first source of of information concerning anything of the like"* *"and the internet especially the, uhm the one I*

		told you before about haircuts" *"the media is very informative these days. There is always phrases like practice safe sex, not only TV"*
	Educational institutions	*"well basically as a first year we had to go through like a seminar where you had to get like all the scary details are told to you and stuff"* *"uhm with condoms for example I got to know about that in primary school from uhm like sciences so it was basically education. I think it's part of the curriculum where you study that in uhm I think its grade 6 yah uhm I think its grade 6 yah and then uhm we also studies a bit of that in high school. And then uhm I got even more exposed uhm here at varsity uhm through a certain program called CSA"* *"school there are many campaigns I know when you visit the university clinic they always discuss these things with you encouraging safe sex and they do provide free condoms"* *"it's something I learnt from high school, through life orientation subjects that were offered or that we had to take"*
The most preferred and effective HIV prevention and treatment methods by students	Condoms (prevention)	*"uhm OK mostly its condoms and the reason is people don't want to abstain *giggles* uhm yah they just want to get into it young"* *"But mostly prevention would be or protection for them would be using condoms. And that's it"* *"condoms, because of their accessibility also and the cost and the admin involved. I don't*

		*think I need my name being registered at a pharmacy for buying post exposure pills when I can just buy condoms over the counter and just done. No one's going to ask you ten million questions about what you are going or do and who you are going bro do it with. It's just basically an easier step for us because we don't like things that are complicated and we for want things possibly going back to our parents somehow *giggles**
	ARVs (treatment)	*"the most used will probably be the ARVs cause people are starting treating it too late because uhm a lot of people I know a lot of friends who are not testing their HIV status so it means they are not preventing anything cause most of them do not use protection or at a point in their lives they stopped using protection so I don't know the most used for me would be when you are now in trouble which would be the ARVs so"* *"I guess the pills help but I don't know to what extent or how effective they are but yah"*
The role of culture in HIV and AIDS transmission, prevention and treatment	Negative role	*"there's a whole lot of secrecy between parents and children and I mean obviously there's a whole lot of rebellion because of the strict culture and traditions as well a whole lot of things being facilitated because of culture in between families so there's nothing positive for me right now. It just seems as though some, most of the these cultural practices just either strain, straining efforts to get children more aware of HIV and AIDS and how to prevent it and they are also just boosting ways for people*

		to get sexually transmitted, to get HIV through sexual". *"I recently tested for HIV and the the nurse told me that she had tested 8 women in the month and they were all HIV positive and they were all married. But they all knew their husbands were cheating or they couldn't all it cheating because its allowed in their culture. So uhm I guess we can then link it in that regard".* *"there's this one article I read about a man who initiates all the girls into womanhood in some village in Zambia where he sleeps basically with every woman and he was HIV positive. And in cultural practices like this I don't think people would be taking any any like precautions that maybe we should be using protection or whatever so basically you're lucky if you don't go through him and get HIV but if he if he sleeps with you, he claims to have left with more than 500 women in his whole life".* *"I will start with the negative uhm there some cultures practiced buy Africans, in my culture okay the first I'm going to discuss is 'Kugara nhaka'. It's when for example if your older sister is married then she dies as the younger sister I have to replace her as a wife so uhmm in that case if my wife had died of AIDS this means that I'm going to go and get AIDS as well because condoms are not really allowed if I can say that in a matrimonial home you are supposed to be able trust your husband of which that's also one of the cultures I was about to talk about uhmm so basically*

		yeah" *"like I mentioned before the use of condoms, people do not really encourage the use of condoms, they actually dont agree with it and as a wife I can't go to my husband and say babe we gotta be using condoms now because that's not the point, because you are not getting married so that we use condoms".* *"And also the fact that we don't openly talk about AIDS with our children as African we just feel like okay fine they must go to school and learn it. Sometimes things are learnt better when they are discussed in a family setting coz then they are closer to home and you can be like you know this is what happens".* *"and I also think culture, like I know there's people who don't like get medication. So you could be HIV positive but that they don't encourage you to go and get treatment and stuff which helps, which which in a way aids this whole process where people keep dying because automatically its not acceptable".*
	Positive and influential role	*"that if they are still virgins and what not. So if you avoid that or if you know you're going to be checked or not you would then be so scared to go and do other things out there. So Uhm if you then do it then there are chances of you having HIV and AIDS if you practice it or practice having sex or whatever. So I feel like yes it does play a role".* *"cause with us you are told you can't have sex before marriage and stuff. We do it yes but its*

		something that's not advised by our parents so in that in that sense it uhm actually stops you from getting cause you can abstain yah". *"But the good part about that well 'Kugara nhaka' means that the AIDS is kept in one family".* *"uhm there are some cultures in the African people that don't encourage a man to have another woman, u should stick to your family and it a taboo for you to go out and look for another woman".*
	Mixed feelings	*"okay I do believe culture has an important role in HIV transmission because; okay it's a 2 way thing if you look at it okay. I will start with the negative…."*. *"umm there is definitely a connection. There is definitely a negative connection between culture and HIV and AIDS, as well as a positive connection. It really depends where in the world you are placed and what your culture is and what their values are. And yeah umm I say that because in South Africa where I stay we see a huge gender and inequality in most of the cultures that we have here".*
	Cultures do not play any role	*"mmmmm uhm no. Well from my culture, my household, my upbringing I haven't been like… It's, like HIV has always been a cold (strange and unusual or taboo) medical term. There's never been any beliefs around it".*
Education as a factor regarding the perceptions	Definitely education plays	*"uhm my education has definitely played a part in what I think, it has definitely played a part in me preventing HIV uhm because I have had the*

on culture and HIV and AIDS	a big role	*ability to be or I have had the opportunity to be basically warned about it and to be you know constantly fed with information on how I can prevent it. So for me I would say education has definitely played a role. Some people don't have the education that they need for that. I mean especially rural communities so what would you expect a woman who's getting into adolescence a young girl who's getting into adolescence in the rural communities to know on how to prevent HIV and AIDS. I mean toy go through so much growing up so if education is lacking I mean it's like every other situation. If there's no warnings, there's no preparedness"* *"uhm I think education plays a great role because uhm its different when you are educated. Its uhm you seek facets, you seek to know ways best for you"* *"yes, I do think that. Maybe if I was not raised in this setting I would have a different perspective. I would be looking forward to replacing my sister as a wife and that would be my goal in life but it's not that it's a bad this it's just that the setting that you are raised in. So as an educated person I've managed to see things from a different perspective and I see the wrongs in our culture, but if I was brought up in strongly cultural home I believe that I would not be so against some of our cultural practices coz there would be a part of me"* *"'It's not the end of the world' you can absolutely manage it, it's OK you know. When*

		*people look at it in the different places I've stayed in people look at as the opportunity cost is not so high in the sense of uhm you know they want to have, they call it 'raw sex' *M giggles* but I mean like sex without a condom and they are looking at that you know the possibility of getting HIV and they are like 'ah nah bra when I weigh these two things it's still...uhm I can take the chance' because A HIV is not such a big deal and you can get medication, you know".*

4.3 Knowledge about what HIV and AIDS and the difference between them

Adequate knowledge and understanding

Findings revealed that most participants; 6 out of the 7, had adequate knowledge on what HIV and AIDS are as well as the difference between the two. Below are direct quotations made by different participants, showing their knowledge on the difference between HIV and AIDS is.

One participant further explains the difference simply stated by another participant by highlighting that AIDS is in a way a 'continuation' of HIV; which is the initial infection stage:

> *"well, HIV is a Virus and then after it has manifested probably that's when it becomes AIDS which is I think an immunodeficiency syndrome. So one is a lighter version of the other. So AIDS is probably at its peak where its forward and where you probably can't control it anymore"*

Another participant further elaborates on the difference between HIV and AIDS saying that:

> *"mmm I think it's connected but its two different things. Like if it's happening in your body its two different things, it's not like you can't generalize HIV to be AIDS and you can't generalise AIDS to be HIV. They are very different. How they like affect your body are different. It's different. Your HIV is uhm still controllable. It manage your*

diet, manage your lifestyle, leave some habits like smoking and drinking, it's manageable. You can have pills to to you know. But when its AIDS it's a bit more down the lane and you can't, it can't be stopped as readily as HIV and usually when its gone to AIDS your body starts wasting and you start not responding to medication, you're your organs start failing, that kind of thing. So AIDS becomes more of a threat to your life than HIV. When you have HIV, even if the viral load is is still high, they can work towards lowering it but when its AIDS it's usually, there's something some people never come back from yah"

A participant highlights below how even though HIV and AIDS are not the same thing, people in ever day life usually use the terms interchangeably and as meaning the same thigh.

"uhm they are different because HIV is the virus and AIDS is uhm the disease, it's like the final stage of HIV. But in everyday normal conversations people don't make a distinction between the two".

The statement below was made by another participant; highlighting the important fact that it is not in all cases where an HIV positive individual progresses to the AIDS stage (WHO, 2016).

"AIDS is the later stages of HIV when it becomes really serious and that's yeah that's like the later stages of HIV, but usually people just end up with HIV and not necessarily AIDS so it like one leads to the other"

Literature agrees with the views of participants that had adequate knowledge and understanding on what HIV and AIDS are as well as the difference between the two. These participants view concur with literature that states that HIV is in fact the initial infection and AIDS is the progression of HIV infection that sees a drop in CD4 count and weakening of the infected patient's immune system. This then gives rise to opportunistic infections. HIV is an acronym that stands for Human Immunodeficiency Virus (Poku, 2002). It is a virus that attacks the white blood cells of a human who is HIV positive, depleting the cells and lowering the CD4 count and weakening the individual's immune system. The weakening of an individual's immune system gives way to opportunistic infections such as Tuberculosis and Candidiasis, commonly known as thrush (World Health Organization, 2004). When one either has two or more of these infections, or their CD4 count drops below 200, they are said to have AIDS, or be in the advanced stage; the AIDS stage. AIDS stands for Acquired Immune Deficiency Syndrome. This describes the acquiring of the virus from another human,

the depletion of the immune system and the collective of infections that result. AIDS is the progression of HIV (Poku, 2002). It is in this stage after HIV acquisition where individuals are advised to start taking Antiretroviral drugs (ARVs) (WHO, 2016).

