CHAPTER 3

HIV AND AIDS: A THEORETICAL OVERVIEW

3.1 INTRODUCTION

Much is known about the virus that causes AIDS, the ways in which it is transmitted, about the acute symptoms and the impact on the society. In addition, the statistical picture of HIV and AIDS at both national and international level is clear. This chapter aims to illustrate the basics of HIV and AIDS.

3.2 DEFINITION OF HIV AND AIDS

Acquired Immuno Deficiency Syndrome (AIDS) was first recognised in 1981 as a distinct medical condition by the Centre for Disease Control (CDC). A person infected with HIV is diagnosed with AIDS when the body's immune system breaks down and certain conditions or illnesses occur. HIV is a virus that attacks the body's immune system.

A person infected with HIV may not initially show any symptoms, but eventually, without effective treatment, the immune system will become very weak and the person will no longer be able to fight the illnesses. The Centre for Disease Control and Prevention (CDC) defines a person who has AIDS as being infected with HIV and having less than 200 CD4 cells per cubic millimetre of blood accompanied by health problems common in people with AIDS, which are called opportunistic infections (CDC, 2006). Healthy adults have CD4 and T cell counts of 1,000 or more.

HIV destroys white blood cells named the CD4+ T-lymphocytes, which are important to the body's immune system. When these cells are weakened or lost, the body becomes weak and is left vulnerable to opportunistic infections. The death of these blood cells is a consequence of the infection with HIV (National Research Foundation (NRF), 1986: 6). Opportunistic infections are illnesses that are caused by organisms that do not ordinarily cause disease in a person with a healthy immune system, such as tuberculosis,

pneumocystis carinii pneumonia, cervical cancers, herpes zoster, lymphoma and others (*World AIDS Day Website*…, 2007).

The Human Immuno-deficiency Virus (HIV) causes the acquired immuno-deficiency syndrome AIDS. There are different types and strains of HIV. Most people have the HIV-1 strain (type). A person can become infected with more than one strain. HIV attacks the body's immune system (natural defence system against disease) by destroying one type of blood cell (CD4 cells) that helps the body fight against and destroy germs.

CD4 cells belong to a group of blood cells called T-cells that also help the body fight disease. In the body, HIV enters these cells, replicates, and kills the healthy cells and leaves the body vulnerable against germs. When HIV overpowers enough CD4 cells or causes serious infections that do not normally make a healthy person sick, a person is then confirmed to have AIDS. The progression from HIV to AIDS is different from person to person, meaning some people live for 15 years or more with HIV without it developing into AIDS, while others develop AIDS faster. The exact explanation for progression from early HIV to AIDS is unknown. A number of factors are involved, including genetic susceptibility, co-infection with other viruses, age, and probably the resistance of HIV to anti-HIV drugs (Essex & Kanki, 1989:3).

3.3 HOW IS HIV TRANSMITTED?

HIV is transmitted through contact with certain body fluids or tissue of persons infected with the virus. HIV travels in the blood, semen, vaginal fluids, and breast milk of an infected person. The virus is transmitted through sexual contact (unprotected vaginal, anal and oral), by needle sharing, from mother to child during pregnancy, birth or after birth, through blood transfusion, tissue or organ donation.

The virus enters the body and attaches itself to host cells, which is known as the CD4 cells (or T-helper cells). The T-helper cells are the prime targets of HIV. In order for the person to be infected, the virus has to enter the body and attach itself to the CD4 cells. The process of the HIV infection and killing of the T4 cells is the process that starts the

infection. The infection begins as a protein on the viral envelope that attaches itself tightly to a protein known as CD4. The virus then merges with the T4 cell and transcribes its RNA genome into the double-strand DNA. The viral DNA becomes incorporated into the genetic material in the cell's nucleus and directs the products of new viral RNA and viral proteins, which combine to form new virus particles. These particles bud from the cell membrane and infect other cells. Finally, the viral protein circulates in the blood of people with HIV and makes the immune system weak (Redfield & Burke 1989: 3).

AIDS has become a social disease that can be defined as a social disease with its transmission related to certain identifiable forms of social behaviour, such as sex. The emphasis is also on behaviour change as the only way to prevent the spread of AIDS in the current event of absence of a medical cure. The two identifiable options to address behaviour, in the opinion of Jobson (2002:3), are reducing the number of sexual partners and increasing the use of condoms. Pool (1997:83) suggests that an understanding of the social, cultural, and economic contexts of the behaviour concerned is as important. He further adds that the relationship between knowledge and general causal models is essential, noting the following:

- Sexual behaviour and related attitudes.
- Knowledge and perceptions of AIDS.
- Local aetiologies and treatment-seeking behaviour.
- Social organisations, customs and norms.
- Underlying socio-economic factors.
- Coping with AIDS and its consequences.

There are symptoms and signs that identify a person who is HIV infected. During the first stage of HIV infection, the person is 'asymptomatic'. Asymptomatic means the person shows no symptoms of being infected. In this case, the only way to know if the person is infected is through a blood test. The second stage is called the symptomatic stage. The symptoms associated with this stage are fatigue, fever, swollen lymph glands, chronic

diarrhoea, meningitis, and weight loss. HIV may also result in symptoms such as neurological damage, and of the neurological complications, dementia is among the most severe and disabling (CDC, 1993: 2). Sometimes the presence of neurological complications may mimic psychological problems, posing difficulties in diagnosis. Women experience vagina yeast infections. This stage may last for several years, but it also may progress to severe, advanced illness in a matter of weeks or months. Through the introduction of drug therapy, the length of time can be extended before the person becomes seriously ill. The most advanced stage of HIV infection is the AIDS phase. This is the stage when the infected person has severe immune-suppression (less than 200 CD4 count).

3.4 STAGES OF HIV

The following description is a summary of the training manual developed by the researcher for the purpose of HIV training that is offered to various workplaces through consultation process. The manual is in a presentation format and the content was gathered from various research from newspapers and Internet sources, seminar and conference papers and interactions with experts in the field of HIV and AIDS over the past years.

