

Chapter 6

**The Current and Future Impact of the HIV/AIDS Epidemic
on South Africa's Children***

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Summary: In this chapter we had three main aims. One, to investigate the impacts of the HIV/AIDS epidemic upon the children of South Africa, with a focus on the health, welfare and education implications. Two, to examine the responses of families, communities, civil society and especially governments to the crisis confronting the children. Third, to critique those responses and offer alternatives which may assist in ameliorating the impacts on children.

The impacts: infant and child mortality rates will double over 15 years; life expectancy will dramatically decline as more children acquire HIV; millions of orphans will be created as adults die and these children will be kept in poverty and be less likely to attend school and receive the normal socialisation of childhood.

The responses: the national AIDS plan has a focus on prevention of HIV transmission, with existing health services expected to treat HIV infected and affected children; information and education about HIV have been effective in raising awareness of the disease; government has pushed orphan care onto the community, however, the existence of a welfare system is helping some children and their carers cope.

Alternatives: existing health services are not coping with the increased demand, extra resources are needed; government is denying Nevirapine and ARVs to people, this needs to be changed; community capacity in coping with orphans is near breaking point and government needs to look at reconfiguring the welfare system to reach those children and provide for their care.

JEL: D13, I12, I18, J13

*** This study presents the views of its authors and not the official UNICEF position in this field.**

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AIDS, PUBLIC POLICY AND CHILD WELL-BEING *

edited by Giovanni Andrea Cornia

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1. Introduction

Every child in South Africa will feel the impact of HIV/AIDS. For some it will be far removed, while for others it will be within them destroying their immune system, and eventually leading to their death. Although most AIDS deaths will be adults, much of the impact will be felt by children (see chapter 1 of this study). Children are experiencing, and will experience at an increasing rate, the deaths of their parents, other family members, teachers and at times their peers. Deaths will affect the provision of services, education, health and welfare. Children will grow up in societies where death is a common experience, affecting them emotionally, economically and psychologically. The epidemic violates many of the fundamental rights of South African children. History will judge our response, or lack of it.

This chapter aims to highlight the plight of South Africa's children in the face of HIV/AIDS in an effort to identify ways and means to alleviate the many impacts. It examines the nature of the epidemic and its likely course, assessing the impact on mortality for adults and children. The paper goes on to discuss the impact of increased illness and death from HIV/AIDS on the health, welfare and education of children and on children already living in poverty. These areas are examined in terms of household level economic strain and the damage to the systems designed to provide services to children. Attention is given to the interventions, which currently exist in terms of prevention and mitigation. Family, community and state responses are outlined and critiqued. This information is used to identify key concerns and areas for action.

2. Impacts

2.1 Population

The HIV/AIDS epidemic has had many negative implications for South African society, which stem from the illness and eventual death resulting from HIV/AIDS. The identification of impacts needs, therefore, to be placed in context of the scale of illness and death. The following section examines the path which the epidemic is expected to follow and the implications this has for illness, death and population structure.

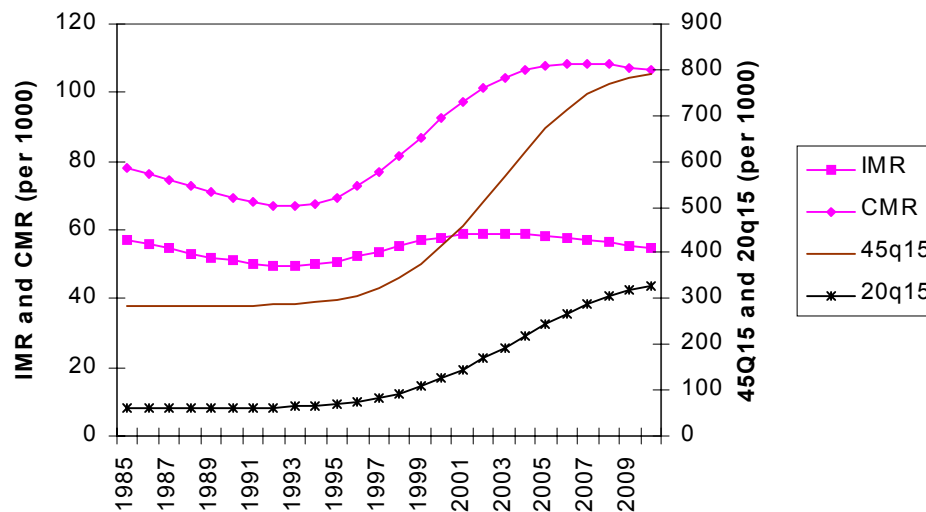
2.1.1 Modelling Results

The projections in this chapter are based on the ASSA2000 model developed by the Actuarial Society of South Africa.

Figure 1 shows the significant impact HIV is likely to have (and is indeed already having) on the mortality of the South African population. We see that the past trend of falling IMR (infant mortality rate) has been halted and that IMR is likely to remain

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Figure 1 Mortality Rates per 1000



above 50 per 1000 for the next 10 years. Of course most paediatric HIV mortality is likely to occur after the first year of life and there is not only a reversal of a previous downward trend but a significant (around 50% over the next 10 years) increase in the childhood mortality rates (new-borne child dying before reaching age five). But even more startling than this is the impact on adult mortality (as measured by the 45q15, the probability of a fifteen year old dying before reaching age 60). This rate is expected to increase by around 150% by 2010, from around 30% to around 80%, implying that without behavioural change and interventions half of adults can be expected to contract the virus during their life times.