Inadequate knowledge and understanding

Only 1 of the 7 participants had no idea what the difference between HIV and AIDS is. In fact, this participant stated that she saw no difference between the two. The researcher found this alarming as the researcher had assumed that at postgraduate level, everyone would know at least the basic difference between the two. The participant states that:

> *"from my understanding HIV and AIDS is basically an uhm disease that uhm stops you from doing a lot of things like uhm it kills you *laughs*in terms of like what I was explaining, in terms of gender and what not, AIDS would be one of the reasons why people are not allowed to mix and mingle".*

After the researcher probed further, asking if this participant saw any difference between HIV and AIDS, their response was:

> *"mmmm not really, I just see it as one thing yah".*

Another participant acknowledged theat there is in fact a difference between HIV and AIDS and furthermore offered an explanation for this participant's and many other people' s belief that there is no difference between the two by stating that:

> *"But in everyday normal conversations people don't make a distinction between the two. When you say AIDS or HIV you are basically saying the same thing. So I'm conscious of the fact that its different things but in speaking it's just HIV/AIDS. So sometimes you just say AIDS or HIV.*

It is important to note that even though most literature clearly states that HIV and AIDS are not the same thing, neither should they be used as interchangeable terms, this is the case in most everyday life conversations. "For many people, HIV and AIDS are the same thing; they are interchangeable terms for seemingly the same condition" (Stolley & Glass, 2009, p. 3). The only commonality between HIV and AIDS is that both conditions involve the initial infection which is the HI Virus. It should be noted also that this common mistake and misunderstanding is not only seen between uneducated or regular people that are not part of

the medical profession, but in fact this confusion is even seen among people in and around people employed in the medical realm that should seemingly know better as well as in literature related to the field of medicine (Davis, 2017). Literature contradicts the view that HIV and AIDS are the same thing as it has been clearly established and proven that HIV and AIDS are in fact not the same thing. However, some literature does in fact also note and concur that HIV and AIDS are in fact in a lot of cases used as interchangeable terms in everyday life and every day speaking, which is wrong.

4.4 How HIV is transmitted

Inadequate knowledge and understanding

Findings indicated that some participant showed inadequate knowledge and understanding of how HIV is transmitted.Some participants gave reference to the most obvious and common way HIV is transmitted; which is sexually.

One participant however further mentioned HIV transmission from mother to child through child birth but seemed rather unsure about this way as well as by the use of needles:

> *"I think the biggest one which anyone would go for first is sexually. And then in the past probably through birth but recently I think it's changed its not as much birth. And then sometimes I think through surgical processes or through negligence when you're just, let's say doing drugs and you just are uhm using the same needle type of thing"*

Another participant gives a similar answer which again sounded rather unsure:

> *"well through different channels but the most common one is uhm sexually and uhm yah I guess there's other instances where it could be by birth from mother to child or I don't know other instances with needles and the like especially in drug abuse".*

There are misconceptions and misunderstandings regarding how HIV is transmitted. An individual's beliefs and behavior regarding HIV and AIDS transmission can be dictated by their beliefs of what HIV is and how it originated and why. There are a number of beliefs in different communities surrounding what the causes of HIV and AIDS are. These beliefs range

from the real cause of HIV and AIDS being spiritual in nature, conspiracy theories; for example that the virus was created in a laboratory by white people and in lastly, in some cases, denial of the existence of the epidemic and misinformation about the transmission of the virus (vanDyk, 2001). This is completely incorrect and is seen in extreme cases. Due to both basic education and formal and informal channels of making people aware and educating them on HIV and AIDS transmission, there is accurate information surrounding the AIDS pandemic being passed around globally. However, due to a number of factors such as stigma and discrimination (Deacon, 2006), attached to talking about the pandemic as well as participating in any initiatives, and lack of accurate and or enough and extensive information regarding the subject matter, many people are left having only basic knowledge and understanding of HIV and how it is transmitted (Harrison, Newell, Imrie & Hoddinott, 2010). Literature concurs with all the above information given by participants on the transmission of HIV. The problem in this study was not that the participants did not know or misunderstood the concept, neither was it that due to their beliefs they didn't know how HIV was transmitted. The problem rather is that these participants had only surface level information. They knew the basic methods of contracting HIV or the means through which the virus is transmitted from person to person. They did not have a deeper understanding on the actual biological process of how HIV is transmitted.

Adequate knowledge and understanding

Some of the participants displayed adequate knowledge and understanding of how HIV is transmitted. This is shown by the detail they put in explaining their understanding of how the HI Virus is passed on from one HIV positive individual to another HIV negative individual; mentioning important factors such as the bodily fluids such as blood, semen and vaginal discharge; containing sufficient amounts of the virus in them, of an HIV positive person have access to a HIV negative individual's bloodstream (World Health Organisation, 2004)

One participant states that:

> *"from what I've studied again its by direct blood contact and intercourse without protection. So like your blood transfusion so like obviously a person, someone with HIV. It's usually rare cases because they usually test the blood before you uhm you have your transfusion. And uhm you can get it from cuts. Uhm like sharing razor*

blades and uhm knives. Those are the general ones, even like I was saying there's just sex, sex that's the biggest thing".

The next 2 participants' statement also recognised the importance of high viral load containing body fluids in HIV transmission and goes on to add breast milk. However, breast milk is not a high viral load body fluid and this makes the statement partially incorrect:

"uhm transmission is like well I know it's mainly through body fluids like uhm semen and all those fluids from females too and blood as well as from some rare cases I hear from breast milk, mother to child. Those are the main".

And:

"they are quite a few ways I am aware of how you can contract HIV. Umm one is through contact with blood. The other is through sexual intercourse or getting in contact with bodily fluids, whether it's semen, or as mother breast milk, also mother to child infection. Also maybe through sharing of syringes by using drugs".

It is important to note that HIV is a virus is one that affects only humans and is transmitted when bodily fluids such as blood, semen and vaginal discharge; containing sufficient amounts of the virus in them, of an HIV positive person have access to a HIV negative individual's bloodstream. This can be through sharing of sharp objects such as injections and blades, from mother to child during childbirth and the most common way worldwide, through unprotected sexual intercourse (The World Health Report, 2004). Once this happens, the virus attacks the white blood cells and takes part of the individuals DNA and transforms itself continuously, which helps it lower the chances that it is quickly discovered and fought off by the white blood cells and making it ultimately hard to find a cure (Marks, 2002). Literature concurs with the more in depth responses given by participants regarding the process of HIV transmission. These participants didn't have basic knowledge on the means of transmitting or contracting HIV but knew more in depth information regarding the actual biological process that happens, giving more precise and complex information.

4.5 How HIV and AIDS can be prevented

Inadequate knowledge and understanding

Some participants demonstrated inadequate knowledge and understanding, on how HIV and AIDS can be prevented. These participants

A participant stated the following after asked how HIV is prevented:

> *"umm I know of two. And that is using condoms and the second will be abstinence form sex. Hmm maybe there is a third one just keep yourself safe from any contact with blood maybe wear gloves of your working with someone who is sick. Of you are doing CPR, it depends though, if there is blood involved or bodily fluids try protecting yourself with gloves or any other form of protection".*

Another participant also had the basic understanding of HIV prevention, mentioning the same methods seen above:

> *"okay so with regards to prevention uhm practicing safe sex, the use of condoms uhm yeah for safe sex is condoms and not sharing sharp objects like razor blades and needles. If u use one it will have to be exclusively for yourself as well as if a mother is HIV positive it is advised not to breast feed the child and to also go for anti natal care that she should be helped not to pass it on to the children".*

Another participant referred to simply completely abstaining from sex as a way of HIV prevention:

> *"OK well we can start with just don't have sex. It's just don't go there. Keep away from it!".*

In this case, again, the problem is not that participants did not know how HIV and AIDS are prevented. The problem was rather that they did not have enough or in depth and more thorough and complex information on how to prevent HIV and AIDS rather than the basic means without knowing the actual technicalities.

Adequate knowledge and understanding

Where some participants only demonstrated basic knowledge regarding HIV prevention, some had more information regarding HIV prevention. These participant mentioned the basic prevention methods such as condom use but went on to further give more strategies.2 participants went on to mentioned in one way or another the use of Pre-Exposure Prophylaxis

treatment. One of the participants however explained this form of prevention though they did not specifically mention the name. this participant spoke about (PrEP) in the statement below, going on to mention the more basic prevention methods including both the female and male condoms and Prevention of Mother To Child Treatment (PMTCT):

> *" I've been reading a lot about it like do you know how they've been doing research on medicines that could stop you from getting HIV before getting exposed to it. So let's say for example for sex workers there a now pills that they can take before they have sexual encounters with people since they are my sure if they are HIV positive or not. And then basically there's the normal ones like using condoms when having sex. Like there's female condoms and there's male condoms and that would be preventative. Or you just abstain basically "prevention uhm for sex that would be protection; condoms. uhm I also know for instances like for example of you are raped there's a pill that can be given to you or something like that so it basically attacks it at its first stage of inception or who know what. And then uhm I think as well when giving birth I think there's a I don't really knowhow but there's a method that doctors use to ensure that and I think they give some sort of medication so that the baby can also fights the disease when it's in the tummy"*

Another participant mentions more than the obvious and common basic prevention methods, also including the use of dental dams and how they are used or rather why, but after stating that abstinence would be best:

> *"It's just don't go there. Keep away from it! But you know if you can't then you have your uhm condoms uhm uhm you know you know there's the dental dam. Basically just preventive measures for sexual activities. Be it dental dams or gloves because like you know for example oral pleasuring and stuff and if you have cuts you know there's bodily fluids and you make contact then boom. So uhm yah just all those preventive measures and those and uhm what else what else and uhm what else what else uhm preventative".*

