

CHAPTER 6: AN ANALYSIS OF AIDS AS AN EPIDEMIC

6.1 Introduction

AIDS is threatening human development like no other disease before in modern history. Sub-Saharan Africa is experiencing one of the most severe HIV/AIDS epidemics in the world with national antenatal prevalence of HIV in some countries around 35%, millions of children being left orphaned, life expectancy reduced to levels seen more than 50 years ago and more or less all sectors in society being affected to varying degrees. This chapter outlines the global AIDS epidemic with up-to-date information on the drivers of the epidemic and the epidemiology of the disease. A more in-depth analysis of the HIV/AIDS epidemic in sub-Saharan Africa provides insight into why the region is particularly affected. The impact of the AIDS epidemic on population and population structure, government and governance and the effect on the individual, communities and societies are being discussed. Lastly, the impact the AIDS epidemic will have on sub-Saharan Africa's attainment of the Millennium Development Goals is being considered. The Millennium Development Goals address poverty, education, health, social and environment issues and for each of the eight goals there are time-bound targets to reach. In developing countries with a high HIV prevalence the AIDS epidemic threatens the achievement of these targets, especially with regards to access to primary education, gender equality and the empowerment of women, child deaths, maternal health and deaths, and malaria and other communicable diseases.

6.2 The global HIV/AIDS epidemic

The following quote from UNAIDS (2006:3) gives a clear picture of the epidemic:

At the 2001 Special Session of the UN General Assembly on AIDS, 189 nations agreed that AIDS was a national and international security issue of the highest priority, signing an historic Declaration of Commitment on HIV/AIDS that promised innovative responses, coordinated efforts and accountability for progress against the epidemic... The Declaration set a comprehensive list of time-bound targets to support the Millennium

Development Goals of halting and beginning to reverse the epidemic by 2015. The story...is complex and at times disheartening. Nearly twenty five years of experience with prevention and ten years of experience with effective antiretroviral therapy have produced mountains of evidence about how to prevent and treat this disease. Yet these advances...while vitally important to mounting an effective response, do nothing to mitigate the shortages of leadership and human compassion that frequently hinder progress toward our shared goals.

6.2.1 The characteristics of HIV/AIDS

HIV is a retrovirus, and falls in the group called lentiviruses. Lentiviruses take a long time to develop, causing diseases which mainly affect the immune system and the brain. The retrovirus has a unique enzyme, reverse transcriptase, which, after entering a cell, makes DNA copies of its own RNA and has the ability to reproduce (Barnett & Whiteside, 2006:32). This characteristic and the virus' ability to mutate make it extremely difficult to respond to with drugs.

HIV is transmitted through bodily fluids from an infected person to another and the main mode of HIV transmission is heterosexual intercourse. HIV targets the CD4 cells, which are mainly responsible for organising the body's immune system. When a person becomes HIV-infected, the battle between the virus and the body's immune system starts. The only way to detect HIV is through a blood test. At the onset of the HIV infection, the infected person may have flu-like symptoms at which stage the virus is undetectable in the person's blood, also called the window period. A long incubation period follows and the infected person's immune system will be broken down systematically until it is so compromised that the person develops AIDS. The end result is death. Since the onset of the AIDS epidemic, research into treatment, cures and vaccines has dominated the international pharmaceutical arena. Vaccine trials are underway, but are still many years away from completion. There is no cure, but the treatment available may prolong an infected person's life for many years.

6.2.2 The epidemiology of HIV/AIDS

HIV can only be transmitted through contaminated bodily fluids. For a person to become infected, there needs to be an entry point in the skin/mucus membranes and there needs to be a sufficient quantity of viruses entering the body. The main modes of transmission are:

- Unsafe sex
- From an infected mother to her child
- Using infected blood and blood products (e.g. transfusions)
- Contaminated needles from infected drug users
- Other types of transmission of HIV where people are exposed to blood/bodily fluids.

Knowledge of the transmission of HIV, prevention, disease management, treatment and care has been known for about 25 years, but the epidemic is still growing. Scientists, scholars, practitioners and role players have come to the realisation that in order to adequately respond to the AIDS epidemic a thorough knowledge of the epidemic is necessary: The heterogeneity of HIV and epidemic typologies need to be studied to understand that there are different epidemics across countries, even different epidemics within a country, and these epidemics should be addressed differently.

Table 6.1: The heterogeneity of HIV and epidemic typologies

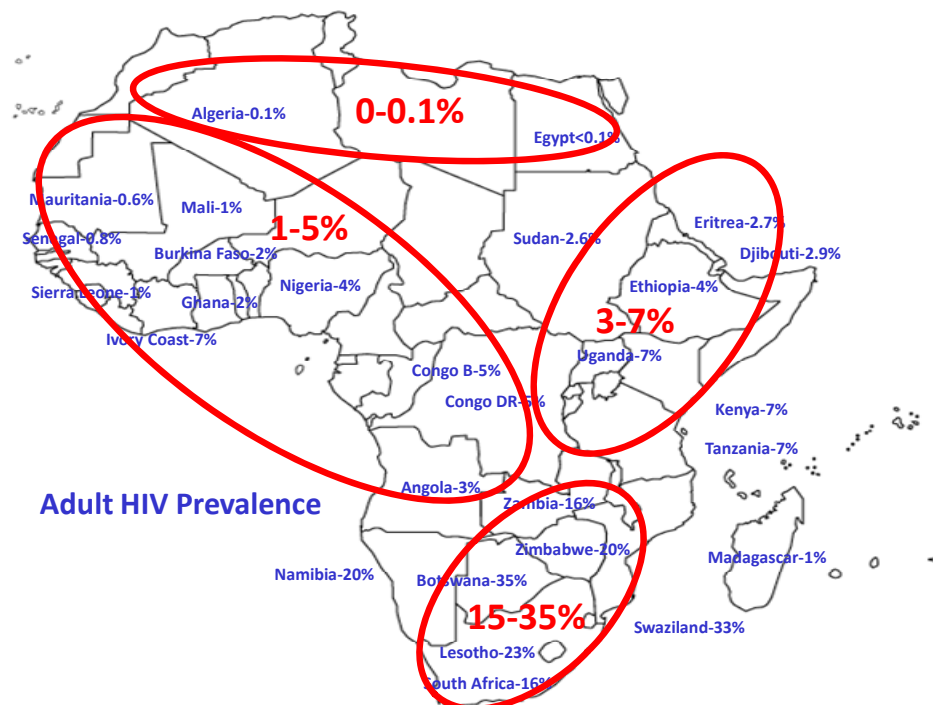
Typology	Prevalence	Who has HIV?
Low-level	Below 1% of population	HIV has not spread to significant levels within any sub-population.
Concentrated	Below 1% of the population	HIV transmission occurs largely among vulnerable groups (e.g. intravenous drug users, sex workers and clients, men who have sex with men) but has not spread to the general population.
Generalised	Between 1-15% in pregnant women attending public sector antenatal clinics	HIV transmission occurs primarily outside vulnerable groups. HIV prevalence is present among general population and at sufficient levels for sexual networking to drive the epidemic.
Hyper-endemic	More than 15% of the adult population	HIV transmission driven through extensive heterosexual multiple concurrent partnerships with low and inconsistent condom use and in context of low male circumcision.