Figure 2 shows these effects have the consequence of reducing life expectancy at birth, in South Africa, from over 60 years in the mid-1990s to slightly above 40 years by 2010.

Figure 2 The Impact on the Life Expectancy at Birth

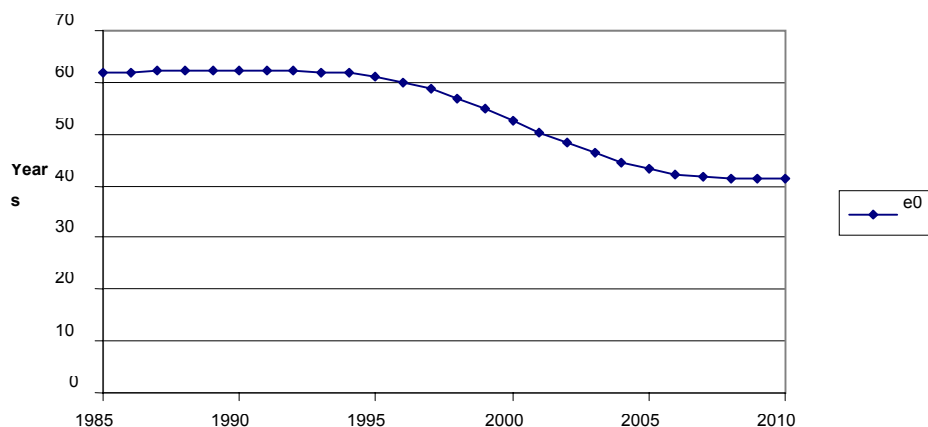


Figure 3 shows that the number of HIV deaths is expected to exceed the number of deaths by all other causes within the next three years. Included in this figure are the numbers of new infections showing that although these have already peaked, the number of deaths is only expected to peak in 2010.

Figure 3 Comparison of the Number of New Infections with the Number of Deaths

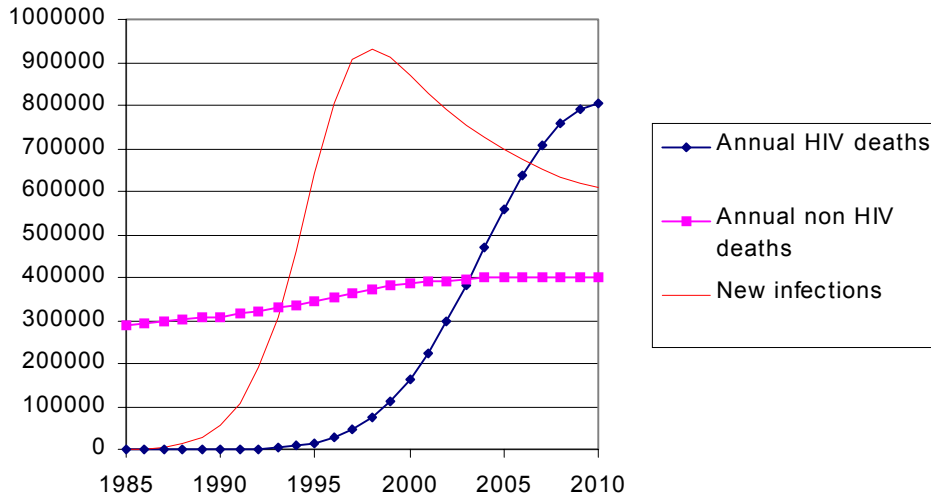
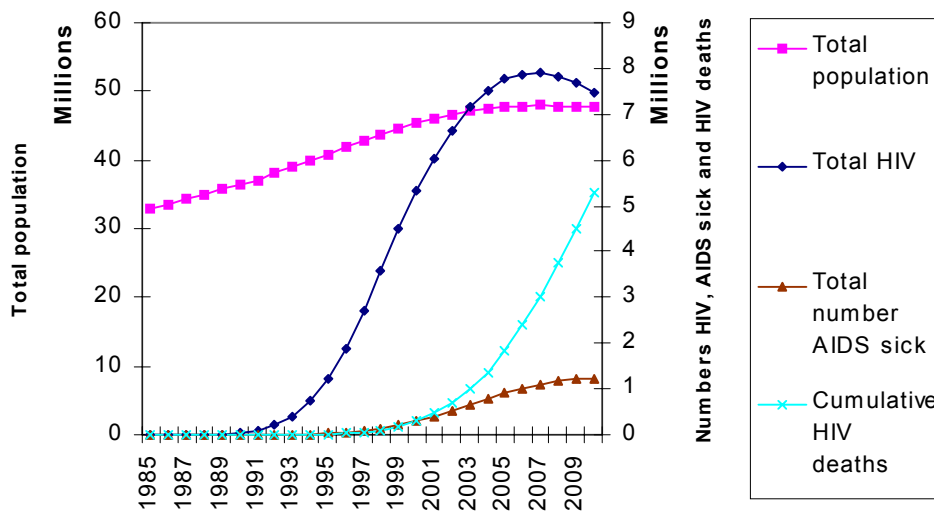


Figure 4 Projected Population, Number Infected, Cumulative Number of Deaths and Total Number Living with AIDS



In Figure 4 we see that population growth rate is expected to fall to zero over the next few years and that the South African population is unlikely to exceed 50 million. The number of maternal AIDS orphans (children under the age of 15 whose mothers have died of HIV/AIDS) is expected to rise from some 300 000 currently to around 3 million by 2011.