A few participants highlighted abstinence from sexual activity as a form of HIV and AIDS prevention. One participant added that abstinence can also be involuntary in the form of virginity tests; which somewhat forse young girls to abstain from sexual activity. However,

this particular participant implied that this strategy is old fashioned and not fit for this generation saying:

> *"well I guess its already something that we can't stop. So I think the best way is to try to exhaust the options that are there and yah I think they just uhm yah"*

Below is literature on HIV and AIDS prevention:

A condom can be defined as a type of rubbery textured barrier worn either over the penis (Avert, 2017d) or worn internally by being inserted into the vagina (Marie Stopes South Africa, 2017) to prevent direct contact and the exchange of sexual bodily fluids that can result in pregnancy and the transmission of STDs; including the HI Virus in HIV positive people (The World Health Report, 2004). A condom prevents the transmission of HIV by acting as a barrier between sexual reproductive organs. A similar prevention method similar to the condom is a dental dam. This is a square piece of latex or silicone; sometimes flavoured, that is also used as a barrier over sexual organs during oral sex (Brown, 2013). Abstinence from sexual activity is another way HIV and AIDS can be prevented, which is seen as a behavioural preventative method (Muula, 2006). By abstaining from sex, there is a lower chance that one will be infected by HIV through unprotected sex with an HIV positive partner (Mutema, 2013). Abstinence is defined and understood differently, by different people due to different factors. Muula (2006) and Mokwena & Morabe (2016) simply describe abstinence as the avoidance or postponing of sexual activity; especially in young people. Abstinence can be said to depend also on the way an individual defines 'sex'. What sex is will define what avoiding sex will entail or include and exclude (Barnette & Parkhurst, 2005). Abstinence can either mean not having vaginal penetrative intercourse but leaving room for oral sex, anal sex and any other form of sexual activity or complete avoidance of any form of activity that might lead to any form of sexual activity with oneself; masturbation, or which a partner (Planes, Gomez & Gras, 2009). Abstinence is not always a choice or an option. For example, a widow is forced to have sex with a kinsman of her late husband, in a ritual cleansing, in order to make her 'normal' again and accepted in society. Another way sex is seen is in the practice of sex inheritance where a widow is made to have sex with a kinsman for socioeconomic support and continuity of the bloodline and clan (Barnette & Parkhurst, 2005). Furthermore, according to Hans and Kimberly (2011), abstinence is said to be a concept that has, and continues to change over the different generations as the years go by (as cited in Mokwena & Morabe, 2016).

In a lot of cases, abstinence carries a "religious and moral connotation" (Planes, Gomez & Gras, 2009, p. 2) as well as it being influenced also by traditions and culture; shaped by social standards set by families and communities. An example is the practise of virginity testing in some South African cultures. By doing this, young girls are forced to maintaining their virginity by abstaining from sexual activity, in turn reducing their chances of falling pregnant outside marriage and becoming infected with HIV and other STDs or actually spreading those (Mokwena & Morabe, 2016). For one to be able to in the first place prevent themselves by HIV infection, the need to be aware of their HIV status, which should be HIV negative in order to stay HIV negative by preventing oneself from becoming affected. This is where HIV and Counselling (HTC) comes in. As the name suggests; HTC is an HIV prevention method that includes the testing and counselling of people in order to make them aware of their HIV status and also teach the people tested how to either maintain their status as being HIV negative or how to continue to live a long and healthy life as an HIV positive person. HTC is also vital during antenatal care for pregnant women in order to start PMTCT if the pregnant woman in HIV positive. HTC is performed also in the event that a person is being treated for Opportunistic infections (OIs) as these usually develop due to the lowered immune system due to HIV infection and the progression to the AIDS stage (Johnson, Dorrington & Moolla, 2017). PMTCT is also another method of preventing a pregnant HIV positive pregnant woman from transmitting the virus to her unborn child or an HIV positive breast feeding mother from transmitting the virus to the baby (WHO, 2016). One of the more successful and effective ways of preventing HIV transmission is through abstaining completely from sexual activity. By not having sex at all, there is a very low chance that one will be infected by HIV; but that's only true for the most common way of getting infected by the HI Virus; which is through unprotected sex with an HIV positive partner (Mutema, 2013). Abstaining however only works to a certain extent as it doesn't account for rape and non-sexual HIV transmission methods. Attainment of accurate knowledge about HIV and AIDS is vital in the fight against the deadly pandemic. For one to be able to practice safe sex and prevent transmission of HIV or treat it, it is vital that one has accurate knowledge about HIV and AIDS development. Accurate knowledge about HIV prevention could include how to choose and use condoms properly, how to avoid risky situations that may lead to risky behaviour related to HIV transmission and etc. (Vandemoortele & Delamonica, 2000).

Lastly, a way of preventing HIV is in using ART in the form of PrEP and PEP. PrEP is Pre-Exposure Prophylaxis treatment. As the name suggests, PrEP is given in the anticipation of

possible near future risk of HI Virus acquisition to tested HIV negative people, including doctors and nurses (AIDS Info, 2016). PrEP is taken in order to try and block the possibility of HIV infection before an anticipated situation where the person could be at risk to be infected (Baggaley, Doherty, Ball, Ford & Hirnschall, 2015). Post-Exposure Prophylaxis are given to people who may have been directly exposed to the HI Virus and are thus are at risk of acquiring the HI Virus. These are usually people that are victims of sexual crimes such as rape and sharing needles during drug use as well as people who may have been exposed to the Virus through their profession such as emergency paramedics and other medical staff (AIDS Info, 2016). Both PrEP and PEP are taken in attempts to prevent one from becoming infected with HIV; the former in anticipation of risk and the latter after suspected risk exposure. It is vital that these vulnerable people seek medical attention and have an HIV test done as soon as possible; 72hrs or less after exposure to the Virus. It is only when this test comes out negative that a 28 day PEP treatment is administered, again in the form of a FDC regimen, depending on whether the person is ARV naïve or not. It is vital for a test to be done 3 months after to determine whether the PEP treatment was successful; when the treatment will be stopped, or if it was unsuccessful, having an HIV positive result; where the person will start taking ARVs for an extended period on a higher or rather following regimen (AIDS Info, 2016). Literature concurs with the views noted by the researcher, of the participants, on how HIV and AIDS can be prevented, Both the responses of the participants with basic and in depth knowledge and understanding of HIV and AIDS prevention are accurate and are as stated in literature from previous studies. It is necessary that more in depth and precise knowledge is provided to the public regarding HIV and AIDS prevention strategies. This will help in the fight against HIV and AIDS, as also people make informed decisions on when, why and how and which HIV prevention strategies to use.

4.6 How HIV and AIDS can be treated

Inadequate knowledge and understanding

All of the participants mentioned (Anti-Retroviral Treatment (ART) in the most basic ways. Two of the participants however gave more detail on what ART is as seen below.

One of the participants stated that:

> *"I know of Anti retro viral drugs which basically aim to increase your cd4 cells so that you can be able to fight off diseases more. I know there is cure yet".*

Another participant also gave more detail about how ART works:

> *"umm I am only aware of ARVs which is the medication that you go on once you have contracted HIV. I think it just suppresses your CD4 count or it just keeps it at a level, so it does cure it but it just tries and maintains it".*

Another participant had an idea of treatment in the form of PEP:

> *"And then for after you've been exposed to it and you are HIV positive, you can actually get treatment that will make tour life just as normal as someone who is not HIV positive because it's different from back in the day when HIV was a life sentence".*

HIV and AIDS treatment strategies involve methods in which someone who is already HIV positive can better their health and extend their life through the consumption of ARV drugs; in different cases, in turn reducing their viral load and strengthening their immune system; thus reducing the probability of the development of Opportunistic Infections (Johnson et al., 2017). Someone who is HIV positive but not in the AIDS stage can also be prevented from that progression in a number of ways which focus on the treatment of HIV and suppression of viral load (so that it doesn't further develop into the AIDS stage (Poku, 2002). HIV and AIDS treatment strategies include ART and PMTCT. ART is the main form of HIV and AIDS treatment. This treatment involves the use of ARVs; which are drugs (WHO, 2016), in the form of a combination of three drugs in the form of one pill that aims to stop different, compressing the stages in the multiplication of the virus, in order to be able to fight it and in turn boost the immune system viral load (WHO, 2016). This is called Fixed Dose Combination (FDC) (The World Health Report, 2004). Antiretroviral drug treatment (ART) is taken in different instances due to the reason for taking them as a FDC containing either 2 or 3 drugs. ART is given either as ARVs to an HIV positive person in the AIDS stage, to a pregnant HIV positive women to prevent transmission to the unborn child; Prevention of Mother to Child Treatment (PMTC), as Post-Exposure Prophylaxis (PEP) and Pre-Exposure Prophylaxis (PrEP) (AIDS Info, 2016). ART was formerly only given to patients in the AIDS stage; where someone's CD4 count was either less than or equal to 200 or someone had 2 or more Opportunistic Infections such as TB (Poku, 2002). PMTCT is basically a for on ART

given to either a pregnant woman and or a breastfeeding woman who has tested HIV positive; in an effort to prevent the mother from transmitting the HI Virus to the unborn child (WHO, 2016).

To the surprise of the Researcher, none of the participants mentioned PMTCT as an ART for HIV and AIDS.