Sources: Halperin, D. 2006. Why is HIV prevalence so severe in (southern) Africa? CD Rom: Southern African Development Community. Expert think tank meeting on HIV Prevention in high-prevalence countries in Southern Africa. Report. Maseru, Lesotho, 10-12 May 2006. Gaborone: SADC.

Jackson, H. 2008. HIV prevention. Know your epidemic. Paper presented at the Swedish African Regional strategy consultation on HIV prevention, 16 April 2008. Pretoria.

One generic solution cannot respond to an epidemic which can be low-level, concentrated, generalised and a hyper-endemic in the same country (Jackson, 2006). The understanding of the evidence of the AIDS epidemic is essential. Without reliable data and interpretation of data the type and timing of interventions will be poorly executed. Figure 6.1 illustrates the heterogeneous nature of the HIV epidemic in southern Africa. Even within a single country the epidemic varies.

Figure 6.1: Heterogeneity of HIV in Africa

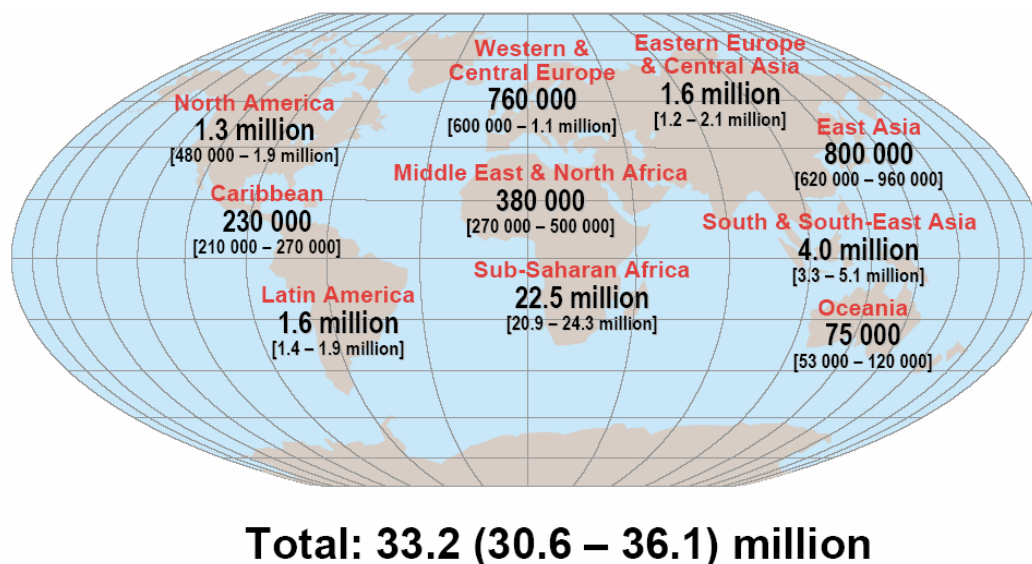


Source: Msiska, R. 2005. *Mainstreaming HIV & AIDS into Poverty Reduction Strategies*. Presentation at the Joint UN, Sida and Norad Meeting in Johannesburg, 16-18 November 2005. (Available on CD-Rom).

According to UNAIDS, there are approximately 33.2 million people living with HIV/AIDS, of which 22.5 million are in sub-Saharan Africa by the end of 2007 (Figure 6.2). There were about 2.5 million new infections in 2007 and 2.1 million deaths due to AIDS in the same period (UNAIDS, 2007:1). Of the new infections, an estimated 65% occurred in

sub-Saharan Africa.

Figure 6.2: Adults and children estimated to be living with HIV in 2007



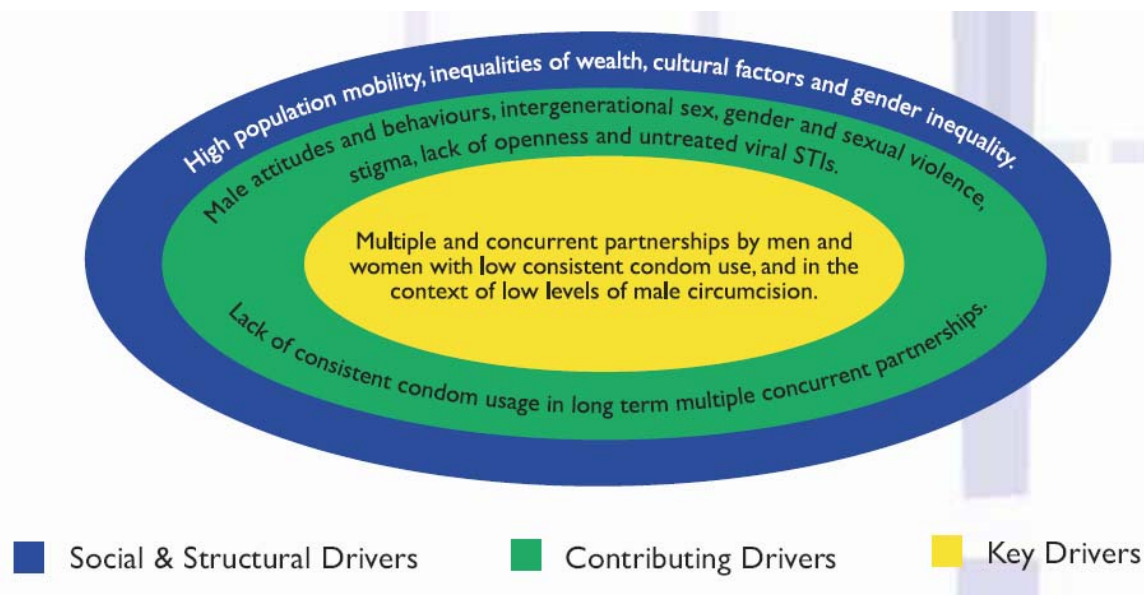
Source: UNAIDS 2007. *AIDS epidemic update*. December. Geneva: UNAIDS.