We can expect the number of infected people in the population to peak at between 7 and 8 million in contrast with the current estimated number infected of 5,3 million, while the country will have to cater for approximately 1 million people living with AIDS. A total of between five and six million people will probably have died of HIV/AIDS by 2010.

Figure 5 Provincial ANC Prevalence Projections

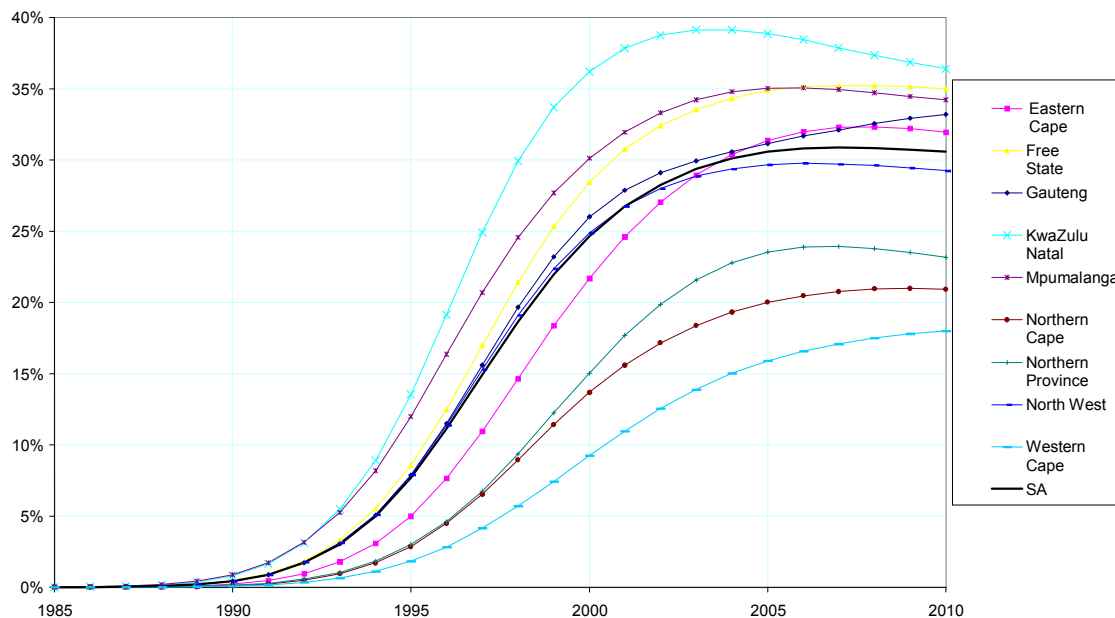
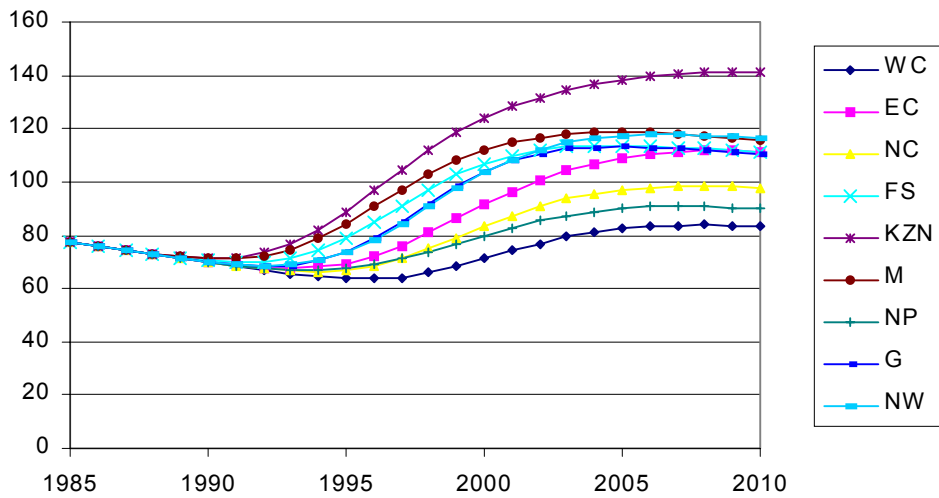


Figure 5 shows the provincial Antenatal Clinic (ANC) prevalence projections. From this we can see that there are substantial differences between the various provinces. KwaZulu-Natal has the highest prevalence, almost reaching 40% before falling and plateauing at slightly above 35%. The next five provinces (Free State, Gauteng, Eastern Cape, Mpumalanga and North West Province) are predicted to plateau between 30% and 35%, and are following similar paths. Below that are three provinces (Western Cape, Northern Cape and Northern Province) which are expected to plateau at substantially lower levels. Lowest amongst these is the Western Cape which is the province with a very different mix of the population groups (50% coloured (i.e. mixed races), 25% white and 25% black) and with the second highest GDP per capita. The explanations for the low prevalences in the other two provinces is not that clear but in the case of the Northern Cape it is probably that the population is fairly sparsely spread. In the case of the Northern Province, it is possible that the lower prevalence is the result of the fact that the population is mainly rural poor and that there are no metropolitan conglomerations.