PMTCT is a very important aspect in HIV and AIDS prevention when it comes to reducing the number of new cases of infection and mortality rates when it comes to transmission of the virus during birth and breastfeeding. PMTC is the treatment given to either a pregnant woman and or a breastfeeding woman who has tested HIV positive; in an effort to prevent the mother from transmitting the HI Virus to the unborn child (WHO, 2016). Depending on whether the mother is ARV naïve or not, they are given either first line or second line regiment FDC which will contain a combination of 3 ARV drugs that will not affect the baby or the hormonal balance. HIV positive pregnant women are now advised to get on ART after being tested as early as possible in the pregnancy after finding out (AIDS Info, 2016). Although PMTCT is seen mostly as a woman's responsibility as they are the ones directly and immediately affected, there is emphasis currently on the fact that men should become involved in the promotion of PMTCT; Male Partner Involvement (MPI) (Matseke, Ruiter, Rodriguez, Peltzer, Setswe & Sifunda, 2017).

Some knowledge, but not sure about the name of HIV management medication

Also, to the shock of the Researcher, two of the participants seemed either unsure about the nave given to HIV management or treatment medication as well as another participant somewhat denying that ART is a way to treat HIV. This is due to the assumption that everyone at this age and level of education would at least have heard of and had even the most basic knowledge and understanding of ARVs or ART treatment.

One participant failed to mention the name of the most basic treatment of HIV and AIDS; ARVs or ART when they stated that:

> *"I know that there's certain medicine AIDS suffers take; well people affected with AIDS"*

Lastly, another participant did not consider ARVs or ART as being treatment for HIV and AIDS. This participant however had some idea that ART helped treat HIV and AIDS by bettering the health of the patient, allowing them to live a longer and more comfortable life, rather putting it as:

> *"not necessarily a treatment but like pills that at least keep you alive and going for a while"*

A conclusion reached by the researcher throughout the theme regarding knowledge on HIV and AIDS transmission, prevention and treatment is that in all the cases, the problem was not discovered to be that the participants had no knowledge or inaccurate knowledge on the above matters. The problem however is that the participants do not have enough information. In most cases, what they know is the basic information, lacking precise information on the technicalities as well as the actual ways of HIV transmission, prevention and treatment rather than the means of doing so. More in depth and thorough and precise information needs to be imparted on not only postgraduate university students but to the entire population at large in order to win the fight against the HIV and AIDS pandemic.

4.7 Attaining knowledge about HIV and AIDS transmission, prevention and treatment

Some participants reported that they attained knowledge on HIV and AIDS from thei families and in their communities, while others attributed their knowledge to social ,media and most of them went on to mention most importantly and dominantly attaining their knowledge from educational institutions and forums.

Parents and community

Most of the participants felt that in their cultures, many African parents and communities do not openly talk about HIV and AIDS. Participants however stated the below when asked how they attained knowledge on HIV and AIDS and if it's openly discussed at home:

Participants expressed that HIV and AIDS is a topic their parents did not openly and thoroughly discuss with them in their homes although it was something briefly and randomly mentioned and referred to at times. However, two participants said that HIV and AIDS was something that is openly discussed in their homes with their parents. One of them stated that:

> *"in my home we are very open about this discussions and umm and from the clinic when you go hey tested, they tend to give you a consultation session and they tell you about these things".*

One participant gave more detail on how HIV and AIDS are discussed in their family and community when they expressed that:

> *"uhm I think its talked about, but its talked about positively when you are not HIV positive like its different from if to u are HIV positive. Like if you are not I think your parents will tell you the basics of don't sleep around, please uhm look after yourself if you are going to have sex use protection or don't be sleeping around with so many people. Maybe have one partner that type of thing. They'll tell you it like like like actually, it's not like they tell you about right in the open like my child let's sit down let's talk about HIV and AIDS. No they don't do that but if you are HIV positive I think it gets talked about socially in a very negative way. It almost seems as you are getting shunned and people won't talk to you about it. They talk rather in the background".*

Another participant also highlighted the fact that its merely mentioned here and there by stating that:

> *"So in my family specifically uhm my parents don't really discuss this much, I think it's a Congolese thing. They don't like dwell too much into these issues cause there I think it's more of a taboo".*

Some of the participants mentioned that they felt that there was a 'culture of silence and secrecy' when it came to HIV and AIDS and discussing it with their parents. One r participant in a way gave an explanation on why most parents didn't talk to their kids and families about HIV and aids in saying that:

> *"I guess well with family I think they always think uhm I know about this through college and stuff like that so they find no real reason why they should sit me down for that".*

Literature concurs with the above views and experiences of the participants. It shows that the belief that openly talking about sex and sexually related topics is a taboo in many African

communities, with parents also being naïve about the involvement of their adolescent children in sexual activities (MacPhail & Campbell, 2001). This causes a huge problem especially because an individual's behaviors are shaped and guided by how they are socialized, in their families and communities. Family and community are also people that can be trusted to have an individual's interests at heart and would be responsible enough to impart correct and safe information to children and adults regarding HIV and AIDS transmission, treatment and prevention (Mutema, 2013). Also, a lot of parents are shy and unable to explain and talk to the students freely due probably to them having inadequate knowledge on the subject matter as well as the fact that growing up they also saw such open discussions as a taboo (Harrison, Newell, Imrie & Hoddinott, 2010; Avert, 2017a).

Social media

Many young people have turned to social media as a way of attaining knowledge regarding HIV and AIDS and related isssues surrounding the pandemic. A few of the participants attributed their knowledge of HIV and AIDS to social media including television adverts, newspapers, social applications and the internet and made the statements below:

> *"uhm adverts, TV, flyers around, posters, yah".*

Another stated that*:*

> *"from the Internet definitely. That's where uhm what was my first source of of information concerning anything of the like".*

Another participant said :

> *"and the internet especially the, uhm the one I told you before about haircuts".*

While another participant also commented that:

> *"the media is very informative these days. There is always phrases like practice safe sex, not only TV".*

Literature concurs with the statement made by the above participants, showing how the many people (especially young adults) have started using social media in learning about the AIDS pandemic for different reasons. Social media including television programs and the internet have also played an important role in the impartation of HIV and AIDS education and

awareness around the world. As the world becomes more globalized and technologically advances, social media plays a huge role in the daily lives of majority of people worldwide (Avert, 2017a). This fact has been noted and used as an advantage in reaching out to people and spreading awareness about HIV and AIDS. Social media not only provides a means to access to information and communicate, but also it protects the identities of anyone using these platforms to share knowledge and concerns or ask questions openly, reducing the risk or probability and extent of being stigmatized and discriminated. Social media and technology also avail access that might not be there physically to populations in many geographical areas out of direct reach (Taggart, Grewe, Conserve, Gliwa & Isler, 2015). Programs and films on the television and internet that aid this include MTV's Shuga, Soul City and Soul Buddy (Avert, 2017a).

Educational institutions

All the participants mentioned the important role that educational institutions and forums have played an important role in educating and making them aware of HIV and AIDS and their transmission, prevention and treatment. These institutions are both formal and informal; ranging from primary school, to high school and university level programmes and forums.

One of the participants explained how in their first year at university HIV and AIDS was discussed during orientation:

> *"well basically as a first year we had to go through like a seminar where you had to get like all the scary details are told to you and stuff"*

Two participant recalled learning about HIV and AIDS transmission, prevention and treatment way back in high school.

One of the participants stating that these lessons were compulsory:

> *"it's something I learnt from high school, through life orientation subjects that were offered or that we had to take".*

The following participant in turn remembers being taught the basics about HIV and AIDS even more years ago in primary school and then more in depth in University at a research centre:

> *"uhm with condoms for example I got to know about that in primary school from uhm like sciences so it was basically education. I think it's part of the curriculum where you study that in uhm I think its grade 6 yah uhm I think its grade 6 yah and then uhm we also studies a bit of that in high school. And then uhm I got even more exposed uhm here at varsity uhm through a certain program called CSA".*

The last participant stated that HIV and AIDS awareness and education was offered on and around campus at the clinic:

> *"school there are many campaigns I know when you visit the university clinic they always discuss these things with you encouraging safe sex and they do provide free condoms".*

Both basic education and specifically HIV and AIDS education is important in the fight against the AIDS pandemic in Africa. It should also be noted that basic education is vital for an individual to understand and make sense of sexual education (Vandemoortele & Delamonica, 2000). The education of the public on issues surrounding HIV and AIDS is a strategy that has been implemented in the effort to make people not only aware of this pandemic but have correct information regarding this issue. This responsibility has been taken both government and NGOs; teaming up to provide accurate information to the public on what HIV and AIDS are, how the virus can be transmitted, what precautions to take against risking infection with HIV; such as safer sexual practices, and how HIV and AIDS has no cure, but can be treated and how. The education and awareness programs are implemented by governments and NGOS, and knowledge is imparted through formal and informal channels (Leclerc-Madlala, 2002). An example of informal HIV and AIDS education is through voluntary peer education, such as the 9 week HIV and AIDS education course offered by the University of Pretoria, at the Centre for the study of Sexuality, AIDS and Gender (MacPhail & Campbell 2001). In the year 2000 in South Africa, government also implemented a strategy where a subject that is compulsory in public high schools called Life Orientation (LO) was added to each learner's other subjects (Avert, 2017a). Attainment of accurate knowledge about HIV and AIDS is very important. For one to be able to practice safe sex and prevent transmission of HIV or treat it, it is vital that one has accurate knowledge about HIV and AIDS development. Accurate knowledge about HIV prevention could include how to choose and use condoms properly, how to avoid risky situations that may lead to risky behaviour related to HIV transmission and etc. (Vandemoortele &

Delamonica, 2000). Literature concurs with the widespread use of educational institutions in HIV and AIDS education and awareness in order for populations to attain correct information regarding the subject matter. It implies that a lot of parents, families and communities have also left this for educational institutions as they assume that while students of all levels learn the other modules such as math and science, so will they also learn about HIV and AIDS.

4.8 The most preferred and effective HIV prevention and treatment methods by students

This theme emerged together with sub themes which were condoms and ART. Most of the participants mentioned that they perceived condoms as being the most effective and preferred HIV prevention strategy and ART as the mist effective and preferred treatment method. Some of the participants stated condoms as being the most preferred and effective HIV prevention and treatment strategy. Some participants attributed to the easy access of condoms; both female and male condoms being distributed free of charge also by a number of governments.