6.2.3 The drivers of the epidemic

There are many drivers of the AIDS epidemic, such as the high mobility of people, inequities of wealth, the status of women, male attitudes and behaviour, stigma and discrimination. This, however, does not explain why sub-Saharan Africa has such a severe epidemic in relation to the rest of Africa, and indeed the rest of the world. New research results on concurrent sexual partnerships have shed some light on the high HIV prevalence in the region. The term *concurrent sexual partners* is used to describe sexual partnerships overlapping in time when two or more partnerships takes places over the same period, or when a new partnership begins before the current partnership ends (Parker, Makuhubele, Ntlabati, & Connolly, 2007:12). For HIV infection to occur in these sexual partnerships, partners do not practice safe sex (no condom use or inconsistent condom use). According to Parker, susceptibility to HIV infection increases greatly when people have concurrent sexual partners over an extended period of time (Parker *et al.*, 2007:12).

The response to the AIDS epidemic needs to take cognisance of epidemic trends, comprehension of the evidence, the impact of interventions and the drivers of the epidemic. Continuous research has shown that the drivers of the AIDS epidemic are in three layers, with the social and structural drivers on the outer level, next is the level of the contributing drivers and the key drivers are in the core (Southern African Development Community, 2006:3). Social and structural drivers of HIV transmission are high population mobility, inequalities of wealth, cultural factors and gender inequality (Figure 6.3). The contributing drivers are male attitudes and behaviours, intergenerational/age-disparate sex, gender and sexual violence, stigma, lack of openness, untreated viral STIs and lack of consistent condom usage in long term multiple concurrent partnerships. The key drivers are multiple and concurrent partnerships by men and women with low consistent condom use, and in the context of low levels of male circumcision.

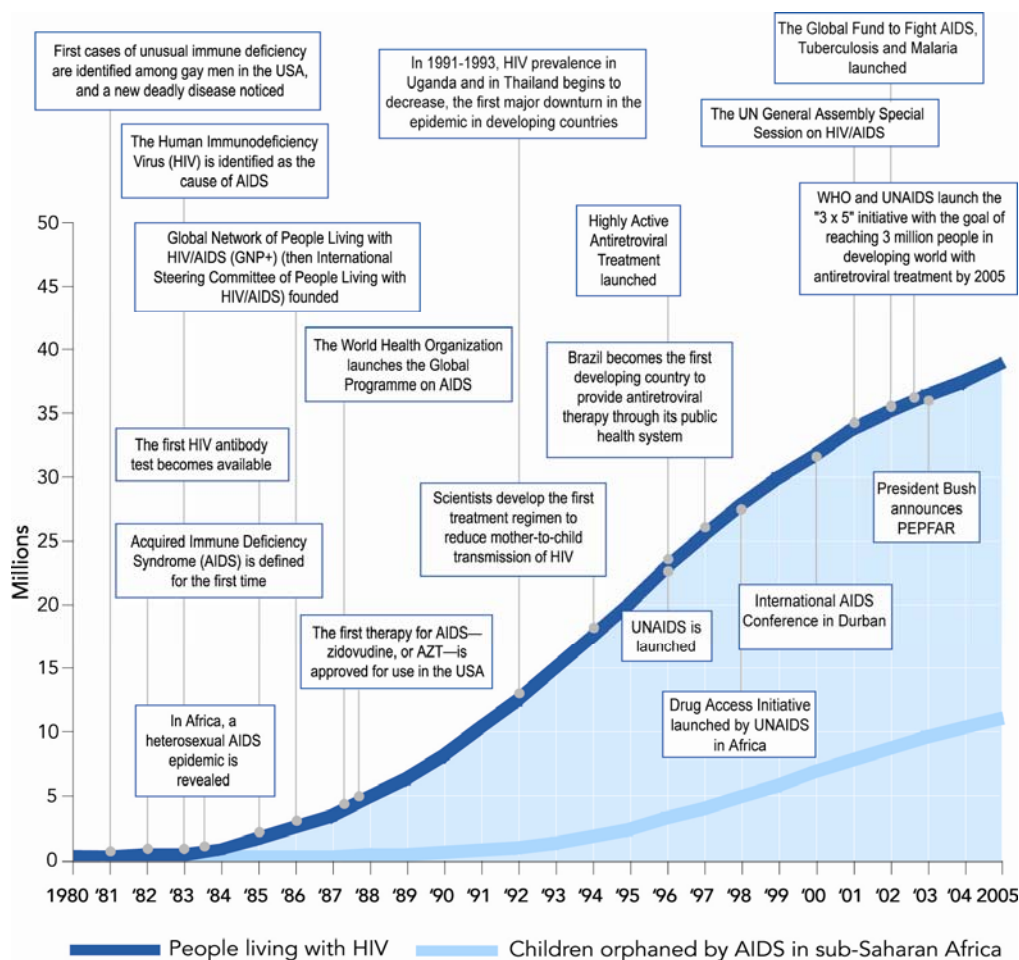
Figure 6.3: Drivers of the epidemic in southern Africa



Source: Southern African Development Community. 2006. *Expert think tank meeting on HIV Prevention in high-prevalence countries in Southern Africa. Report.* Maseru, Lesotho, 10-12 May 2006. Gaborone: SADC.

The story of HIV/AIDS starts in 1981 when cases of an unusual immune deficiency were identified among gay men in the United States (Figure 6.4). This deadly new disease had created huge concern and a year later the disease was named acquired immune deficiency syndrome (AIDS). In 1983, the human immunodeficiency virus (HIV) was isolated as the cause of AIDS (Piot, 2006). As early as 1983, it was revealed that in Africa, the AIDS epidemic occurred among heterosexual people.