Figure 6 illustrates the impact of the epidemic on childhood mortality (per 1000) in the provinces.

In the most severely affected province, KwaZulu-Natal, the child mortality rate is expected to exceed 140 per 1000, more than double the rate in the late 1980s. Even in the Western Cape, which has the lowest prevalence, HIV will reverse the downward trend in child mortality. Adult mortality rates have already increased in all the provinces and this rise is set to continue.

Figure 6 Provincial Childhood Mortality Rates



HIV and AIDS are already affecting the size and structure of South Africa's population and the impacts on the population are only in their infancy. High levels of child and adult death will have many follow on impacts. Table 1 incorporates some health, education and welfare indicators with recent past measures.

Life expectancy has declined as AIDS has taken its toll. Life expectancy will be 19 years lower as a result of the epidemic in 2000. Infant and child mortality in South Africa have been on a downward trend for many years. The HIV/AIDS epidemic is expected to reverse this trend and lead to large increases. Evidence suggests that this reversal has already begun. Table 1 shows detailed results from the Demographic and Health Survey. Despite some fluctuations, it is clear that infant mortality level off in the early 1990s and then began to rise rapidly in 1995, and mortality at ages 1-4 increased rapidly in 1997. Under 5 mortality is estimated to be at its highest level in almost 20 years. Other important health indicators will be unchanged.

Enrolment of both boys and girls in school has declined over the past five years. This trend is highly likely to continue over the next decade. The number of maternal or double orphan children will increase dramatically as a result of the epidemic.

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Table 1 Health, Education and Welfare Measures (1985-2000)

Health^a	1985	1990	1995	2000
Life expectancy at birth – without AIDS	58	59	63	66
Life expectancy at birth – with AIDS	58	59	55	47
Infant Mortality rate (measured – DHS) ^b	0.062	0.052	0.046	0.065 (1997)
Under 5 Mortality rate – without AIDS (estimated ASSA) ^b	0.079	0.071	0.062	0.057
Under 5 Mortality rate – with AIDS (measured – DHS) ^b	0.07	0.052	0.058	0.087 (1997)
DPT3 immunisation coverage	75%	72%	72%	76%
Measles immunisation coverage	70%	79%	76%	82%
Antenatal care			89%	94%
Delivery attendance			82%	84%
Education^c				
Primary school female gross enrolment	114	120	130	86 (1997) ^x
Primary school male gross enrolment	116	123	135	98 (1997) ^x
Secondary school female gross enrolment	52	80	103	
Secondary school male gross enrolment	55	69	88	
Pupil teacher ratio ^d	34:1	33:1	34:1	33:1
Social welfare^a				
Maternal or double orphan children			3.6%	5.2%
Maternal or double orphans from AIDS			36%	61%

Sources: a) Health and social welfare data supplied by Professor Fabio Zagonari, b) Nannan N., Bradshaw D., Timaeus I. and Dorrington R. (2000) 'The Impact of HIV/AIDS on infant and child mortality in South Africa' Poster presentation 13th International AIDS Conference, Durban. Updated version supplied by Nadine Nannan, c) All education data are from UNESCO unless otherwise stated, d) Education Foundation

Table 1a Survival rates and repetition rates in primary school by grade (1990)

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Survival rates	100	83	80	76	75	71	68
Repetition rates	16	13	13	11	13	11	10

Sources: UNESCO and Education Foundation.

2.1.2 Social Epidemiology

Bio Medical Factors

The most significant bio-medical factor driving the epidemic in South Africa is the high prevalence of sexually transmitted diseases (STDs). Genital sores and ulcers caused by these STDs greatly increase the risk of HIV transmission, and there is thus a significant correlation between levels of STD and HIV prevalence. The following figures bear testimony to the high levels of sexually transmitted infection.

- It is estimated that there were between 5 000 and 15 000 cases per 100 000 of syphilis in South Africa in 1996. This compares with a rate of about 15 per 100 000 in the US and the UK (Pham-Kanter et al, 1996).
- Wilkinson et al (1999) estimate that 25% of women in rural KwaZulu-Natal have at least one STD.
- According to the South African Demographic and Health Survey (SADHS) (Department of Health, 1999a) about 12% of men reported having suffered from a STD in the last three months.

Levels of STD treatment are low for a number of reasons. Firstly, many STDs (particularly those affecting women) are asymptomatic, and even when symptoms occur, they may not be recognized as being due to infection. A study of pregnant women in KwaZulu-Natal, for example, found that although more than 50% had at least one infection of the reproductive tract, none volunteered symptoms of an STD (Sturm et al, 1998). A second problem is that even when symptoms occur, individuals will often not seek treatment, either because treatment is inaccessible or because the infection is not regarded as being serious. To aggravate the situation further, treatment is often ineffective.

The relationship between HIV prevalence and STD prevalence is demonstrated in Figure 7. HIV prevalence levels among pregnant women, estimated from the 1998 antenatal clinic survey (Department of Health, 1999b), are compared with percentages of men reporting having had painful urination, penile discharge or genital sores in the last three months from the SADHS (Department of Health, 1999a), in each of the nine provinces. With the exception of Gauteng and the Northwest, there is a pattern of high HIV prevalence in provinces with high STD prevalence, and lower HIV prevalence in provinces with low STD prevalence. (The anomalous situation in Gauteng can probably be explained by the high degree of urbanization and relatively universal access to health care, that in Northwest is a little more difficult to understand).