Condoms

When asked what the most preferred and effective HIV and AIDS treatment strategy is among university students was, the participants all made reference to condom use.

One participant initially said that:

> *"well well I have no idea"*

With probing from the researcher on their previous comment about condoms being used frequently as a way of preventing HIV among university students, this participant then stated that:

> *"to some extent yah I think so"*

Another participant participant also said condoms, giving an explanation why:

> *"uhm OK mostly its condoms and the reason is people don't want to abstain *giggles* uhm yah they just want to get into it young".*

The next participant implied that condoms were the only sensible way, stating that:

> *"But mostly prevention would be or protection for them would be using condoms. And that's it".*

Lastly, a participant highlights why university students prefer using condoms by stating that:

> *"condoms because of their accessibility also and the cost and the admin involved. I don't think I need my name being registered at a pharmacy for buying post exposure pills when I can just buy condoms over the counter and just done. No one's going to ask you ten million questions about what you are going or do and who you are going bro do it with. It's just basically an easier step for us because we don't like things that are complicated and we for want things possibly going back to our parents somehow *giggles*"*

Condom use is described as a method of practicing safer sex (World Health Organization, 2004). A condom can be defined as a type of rubbery textured barrier worn either over the penis (Avert, 2017d) or worn internally by being inserted into the vagina (Marie Stopes South Africa, 2014) to prevent direct contact and the exchange of sexual bodily fluids that can result in pregnancy and the of STDs; including the HI Virus in HIV positive people (The World Health Report, 2004). Condoms are made using mainly two types of materials; latex or polyurethane (non-latex). The polyurethane (non-latex) condoms specifically cater for latex sensitive or allergic people and is made in the form of a female condom (Avert, 2017d). In and around the world, condoms are very widely used and popular due to the fact that they are cost effective (Avert, 2017c); with a number of countries manufacturing and distributing free condoms. South Africa for example provides free male condoms called *Choice, as* well as female condoms called *Cupid* (Society for Family Health, 2017). These free male condoms now come in a variety of flavors for example grape and banana as well as different textures (ribbed) as well as different thicknesses for maximum sensation (MacPhail & Campbell, 2001). Literature concurs with the views of students regarding condoms being the most used and preferred HIV prevention strategy, not only among university students but generally in all populations. Literature proves the claims of the participants that condoms are easily accessible and available.

When asked what the most effective and preferred HIV treatment strategy was among university students, most participants did not really address treatment using ART but rather focussed on prevention being more effective rather than treatment. All the participants

however did mention ARVs or ART earlier on in the interview, but not specifically reefing to or directly answering the question of the most preferred and effective treatment method among university students.

One participant did however directly answer and refer to ARVs stating that:

> *"the most used will probably be the ARVs cause people are starting treating it too late because uhm a lot of people I know a lot of friends who are not testing their HIV status so it means they are not preventing anything cause most of them do not use protection or at a point in their lives they stopped using protection so I don't know the most used for me would be when you are now in trouble which would be the ARVs so".*

Another participant sounded unsure as they simply stated that:

> *"I guess the pills help but I don't know to what extent or how effective they are but yah".*

Anti-Retroviral Therapy (ART)

ART is the main form of HIV and AIDS treatment. This treatment involves the use of ARVs; which are drugs (WHO, 2016), in the form of a combination of three drugs in the form of one pill that aims to stop different, compressing the stages in the multiplication of the virus, in order to be able to fight it and in turn boost the immune system viral load (WHO, 2016). This is called Fixed Dose Combination (FDC) (The World Health Report, 2004). ARVs can be given both as a prevention method in the form of PEP, PrEP and PMTCT as well as a treatment method for individuals already infected by HIV and AIDS. However, most people consider ARVs as a treatment method when prevention has failed and there being no other option but treatment (Poku, 2002). There has been very good progress in South Africa when it comes to ART. This method of HIV and AIDS treatment is now available to anyone diagnosed HIV positive. This is regardless of the CD4 count or viral load and the presence of any Opportunistic Infections (Johnson et al., 2017). South Africa boasts of the largest ART program not only in Africa, but globally which also is funded mostly through domestic resources (Avert, 2017a).

4.9 The role culture plays in HIV and AIDS transmission, prevention and treatment

From the study, it has been established that culture to a greater extent most definitely plays a role in HIV and AIDS transmission, prevention and treatment. On analysing the data provided by participants, the researcher was able to establish the role culture plays in HIV and AIDS transmission, prevention and treatment as a theme. The subthemes that emerged according to the participants' responses where some participants explicitly saw culture as playing negative role, while others saw culture as playing a positive and influential role. Some participants however had mixed feelings on the role culture plays in HIV and AIDS transmission, prevention and treatment.

Negative role

Most of the participants expressed that they perceived culture as playing a negative role in HIV and AIDS transmission, prevention and treatment. Furthermore, some of them refered to 'the culture of silence' where in some culture, talking about HIV and AIDS is a taboo.

One participant completely agreed as they stated that:

> *"there's a whole lot of secrecy between parents and children and I mean obviously there's a whole lot of rebellion because of the strict culture and traditions as well a whole lot of things being facilitated because of culture in between families so there's nothing positive for me right now. It just seems as though some, most of the these cultural practices just either strain, straining efforts to get children more aware of HIV and AIDS and how to prevent it and they are also just boosting ways for people to get sexually transmitted, to get HIV through sexual".*

Another participant also comments on the 'culture of silence' where families do not talk openly about HIV in order to discuss and impart knowledge on HIV transmission, prevention and treatment, rather leaving it to educational institutions in stating that:

> *"And also the fact that we don't openly talk about AIDS with our children as African we just feel like okay fine they must go to school and learn it. Sometimes things are learnt better when they are discussed in a family setting coz then they are closer to home and you can be like you know this is what happens".*

This same participant went on to highlight the negative influence of culture in the form of gender roles and the inability of women to negotiate safer sex as well as accepting polygamy or cheating by their husbands as instructed by cultural norms stating that:

> *"I recently tested for HIV and the the nurse told me that she had tested 8 women in the month and they were all HIV positive and they were all married. But they all knew their husbands were cheating or they couldn't all it cheating because its allowed in their culture. So uhm I guess we can then link it in that regard".*

Two participants referred to the cultural practice of 'widow cleansing'. One of the two participants further stated how this cultural practice may lead to HIV transmission and reduce HIV prevention attempts in saying:

> *"there's this one article I read about a man who initiates all the girls into womanhood in some village in Zambia where he sleeps basically with every woman and he was HIV positive. And in cultural practices like this I don't think people would be taking any any like precautions that maybe we should be using protection or whatever so basically you're lucky if you don't go through him and get HIV but if he if he sleeps with you, he claims to have left with more than 500 women in his whole life can can bring HIV into the whole thing".*

Two participants referred to 'wife or widow inheritance'concurring with the fact that many cultural practices and beliefs affect HIV transmission and prevention negatively. This cultural practice goes hand in hand with the discussions on another cultural practice that was perceived by some of the participants as negatively affecting HIV and AIDS prevention and treatment efforts; polygamy.One of the participants gave an account of some of these cultural practices and beliefs:

> *"there some cultures practiced buy Africans, in my culture okay the first I'm going to discuss is 'Kugara nhaka'. It's when for example if your older sister is married then she dies as the younger sister I have to replace her as a wife so uhmm in that case if my wife had died of AIDS this means that I'm going to go and get AIDS as well because condoms are not really allowed if I can say that in a matrimonial home you are supposed to be able trust your husband of which that's also one of the cultures I was about to talk about uhmm so basically yeah".*

This same participant goes on to discuss beliefs on condom use according to cultural beliefs, again highlighting the inability of women to negotiate safer sex in marriages due to their cultural gender roles in society:

> *"like I mentioned before the use of condoms, people do not really encourage the use of condoms, they actually don't agree with it and as a wife I can't go to my husband and say babe we gotta be using condoms now because that's not the point, because you are not getting married so that we use condoms".*

This participant concludes their response on the role culture plays in HIV and AIDS development by bringing in a cultural practice or belief regarding treatment of HIV and AIDS using medication (different forms of ART):

> *"and I also think culture, like I know there's people who don't like get medication. So you could be HIV positive but that they don't encourage you to go and get treatment and stuff which helps, which which in a way aids this whole process where people keep dying because automatically it's not acceptable".*

This participant gives an example of this referring to PMTCT which would be emphasied in antenatal care. This participant says it isn't something that her culture believed in and that they believe that when a woman is pregnant she doesn't need any medications or check and that she simply has to give birth as this is her role in society and according to culture.

A lot of literature depicts culture as playing a negative role when it comes to HIV and AIDS development (Brown, Trujllo & Macintyre, 2001). It is implied in a lot of instances that some African cultures are in a way backward and thus are in need of change to facilitate constructive progress toward addressing the HIV epidemic in Africa (Ferguson, 1990). There is a cultural belief that openly talking about sex and sexually related topics is a taboo in many African communities, with parents also being naïve about the involvement of their adolescent children in sexual activities (MacPhail & Campbell, 2001). Also, a lot of parents are shy and unable to explain and talk to the their children freely due probably to them having inadequate knowledge on the subject matter as well as the fact that growing up they also saw such open discussions as a taboo (Harrison, Newell, Imrie & Hoddinott, 2010; Avert, 2017a). An individual's behavior is influenced by upbringing, and culture and thus not talking openly about HIV and AIDS; 'the culture of silence' results in behaviors that is risky when it comes

to HIV transmission due either to rebellion to strict rules regarding sexuality or confusion and lack of knowledge, incorrect and inadequate knowledge (Mutema, 2013).