Figure 6.4: The story of AIDS



Source: Piot, P. 2006. *Innovative financing: Exceptionality of AIDS*. Brookings Institution and Health Financing Task Force, Washington, D.C. [Online] Available at: <http://www.unaids.org> [Accessed: 31 December 2007].

In 1987, the first of many antiretrovirals was approved for use in the United States and it

was subsequently approved in many other countries. Millions of US dollars have been pumped into research and today there are many different types of medicines available that will assist in keeping HIV-positive people healthy and living longer. These antiretrovirals are expensive and most of the developing world's people do not have access to treatment.

Despite the launch of the global programme on AIDS and billions of US dollars in aid to combat HIV transmission, the global AIDS epidemic has escalated from a few cases in the early 1980s to approximately 33.2 million in 2007 (Figure 6.2). The AIDS epidemic has escalated into an epidemic with not only health consequences, but with far-reaching economic and social impacts on the individual, the community, societies and governments. AIDS has become the stumbling block of developing countries for the attaining of their development goals; impacting on poverty, food security, education, gender equality, child death rates, maternal health and other infectious diseases such as tuberculosis (TB). The international community responded to the epidemic through the establishment of institutions such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and the Global Coalition on Women and AIDS.

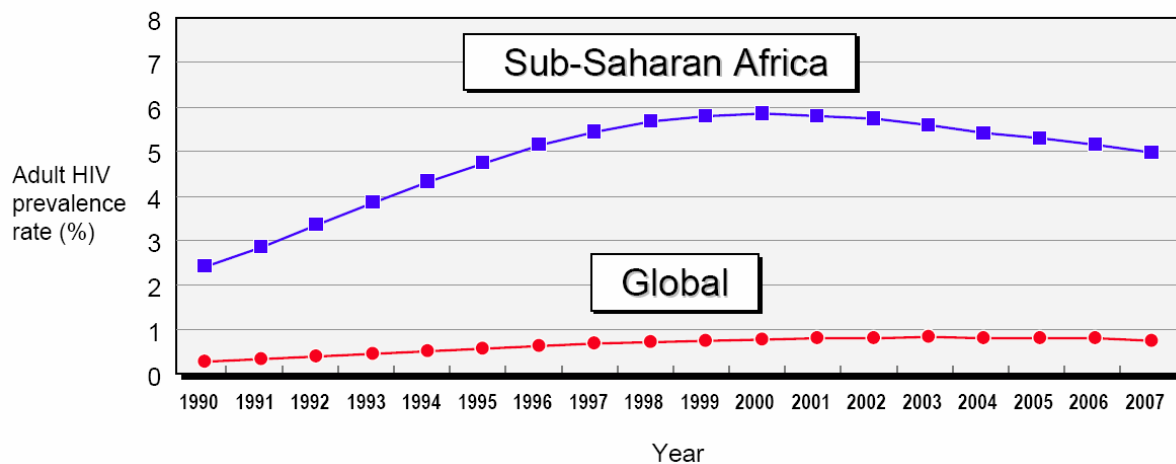
The AIDS epidemic is the only disease that has a dedicated United Nations agency, UNAIDS, charged with the goal to deal with it. Various international private and public institutions such as the Global Fund, PEPFAR and the Gates Foundation have been established to respond to the epidemic at an increased pace.

6.2.4 AIDS in sub-Saharan Africa

The epicentre of the HIV/AIDS epidemic is in sub-Saharan Africa with more than 60% of all infections occurring in the region. Some factors which played a role in the high HIV prevalence in sub-Saharan Africa are poverty, in particular where it is associated with inequities of income and a high rate of unemployment; women's status in the community; high occurrence of other STIs; low levels of condom use and low levels of

male circumcision; multiple concurrent sexual relationships; and high mobility of people due to employment, conflict or draught (Smart, 2004:23). The age group that is most infected and affected by HIV/AIDS is the adult age group of 20-49 years, the so-called sexually, economically and socially active people in a population. People in this age group have families and jobs and contribute to the economy of their countries.

Figure 6.5: Estimated adult (15-49 years) HIV prevalence percentage globally and in sub-Saharan Africa, 1990-2007



Source: UNAIDS. 2007. *AIDS Epidemic Update*. Geneva: UNAIDS.

Figure 6.5 clearly shows that sub-Saharan Africa is worst affected by HIV/AIDS with more than two-thirds of all HIV-positive people living in this region. The people living in this region already face challenges such as increased illness and death because of malaria and infectious diseases; extreme poverty and food insecurity; unemployment; low rates of education and literacy; and political instability (Schaefer, 2004:1). All of the previous challenges are serious in themselves, but if HIV/AIDS is also added on, most of the health and socio-economic conditions of the poor people become disastrous.



Table 6.2: HIV/AIDS figures in nine sub-Saharan African countries

Country	Botswana	Lesotho	Malawi	Mozambique	Namibia	South Africa	Swaziland	Zambia	Zimbabwe
Life expectancy at birth - years	40	41.5	41.5	45.0	53.5	48.0	37.5	40.0	35.5
MDG - % population below \$2 per day	50.1	56.1	76.1	78.4	55.8	34.1	no data	87.4	83.0
Estimated national HIV prevalence 15-49 years	24.1	23.2	14.1	16.1	19.6	18.8	33.4	17.0	20.1
Estimated children HIV+	14,000	18,000	91,000	140,000	17,000	240,000	15,000	130,000	160,000
Estimated number of orphans	97,000	100,000	550,000	510,000	85,000	1,200,000	63,000	710,000	1,100,000

Sources: United Nations Development Programme (UNDP). 2005. Human Development Report 2005. New York: UNDP.

PlusNews. 2004. Country profiles. [Online] Available at: <http://www.plusnews.org> [Accessed: 29 May 2006].

UNAIDS. 2006. Report on the global AIDS epidemic. A UNAIDS 10th anniversary special edition. Geneva: UNAIDS.