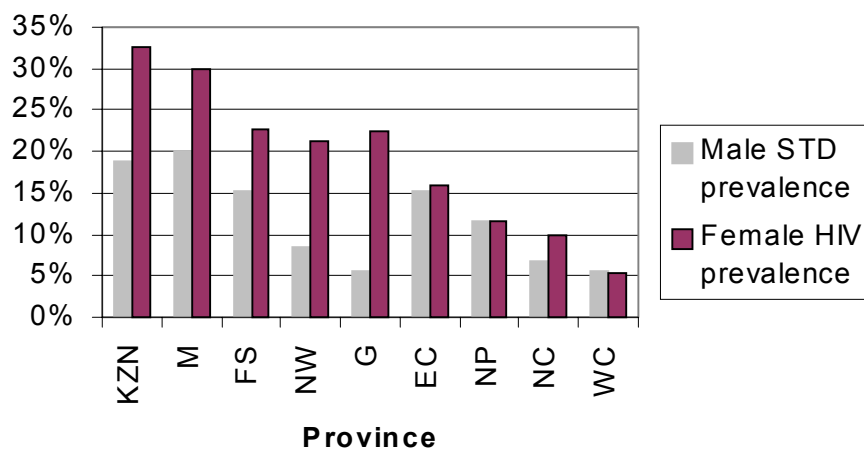
Sexual Behaviour Factors

Knowledge and belief about HIV/AIDS and STDs

Although a large number of public AIDS awareness and education programmes have been launched in South Africa, there remains a significant proportion of the population that – due to illiteracy, geographical isolation or misinformation – is still ignorant of the basic facts of AIDS. A recent survey of teenagers between the ages of 12 and 17 (Kaiser Family Foundation, 2001) found that

- Levels of awareness of HIV/AIDS were high (91% of respondents), but tended to be lower in rural areas (86%). The SADHS (Department of Health, 1999a) showed that among women aged 15 to 49, 97% had heard of AIDS, and of those who had heard of AIDS, 87% knew that using condoms was a means of avoiding the disease (the rate was again significantly different in urban and rural areas, at 91% and 81% respectively).
- 7% of respondents said they believed that one could be cured of AIDS by having sex with a virgin, and 12% believed that one could get HIV/AIDS from condoms.
- 13% said they believed that traditional African medicine had a cure for AIDS, while 15% believed that Western medicine had a cure.

Figure 7 Comparison of STD and HIV Prevalence Levels (1998)



Source: Department of Health (1999a and 1999b)

Sexual abuse and the status of women

Since the new political dispensation in 1994, much political emphasis has been placed on the rights of women, and the need for gender equality. However, South Africa remains a fairly patriarchal society, in which women are vulnerable to sexual abuse. In 1998 South Africa had the highest per capita rate of reported rape in the world (115.6 for every 100 000 of the population), and - on the common but highly debatable assumption that only one in every twenty rape cases are reported - close to one million acts of rape occur in South Africa every year (Rape Crisis Cape Town, 2001). Marital rape is particularly under-reported, with many relationships being characterized by violence and sexual abuse. Vundule et al (2001) found, in a study of black teenagers attending antenatal clinics in Cape Town, that 72% of girls reported having been forced to have sex at some stage, and 11% reported having been raped. The South African National Youth Survey (Kaiser Family Foundation, 2001) also found that 39% of sexually experienced girls had been forced to have sex, and 33% reported being afraid of saying no to sex. In many cases, therefore, women have limited control over their sexual activity, and are thus more vulnerable to HIV infection.

Prostitution and high-risk forms of sexual behaviour

Commercial sex workers are particularly at risk of infection. The first reason for this is the high number of sexual partners that they have. Rees et al (2000) estimate that the average sex worker has 25 clients a week. The other reason is that sex workers are frequently forced to engage in high-risk forms of sexual intercourse, such as anal sex and “dry sex”.

Social Risk Factors

Migration Patterns

South Africa has experienced high levels of political and economic migration in recent decades, both between its provinces, and between itself and its neighbouring states. Migration increases the extent of sexual networking, and thus facilitates the swift spread of the HIV/AIDS epidemic. This is demonstrated in a study of a rural community in KwaZulu-Natal: people who had recently changed place of residence were three times more likely to be HIV positive than those that had not (Abdool Karim et al, 1992). It is therefore a concern that rates of migrant employment are as high as 60% of males and a third of females, between the ages of 19 and 49, in some rural areas (Lurie et al, 1997).

Economic Factors

Income is one of the most significant factors correlated with HIV prevalence. The relatively poor members of society are most affected by the epidemic, as most of the risk factors described above are linked to low socio-economic status. However, it should not be assumed that HIV/AIDS is a disease affecting exclusively the poor. It can be argued that as individuals earn more and their socio-economic status rises, they are able to attract greater numbers of sexual partners, which places them at greater risk of infection (Kinghorn and Steinberg, 1998).