Polygamy is a cultural practice that is seen as possible contributing to the transmission of HIV and AIDS. It can be described as the practice of having more than one spouse at a time openly, with some instances where the first wife of a man actually helps him in finding a suitable second wife, as in Uganda (Dzimnenani, 2007). Male polygamy is most accepted in societies according to culture. This is when a man has more than one wife at the same time, is in many cultures acceptable in many cultures, as long as he pays dowry or lobola for them, a perfect example of a polygamist being the Swaziland King, who in 2000 had more than a dozen wives (Dzimnenani, 2007). Polygamy is also seen as a sign of wealth, prestige and status in some communities, as well as a sign of manliness (Leclerc-Madlala, 2002), with a man in a monogamous marriage being teased as being a 'bachelor' (Dzimnenani, 2007). This is because only a rich man is able to pay for a number of women's bride price, usually in the form of cows. However, the opposite of this is true in the situation of a female polygamist. Such a woman is seen as being promiscuity and is discriminated against; shunned and judged as being irresponsible and unacceptable (Akwara et al., 2003). This concurs with the cultural gender roles in society and how they play a negative role in HIV transmission, prevention and treatment.

In Africa, a man is responsible for working and providing for his family's needs. He is the head of the house, having power over his wife (Albertym, 2003) and the ultimate say in a number of issues, including sexual behavior. A woman on the other hand is seen as a nurturer, whose role is to take care of her children and family and submit completely to her husband and having no power to negotiate or control of many issues, especially regarding sexual activity (Mofolo, 2010). Her role is to provide sexual fulfillment to her husband, and thus has no right to deny him this right (Albertym, 2003), nor suggest or negotiate safer sexual practices such as condom use (World Health Organization, 2004). The inability of a married woman to negotiate safer sex puts her at risk of becoming infected with HIV from her husband who might be promiscuous and or be a polygamist (Marks, 2002), especially because she has no power to question his sexual behaviours or status in order to protect herself (Bunnell, Mermin & De Cock, 2006). In a situation like this, many cultures believe that married people do not need to use condoms. Condom use is believed to be only necessary when engaging in casual sex. In serious or steady relationships, the use of condoms

or suggestion to use condoms is seen as the result of lack trust in your partner or that you do not love them, as well as infidelity (Leclerc- Madlala, 2002).

Also, at the death of a young woman's husband, probably due to HIV and AIDS related illnesses, but unknown to the public, a ritual of cleansing is preformed, believed to chase away the spirit of the deceased. This involves the hired spirit cleanser having unprotected sex with the widow. This cleanser is usually a 'professional' who has and still performs this ritual on many other widows, who might have infected him with the virus, which he in turn, infects the unknowing widows too. In the event that the deceased man was a polygamist, these results in multiple rituals cleansing being done on each of his wives, usually one after the other, increasing the probability of multiple infection by the same person within a short period of time (Sovran, 2013). Another cultural practice is when a woman's husband dies and she is given away as a bride to the deceased husband's older or younger brother. This is called 'sex inheritance" where a widow is required to live with and have sex with a kinsman for socioeconomic support and continuity of the bloodline and clan (Barnette & Parkhurst, 2005). If either partner is HIV positive, this means that the Virus will be transmitted to the other HIV negative partner or reinfection will take place of a partner who is already HIV positive, creating a different virus variant (Muula, 2006). PMTC is the treatment given to either a pregnant woman and or a breastfeeding woman who has tested HIV positive; in an effort to prevent the mother from transmitting the HI Virus to the unborn child (WHO, 2016). Many women do not know about PMTCT, especially in rural settings or in situations where the mother has no information or education regarding this strategy. A woman is expected to get pregnant by her husband and simply have children through giving birth. Culture does not give reference to HIV testing or ART in the form of the PMTCT and thus many children are born HIV positive as they aquire the virus from their HIV positive mothers that would not have been on the PMTCT program (Dzimnenani, 2007; Mofolo, 2010). Lastly, conspiracy theories and cultural beliefs on how HIV is spread or acquired, including that it is a punishment from God or the ancestors due to sin and disobedience, respectively, (Bogart, Skinner, Weinhardt, Glasman, Sitzler, & Kalichman, 2011) may result in people rejecting ART and rather seeking alternative ways to try and treat or cure the infection, such as seeking traditional medication from traditional healers, some going for up to months after being diagnosed with the virus such as seen in a case in KwaZulu Natal, South Africa (World Health Organization, 2004), in turn giving the virus more time to kill your immune system, increasing the number of people developing AIDS in a short period (World Health

Organization, 2004). All the above literature and quotes show and prove how culture plays a negative role and affects the extent to which many HIV and AIDS prevention and treatment strategies will be effective. Literature therefore concurs with these perceptions of the role culture plays in HIV development to this; culture in this aspect would play a negative role.

Positive and influential role

One of the participants expressed that the saw a connection between HIV and AIDS transmission, prevention and treatment and culture, seeing a positive role played by culture. To support this fact is the statements below:

One participant highlighted that virginity testing encouraged abstinence from sex in girls from families whose culture practiced this stating that:

> *"uhm well in our culture , which we never really practice at this moment, but there, I understand that back in the day they used to like check girls to see if they were still 'fine' and what not".*

Because the statement was unclear, the researcher probes which resulted in the same participant explaining that the above statement referred to:

> *"if they are still virgins and what not. So if you avoid that or if you know you're going to be checked or not you would then be so scared to go and do other things out there. So Uhm if you then do it then there are chances of you having HIV and AIDS if you practice it or practice having sex or whatever. So I feel like yes it does play a role".*

Another participant perceived culture playing a positive role in HIV transmission and prevention by encouraging abstinence from sex

> *"cause with us you are told you can't have sex before marriage and stuff. We do it yes but its something that's not advised by our parents so in that in that sense it uhm actually stops you from getting cause you can abstain yah".*

The following statement was made by a participant that saw a positive aspect in 'sex inheritance' as a cultural practice stating that"

> *"But the good part about that well 'Kugara nhaka' means that the AIDS is kept in one family".*

Lastly, another participant refers to cultures that support monogamy in marriages as a way of reducing the possibility of the spreading or acquiring of HIV and AIDS due to promiscuity and polygamy

> *"uhm there are some cultures in the African people that don't encourage a man to have another woman, u should stick to your family and it a taboo for you to go out and look for another woman".*

Abstinence from sexual activity is another way HIV and AIDS can be prevented, which is seen as a behavioural preventative method (Muula, 2006). By abstaining from sex, there is a lower chance that one will be infected by HIV through unprotected sex with an HIV positive partner (Mutema, 2013). Abstinence carries a "religious and moral connotation" (Planes, Gomez & Gras, 2009, p. 2) as well as it being influenced also by traditions and culture; shaped by social standards set by families and communities. An example is the practise of virginity testing in some South African cultures. By doing this, young girls are forced to maintaining their virginity by abstaining from sexual activity, in turn reducing their chances of falling pregnant outside marriage and becoming infected with HIV and other STDs or actually spreading those (Mokwena & Morabe, 2016). Polygamy practiced in faithfulness between an HIV negative man and his HIV negative wives has no direct risk in spreading HIV. However, in the event that one of the partners is HIV positive, unknown to the rest, together with belief that condoms are not necessary to use in steady relationships and among married people, this will result in all partners involved being infected with the HI Virus (Sovran, 2013). Lastly, efforts are being put into adopting the culture of 'monogamy' in an attempt to curb the spread and transmission of HIV and AIDS. Culturally in a lot of instances, polygamy is encouraged which contradicts the strategy of encouraging monogamy, which is seen by many cultures in Africa as being a Western value. However, efforts are being made to encourage monogamy. An example of this is a strategy called the "O icheke-Break the chain campaign led by National AIDS Coordinating Agency (2009)" (Chilisa, Mohiemang, Mpeta, Malinga, Ntshwarang, Koyabe, & Heeren, 2016, p. 564) in Botswana. Cultures that encourage monogamy have a positive and inbfluential role in HIV and AIDS transmission, prevention and treatment by reducing the possibility of the spreading or acquiring of HIV and AIDS due to promiscuity and polygamy.

Literature concurs with the fact that in some instances, culture does in fact play a positive and influential role in influencing sexual behaviour in societies which aid in the effectiveness in the success of HIV prevention and treatment strategies.

Mixed feelings

Most of the participants gave both positive and negative roles that they perceive culture as playing in HIV and AIDS transmission, treatment and prevention. They did not perceive culture as having an extremely positive or negative role but perceive culture as both having positive and negative influence..

One participant expressed the above as they stated simply how they perceived culture playing both a negative and positive role in HIV and AIDS transmission, prevention and treatment by saying that:

> *"okay I do believe culture has an important role in HIV transmission because; okay it's a 2 way thing if you look at it okay. I will start with the negative…."*.

This participant went on to give an account of this by starting with the negative role and then moving on the positive role they perceived regarding culture and HIV and AIDS.

One other participant also expressed mixed feelings regarding culture's role in HIV and AIDS transmission, prevention and treatment by stating that:

> *"umm there is definitely a connection. There is definitely a negative connection between culture and HIV and AIDS, as well as a positive connection. It really depends where in the world you are placed and what your culture is and what their values are"*.

Cultures do not play any role

All this said, one participant saw no relationship between culture and HIV and AIDS development. This participant did not see culture as playing any role at all in HIV and AIDS transmission, prevention or treatment, stating that:

"mmmmm uhm no. Well from my culture, my household, my upbringing I haven't been like… It's, like HIV has always been a cold medical term. There's never been any beliefs around it".