As illustrated in Table 6.2, Botswana, Lesotho, Mozambique, Namibia, South Africa Swaziland, Zambia and Zimbabwe have lowered life expectancy due to the AIDS epidemic. These countries, with the exception of South Africa and Botswana, also carry the heavy burden of extremely poor people. In Malawi, Mozambique, Zambia and Zimbabwe, more than three-quarters of the population live on an income of US \$2 and less per person per day (UNDP, 2005:227). With the highest number of people living with HIV/AIDS in the world living in sub-Saharan Africa, poverty and all it encompasses pose a serious threat to the people of the region.

The question arises: why is there such a huge disparity in HIV prevalence in the different regions in Africa (Figure 6.1)? Southern Africa has an average adult HIV prevalence of 25% whereas north-east and west Africa have single digit HIV prevalence rates. Although many reasons have been provided for this phenomenon such as religion, cultural practices, male circumcision and migration of people, scholars have yet to research the real reason for the difference. New research on male circumcision

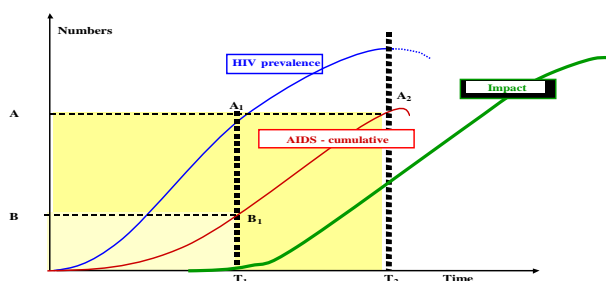
(Msiska, 2005) and concurrent sexual partnerships (Parker *et al.*, 2007) suggests that these two factors may have an influence on the heterogeneity of HIV in Africa.

6.3 HIV/AIDS – a long-wave-effect

The consequence of HIV infection is that people fall ill and die of AIDS. It strikes adults at their most economically productive years; hence HIV/AIDS will have a greater social and economic impact than many other diseases in developing countries. The effects of AIDS are complex and can best be described with three curves (Figure 6.6). Most of what will happen is still in the future. The first curve represents the people who become infected with HIV.

The epidemic starts slowly and gradually and when a critical mass of HIV-infected people has been reached, the growth of new infections increases fast. At this stage, the epidemic spreads through the whole population and all who are susceptible and have been exposed to HIV would have been infected. At the final stages of the HIV epidemic, the S-curve will start to flatten out, either because people are getting well or, in the case of HIV, the deaths even out the number of new infections. In most infectious disease outbreaks, at this stage the curve will decline very quickly, but not so in the case of HIV/AIDS.

Figure 6.6: Epidemic curve of HIV, AIDS and impact



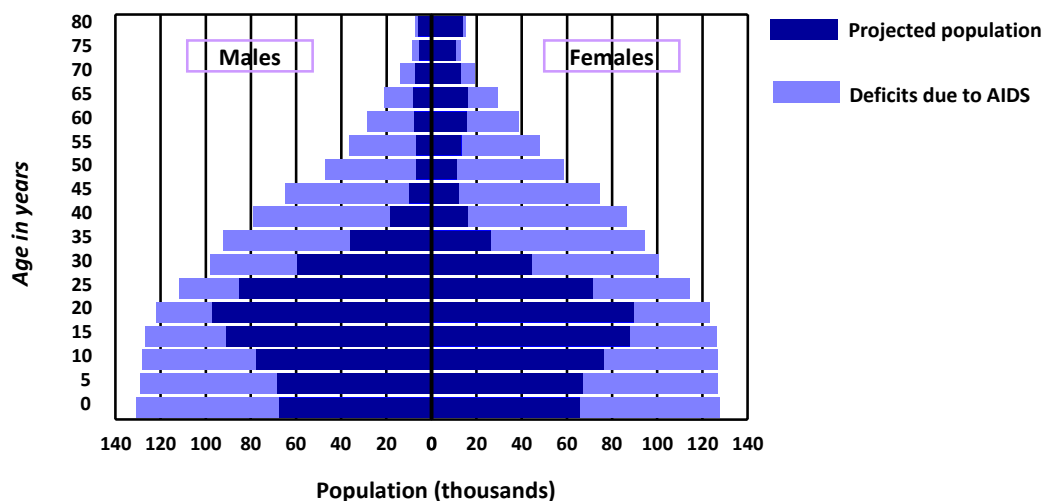
Source: Whiteside, A. 2005. *An overview of the HIV/AIDS epidemic in Eastern and Southern Africa*. Presentation at the Joint UN, Sida and Norad Meeting in Johannesburg, 16-18 November.

Many years later, a new S-curve forms, following the same pattern as the first curve. The AIDS curve follows about seven years after the HIV curve due to its long incubation period. The only way that people will leave the infected pool is death, as there is no cure for HIV. Antiretroviral medication can prolong life and make people well again, putting them back into the HIV curve, thus increasing the pool of infected people. A new curve, the impact curve, follows the AIDS curve. The impact curve follows approximately seven years after the AIDS curve and 14 years after the start of the HIV curve. Impact can be measured at demographic, political, economic, personal and community levels. Examples of the impact of HIV/AIDS are orphans left to fend for themselves, people losing their jobs because they are too ill to work and children taken out of school to help sick parents, to name but a few.

6.4 The impact on population and population structure

The HIV/AIDS epidemic can be described as a long-wave event with demographic, political and economic consequences. Life expectancy will decrease and the population growth will slow down (Figure 6.7).