2.2 Health Impacts

Perhaps the most startling evidence of the impact is the effect that the AIDS pandemic is expected to have on child health indicators, morbidity and mortality of women and young adults, and the number of children who will be orphaned (see chapters 13 and 15 of the compilation). Recent trends suggest that we will be starting to see a reversal in the gains achieved in improving child health indicators over the past decade. Increased morbidity and mortality in young adults reduces the pool of caregivers and breadwinners, leaving an increasing number of children in conditions of poverty and neglect. The “orphan epidemic” in South Africa is a crisis in its own right with 3 million orphans expected within the next 10 years. AIDS orphans are arguably the most vulnerable children in our society, struggling not only to survive, but to do so within the context of open discrimination.

The impact of HIV/AIDS on child health is being reflected in a reversal of the gains we have achieved in improving child health indicators over the 1980s and first half of the 1990s. Trends in improvement in infant mortality obtained through successful

child survival programmes over the past 15 years have been reversed and predictions are that if the transmission of HIV from mother to child is not prevented, child mortality rates will increase to over 100 per 1000. Few events impact as severely on the health and well-being of a child as the death of his/her mother. The maternal mortality rate in South Africa is 150 per 100 000 live births. In 1999, non-pregnancy related infection was the leading cause of maternal mortality and 30% of these deaths were AIDS related. In most provinces, HIV/AIDS is emerging as the major contributory cause of maternal deaths. The implications for the health of children will be widespread, but some will be particularly vulnerable.

2.2.1 The Health of HIV Infected and Affected Children

This section focuses on the impact of HIV/AIDS on three particularly vulnerable groups of children, namely:

1. Children living in households where one or more family members is HIV+
2. Children orphaned by HIV/AIDS
3. Children who are HIV+

Child Health and Well-Being in Infected Households

Poor health among children living in HIV infected families, is common. This is believed to be a consequence of HIV disease itself (in the case of MTCT), increased exposure to opportunistic infections, disease related poverty and psycho-social factors which impact on caregiving practices and child wellbeing (Piwoz and Preble, 2000). Children living in households with HIV infected persons are more exposed to opportunistic infections, such as TB and pneumonia. With caregivers sporadically sick or absent, the child is less likely to get the medical attention s/he needs and more likely to have repeat infections.

Children Orphaned by HIV/AIDS

South Africa already has 300 000 maternal AIDS orphans, yet the 'orphan epidemic' is still in its infancy and over the next few years, is expected to grow to devastating proportions. In most parts of the industrialized world, no more than 1% of the child population is orphaned. In developing countries this figure was around 2.5% before the HIV/AIDS pandemic (Loening-Voysey and Wilson, 2001). If one combines all other causes of maternal death with the HIV/AIDS pandemic, 11% of children under the age of 15 years in South Africa are orphans and this figure is expected to rise to almost 17% by 2010 (SA National Council for Child and Family Welfare, 1999). By 2015, AIDS orphans will constitute between 9 and 12% of South Africa's total population.

Children Infected with HIV

There are at present at least 120 000 children under the age of 13 years who are infected with HIV. The majority acquire HIV from their infected mothers during pregnancy, at the time of delivery or after birth, through breastfeeding. Over 105 000 babies will be born HIV+ this year. 60% of these children will not live beyond their 5th birthday. 40% of them will and the majority of these children will join the 60 to 70% of children in South Africa who live in conditions of extreme poverty.

Fifteen to 18 year olds fall within the age category most vulnerable to HIV infection through sexual contact. Within this group, girls are particularly vulnerable to infection. Physiological, cultural and social factors contribute to their vulnerability and girls between the ages of 5 and 14 years are more than 8 times more likely to be infected through sexual abuse than their male counterparts (Shell, 2000). In Sub Saharan Africa, the rate of HIV infection in teenage girls is 5 times higher than the rate of infection in teenage boys (Mpanju-Shumbusho, 2001). The lower differential of 5 times compared to 8 is because the difference in risk, between males and females, for older teenagers is not as marked as for younger children.

Although the impacts will be greatest for these vulnerable groups the health of many more children will be affected by the strain placed on the health care system.

2.2.2 The Impact on Child Health Service Demand and Delivery

Studies of paediatric admissions in South African hospitals have shown a marked increase in HIV related admissions (Zwi et al, 1999). HIV+ children spend an estimated 3.4 times longer in hospital and requiring multiple admissions (Cotton et al, 1998). In 1997, 20% of paediatric admissions at Chris Hani Baragwanath Hospital were HIV related (Zwi et al, 1999), and over half of the admissions to King Edward VIII Hospital in Durban were HIV related (Colvin et al, 2001). Increases in paediatric admissions in general over the past few years are significant and entirely attributable to HIV/AIDS (Mpanju-Shumbusho, 2001). In areas of the country with very high rates of infection, up to 75% of beds in the children's wards are occupied by children with AIDS related conditions (Barrett et al, 1999).

As a result of the increased burden on health services, children suffering from conditions other than HIV will have to wait longer for access to a hospital bed and we can expect to see an increase in mortality among HIV- patients due to delayed treatment. As the epidemic progresses and more HIV+ people develop AIDS, the impact on the health sector will grow exponentially.

Rationing of services for HIV+ children in healthcare facilities has already begun (Schneider and Russel, 2000) with HIV+ children being denied access to intensive care units in some provinces. Many HIV+ children are also diagnosed early as "rapid progressors" and denied access to medication on the assumption that the medication will do little to extend their life. In a further attempt to deal with the epidemic, patients are being referred away from health facilities to more community based programmes such as home based care.