This perception is a perfect example of how the beliefs, perceptions and behaviours we have as people greatly depend on how we are socialised and brought up (Campbell& MacPhail, 2002). Culture can be 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" (Mofolo, 2010). This literature therefor concurs with the neutral role that one participant saw culture as playing in HIV and AIDS transmission, prevention and treatment

4.10 Education as a factor in perceptions on culture and HIV and AIDS

Definitely education plays a big role

The last theme that emerged after data was analysed is on education as being a factor in the participants'' perceptions of HIV and AIDS. All participants stated that education definitely played an important role in how they perceived culture and HIV and AIDS when the researcher asked them if education had influenced their perceptions regarding culture and HIV and AIDS. One participant showed the vitality of education in their understanding and perceptions surrounding HIV and AIDS as concepts as well as how they can be transmitted, prevented and treated, furthermore what role culture plays in this and stated that:

"uhm my education has definitely played a part in what I think, it has definitely played a part in me preventing HIV uhm because I have had the ability to be or I have had the opportunity to be basically warned about it and to be you know constantly fed with information on how I can prevent it. So for me I would say education has definitely played a role. Some people don't have the education that they need for that. I mean especially rural communities so what would you expect a woman who's getting into adolescence a young girl who's getting into adolescence in the rural communities to know on how to prevent HIV and AIDS. I mean toy go through so much growing up so if education is lacking I mean it's like every other situation. If there's no warnings, there's no preparedness".

Another participant highlighted the importance of education in questioning traditional and cultural values, norms, beliefs and practices by stating that:

> *"uhm I think education plays a great role because uhm its different when you are educated. Its uhm you seek facets, you seek to know ways best for you".*

One other participant reiterates the stand point of the previous one, explaining how their perception might have been different if they were not educated to the level and extent they are. Below is a direct quote of what the participant said:

> *"yes, I do think that. Maybe if I was not raised in this setting I would have a different perspective. I would be looking forward to replacing my sister as a wife and that would be my goal in life but it's not that it's a bad this it's just that the setting that you are raised in. So as an educated person I've managed to see things from a different perspective and I see the wrongs in our culture, but if I was brought up in strongly cultural home I believe that I would not be so against some of our cultural practices coz there would be a part of me".*

Lastly, one participant argues that in some cases, education does not mean people will change their sexual behaviour to be more careful and practice safer sex methods such as condom use:

> *"So education makes you aware, it shows you the danger. Uhm any rational person will stay away from danger *giggles* but because of our nature…..our uhm they call it 'the dog tendencies' *giggles* you know they just emanate some things and kinda still go for it. You know".*

This participant also stated that in some ways education may actually encourage risky sexual behaviour:

> *"It's not the end of the world' you can absolutely manage it, it's OK you know. When people look at it in the different places I've stayed in people look at as the opportunity cost is not so high in the sense of uhm you know they want to have, they call it 'raw sex' *M giggles* but I mean like sex without a condom and they are looking at that you know the possibility of getting HIV and they are like 'ah nah bra when I weigh these two things it's still...uhm I can take the chance' because A HIV is not such a big deal and you can get medication, you know".*

For one to be able to practice safe sex and prevent transmission of HIV or treat HIV and AIDS, it is vital that one has accurate and adequate knowledge on how HIV and AIDS develop. Accurate knowledge about HIV prevention could include how to choose and use barrier methods such as condoms properly, how to avoid risky situations that may lead to risky behaviour related to HIV transmission and etc. as well as how to treat HIV and AIDS as well as prevent your unborn child from becoming infected with the HI Virus (Vandemoortele & Delamonica, 2000). Education and awareness are vital when it comes to changing behaviours and perceptions of HIV and AIDS in individuals. This is because one is able to challenge certain beliefs, norms and values they are socialised to believe religiously and culturally. Individuals are empowered to as the how, why, what, when etc. questions in order to discover the truth and make informed decisions regarding their lives (Vandemoortele & Delamonica, 2000). It is also vital hat individuals and communities be empowered to participate and contribute to HIV and AIDS prevention and treatment strategies that they will more easily accept and agree with, accounting for their cultures and religious beliefs that will not contribute to risky behaviours that will lead to HIV and AIDS transmission (Harrison, Newell, Imrie & Hoddinott, 2010). Both basic education and specifically HIV and AIDS education is important in the fight against the AIDS pandemic in Africa. It should also be noted that basic education is vital for an individual to understand and make sense of sexual education (Vandemoortele & Delamonica, 2000). Basic primary school education enables individuals to become literate and more employable. This in turn reduces the chances of people engaging in risky behavior in order to get money; such as female prostitution in order to make ends meet and become economically stable. Also, as more and more educational institutions have implemented programs that teach children about HIV and AIDS, the population of kids that do not go to school for the various reasons are unable to access this information, thus limiting their knowledge of HIV and AIDS to what they may hear from friends and what is believed by their parents and communities (MacPhail & Campbell, 2001).

The education of the public on issues surrounding HIV and AIDS is a strategy that has been implemented in the effort to make people not only aware of this pandemic but have correct information regarding this issue. This responsibility has been taken both government and NGOs; teaming up to provide accurate information to the public on what HIV and AIDS are, how the virus can be transmitted, what precautions to take against risking infection with HIV; such as safer sexual practices, and how HIV and AIDS has no cure, but can be treated and how. The education and awareness programs are implemented by governments and NGOS,

and knowledge is imparted through formal and informal channels (Leclerc-Madlala, 2002). The people, now equipped with accurate information and knowledge regarding HIV and AIDS, are able to question some cultural beliefs and practices contributing to the spread in the deadly virus, allowing advocacy also in order to ensure practices such as female genital mutilation are stopped (Mofolo 2010), and negotiate the safer practice of male circumcision by sterilizing of tools or using different ones for each initiate (Sovran, 2013). Knowledge and or awareness of HIV and AIDS transmission, prevention or treatment is not learnt by children mostly through their families and or communities, but rather in schools and educational institutions through a number of programs, from as early as primary school (Leclerc-Madlala, 2002). This then means that in cases like this, if one has no access to educational institutions due to either; poverty or other resources, their knowledge surrounding HIV and AIDS may be minimal, or in extreme rural poor locations close to nothing, with the exception of the general knowledge of what HIV and AIDS is (MacPhail & Campbell, 2001).

Although many people believe that 'knowledge is power', this doesn't necessarily increase the extent of HIV prevention and treatment. This is because even with the correct information regarding HIV and AIDS, still, people engage in risky behavior. This may be due to ignorance, poverty and other socioeconomic factors as well as religious and cultural norms, values and beliefs (Dube, Nkomo & Khosa, 2017). Trinitapoli, (2009) as cited in Sovran (2013, p. 38) support this fact by stating that "religious teachings may be detrimental by banning certain protective measures, such as condom use, or denying young people education about safe sex". Dzimnenani supports this notion, however arguing about the relevance of the information in some extreme situations, in his statement that "it is not simply that information, education, and counseling activities are unlikely to reach the poor but that such messages are often irrelevant and inoperable given the reality of their lives" (Dzimnenani, 2007, p. 606). Literature concurs that education plays a vital role in the perception of people, in this case, postgraduate students in Gauteng on HIV and AIDS as well as the role of culture in its development. This is true for basic education in general as people become literate and can read and research on the topic at hand, as well as formal and informal education where they will be able to better understand HIV and AIDS specifically. Literature to some extent concurs to the fact that uneducated and illiterate people are at a disadvantage as they may have limited access to or may not fully understand HIV and AIDS, how its transmitted, prevented and treated. Literature however also to a less extent contradicts that education will result in more effective and efficient HIV and AIDS prevention and treatment, in the fight

against the deadly pandemic. This is because there are many other determinants of behaviour and behaviour change regarding HIV and AIDS prevention and treatment such as religion. Also, just because someone is educated generally, and on issues regarding HIV and AIDS, this doesn't necessarily mean their behaviour becomes or is less risky in order to prevent HIV.

4.11 Summary of chapter

This chapter presented a summary of the findings and discussions of the study. It met the goals and objectives the study set initially by giving different accounts of what HIV and AIDS are perceived to be, how they are transmitted, prevented and treated, as well as the role that culture plays on HIV and AIDS development. The chapter also presented and discussed education as an important role in HIV and AIDS and Cultural perceptions; all by and from a study conducted with postgraduate students in Johannesburg and Pretoria. The following Chapter, which is the final one in this report and it will highlight the main findings from the study as well as draw conclusions and give recommendations on the way forward in the fight against the HIV and AIDS pandemic in Africa, focussing on the role culture plays and should play.

CHAPTER FIVE: MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the main findings of the study in relation to the set objectives. Conclusions drawn are also presented in this chapter together with the recommendations. The study explored the perceptions of university students regarding the role of culture in the transmission, prevention and treatment of HIV and AIDS in Johannesburg and Pretoria, South Africa.

5.2 Summary of findings

The summary of the study findings is presented in relation to the study objectives.

The first objective of the study was to explore university students' knowledge about the transmission, prevention and treatment of HIV and AIDS in Johannesburg and Pretoria, South Africa.

Findings revealed that almost all the participants had adequate knowledge on what HIV and AIDS are as well as the difference between the two. They were able to describe in detail the differences between the two concepts. Participants also had a fairly good understanding of the process of HIV transmission and how HIV and AIDS can be prevented and managed. However, one participants showed little understanding regarding the difference between HIV and AIDS. This was quite alarming as the researcher had assumed that at postgraduate level, most students might know at least the basic difference between the two concepts. Regarding the HIV prevention methods, participants revealed that they felt that the most popular and commonly used HIV prevention method was using condoms. One participant stated that abstinence was the best, however, some participants were of the idea that abstinence was difficult stating that in this day and age and with this generation, it was almost impractical as some people at this age are involved in some type of sexual activity, and it would be naïve to think or assume otherwise. This was therefore seen as a contested issue that could be context specific. It was also found that although prevention was definitely the better option, students were in some cases ignorant when it came to this knowing that HIV and AIDS are not a death sentence and thus still engaging in risky sexual behaviour. Participants unanimously referred to ART as the most effective and only treatment for HIV and AIDS, as the pandemic still has no cure.

The second objective sought to elicit the views of university students on the role, if any, of culture in HIV transmission, prevention and treatment in Johannesburg and Pretoria, South Africa.