Figure 6.7 *Projected population structure of Botswana 2020*

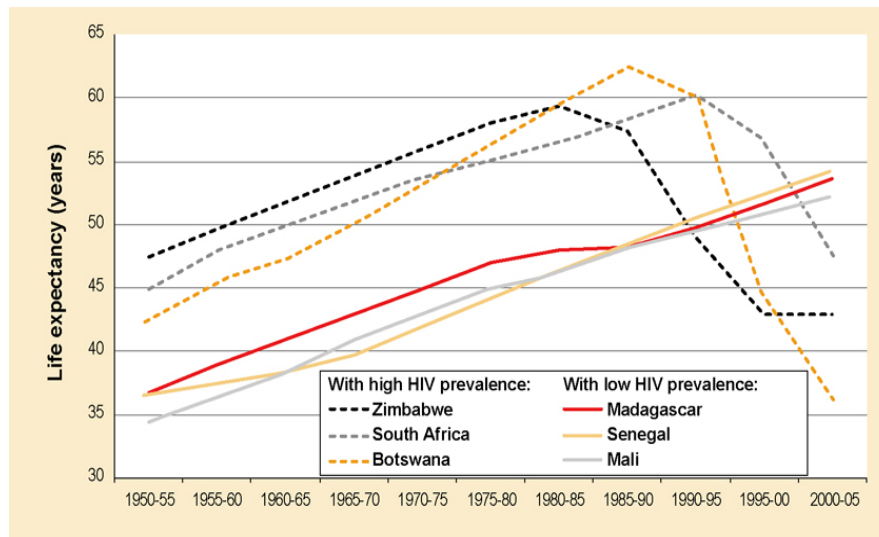


Source: Whiteside, A. 2005. *An overview of the HIV/AIDS epidemic in Eastern and Southern Africa*. Presentation at the Joint UN, Sida and Norad Meeting in Johannesburg, 16-18 November.

It is estimated that the impact of AIDS on the world population will reach its peak by the second half of the 21st century (UNAIDS, 2006:81). The most affected countries will be in sub-Saharan Africa and AIDS will continue to slow or even reverse improvements in life expectancy, and distort the age-sex structures of affected populations.

Figure 6.8 clearly indicates that countries with a high HIV prevalence rate will have a marked reduction in life expectancy. Countries such as Botswana, Lesotho, Mozambique, South Africa and Swaziland that are expected to have a negative population growth will present with population pyramids with a chimney shape (Economic Commission for Africa, no date:3). According to the World Bank (Bollinger & Stover, 1999:8), the HIV/AIDS epidemic appears to be a major reason why per capita growth is slowing down in sub-Saharan countries. Poverty is expected to increase and development to falter due to the epidemics' effects on households, governments, businesses and national economies.

Figure 6.8 *Life expectancy in selected African countries with low and high HIV prevalence, 1950-2005*



Source: UNAIDS 2002. *Report on the global HIV/AIDS epidemic*. Geneva: UNAIDS.

The impact of HIV/AIDS on life expectancy in African communities is already devastating and the gains in the child mortality rate over the past 50 years have been eroded by the impact of AIDS. Seven countries in sub-Saharan Africa, namely Angola, Botswana, Lesotho, Malawi, Mozambique, Rwanda and Zambia, have recorded life expectancy at birth below 40 years of age (Economic Commission for Africa, no date:3). The way AIDS selectively destroys human capital can weaken and even destroys the mechanisms that build human capital (Economic Commission for Africa, no date:6).

6.5 Poverty and inequity

Some of the poorest countries in the world are in sub-Saharan Africa, which makes it difficult to distinguish between the impact of HIV/AIDS and general poverty. Some of the hardest hit countries were also poor at the onset of the HIV epidemic, and because of the vulnerability of the population, the epidemic will have an exceptionally harsh effect on these countries. Therefore, the poorest households will to a certain extent be worse affected by HIV/AIDS (Isaksen, Songstad, & Spissøy, 2002:10). Some of the characteristics of poverty in the region are (Isaksen et al., 2002:10):

- poverty primarily in rural areas;
- poor people in rural areas mostly engage in subsistence farming;
- the new face of poverty is in the urban areas, mostly informal settlements;
- large families, children and old people are among the poorest; and
- poverty has a gendered dimension, women are poorer than men.

The impact of the HIV/AIDS epidemic will be the hardest at household level of poor people. With the onset of AIDS, the household will have increasing medical, funeral and legal costs. This will eat into the household's savings with the resulting changes in consumption and investment patterns. The whole household's financial, social and health status will be affected with the loss of breadwinners. With the economically

active adults of the household ill and dying, the household can dissolve with children left to fend for themselves. Orphans are often taken into households that themselves already have difficulty in surviving.

6.6 Impact on women and children

In Africa poor rural women will bear the brunt of the AIDS epidemic. Women, as the primary caregivers of the household, will have to care for the sick, giving up their jobs or unpaid work that contributed to the survival of the family (Isaksen et al., 2002:14). High levels of illiteracy and little or no financial independence exacerbate the women's situation. With the deterioration of household finances, women's expenditure and access to health care will most probably be affected, making them more vulnerable.

The many orphans due to AIDS are sometimes referred to as a lost generation because of the risk of little or no education, poor socialisation, social disturbance and belonging to an inferior economic class (Alban & Guinness, 2000). Due to the large numbers, the social systems are overwhelmed and many orphans are left to fend for themselves or put in foster care in a community that is already suffering under the burden of the disease. Girl children are particularly vulnerable, as they are the first to be taken out of school to care for the sick and other siblings (Isaksen et al., 2002:15). Many children are born HIV due to vertical transmission from mother to child and these children face an unclear future of disease and early death (Table 6.3).

Another aspect of the impact of AIDS on women and children is the burden it places on the grandmothers. Many grandmothers are forced to take their grandchildren in, which places a tremendous stress on the women as well as the children (Isaksen et al., 2002:17). The additional financial and social burden it places on grandmothers

increases their vulnerability to become dependent themselves. Surviving siblings often foster many children, placing a financial burden on their own families.

Table 6.3 *Estimated figures for children in nine southern African countries - 2006*

Country	Life expectancy at birth - years	Estimated children HIV+	Estimated number of orphans
Botswana	40	14 000	97 000
Lesotho	41.5	18 000	100 000
Malawi	41.5	91 000	550 000
Mozambique	45.0	140,000	510 000
Namibia	53.5	17 000	85 000
South Africa	48.0	240 000	1 200 000
Swaziland	37.5	15 000	63,000
Zambia	40.0	130 000	710 000
Zimbabwe	35.5	160 000	1 100 000

Sources: United Nations Development Programme (UNDP). 2005. Human Development Report 2005. New York: UNDP.

PlusNews. 2004. Country profiles. [Online] Available at: <http://www.plusnews.org> [Accessed: 29 May 2006].

UNAIDS. 2006. Report on the global AIDS epidemic. A UNAIDS 10th anniversary special edition. Geneva: UNAIDS.