The growing demand on health care services is exacerbated by an escalating TB epidemic, developing in the shadows of HIV. Currently, about half of all TB cases in South Africa are thought to be attributable to HIV (Allen et al, 2000). With a greater number of HIV positive people developing TB, HIV-positive and HIV-negative children will be exposed to a greater number of potential sources of TB infection (Schaaf et al, 2000). The World Bank estimates that 25% of TB related deaths in HIV-negative people in the coming years will be a direct result of the HIV/AIDS pandemic (UNAIDS, 2000).

This increasing demand and strain will occur at a time when resources will be in short supply. Health service providers are already suffering the loss of skilled and specialised staff who themselves are infected and becoming ill and dying. The majority of health care professionals are women, which places them at greater risk, in the ages groups most affected by AIDS illness and death. In addition to their demographic characteristics they may be infected through work related accidents. Not only will staff illness and death affect the provision of services, but the emotional strain placed on staff working with incurable patients may affect productivity and increase attrition. Aside from human resource constraints, HIV/AIDS will add additional pressure to the budget.

Costs of Health Care

On the basis of current interventions offered to HIV+ patients at health care facilities, acute health care costs for South Africa are expected to double in the public sector by 2010. The estimated cost per year of treating an HIV+ individual with the interventions currently available at public sector health care facilities is R17 000 (stage 4 of disease), R6 200 (stage 3) and R1 300 (stage 1 and 2) (Steinberg et al, 2000). Rationing of services will have to occur as projected expenditure requirements are not sustainable.

2.2.3 Nature and Reliability of the Surveillance System

Antenatal surveys are part of an initiative started by the WHO and later taken up by UNAIDS for estimating the prevalence of HIV in the population. The national antenatal survey was first conducted in 1990. It is recognised as being one of the most reliable surveys conducted by middle and low-income countries and certainly the best in sub-Saharan Africa.

The survey is an anonymous, voluntary (in that women are allowed to refuse to be tested) unlinked, cross-sectional survey of residual blood specimens which are collected for routine syphilis and rhesus testing, conducted among pregnant women attending public antenatal clinics for the first time during their current pregnancy. The survey is conducted concurrently over nine provinces during October each year.

The survey is based on a large scientifically selected sample of sentinel sites chosen to represent each province (currently over 16 000 specimens from 400 clinics are tested per year). The methodology was substantially revised in 1995 with the assistance of the Medical Research Council. In particular improvements were made to the methodology of sampling, the quality control and the field procedures, phased in over a period from 1997 to 2000, to ensure that expected prevalence trends are not disrupted.

2.3 Education Impacts

The process of education and learning is the key to social, cultural and political participation, personal and community economic empowerment and national development. Its output is the human capital which constitutes the nation's primary wealth and potential for growth.

HIV/AIDS represent the largest single threat to this education process. This threatens the systemic functioning of education at all levels. To place this in perspective, it should be noted that one-third of all HIV+ persons in South Africa were infected during their school years, while a further third were infected within two years of leaving school. This confirms schools as a high-risk environment (see chapter 12 of the study).

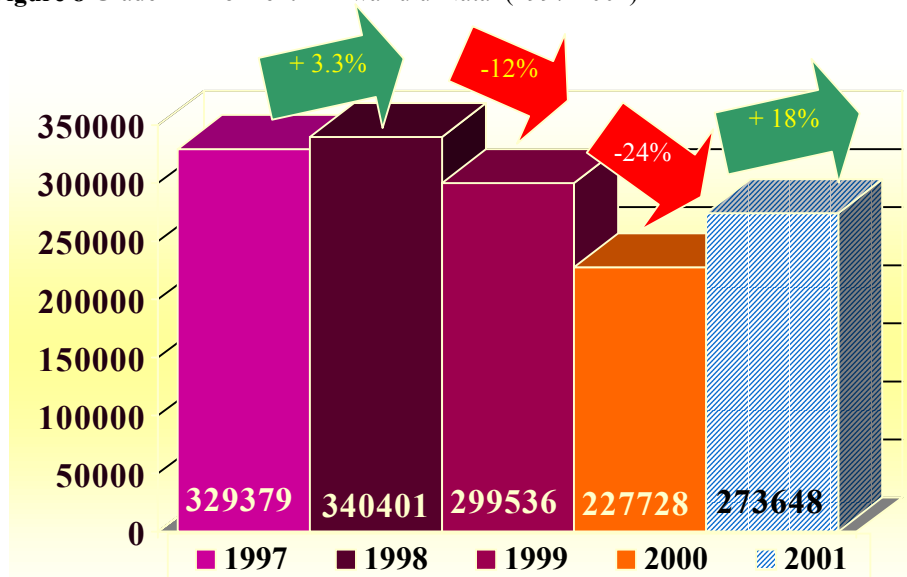
2.3.1 The Impact of HIV in the Home and on Education

The incidence of HIV+ in the home can be expected to further reduce access to education. This will occur due to increased economic hardship, family care and other household or agrarian duties, the need to find employment, declining health due to deteriorating nutrition and other opportunistic infections, and the effects of personal trauma associated with grief, stress and added responsibility. The child in an affected household, with an infected parent to consider and even care for, will be exposed to a variety of impacts that together may reduce or even preclude access to schooling, either temporarily or permanently.