3.4.1 Stage 1: HIV Infection

This stage comprises the first 6-12 weeks after acquiring the HIV-infection, until the body's initial immune response develops enough antibodies to reduce the amount of HIV in the body. During this period, people are highly infectious and the virus can then easily be passed on to others.

At this stage some people may develop a flu-like illness, called 'sero-conversion illness'. This occurs around the time the HIV antibody test converts from negative to positive, i.e. when the body has developed sufficient antibodies to be able to detect them with a blood test. It is probably caused by the activation of the immune system. Sero-conversion illness may present as follows:

- Fever, headache, malaise (general feeling of illness)
- Enlarged lymph nodes (glands of the immune system in the neck and groin)
- Skin rash
- Painful muscles and joints
- Sore throat

These symptoms usually disappear within a week to a month and are often mistaken for a simple cold or flu.

The period prior to sero-conversion is known as the 'window period'. During this period, antibodies are not detectable and a blood test may return a false negative result. This phase lasts two to twenty-four weeks after infection and most HIV tests will show negative results in this phase, although the person is already infected. This is a very dangerous period because people are infectious and are easily able to spread the virus, even though blood tests show that they are 'negative' (CDC, 2004).

Once antibodies are detected, the blood test result is positive and sero-conversion is said to have taken place. During sero-conversion, the antibody levels are very high. Levels drop much lower thereafter. Once the symptoms related to the sero-conversion illness disappear, the infected person may remain symptom-free and well for many years.

3.4.2 Stage 2: Asymptomatic Or Silent Phase

During this stage, an HIV positive person enters an asymptomatic phase, during which time he or she remains clinically healthy. This stage can last anything from three to seven years - sometimes up to 10 years. Although the infection is silent, the virus is continues its onslaught on the immune system, which is slowly deteriorating.

During this phase, the only indication that a person is infected with HIV would be by a positive HIV test. The person remains infective throughout this stage. This stage is associated with a CD4 cell count of 500 - 800 cells/mm^3 (CDC, 1993:4).

Most of the patients in this phase of the disease are unaware of their HIV infection and continue with their lives as normal. Those who become aware of their status, usually from screening during pregnancy, testing for blood donation or testing for insurance purposes, have to make a major social adjustment. A positive diagnosis usually causes an acute (sudden onset) emotional crisis for the person (and his/her family) and often results in depression. Psychological support in the form of counselling is often necessary.

3.4.3 Stage 3: Minor Symptomatic Phase

As the CD4 cell count reduces, a variety of minor complications begin to surface because of the weakened immune system. (Stage 3, characterised by minor symptoms, and stage 4, characterised by more serious symptoms are often discussed as one stage).

One of the first such symptoms experienced by many people infected with HIV, is lymph nodes (glands) that remain enlarged for more than three months, also called persistent lymphadenopathy (Crewe & Orkin, 1992).

Other symptoms often experienced months to years before the onset of AIDS include:

- A lack of energy
- Weight loss
- Frequent fevers and sweats
- Persistent or frequent yeast/thrush infections (oral or vaginal)
- Persistent skin rashes, dry and itchy skin
- Pelvic inflammatory disease that does not respond to treatment
- Short-term memory loss

- Children may have delayed development or 'failure to thrive'
- Fungal nail infections
- Recurrent mouth ulcers
- Recurrent throat infections
- Shingles (herpes Zoster)

As the virus spreads and CD4 cells are destroyed, the loss of these cells reaches a point where the CD4 count drops to as low as 350 cells/mm3. This marks the end of the minor symptomatic stage (Bendell, 2003).

3.4.4 Stage 4: Symptomatic HIV-Disease

About 5 to 8 years after infection, the immune system finds it increasingly difficult to sustain its defence against the HIV virus and the viral load progressively increases as the CD4 cell count decreases. Signs and symptoms of opportunistic infections now start appearing because the immune system is deteriorating. This period may continue for months or years but the infections gradually become more frequent and serious.

Symptoms are now more severe and may include the following according to (CDC, 1993: 12):

- Recurrent oral and vaginal thrush (Candida)
- Recurrent Herpes simplex infections (Fever blisters/cold sores)
- Herpes Zoster infections (Shingles)
- Hairy fungal growth of the tongue (Hairy leukoplakia)
- Chronic bacterial skin infections and other skin rashes
- Chronic diarrhoea
- Weight loss of more than 10% of the initial body weight
- Swollen lymph glands or shrinking of previously swollen glands
- Persistent and unexplained fevers and night sweats
- Reactivation of tuberculosis (TB).

The CD4 cell count during this stage may be between 150 and 350 cells/mm^3 (Hunt, 1996: 1283). These and other conditions can usually be treated effectively and the person can be kept in reasonably good health in between the bouts of illness.

3.4.5 Stage 5: Full-Blown AIDS

This is the final and most serious phase that is followed by death. By this time the immune system is severely weakened so that it cannot fight life-threatening diseases or cancers.

At this stage the imbalance between the CD4 cell count and the viral load, in favour of HIV, is significant. According to international guidelines, a person is said to have full-blown AIDS when the CD4 count drops below 200 cells/mm^3. The infected person now becomes vulnerable to serious opportunistic infections and some cancers. It is at this stage that the person moves from being merely HIV positive to having full-blown AIDS. Typical symptoms associated with this stage are:

- Chronic diarrhoea, nausea and vomiting
- HIV wasting syndrome (weight loss of more than 10% of body weight)
- Poor concentration and memory loss, often due to HIV encephalopathy

3.5 THE INTERNATIONAL EPIDEMIOLOGY OF AIDS

Ever since the AIDS pandemic was initially recognised in 1981, there has also been a realisation that AIDS is an unprecedented threat to global health. From analyses of both AIDS reports and sero-prevalence data, three broad and yet distinct patterns of AIDS have been recognised. According to Mann, Tarantola, and Netter (1992:34) three infection patterns of the AIDS virus are apparent worldwide. Research has identified the different pattern of AIDS:

Pattern One: The pattern that is known to be commonly and clearly visible in the USA among homosexuals. Pattern one is also found in South America, Western Europe,

Scandinavia, Australia and New Zealand, where about 90% of the cases are homosexual males or users of intravenous drugs.