Findings showed that participants perceived culture as having both a negative and positive role in HIV and AIDS transmission, prevention and treatment. Participants perceived the role of culture being influenced by cultural beliefs, norms, values and practices that may either positively or negatively affect HIV and AIDS prevention and treatment efforts. Reference was made by different participants repeatedly on how in most of their families and

communities, discussions on the subject matter remained a taboo, as well as that there was a lot of assumptions, stigma and discrimination associated with HIV and AIDS. This was especially regarding open discussions about the virus and the disease, as well as an expression of open interest in wanting to know more about the pandemic. This finding aligned mostly to participants' homes and community.

It was found that because of the culture of silence, inadequate knowledge and the stigma and discrimination associated with HIV and AIDS and the issues surrounding them in especially communities, students are forced to rely on educational institutions and also social media to gain information on the subject matter. Most participants attributed the knowledge that they had on HIV and AIDS to education and awareness programmes provided by educational institutions they attended. Participants indicated that this self-education started when they were in primary school, all the way up to their current higher institutions of education. In addition, due to globalization and the ever evolving technology, a number of participants had access to social media such as television, radio and various internet sources, and used these to research and find out more on the subject matter. It should be noted that participants indicated that even though at times there was a mention of HIV and AIDS in their homes, it was done so in passing and very vaguely and negatively.

The third objective investigated whether exposure to formal education had any influence on university students' views regarding the role of culture in HIV transmission, prevention and treatment in Johannesburg and Pretoria, South Africa.

Findings revealed that participants expressed that formal tertiary education has definitely played a big role in their perceptions on culture and HIV and AIDS. Participants expressed that through education they were able to learn all they know regarding HIV and AIDS transmission, prevention and treatment as well as be able to question and challenge certain cultural norms, values, beliefs and values that are stipulated in and around their families and communities. Furthermore, education has played a big role in how they perceive culture and its role in the subject matter, allowing them the opportunity to reduce their risk of getting HIV and AIDS otherwise due to no knowledge and or ignorance in some cases.It was found that education played a significant role in the perceptions of participants regarding HIV and AIDS. Participants expressed gratitude for the opportunities and that they were fortunate enough to have been afforded education as they indicated that it empowered them to make more informed decisions, and to question a number of their cultural practices, norms, values

and beliefs that may result in a higher probability of them becoming infected with HIV and/or reduced efficiency on HIV and AIDS prevention and treatment strategies. It should be noted that one participant mentioned that having acquired education and knowledge, does not necessarily mean a change in behaviour. The participant gave an example of one of the observations where a fellow postgraduate student who had good knowledge on HIV and AIDS transmission, almost did not practice safer sex, comforting themselves by saying that HIV was not a death sentence, and he could still live a long and fulfilled life as an HIV positive individual. Even though this was the elaboration on the assertion made, it was difficult to measure its truthfulness due to lack of evidence.

Some of the participants noted that their perceptions as educated postgraduate young adults may differ on the same subject in matter, understandably, to those of a young adult who might not have been awarded the chance of formal education and at a higher level for that fact. Due to illiteracy and or very little or no access at all to educational facilities and institutions and technology to access social media, they can understand how someone in such an opposing situation and context as theirs might not or would not share the same sentiments and perceptions on the role culture could play in HIV and AIDS transmission, prevention and treatment.

5.3 Conclusion

The researcher concluded that although all of the participants were very much aware of HIV and AIDS and the issues surrounding the pandemic, in some cases, the knowledge they had regarding what HIV and AIDS are, how HIV is transmitted and how they were prevented and treated was either not completely correct or was inadequate. Another conclusion was that most of the participants attained their knowledge on the subject matter through mostly educational institutions and educational awareness programmes and platforms; including social media. Thus the study concluded that this was alluded to the culture of silence among parents and their children, families and community members, where HIV and AIDS were not usually discussed and that where they were discussed it was always vaguely done or done in passing. Findings showed that culture played both a positive and negative role in behaviour and perceptions regarding HIV and AIDS. Education was also revealed as playing a big role in making people aware of and providing important information on HIV and AIDS prevention and treatment as well as changing or at least helping people question certain

cultural practices, beliefs and norms associated with aiding the spread of the pandemic and reducing the effectiveness of attempts to prevent and treat HIV and AIDS.

5.4 Recommendations

Based on the findings from the study, the following recommendations are made:

Recommendations for programmatic and policy interventions

- Culture needs to be considered in the planning of future strategies targeting HIV and AIDS transmission, prevention and treatment, as this might the lower rates of new infections and mortality.
- A more participatory approach must be adopted in order to include ordinary citizens and local members of community during the planning and implementing of HIV and AIDS transmission, prevention and treatment strategies, this might promote the achievement of desired outcomes as the community might feel being involved in the development of the strategies.
- Programmes to be developed that will assist families and communities to openly and honestly discuss issues surrounding the HIV and AIDS pandemic in order encourage the sharing of more accurate knowledge about the pandemic.
- Policy makers should note and consider the many other factors that influence behaviour such as religion, socioeconomics and politics, among others, so that a policy with a holistic approach can be developed.

Recommendations for future research

- Further research should be done highlighting, in-depth, the importance of culture, as it has been shown as having an impact on issues surrounding the HIV and AIDS pandemic in Gauteng.

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APPENDIX A PARTICIPANT INFORMATION SHEET

Good day,

My name is Tapiwa Chimonyo and I am a post graduate student registered for the degree Masters in Social Development at the University of the Witwatersrand. As part of the requirements for my degree, I am conducting research into '***the perceptions of University students in Pretoria and Johannesburg on Culture and HIV/AIDS in modern day South Africa on Culture and HIV and AIDS***'.

Culture plays a big role in people's behavior and perceptions of different phenomenon. Also, with formal education comes a lot of contradictions and confliction where a number of our traditional cultures are more and more seen as conflicting with Western education, especially when it comes to HIV/AIDS prevention and treatment strategies.

I am therefore extending an invitation for you to participate in my study. If you do agree to take part, I shall arrange to interview you at a time and place that is suitable for you. The interview will last approximately 30-45 minutes. It is important that you know that your participation is entirely voluntary and if at any point you decide to retract your agreement of participating in my study for any reason at all, it will not be held against you in any way. You may withdraw from the study at any time and you may also refuse to answer any questions that you feel uncomfortable with answering.

With your permission, the interview will be audiotape-recorded. No one other than my supervisor and examiners will have access to the tapes in order to assist me with transcription of the interview. The tapes and interview schedules will be kept; safely locked away for two years following any publications or for six years if no publications come out from the study. Please be assured that your name and personal details will be kept confidential and no identifying information will be included in the final research report.

If you would like to access the final research report, you are able to do so by emailing me on crystalchimonyo@gmail.com and requesting a copy. The University of Witwatersrand will also make available a copy in their library and on the library website.

As the interview may include sensitive issues, there is the possibility that you may experience some feelings of emotional distress. Should you therefore feel the need for supportive counselling following the interview, I have arranged for this service to be provided free of charge at the Emthonjeni Centre at the University of the Witwatersrand. Please feel free to

ask me any questions regarding my study which I will answer to the best of my ability. You may contact me on my cell phone number +27 84 620 4105, and email address crystalchimonyo@gmail.com or through my supervisor, Mr Nkosiyazi Dube from the University of the Witwatersrand School of Human & Community Development Department of Social Work on Tel + 27 117178686, and email address ndube@cartafrica.org.

Thank you for taking the time to consider participating in the study.

Yours sincerely,

Tapiwa Chimonyo (student researcher).

APPENDIX B CONSENT FORM FOR PARTICIPATION IN THE STUDY

I hereby confirm that:

I have been briefed on the research that ***Tapiwa Chimonyo*** is conducting on *"**Exploring postgraduate university students' perceptions regarding the role of culture in the transmission, prevention and treatment of HIV and AIDS in Gauteng**".* The purpose and procedures of the study have been explained to me, therefore:

- I understand what participation in this research project means,
- I understand that my participation is voluntary,
- I understand that I have the right not to answer any questions that I do not feel comfortable with,
- I understand that I have the right to withdraw my participation in the research, at any time, I so choose, and
- I understand that any information I share will be held in the strictest confidence by the researchers.
- Some of my direct quotes will be reported as is in the report.
- I hereby consent to participate in the research project.
- <u>Optional clauses:</u>

I hereby request that I be guaranteed anonymity	Y	N
I hereby request a copy of the research report	Y	N
I hereby agree to have the interview recorded	Y	N

Name of Participant:_____

Date: _____

Signature: _____

APPENDIX C CONSENT FORM FOR AUDIO-TAPING OF THE INTERVIEW

I hereby consent to tape-recording of the interview. I understand that my confidentiality will be maintained at all times and that the tapes will be destroyed two years after any publication arising from the study or six years after completion of the study if there are no publications.

Name of Participant: ……..

Date: ……..

Signature: ……...

APPENDIX D SEMI-STRUCTURED INTERVIEW SCHEDULE

Section A: Biographical information

Sex :

Age :

Race :

Ethnicity :

Home Language :

Section B: Interview questions

1. What is your cultural background?
2. What is HIV and AIDS?
3. How is HIV and AIDS transmitted?
4. What HIV and AIDS prevention and treatment strategies do you know?
5. How did you get to know about these strategies?
6. Which ones do you think are the most used and most effective?
7. Why do you think these are preferred and work best?
8. Do people in your family or community talk about HIV and AIDS openly?
9. Do you see any connection between culture and HIV and AIDS?
10. If yes, what cultural values, norms, beliefs and practices do you perceive to be connected to HIV and AIDS?

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Chimonyo

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H16/06/06**
PROJECT TITLE	The perceptions of university students in Pretoria and Johannesburg on culture and HIV/AIDS in modern day South Africa
INVESTIGATOR(S)	Ms T Chimonyo
SCHOOL/DEPARTMENT	Human and Community Development/
DATE CONSIDERED	24 June 2016
DECISION OF THE COMMITTEE	Approved
EXPIRY DATE	26 October 2019

DATE 27 October 2016 **CHAIRPERSON** J Knight
(Professor J Knight)

cc: Supervisor : Mr N Dube

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

Signature

15/03/2018
Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES