CHAPTER 3: HIV/AIDS AND HEALTH CARE REFORMS

Evidence from many countries shows that income is probably the most important factor outside of the health sector, while others include social inputs such as education, environmental inputs, access to clean water, and general economic measures such as food rationing and subsidies, etc...This approach identifies economic and political factors as the most significant determinants of health, as these factors determine who has control over resources and decision-making and who has power of whom... (Labonte et al., 2004:173)

3.1 Introduction

Formulating the problem requires insight into the dynamics and patterns of the disease, the design of biomedical and behavioural interventions as well as gaining insight into the social and economic impact of the HIV/Aids epidemic on health care systems. Therefore, careful consideration has to be given to where the epidemic is located, how it will spread and affect communities and health care systems in order to implement effective roll-out strategies for HIV/Aids interventions. Defining the HIV/Aids-related problems and identifying the assumptions that constrain decision-making are critical elements in putting together interventions that are able to target the real needs and issues. Strategic forecasting becomes a key success factor in building a system of profound knowledge and in coming to understand the driving forces necessary to design effective health care intervention strategies for HIV/Aids.

This chapter focuses on the origin and epidemiology of HIV/Aids, the distribution and determinants of health-related conditions with the aim of providing a basis for a best practice model to control this health care problem. Many strategies fail because the operational aspects are separated from the strategic aspects. Only by bringing together all the different aspects that influence the biomedical and behavioural interventions can risks be managed and actions be implemented that offer adequate resources and capacity-building structures.

3.2 HIV/Aids, the disease

According to Tabane (2004:26), HIV is a human immunodeficiency virus that can be transmitted sexually through blood and during pregnancy. She states that like herpes and syphilis, HIV affects the whole body. Tabane (2004:26) and van Dyk (2001:4) describe Aids, an acronym for acquired immune deficiency syndrome, as being caused by a virus (HIV) which enters the body from the outside. Deficiency means that the body is unable to defend itself against infections and disease. Aids should be seen as a syndrome of opportunistic diseases, infections and certain cancers. All of these diseases result in death in the final stages of the disease. Treatment does not cure the disease but buys time and quality life.

Aids has killed more than 25 million people since it was first recognised in 1981 (UNAIDS/WHO, 2005:2). This makes it one of the most destructive epidemics recorded yet. According to the UNAIDS (2005:2), the total number of people living with HIV has reached 40.3 million. Newly infected people grew by close to 5 million for the year 2005. Women in the developing countries are the hardest hit by the epidemic. The infection levels amongst pregnant women are shown to be 20% higher than those that are not pregnant (UNAIDS/WHO, 2005:4). Ababio (2005:331) and Van Dyk (2002:88) point out that the causes and spread of HIV/Aids vary. By reducing the stigma, discrimination, violence accompanying sex and isolation of people living with HIV/Aids, the impact of this disease on women will be made softer as the success of prevention strategies depends on treating HIV like any other disease (Van Dyk, 2002:95). Only when people feel safe to be open about their status can the real issues be resolved successfully.

As HIV/Aids is a collection of many different conditions that weaken the body's immune system, each person who is diagnosed as HIV positive reacts differently to the virus. People who are already chronically ill (affected by TB or malaria) will move much quicker through the phases of the disease and show varying degrees of illness that demand alternative measures of medical interventions. Table 3.1 presents five phases of HIV infection identified by Van Dyk (2001:36-40) and Barrett-Grant, Fine, Heywood & Strode (2003:22-23). Van Dyk (2001:36) states that in practice it is difficult to demarcate the boundaries. The phases are theoretically divided and offer a framework in which the progress of the disease can be monitored and measured.

Table 3.1: The phases of HIV infection

Phase	Symptoms and treatment	CD4 count
1. The primary HIV infection	Fever-like symptoms 4-8	Detectable viral loads.
phase.	weeks after infection with HIV	Considered to be the most
	virus.	infectious.
	Window period (3-4 weeks) is	
	the period between onset of	
	HIV infection and the	
	appearance of detectable	
	antibodies to the virus.	
	Treatment immediate and	
	aggressive with antiretroviral	
	therapy (ART) to reduce viral	
	loads.	
2. The asymptomatic latent	Show no symptoms and are	CD4 cell count between 500
phase.	productive workers.	and 800 cells/mm.
3. The minor symptomatic	Show minor and early	CD4 cell count between 350
phase.	symptoms of HIV disease	and 500 cell/mm.
	through shingles, fevers, skin	
	rashes, recurrent upper	
	respiratory tract infections,	
	weight loss, chronic diarrhoea	
	and fatigue.	
4. The major symptomatic	Begin to appear as the	The viral load becomes high.
phase and opportunistic	immune system deteriorates	CD4 count between 150 and
diseases.	The person is usually	350 cell/mm.
	bedridden for at least 50% of	
	the day.	
5. Aids-defining conditions	Patients do not respond to	CD4 count is below 200
and severe symptomatic	antibiotic treatment and more	cells/mm.
phase, also known as full-	persistent untreatable	Patients are considered to be
blown Aids. Takes 18 months	opportunistic conditions and	very infectious when full-blown
to develop into Aids.	cancers manifest.	Aids appear.
People with full-blown Aids	ART and prevention may	
usually die within two years.	prolong the person's life. This	

Source: Adapted from Van Dyk (2001:36, 65-67); Barrett-Grant, Fine, Heywood, Strode (2003:22).

One can therefore deduce from Table 3.1 that each phase requires a specific set of medical, administrative and managerial interventions. Unpacking the internal processes to support actions and strategies for each phase of the disease will provide governments with a means to determine its impact on the national health care system and economy. Unfortunately, the only way to stop Aids is to prevent transmission of the virus. Behavioural interventions were developed in an effort to contain the spread of HIV/Aids. Even though the focus now not only was on medical interventions but also included the mind, there still seemed to be gaps in tackling the disease. Poverty and instability proved to be the main drivers in the spread of the disease. Barnett and Whiteside (2002:76) deliberate on the strategies that supported the biological goal aimed at tackling the epidemic and reducing the rate of transmission. They pointed out that such strategies required considerable financial and logistic resources and are dependent on the availability of treatment.

The ultimate purpose of antiretroviral therapies (ART) is to reduce the HIV viral load as much as possible during the phases of HIV infection. There are three main categories of antiretroviral drugs (ART) that are used to treat HIV/Aids. These three main categories are used in various combinations to treat patients with the best results (Van Dyk, 2001:67). The categories are described by Van Dyk (2001:67) as follows:

- Nucleoside reverse transcriptase inhibitors (NRTI) which include: zidovudine or retrovir (AZT), didanosine (Videx), zalcitabine, lamivudine (Epivir) and stavudine.
- Non-nucleoside reverse transcriptase inhibitors such as nevirapine.
- Protease inhibitors.

While the aid responses have grown and improved access to ART in the developing countries, it has been recognised that gaining the upper hand against the pandemic requires rapid and sustained expansion of HIV prevention (UNAID/WHO, 2005:5).

Treatment of HIV/Aids has been the most effective where a combination of two or three antiretroviral drugs were used. For optimum suppression, a triple therapy is recommended. Mono-therapy is no longer the preferred option as it produces only temporary reduction in viral load and a resistance to the drug develops within a few weeks. When resources are limited bi-therapy is used, though drug resistance may also develop (Van Dyk, 2001:68). It is found that where patients build a resistance against the combinations a new combination that often needs multidrug combinations must be used to treat patients effectively. The challenge thus lies in finding the most suitable combination of drugs as well as the most cost-effective treatment.

ART and multidrug therapy calls for a pattern of chronic care in which individual patients receive follow-up treatment for the rest of their lives (Van Dyk, 2001:68; *cf.* Barnett & Whiteside, 2002:79; *cf.* World Health Organisation, 2004:57). As a result, delivering quality ART involves a broad range of activities that stretch beyond the purchase and disbursement of ARVs. Quality programmes require a diverse set of interventions that include activities to promote adherence. Unless patients adhere to treatment programmes, resistance will spread and current treatments will become ineffective (Office of the US Global Aids Co-ordinator, 2004). Even though prices of drugs are falling in many of the developing countries, poor infrastructure and inadequate resources to fund interventions will remain a constraint (Labonte et al., 2004:39). Accommodating the demands of multidrug treatments requires that infrastructure be scaled up and more service delivery points are made available.

HIV/Aids is a complex disease masked by uncertainty and risk. Identifying adequate resources to cope with the increased demands made on the health system will allow governments to turn the pandemic from a fatal to a chronic condition. The high costs of health care make this extremely difficult and often impossible to achieve, as a country is steered by the minimum standards of health care a government can afford. To reach the turning point from a fatal to a chronic condition is indeed a cost-intensive exercise as it requires strengthening of health care systems to accommodate new patterns and management practices supporting ART aligned with effective roll-out plans for HIV/Aids intervention strategies (World Health Organisation, 2004:58). For this reason, finding alternative mechanisms that offer governments ways and means towards fiscal responsibility becomes a critical aspect in dealing with HIV/Aids and health care reforms.

3.3 The epidemiology: global, regional and national impact of HIV/Aids on health care systems and public finance

Both social and economic characteristics influence the patterns and spread of HIV/Aids. Identifying the determinants which make a society more susceptible and vulnerable to an epidemic spread, requires that high risk or core groups, must be pinpointed. One has to keep in mind that all diseases move through epidemic curves (S-curve) in which one sees infection in some while others are missed. HIV/Aids is unique in that it has two curves. The HIV infection curve preceded the Aids survey by between five to eight years (Barnett & Whiteside, 2002:47; *cf.* Landsberg, 2002:41). The HIV curve reflects a long incubation period between infection and onset of the disease. This aspect impacts on how communities perceive the threat of HIV/Aids against more aggressive types of diseases that show short periods from onset to death. The long incubation period of between three to eight years also offers governments some leeway to plan adequate resources and provide infrastructure that support strategies through future forecasting (Barnett & Whiteside, 2002:168; *cf.* Landsberg, 2002:42). All public policies are future-orientated and aim at promoting the well-being of citizens (Ababio, 2005:330).

A global view of HIV prevalence shows that Sub-Saharan Africa remains the hardest hit. Two-thirds of all people living with HIV are based in sub-Saharan Africa of which women form the main group with 77% of all infections (UNAID/WHO, 2005:2). The cause and spread of HIV/Aids in Africa is ingrained in cultural beliefs and practices while the spread in Europe and Asia is more related to drug abuse and the use of dirty needles. There has been a significant growth in the epidemic in Europe and Central Asia (UNAID/WHO, 2005:2). The poor developing countries are therefore the hardest hit. Coping with the pandemic requires an abundance of resources which these countries do not have. Barnett and Whiteside (2002:169) state that ART are therefore unlikely to make a difference to the life expectancy in the poor world and that price decreases and withdrawal of recent litigation in South Africa by multinational pharmaceutical corporations will have little effect as these drugs are too expensive to implement successfully.

Achieving a turnaround of HIV/Aids from a fatal to chronic condition is thus a dream only rich developed countries can afford. Seeing health as a basic human right with no limit on the costs and resources becomes an unreachable dream for the middle and poor

income countries. Policies therefore aim at promoting well-being through the promotion of accessible, affordable and equitable health care within cost structures that governments can afford. This becomes the pivotal point for determining standards of health care provision and supply of services. HIV prevalence varies between rich and poor families, educated and uneducated, employed and unemployed. It has been noted that the first reaction of most families are similar in rich or poor families. Families pay and take care of treatment. How each household is able to cope with the impacts of the disease over long periods of time depends on their economic status which increases their vulnerability (Barnett & Whiteside, 2002:195; *cf.* Nattrass, 2004a:32; *cf.* UNAID, 2005:31). Poor families rely on public health systems while rich families are able to rely on private health care provision and are more resilient to the negative effects of the disease.

3.4 HIV/Aids: health care reforms, social security networks and fiscal balance

Strengthening national health care systems continue to play a key role in the delivery of effective prevention, treatment and care as part of the overall poverty reduction strategies. Health is recognised as a central part of development and it plays a leading role in how communities perceive democracy and their entitlement to services (Barnett & Whiteside, 2002:295; *cf.* Haacker, 2002:7; *cf.* Freedman, 2005:21). In the developing countries the government is the main force and provider of social welfare, the major producer as well as the biggest employer (Barnett & Whiteside, 2002:296).

HIV/Aids increases the demand for both public and private health services. This means that health care costs rise as personnel costs rise. Looking at the wider impact of HIV/Aids on public revenue and spending, the following critical aspects stand out. Distribution and allocation policies must be able to cope with the effects of HIV/Aids on growth and social justice (Barr, 1998:44). Social security networks are faced with increased demands on their budgets. The impact depends on the type of benefits governments choose to offer (Haacker, 2002:7). This means that HIV/Aids affects the entire social security system. Haacker (2002: 17) points out that it is necessary for governments to distinguish between three types of programmes: provident funds, social insurance or social security programmes. The type of programme selected depends on the strength of the private sector, the revenues government can raise and its approach to social justice. HIV/Aids is expected to deteriorate governments' fiscal position in

several ways. Absenteeism, sick leave and disability pensions, medical care, pensions to surviving dependants, loss of productivity and funeral costs and attendance all have carry-through effects on governments' fiscal position (Haacker, 2002:20).

Research into trends in the composition of health services expenditure identifies medical services (clinical services) and acute hospital care (chronic care) as the two major components of the driving force behind health expenditure. The growth in medical services expenditure is contributed to the overall growth in health services expenditure per person while acute hospitals refer to services in public and private sectors that include recurrent treatments. Trends include a growth in demand for services as technology advances and new drugs extend the boundaries of treatment. Also, increased education of consumers about available treatments raise their expectations of access to a full range of health care. These aspects combine to increase costs of health care as governments are forced to promote higher and higher standards of health care to satisfy the needs and desires of communities.

3.5 International legislation and special features of the HIV/Aids policy process

Legislation that facilitates full community participation and integration of people who are HIV positive into society must provide for non-discrimination and privacy. Its drafting can be complex due to inherent contradictions necessitating exceptions but the need for legislation cannot be underestimated. Also, one cannot ignore the fact that the general principles of Aids legislation are universally applicable. However, enforcement mechanisms must be adapted to suit local situations. Panda et al. (2002:167) state that legislation must be in accordance with United Nations Resolution No. 1995/44 passed by the Commission on Human Rights. The resolution calls upon states to: "ensure where necessary that the laws, policies and practices, including those in the context of HIV/Aids respect human rights standards, including the right to privacy and integrity of people living with HIV/Aids, prohibit HIV/Aids related discrimination and do not have the effect of inhibiting programmes for prevention of HIV/Aids and the care of persons infected with HIV/Aids" (Panda et al., 2002:167).

Efforts dealing with the growing pandemic worldwide in a practical and humane manner raised many pertinent issues. These included issues of mandatory testing and the discriminatory practices in employment. This meant that human rights provided a critical

perspective in the evaluation of Aids policies. It also meant that the legal mechanisms had to reflect the basic rights of individuals in accordance with various international charters and declarations. The multipronged approach to the problems is thus based on human rights obligations which further directed legislation towards considering if it adopts an isolationist approach (mandatory testing) or an integrationist approach (informed consent and confidentiality providing for dignity through anti-discriminatory treatment).

WHO advocates an integrationist approach as it treats the patient as central to the strategy in combating HIV/Aids. Panda et al. (2002:169) point out that the Commission on Human Rights Resolution No. 1994/49 calls upon states to take the necessary steps to ensure full enjoyment of civil, economic, social and cultural rights by people living with HIV/Aids. It urges states to review their legislation and practices to ensure the right to privacy and integrity. On its 57th meeting, the Commission on Human Rights in Resolution No. 1997/33 through a number of guidelines observed that states must review and reform public health law to ensure that they deal with public health issues raised by HIV/Aids (Panda et al., 2002:170).

3.6 Conclusion

International legislation provided a framework by national governments for the development of health rights, access to services and a human rights standard. Fulfilling these three issues has major financial implications for governments. The role and importance of women as a main catalyst in development has been emphasised in development discourse. However, women are the hardest hit by the evolvement of the HIV/Aids epidemic in developing countries. Parallel to this, the long incubation period between infection and the onset of the disease pushed the threat of HIV/Aids to the back of most political agendas. Huge investments into social spending that provides no prognosis after eight to ten years emphasised the discrepancies that develop between each of these issues.

Partnerships propagated by the UN agencies only seem to increase the developing countries' inability to achieve these aims as it highlights the inequities that exist between the rich and poor. Coping with the enormous financial demands needed to support health care and HIV/Aids requires adequate forecasting of future trends whereby

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continuous risk management allows governments to identify opportunities and strengths to overcome risks. The utilisation of public-private partnerships is seen as a mechanism that provides opportunities to improve policy initiatives to build capacity and improve service delivery outcomes. The next chapter investigates public-private partnerships as a tool for macroeconomic planning and its ability to enhance value-for-money outcomes in health care.