Pattern Two: This is known to be primarily common among heterosexuals in Africa. It is also found in the Caribbean and some areas of South America where the primary mode of transmission is heterosexual sex.

Pattern Three: Typical in both homosexuals and heterosexuals and is found in Eastern Europe, North Africa, the Middle East, Asia and the Pacific. The epidemics in Eastern Europe and Central Asia have increased sharply in the past years. In 2007 150 000 people were newly infected with HIV (UNAIDS, 2007:39).

The first cases of HIV were identified as pneumocystis carini and the disease came to be called the Acquired Immuno Deficiency Syndrome (AIDS). In order to understand this new syndrome further research had to be undertaken. In the search to understand the syndrome, the virus that caused AIDS was identified and in 1983, this virus was named HIV. HIV is a retrovirus, meaning one of the first known viruses to transcribe DNA from RNA. The virus's existence depends on its attachment to the CD4 or T-helper cell. The virus reproduces itself and thereby destroys the body's immune system (Whiteside & Sunter, 2000:1).

In 1985, a second strain of HIV was identified and was called HIV-2. HIV-2 is common in West African countries while HIV-1 is prevalent in South Africa. The HIV-2 is the slower-acting virus; HIV-1 has nine different sub-types (Whiteside & Sunter, 2000:2). HIV can only be detected in the human body when HIV antibodies are present in the blood. To identify AIDS, the CD4 count and viral load have to be measured and when the CD4 counts falls below 200, people are regarded as having full-blown AIDS.

According to scientific research, there is no doubt that HIV causes AIDS. HIV, a virus that breaks down cells in the immune system, destroying the body's ability to fight infections and cancers, causes AIDS. According to the HIV and AIDS briefing papers

(2002:2), the virus is transmitted horizontally and vertically. Horizontal transmission occurs during either heterosexual or homosexual sexual intercourse without protection with an infected person. HIV is also transmitted through sharing of infected needles among drug users. Vertical transmission is said to occur between mothers and their children during or after pregnancy.

The epidemic has affected the world in many waves, with the first wave being HIV infection, followed by several years of waves of opportunistic diseases and lastly a wave of AIDS illness and death (UNIAIDS/WHO, 2006:80). Evidently the countries with the highest incidences have not as yet hit the highest peak of the AIDS death wave. The global prevalence of HIV has been published by AIDS update reports since 1998. This reporting system has helped measuring the trends of the epidemic in various continents and countries. The countries are required to give an annual update on the evolution of the epidemic in a uniform reporting guideline. The report is a joint UNAIDS and WHO initiative and is produced by the UNAIDS / WHO work group. So far these reports are the only updated and reliable reports (**See attached Maps, Appendix 13-15**). More than 6 800 persons become infected with HIV daily and 5 700 die from AIDS at a global level. There are varying reasons accounting to these infections, including inadequate access to prevention and treatment services.

According to the reports (UNAIDS / WHO Update, 2007), there are about 32,2 million people with HIV in the world, 2,5 million is the estimated number of adults and children with new infections and 2,1 million AIDS deaths. Clearly, all the estimates from those living with HIV, new infections and AIDS deaths, Sub–Saharan Africa is reported to be the highest on the list with 22,5 million living with HIV, 1,7 million new infections and of 1,6 million AIDS deaths compared to Oceania and Caribbean with the lowest figures at 75 000 and 230 000 with new infections and living with HIV respectively. Only 1 400 and 11 000 in Oceania and the Caribbean respectively are annually dying of AIDS. (**See Appendix 13-15).**

Swaziland and Botswana topped the list of countries with the highest prevalence rates, at 38,8% and 37,3% in 2003. However, at the end of 2007, South Africa clearly indicated an increase and stands at a 29% prevalence rate while both Botswana and Swaziland show a decrease rate to 25%. Life expectancy in Southern Africa, the world's hardest-hit region by AIDS, has dropped to 49 years for men and 53 for women, 13 years less than in the absence of AIDS (UNAIDS, 2006:17). Current global projections suggest that by 2015, the total population will be 115 million in each of the countries most affected by AIDS which is less than it would have been in the absence of AIDS.

At a macro level, the epidemic has impacted national economic growth in a number of countries. According to the UNAIDS (a) (2000:2), Tanzania experienced a 15% to 25% fall in GDP as a result of the AIDS epidemic in 1996. In Rwanda in 1995 an estimated 66% of public expenditure was directed towards HIV and AIDS patients. It is estimated that the impact on the workplace by 2020, including mortality, will reduce workforces globally by 11,5 million people (UNAIDS (b) (2000). Overall, Rwanda's epidemic has been stable in recent years with 190 000 people (UNAIDS, 2006:20) infected. According to the AIDS Watch, AIDS remains the most likely cause of death and days lost among 15 to 44 years old in Asia (Haldenwang, 2008: 1).

According to the U.S. Bureau of the Census, by 2010 in South Africa, more infants will be likely to die of AIDS than from any other cause (U.S. Bureau of the Census, 2004:85). In Zimbabwe, already twice as many infants are dying from AIDS than from any other cause (O'Grady, 2004:204). In Zambia, life expectancy has dropped to 35 years due to AIDS epidemics. It is estimated that in 2010, South African life expectancy will be 36 years (Census, 2004:7). HIV and AIDS have had a great impact on family income. Child labour is estimated to be on the increase, as well as a higher rate of survival sex among street kids (Reed, 2004:234). Zimbabwe's maize production was reported to have dropped by 61% because of AIDS-related losses in staff (UNAIDS (a) 2000:2). Kenya is estimated to loose 20% to 30% in their GDP by 2010 (Robalino, 2002: 14). In Thailand and Côte d'Ivoire, household income has been reported to decline by 40% to 60% when any family member is infected, but on the other

hand the national prevalence and trends on the HIV epidemic show a decline (UNAIDS, 2007:6). The epidemic in Thailand has largely evolved from the sex trade. Thailand attributes the decline of the infection rate to prevention efforts such as education. Thailand education campaigns have focused on decreasing the number of men buying sex and increased condom usage by men (UNAIDS, 2006:26).

Data collected by the European AIDS Treatment Group indicate that 104 countries have HIV-specific travel restriction. The restriction ranges from banning HIV positive people from entering for any reason to limiting them to length of time. According to Haldenwang (2008:2) the arguments regarding restriction involve the protection of public health and high costs associated with care, support and treatment. It is very disappointing that certain countries still have restriction on people living with HIV, in this researcher's opinion it is still discriminatory to put travelling restrictions on people living with HIV, given the fact modes of infection are clearly understood and travelling does not put risk to people that the infected persons come across.

3.6 THE SOUTH AFRICAN TRENDS ON AIDS

South Africa has reached the epicentre of the AIDS pandemic, with the country's first national household sero- prevalence indicating that 14,8% of the country's adult population (15 years and older) are living with HIV and AIDS (HSRC, 2002). South Africa is the country with the largest number of HIV infections in the world (UNAIDS, 2007:16). HIV prevalence collected from the latest antenatal clinic surveillance showed that HIV infection might be levelling off. The prevalence among pregnant women was at 30% in 2005 and 29,5% in 2006 (Department of Health, 2007: 3).

In South Africa, an estimated 6 million of 48 million people are living with HIV and AIDS. An estimated 18,8% of adults were living with HIV in 2005 (*Human Rights Watch Publications*…, 2001:1) and 600 die daily from HIV AND AIDS in the country. (UNAIDS, 2006:17). The UNAIDS HIV prevalence estimates, which describe the percentage of adult men and women living with HIV nationally, incorporates a variety of

HIV data, including gathered household HIV surveys and antenatal clinics. It was projected that by the year 2008, 500 000 people in South Africa would die and life expectancy will drop to 40 years by 2008 (AIDS Foundation of South Africa, undated). Trends in South Africa over time show a gradual increase in HIV prevalence (Department of Health SA, 2005), while household surveys with HIV testing in 2005 showed a lower infection rate. The household prevalence is unreliable as there is a high non-response rate of more than 40% (UNAIDS/WHO, 2006:17).

Lehohla, the Statistician General of South Africa, admitted that statistics on HIV and AIDS deaths are not readily available for South Africa. He explained that mortality data was collected from death notification forms that show that tuberculosis; influenza, pneumonia and cerebro-vascular diseases are the leading causes of mortality. He refused to be drawn on whether deaths caused by the abovementioned diseases could be HIV/ AIDS related, which is a non-notifiable disease. Between 1997 and 2002 mortality increased from 318 287 deaths to 499 268, representing an increase of 57%. Adult (15 years and older) deaths increased by 62% in the same period. A disturbing picture is the 106% increase in the mortality rate among the 20 to 49 age group (the most economically active) - from 121 548 deaths to 250 936. Infant mortality (four years and younger) has also showed a marked increase from 34 779 to 48 572. Lehohla, however, concedes that 'the data provides indirect evidence that the HIV epidemic in South Africa is raising the mortality levels of prime-aged adults in that associated diseases are on the increase' (Haldenwang, 2006:1).

The 6 million South African people infected translate into a prevalence rate of 11%, live in various South African provinces (Department of Health, 2006). The projections show that Kwa-Zulu Natal is the province with the highest prevalence rate of about 40%, the Western Cape is the lowest at 17% and Northern Cape and Limpopo are slightly higher than the Western Cape. The other provinces are expected to level off in the future.

According to the media, one unreleased report, commissioned by the Department of Health, found that 46% of patients in South African hospitals are HIV positive

(*Kaiser Foundation…*, 2004). Another report found that Johannesburg hospitals alone admit 100 full-blown AIDS cases daily (Basset, 2002; 1). The Chris Hani Baragwanath Hospital in Soweto recorded a 500% increase in HIV patients seven years ago (Cheek, 2001: 3).

The impact of HIV and AIDS seems to be exceeding the government capacity, with a high shortage of social workers and health workers (Majors, 2004:126) exacerbating the crises. The HIV infection figures show that the number of the people who are newly infected peaked in about 1998 and is now decreasing. According to the ASSA report, this is because the number of new infections has slowed down to the point where it nearly matches the number of people dying from AIDS (ASSA, 2006:3). An assumption could be drawn that education awareness is beginning to make a positive impact as the infection rate is stabilising.

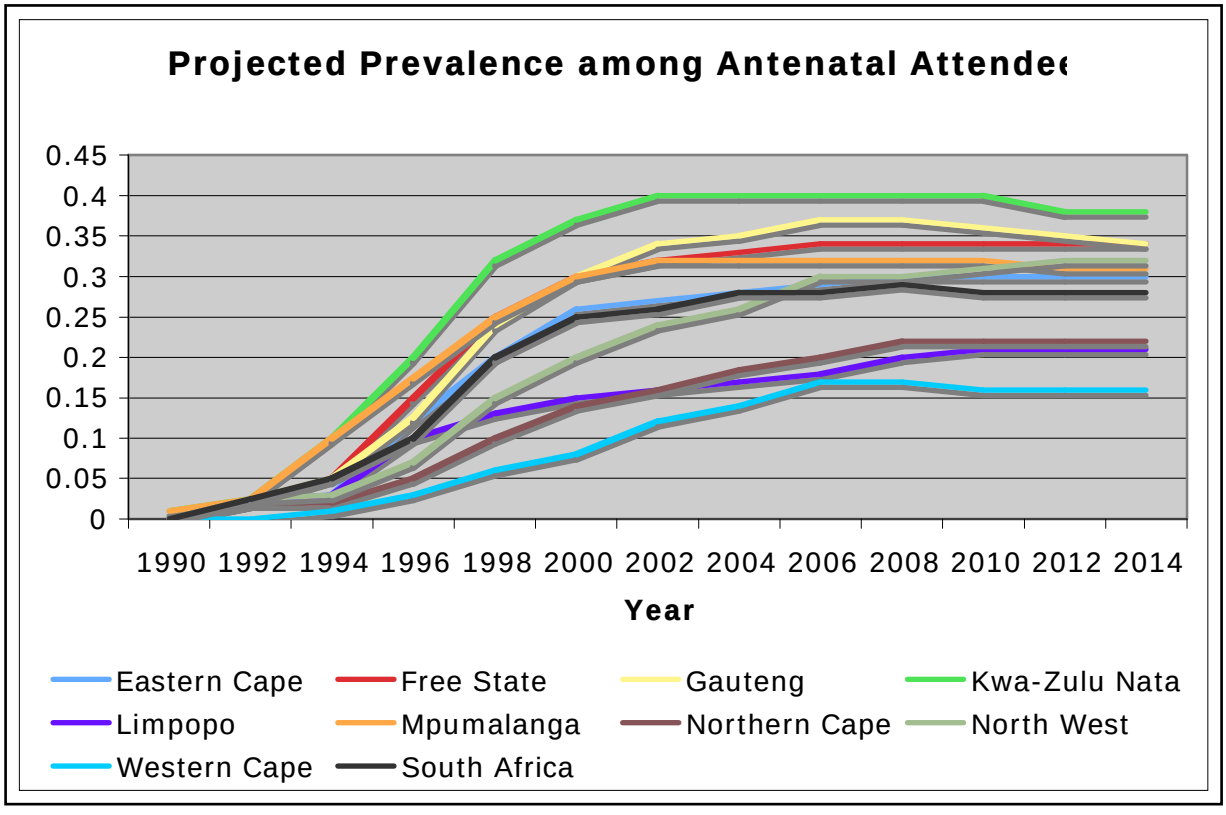
In addition, these projections indicate that anti-retroviral treatment could reduce 338 000 deaths a year, making anti-retroviral treatment one of the key strategic initiatives in AIDS management. According to the Department of Health, the National Strategic Plan (NPS) highlights commitment to give 80% of HIV-positive people access to ARV therapy by 2011.

The ASSA model (2006:1) projected that the HIV and AIDS epidemic in South Africa can be summarised as follows for 2015:

- 38 000 babies will be infected at birth;
- 527 000 uninfected people will become infected;
- 600 000 will be AIDS sick yearly; 3,5 million pre-AIDS sick and 225 000 on treatment;
- 737 000 dead;
- the prevalence will remain high in women;
- more than half of 15 years olds are not expected to survive to age 60.

HIV and AIDS has affected the South African population growth rate; however it is not expected to be negative for the country as a whole. A report by the human rights body Amnesty International (AI) indicated that the poor, rural women experience the impact of HIV pandemic as they face sexual abuse and discrimination. This could be further exacerbated by culture of violence and stigma. According to the ASSA model (2006), only Gauteng and the Free State are expected to show a negative population growth by 2015 and the growth will be due to the very low or negative net migration. Below is a graph by the ASSA model showing the plateau of the infection by percentage as per their estimated model. The graph shows that Kwa-Zulu Natal is the highest hit with about 40% and Western Cape the lowest at 17%.

Figure 1: Antenatal HIV Prevalence Projection by South African Provinces



3.7 SUMMARY

There is clear consensus that HIV leads to AIDS. There are identified stages of HIV that ultimately show that when the immune system is no longer able to fight infection, AIDS is inevitable.

The prevalence of HIV and AIDS in South Africa, and internationally, is still very concerning even though varying reports tend to give an improving situation with varying opinions on the decline of infections; this is mostly due to varied estimating modalities. The majority of the infected people are still women. Women are the majority accessing treatment through antenatal clinics through antenatal clinics.

CHAPTER 4

GENDER AND HIV AND AIDS

4.1 INTRODUCTION

Sexuality is generally considered to be about sexual development, reproductive health, interpersonal relationships, body image and gender issues. In an attempt to stay within the bounds of this study, this chapter will seek to highlight the vulnerability of women within this framework. It further highlights the impact of HIV and AIDS on women and gender influence within the society and workplace. The epidemic's interaction with gender inequality and social exclusion is revised.

There is an inextricable link between gender inequality and vulnerability to HIV and AIDS at every level. Gender inequality means unequal treatment for both sexes in all levels of society. Of people living with HIV and AIDS in South Africa, 65% are adult women between the ages of 15 and 49 years. According to the Daily News (2008:17), men make up half of the HIV positive population, but 70% of HIV positive people on treatment are women. Gender inequality renders women and girls socially and culturally vulnerable.

Gender "refers to the ideas that people have of what it is to be a boy or girl, man or woman, and what is masculine or feminine behaviour; how people are expected to behave simply because they are male or female" (The Gender Manual Consortium: 1999:22). According to Jobson (2000: 7) gender means "shared expectations and norms within a society about appropriate male and female behaviour, characteristics and roles." It is well known and accepted that men and women are different. For example HIV in men means an attack on their survival. Men, e.g. regard procreation as the extension of their surname, therefore the impact of HIV and AIDS (resulting in death) to them means the extinction of their surname. (Daily News, 2008: 2).

Gender ideas and norms reflect and influence the roles that women and men take on in daily life as well as their social status, economic, and political power. These ideas and expectations are acquired and sometimes taught by family members, friends, leaders, religious and cultural institutions, schools, workplaces and the media. The roles, status, and power on the other hand, affect an individual's risks of infection and the community's abilities to cope with HIV/AIDS and sexually transmitted infections (STIs). Ng'weshemi, Boerma, Bennett and Schapink, (1997:88) draw a distinction between sex and gender, stating that if people believe that female / male characteristics, abilities and behaviour are based only on sex / biological factors, they are likely to see the characteristics, abilities and behaviour unchangeable. However, if they understand that these aspects are determined socially by ideas and expectations, they are likely to learn that these dimensions can be changed.

However, a study on religious affiliation and attitudes in the prevention of AIDS by Begue (2001:571), indicates no significant gender differences on moral attitudes. The observation was that when religious belief and the type of social commitment are simultaneously taken into account, no gender differences exist. This may in part indicate that gender differences and moral attitudes might disappear if relevant factors known to be unequally distributed among gender, such as religion or social commitment, are held constant.

Women are disadvantaged in their roles and also in terms of their biological make up. In most of the South African cultures, gender empowers men and disempowers women. The imbalance between power and gender is exacerbated by culture of violence and stigma. This imbalance restricts women's sexual autonomy and expands men's sexual freedom. It may be accepted that a man can talk about sex and how he feels- often in a chauvinistic manner- while most communities will discourage women to have those discussions. If there is a discussion among women around sex, it will be regarding finding ways to satisfy the husband in particular. These discussions often contribute to girls' aspirations and the idealisation of motherhood.

In a study investigating men's feelings about infidelity, men reported that they would experience positive emotions to their partner's infidelity, possibly because that will give them a reason to get out of a relationship that was unsatisfactory already (Laak, Olthof & Aleva, 2003:548). This notion however indicates that men may not necessary deal with a women's infidelity well, a practice that is common among men. A study of Turkish students revealed that women, when dating, have more detailed future plans about relationships and families than men (Sakalli-Ugurlu, 2003:294). This perception, however, reinforces the stereotype with regard to a woman's dependency on a man.

Some of the gender stereotypes encourage women to be virgins when they get married and that men should be always one step ahead of their girlfriends in terms of sexual experiences. In the Zulu culture young girls will routinely undergo virginity tests. It can therefore be argued that these stereotypes encourage men's dominance, decisiveness, and authority over women, and women's acceptance, dependence, and compliance still remains strong in many cultures. The same findings that women tend to idealise family roles that encourage women's dependency on men, were noted in the study of Turkish students by Sakalli-Ugurlu (2003) about their attitudes towards women's compliance in romantic relationships.

Some of the cultural perspectives include putting demands on parenting and child bearing. A study in Northwest Tanzania has indicated that infertility may be indirectly associated with HIV infection. Infertile women suffered more marital break–ups and they also had a markedly higher prevalence of HIV (about 6,6% versus 18,2% women and men, respectively (AIDS, 1995: 913). These patterns are not only common in African countries but also in a country like India (UNAIDS, 2006:25).

Other cultures tend to give men freedom to be more sexually active while restricting female sexual activity. In some African cultures women become infected because of polygamy, and also by marrying their deceased husbands' brothers who are infected. In the event of HIV infection women are more likely to be blamed and rejected than men

would be. The irony being that some cultures actually encourages promiscuity among men as a sign of masculinity, while women are devalued in this regard.

Some of the factors placing women at risk of HIV infection as noted by Ng'weshemi *et al.* (1997:89) are:

- Blood transfusion during pregnancy complications;
- Male to female sexual transmission occurs more easily;
- The need for extra income can lead to unprotected sex with multiple partners;
- STIs in women are often less evident, and treatment may only be effected later;
- Young women are physically less mature and older women's vaginal mucosa thins, increasing the risk for HIV transmission.

In most cultures worldwide, when the male of a household becomes ill, the wife provides care and takes time off to take on additional duties to support the family. In the case of the wife falling ill, another woman may step in to care for her and take responsibility for AIDS affected children instead of the husband.

4.2 GENDER PERSPECTIVE ON WOMEN AND HIV AND AIDS

HIV and AIDS is a crisis for women. International statistics on AIDS reveal a greater impact of the pandemic on the lives of women. According to the GBC report on "In Good Company", the feminisation of HIV and AIDS is not only a humanitarian crisis but also an international emergency that can damage the economy in some countries. Females represent 41 % of the world labour force living with HIV and AIDS, this is so in particular to countries where the global economy relies on the female workforce for imported goods (GBC, 2008: 2).

In the Sub-Saharan Africa, 57% of adults infected are women, and 75% of young people infected are women and girls (Global Report (GRI), 2004:1). The report further states that women living with HIV were vastly out-numbered by men in the early years of the epidemic, however the opposite is true today. On average there are 13 infected

women for every 10 infected men - up from 12 infected women for every 10 infected men in 2002. One study of pregnant women in Rwanda found HIV prevalence rates of 38% of women whose spouses worked for the government, 32% of those with white-collar working spouses, 22% of army families and 9% of farmers (Bloom, 2001:59).

It is reported that in Russia, an estimated 860 000 people are living with HIV, women accounting for an increasing share of new HIV infections. In South and South-East Asia, women are accounting for just less than 30% of all HIV infections. In the United States of America approximately half of the 40 000 new HIV infections annually are African-American women. It is noted that AIDS is the leading cause of death for African-American women aged 25 to 34 (UNAIDS, 2004).

In Cambodia, like in many parts of the world, it is reported that women constitute a growing share of people living with HIV (an estimated 47% in 2003 compared to 37% in 1998). According to UNAIDS (2006: 27), a significant number of women are infected by husbands and boyfriends who have probably acquired the virus during paid sex. Sex work is also a driving factor in Ghana's epidemic where the HIV prevalence in women, attending antenatal clinics, has risen to just fewer than 4% (UNAIDS, 2006:22).

The difference in infection levels between women and men is even sharper among young people aged 15 to 24. The ratio ranges from 20 women for every 10 men infected in South Africa to 45 women for every 10 men in Kenya and Mali (GRI, 2004). In Cambodia and Thailand there are also indications of increasing HIV infections among street youth who use amphetamine-type stimulants (National Centre for HIV and AIDS, Dermatology and STIs, 2005). The trend in Russia is marked among young women, especially those in their late teens (15 to 20 years) and these accounted for more new infection cases in 2004, higher than young men in the same age group. According to the UNAIDS (2006:36), the contributing factors to the high infection rate among young women in Russia, was through injection as a result of drug use. Mobility and migrant work consistently increases vulnerability to HIV, especially for married women. Migratory

work is often linked with increased sexual networking for both men and women (Chirwa, 1997; Romero-Daza & Himmelgreen, 1998).

It has been estimated that by the year 2008, there will be 6 million South Africans infected with the virus and almost 1 million children under the age of 15 will have lost their mothers due to AIDS. Interestingly, and not surprisingly, the infection rates are noted to be high particularly in women and men of reproductive and of the economically active age group (Jobson, 2002: 4). In South Africa the vulnerable groups are predominantly young, black, and economically disadvantaged women. It can be argued that due to the last 14 years of democracy, most of the people in South Africa, particularly those who were previously disadvantaged, underwent various transitions, including freedom and empowerment. These changes however brought about various impacts including stress and adjustment on families.

According to research led by the HSRC on the incidence of HIV in South Africa, and published in the March (2007) issue of the South African Medical Journal, there is an ‘alarming’ increase in new HIV infections among young South African women, suggesting that current prevention strategies, such as condom use and abstinence programmes are failing to curb high-risk behaviour among teenagers and young adults.

The research, which sampled almost 16 000 South Africans, found that women accounted for 90% of all new HIV infections in the 15 to 24 age group. In the 20 to 29 age group, women were six times more likely to be HIV positive than men of the same age. People living in urban informal settlements ‘had by far the highest incidence rates’ at 5,1%, followed by those in rural informal areas (1,6%) and urban formal areas (0,8%). "These results suggest that poverty and education play a significant role in increasing vulnerability to HIV", said HSRC President, Dr Shisana (Haldenwang, 2007: 4). In addition, the gender inequality that is imbedded in many cultural traditions mean that the domestic burden of AIDS care is primarily on women because of their traditional roles as caregivers and homemakers. Not only is the intensive caring for the affected in this

compassionate undertaking for women a great burden, it also limits educational and economic opportunities for women and girls.

A study of HIV-related illnesses on families in Northern Zambia has revealed that when comparing household categories among female-headed household, male households and households taking care of people infected with HIV, among these groups, women supported an average of 3,6 orphans each - far more than male headed households (UNAIDS/WHO, 2006:85).

Women in domestic violence situations are more vulnerable to HIV and AIDS. Between 10% and 50% of women worldwide report physical assault by an intimate partner and in some situations assault involves sexual coercion and forced sexual compliance (UNAIDS, 2006:7). Other forms of violence against women include rape, sexual trafficking and slavery. Available evidence suggests that at least one in five of the world's female population has been physically or sexually abused at some time in their lives. Violence is a significant cause of both death and incapacity among women of reproductive age, and a greater cause of death than traffic accidents and malaria combined (Chin, 1990: 336).

Arranged marriages are well accepted in some cultures and in most cases HIV and AIDS testing is not required before the couple consummates the marriage. Physical violence, threats and fear of abandonment make the negotiation of the use of condoms and discussion about marital fidelity more difficult for women. HIV also affects women's fertility and could also contribute to spontaneous abortion. The UNAIDS report (2006:90) indicate that HIV reduces fertility level of women with 25% to 40%. Women who do not know their status are unable to take steps to prevent pregnancies.

A study by Laak, *et al.* (2003:545) revealed that women are annoyed by their partner's aggressive behaviour while men tend to be annoyed by their partner's sexual withholding. The study therefore supports the belief that women are at risk for HIV as their strategy in withholding sex may be met by aggressive response from their partners.

It should be further noted that if the couples are having marital problems, wives are likely to be more active than husbands in using strategies to maintain the marital relationship. When women are asked to imagine how they would react emotionally to their partner's emotional and sexual infidelity, women reported that they would feel repulsed, depressed, insecure, helpless and anxious (Shackelford, LeBlanc & Drass, 2000).

Women and girls in abusive relationships may have limited capacity to negotiate the terms and conditions of sex. Use of condoms may not be negotiable for them with their partners. HIV positive women who disclose their status are often at risk to violence from their intimate partners, family members, or community. The violence may range from emotional abuse to coerced sex and even to homicide. Sexual violence may increase the risk of HIV for women survivors, as the incidence of sexual violence is never negotiated. Forced or coerced sex creates a risk to trauma, which may be as a result of the torn skin of the vagina during dry or forced sex. To deal with these challenges, Director of Amnesty International (AI) suggests that the SA government should increase efforts to address the wider social and economical inequality, particularly assisting rural women and further suggesting a chronic illness grant to improve HIV-infected women's access to health services and treatment.

One of the contributing factors hampering HIV intervention is that in some part of the world young women are so marginalized that older men who take young lovers commonly help the girl's family by paying for their school fees and food. In South Africa teenage pregnancy is an important indicator of the situation of teenage girls and their lack of educational advancement. According to Stats SA Report 2008, in 2004, the main reason given by teenage girls for not attending educational institution and lack of educational advancement was teenage pregnancy, the number rose from 66 000 in 2002 to 86 000 in 2004.

No where in research is there an indication that the HIV prevalence among adult men and women is more or less the same; women are more infected than men, whether in Sub-Sahara, North-Africa, the Middle East, Asia, Eastern Europe and North America (UNAIDS, 2006:13). The risks for women are more likely to occur during a sexual encounter, while men generally have sex more often with the incidences of more sexual partners such as in the case of contacts with commercial sex workers and that is where their risk is highest. In some cultures women are found to be more at risk due to certain sexual intercourse practices, such as dry and rough sex. Men may prefer dry sex because they think that female vaginal fluids are unclean. Herbs or substances used for dry sex may be inflammatory, which may facilitate HIV transmission, although evidence is not conclusive. Heavy rubbing during dry sex may also cause sores in the mucous membrane and dry sex is also very risky as it may lead to bleeding and lesions, facilitating vulnerability to HIV.

Women are generally infected at an earlier age than men due to the fact that women have sexual contacts with men who are 5 to 15 years older than them. A study at Bugando Medical Centre in Tanzania analysed the admission data of 478 women and 581 men. The mean age of those admitted was 27,7 years for women and 28,8 years for men. The average age as having AIDS was 29,3 for woman and 32,6 years for men. The difference between the sexes became more pronounced when the ages of those who died in hospital were analysed. The average age of women who died with AIDS was 27,8 years and 33,8 years for men (Ng'weshemi *et al.*, 1997: 87). In Zambia 61% of all deaths between 15 and 59 occurred among women, and they were younger in age than men (UNAIDS, 2006:89). In some countries women are reported to live longer than men, however the AIDS epidemic has driven female life expectancy below that of men in four countries: Kenya, Zambia, Malawi and Zimbabwe (*UN Population Division*…, 2005). According to a UNAIDS report (2006:89), empirical evidence supports the existence of gender differences in mortality.

There is thus a link between HIV and AIDS and gender-based violence. For example, forced sex may directly increase the risk of HIV transmission as a result of physical trauma; violence or threats of violence may limit the ability to negotiate safer sex. Inadequacies in justice systems, particularly in South Africa, may discourage rape incidence reporting and subsequently seeking post-exposure prophylaxis. According to UNAIDS (2002:65) in a study in Vietnam, only 35% of women felt able to refuse their husbands sex, and a UNIFEM study on the impact of HIV and AIDS in Zimbabwe revealed that, even if women were educated about AIDS, their economic dependence on men left them feeling helpless to negotiate safer sex.

Marriage and long term monogamous relationships seem not to protect women from HIV. In Cambodia, about 13% of urban and 10% of rural men reported having sex with both a sex worker and his wife or steady girlfriend. In Thailand in 1999, a study found that 75% of HIV infected women were likely to be infected by their husbands. In some parts of African countries married 15 to 19 year old young women have higher HIV infection levels than unmarried sexually active females of the same age (UNAIDS, 2004:1).

The other contributing factor to gender and an increased risk of HIV infection among women has to do partly with social taboos regarding homosexual relations. Many men who have sex with men also maintain sexual relationship with women, who may be unaware of their partners' sexual lives. It is reported that in Ecuador a significant number of women with HIV were infected by their husbands or regular partners who acquired the virus during unprotected sex with other men (Montano, 2005: 58). Similarly, Colombia reports the same trends, namely that higher HIV infection levels have been found in groups of men who have sex with men (UNAIDS, 2006:44).

The explanations offered for the high rate of HIV infection among women in South Africa are:

- very high rates of sexually transmitted infections (STIs) are often with poor treatment success rates due to stigmatisation;
- the early age at which first sexual experiences occur (frequently under coercive conditions);
- a high number of concurrent sexual partners;
- violence against women and young girls;
- low levels of condom usage; and
- high poverty; mobility rate and low literacy levels (SA Health Review 2000).

4.3 THE UNITED NATION'S ROLE

In June 2001, the UN General Assembly Special Session (UNGASS) on HIV and AIDS and Human Rights, issued a Declaration of Commitment that acknowledged the link between gender and the AIDS pandemic. The declaration acknowledged that women and girls are affected by HIV and AIDS and demands commitment to address the gender dimensions of the epidemic through several measures. This declaration emanated from the central importance of human rights and fundamental freedoms to an effective AIDS response. The emphasis is on calling countries to enact legislation barring discrimination against people living with HIV and vulnerable population, among which women and children are mentioned.

Within the global pandemic of HIV infections there are many different epidemics, each with its own dynamics and each influenced by many factors including time of introduction of the virus, population density, and cultural and social issues. Effective management strategies depend on knowledge on all these factors. To control AIDS, an article in Pubmed (Lancet, 1996) strongly argues that countries must not only promote changes in individual behaviour, but also address social issues such as unemployment, rapid urbanisation, migration, and the status of women.

This list (**Appendix 9**) is a comprehensive guideline for addressing the gender inequality with regard to HIV and AIDS. In Africa, UNAIDS focuses on interventions at country level. Their goals are not different from the measures discussed above, with exception of the provision of access to testing, counselling, and drugs for HIV positive women (UNAIDS, 2000: 1). In keeping with these goals, In 2000, SA made a commitment to reducing child and maternal mortality and reversing the spread of HIV and AIDS by 2015. However, the National Strategic Plan (NSP) cautions that the Department of Health could exceed their budget by 20%, which poses a challenge for affordability and sustainability of the NSP.

4.4 SUMMARY

HIV and AIDS is a challenge for women. Gender inequality is the primary impediment to HIV and AIDS prevention. However, gender blindness is curable and continued education on gender issues is paramount. Any programme or policy regarding HIV prevention should address the issue of gender inequality and confront constructed gender roles. The UNAIDS needs to clearly articulate an HIV and AIDS framework from a gender perspective. An understanding of the factors that affect women is critical to any effective measure to contain the spread of HIV, and to deal with its effects on both women and men. The understanding of the vulnerability of women to HIV must be understood in the broader context of deeply embedded social and gender inequalities, which lie at the heart of women's inability to deal effectively with the risks and needs created by the epidemic. There is a need for recognition of the interaction between HIV infection, cultural values and the rights and needs of women.