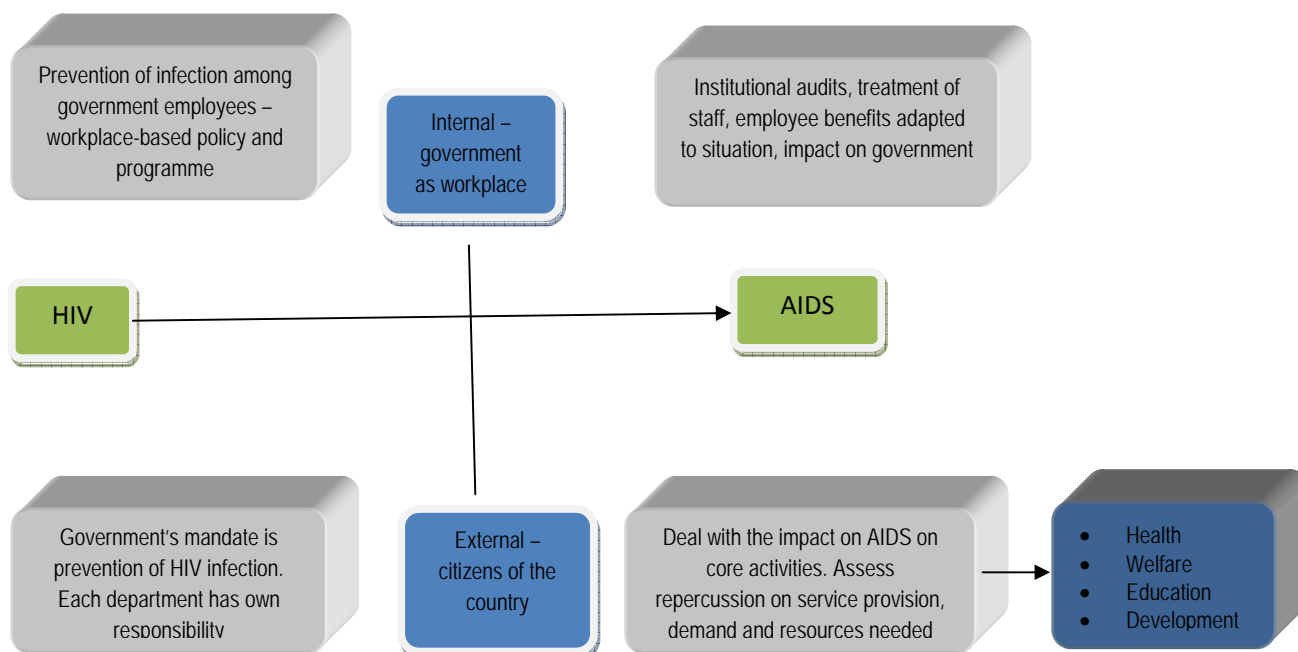
6.7 Stigma and discrimination

People living with HIV/AIDS have been rejected by other people and communities since the onset of the AIDS epidemic. Initially, the stigma and discrimination have been geared towards homosexuals falling ill because of AIDS. As the epidemic progressed to the heterosexual parts of populations, the stigma increased and people have been discriminated to on various levels, from personal rejection to discrimination at healthcare facilities and workplaces. The impact of stigma and discrimination on people seeking healthcare is particularly severe (Jennings, Mulaudzi, Everatt, Richter & Heywood, 2002:11). People that need information, education, testing, care and treatment often do not access these activities due to the fear of stigma and discrimination. Although most countries have enacted laws that combat discrimination, there are often invisible and subtle acts of discrimination against people living with HIV/AIDS and their families (Richter, 2001:5). Stigma and discrimination towards people infected and affected by HIV/AIDS assist with driving the epidemic underground.

6.8 Impact on governments and governance

In most African countries, governments are the main employer and also the main service provider. In countries with a high HIV prevalence, governments face a dual challenge: as the main employer with a shrinking work force and as a service provider with limited capacity and pressure to provide more services. Governments are threatened by the cost of the epidemic because government expenditure will rise in the areas of health, poverty alleviation, employment, orphans' allowance, recruitment/training, destitute allowance, pensions and education (Figure 6.9). As the expenditure increases, the revenue will decrease due to the many deaths of taxpayers. As people become ill, the immediate impact will be on the health services with demands on healthcare staff, hospital occupancy and an increased demand for financial resources.

Figure 6.9 *The impact of HIV/AIDS on government*



Source: Barnett, T. & Whiteside, A. 2006. *AIDS in the Twenty-First Century. Disease and globalisation*. 2nd ed. Hampshire: Palgrave Macmillan.

Given the fact that HIV/AIDS has a long-wave effect and not a once-off shock to the government system, it is debatable whether Africa's governance institutions will be able to face the challenges that HIV/AIDS poses (De Waal, 2003b:12). The impact of HIV/AIDS on governance is difficult to measure and it is an area that needs to be researched (Barnett & Whiteside, 2006:334).

6.9 Impact on the workplace

Although the HIV/AIDS epidemic impacts on all areas of life, it is significant that it impacts the hardest on the working age population (20-49 years). The impact of HIV/AIDS has on the workplace differs from country to country and sector to sector. In countries with a high HIV prevalence, the workplace will be affected the most. A company can expect to have increased costs in terms of staff recruitment and training, medical aid, insurance and retirement benefits (Smart, 2004:24). Other losses are the loss of skills and tacit knowledge.

According to the ILO (2006), more than 3 million people in the global labour force were partially or fully unable to work because they were ill due to AIDS and 75% of these lived in sub-Saharan Africa. Of the 75%, more than 43% were women. Because the workplace is structured and presents a captive audience, it is an easy entry-point to run HIV/AIDS programmes and policies.

6.10 HIV/AIDS and the Millennium Development Goals

The international community has agreed on development goals. The aim is to use the eight millennium development goals (MDGs) as a blueprint to meet the needs of the world's poorest people. These development goals have influenced the development agendas and policies of most of the major donors and donor agencies. However, the

potential impact of HIV/AIDS on development is such that all the development goals will be jeopardised should the HIV/AIDS pandemic not be dealt with as part of each one of the MDGs (Table 6.4).

Table 6.4: The impact of the HIV/AIDS epidemic on the MDG

Millennium Development Goals		Impact of HIV/AIDS
Goal 1	To wipe out extreme poverty and hunger	<input type="checkbox"/> Household capacity <input type="checkbox"/> Food security <input type="checkbox"/> Orphans and vulnerable children
Goal 2	To ensure primary education for all	<input type="checkbox"/> Child labour <input type="checkbox"/> Child-headed households <input type="checkbox"/> Orphans and vulnerable children <input type="checkbox"/> Loss of teachers
Goal 3	To promote gender equality and the empowerment of women	<input type="checkbox"/> Girls withdrawn from school <input type="checkbox"/> Women's higher vulnerability <input type="checkbox"/> Poverty <input type="checkbox"/> Transactional sex
Goal 4	To reduce child deaths	<input type="checkbox"/> Need to roll-out prevention from mother to child transmission (PMTCT) <input type="checkbox"/> Paediatric antiretroviral treatment
Goal 5	To improve maternal health	<input type="checkbox"/> Need to roll out prevention from mother to child transmission (PMTCT) <input type="checkbox"/> Cost of antiretroviral treatment
Goal 6	To combat HIV/AIDS, malaria and other diseases	<input type="checkbox"/> HIV/AIDS 'lost' in other medical emergencies

Source: Sandström, A. 2004. *Dialogue, mainstreaming and direct support*. Presentation at HIV/AIDS and Economists Workshop, Lusaka, Zambia 23-25 February.

Despite official development assistance from the rich countries, the sub-Saharan African region has lagged far behind in the human development indicators. The region is the only one in the world that is not on track to achieve a single target of the Millennium Development Goals (Schaefer, 2004:3). Although the region has had a growth rate of 5.8% during 2005, it was mainly due to the high growth rate in Angola (19.1% due to oil revenues), Mozambique and South Africa (Conference of African Ministers, 2006:section 2.2). The overall development indicators remain below the target set for the MDGs and the progress in the fight against poverty, diseases, gender inequality and illiteracy remains slow. As illustrated in Table 6.3, six of the Millennium Development Goals have not been achieved mainly due to the failure of sub-Saharan

African governments' lack of adequate response to the AIDS epidemic. The AIDS epidemic exacerbates the plight of poor people with many parents dying, with the result of loss of income and food security; children, especially the girl child being taken out of school to work; death of infants and mothers; and the increase of other diseases such as tuberculosis and malaria.

6.11 Mainstreaming HIV/AIDS in development work

The HIV/AIDS pandemic remains a threat to people's health and life, both for the infected and the affected. The demographic, social and economic consequences are huge as young people are mainly infected. Old people are deprived of support from younger people and children are left without parental care, having to take on the responsibility for their siblings at an early age. Communities are weakened and children and elders are left without care. The additional demands on healthcare and social security do not match delivery capacity to the demand even at the basic level of health, education and social security. Unequal gender relations are key factors in the spread of HIV/AIDS, including women's lack of power to negotiate about protected sex.

Governments face special challenges from HIV/AIDS, namely greater calls on its resources and a disease that cuts away at financial and personnel capacity (Barnett & Whiteside, 2002:298). Not much data is available on the impact on government, but it can be assumed that all government departments will be affected, both internally and externally. Internally, governments need to embark on prevention programmes for government employees who are HIV-negative and treatment programmes for employees who are HIV-positive to prolong their productive lives, as well as dealing with issues such as employee benefits, impact on governments and institutional audits. The external response of governments will have to deal with prevention programmes at community level, the impact of AIDS on core activities and service delivery.

According to Barnett and Whiteside (2002:299), AIDS affects two key areas of government:

- government as a collector and spender of revenue and as a service provider, and
- governance: the style, manner and legitimacy of government.

Mainstreaming HIV/AIDS means that HIV/AIDS must be brought to the centre of the development agenda and this requires change at individual, departmental and organisational levels. UNAIDS (2003:2) states that the aim of mainstreaming AIDS in development work is the enhancement of development practices so as to improve its effort to the AIDS response. It also means that AIDS must be incorporated into the national responses of governments' development programmes so that the epidemic can finally be turned around. A more expanded definition by Elsey & Kutengule (2003:12) is "Mainstreaming HIV/AIDS can be defined as the process of analyzing how HIV/AIDS impacts on all sectors now and in the future, both internally and externally, to determine how each sector should respond based on its comparative advantage". Although there are many different definitions of mainstreaming, scholars generally agree that mainstreaming HIV/AIDS does not mean business as usual and it does not change core functions and responsibilities, but rather means viewing it from a different angle and realizing that some things must change (Elsey & Kutengule, 2003:14).

6.12 Conclusion

The primary means of HIV transmission – sexual intercourse – has been known for over two decades, but that information does not prevent thousands of men and women from contracting the virus every day. The AIDS epidemic creates a high and ongoing mortality in the economic and social active sector of the population. The epidemic is being driven by inequities and uneven development, exacerbating existing poverty and human misery. In hard-hit countries in sub-Saharan Africa, the AIDS epidemic sets

back development with human development figures as low as it was in the 1950s. The epidemic changed population structures and has a severe impact on women as caregivers and on children, the most vulnerable sector of society. Six of the eight Millennium Development Goals are directly linked to the impact of the AIDS epidemic and the attainment of these goals.

The required response is complex, multisectoral, multifaceted, large scale and long term, posing challenges to countries and development partners never seen before. The responses in and outside Africa have been inadequate for too long with the result that the AIDS epidemic has made its mark on many countries in the region. The support of political, government, community and business leaders at country level is critical to the implementation of effective HIV/AIDS programmes. The international community has stepped up its response during the past decade, but the question remains: is this too little too late?

Chapter 7 discusses the impact of the AIDS epidemic on development and sustainable development. The concepts of *development* and *sustainable development* will be explored, its origins and objectives, as well as its global legislative framework. A short history of the major milestones of sustainable development and the international reporting mechanisms is included to demonstrate the globalisation of the development arena. The relationship between developing countries and sustainable development in the light of the HIV/AIDS epidemic will show how many gains in human development have been reversed due to the epidemic in sub-Saharan Africa. The impact of AIDS on of individuals, communities, countries and the region will be discussed. Consideration will be given to the impact of AIDS on the attainment of the Millennium Development Goals.