2.3.2 The Impact on Student Enrolment

In Kwazulu-Natal there is a dramatic and recent decline in Grade 1 enrolment, which now means that there are fewer than 60% of the number of learners in Grade 1 that there were in 1998. While there are many apparent reasons for this decline, most of these could be said to be directly or indirectly affected or exacerbated by HIV/AIDS, and confirm the extent of difficulties facing the education system. Grade 1 enrolment has had an historical growth rate of between 3% and 5% per annum over the last 20 years; however in 1999, a 3% growth rate in 1998 reversed to a 12% decline. In 2000, there was a further drop of 24%, a decline exacerbated by regulations that precluded the entry of children under the age of seven from that year. In 2001, preliminary data indicates an increase in Grade 1 enrolment of 18%, but this is in fact still 12% short of the increase required to take up the anticipated holdover from the preceding year's regulatory change, and equates to a real decline of 12% over the three year period (Badcock-Walters et al, 2001). There are no national figures.

Figure 8 Grade 1 Enrolment in KwaZulu-Natal (1997-2001)



2.3.3 The Impact on Transition Rates and Output

Projections suggest about one in five children of school-going age in South Africa will be orphaned by 2010. Drop out rates can be expected to increase. The issue of access will become increasingly important and may mean that orphaned children constitute an entire generation of educational disenfranchised young people. It is likely that they will drop in and out of the system at an increased rate and may not be retained long enough to graduate either the primary or secondary phase, thus impacting output, tertiary access and educated entry into the world of work. This impact will also be aggravated by the proportionally greater decline in the number of girls retained in the system, given that they have constituted the majority of learners in the higher grades.

This implies that South Africa's incremental improvement in matriculation rates will likely be reversed. Moreover, this may be a medium to long-term phenomena, since it is apparent that enrolment in the first grade is also showing real decline and that the system is contracting at an unexpectedly high rate. Output from the system, in the form of demand for tertiary and further education, has historically exceeded supply, but this demand may now be reduced by the drop in the real number of learners qualifying for entrance.

2.3.4 Gender Inequity and Access

South Africa has had, and to an extent continues to have, a unique level of gender equity in its schooling system, relative to its Sub-Saharan neighbours. One obvious implication is that girls will be more affected than boys, and that this balance will be upset.

There are a number of reasons for this, and include the fact that girls are more likely to be withdrawn from school than boys, in the event of economic hardship and deprivation, and more likely to be held back to provide care both for the infected party and for siblings now without care themselves. Girls are also more likely than boys to become the victims of sexual exploitation and may be driven to this course as a means of personal survival and household support. The declining Grade 1 enrolment in KwaZulu Natal, has also shown a disproportionate decline in the enrolment of girls into the first year of school. There is also likely to be a decline in the number of girls matriculating and a consequent drop in the gross number of matriculants.

2.3.5 The Impact on Education Delivery and Maintenance

Education delivery and maintenance will be significantly impacted by the illness and premature death of educators and officials at every level, and by the consequent erosion of systems and structures as a result of the loss of capacity, specialist skills and experience. Two distinct areas of impact will be evidenced, the first in the provision and replacement of educators in the classroom, and the second in the area of system management and administration, at all levels.

The first will have a profound effect on the business of teaching and learning, and may worsen learner/educator ratios, in spite of declining enrolment, and compromise both quality and output through loss of teaching experience. This impact will also

prejudice prospects for positive behaviour change anticipated as a result of curriculum reform, materials development and appropriate role modelling.

The second area may be far more serious insofar as the potential for systemic failure is concerned, and may compromise administration and every aspect of education management, not least because the number of experienced managers and administrators available to the system is already extremely limited. While managers and administrators are theoretically less vulnerable to HIV/AIDS than their colleagues in the classroom, because of their higher average age, they are also closer to retirement and consequently replaced by younger officials, drawn from a higher-risk age group and environment.

The health and performance of the system itself is therefore under threat, and while schools have a long-demonstrated ability to function without departmental support and guidance, the potential collapse of teaching and learning within the school represents a medium - to long-term crisis of unprecedented proportions.

The primary impact of HIV will be to increase the incidence and length of temporary educator absence due to illness, occasional and compassionate leave (for funerals and associated family trauma). This, together with the psychological impact of the illness, will reduce contact time, performance and quality, and will lead to increased health and replacement-educator costs in the system.

The permanent loss of educators and managers through death, relocation, employment change, retirement or chronic illness is already very high, confirming that HIV/AIDS will exacerbate existing attrition rates. In KwaZulu Natal, South Africa's largest provincial system with over 71,000 publicly-paid educators, attrition rates were at 6,7% in 1999, only one percent of which was directly AIDS-attributable. This equated to the loss of 5 300 educators in that year, of whom only around 750 were estimated to have died as a direct result of AIDS. Data on educator mortality in KwaZulu-Natal in 1999 reflect such an improbably dramatic impact that further research is required. Only 471 of 5 972 schools submitted returns on the question of educator deaths from illness, reporting 424 deaths from a sample of 6 553 educators employed in the schools concerned (KwaZulu-Natal Department of Education, 2000). These preliminary results indicate mortality rates of 8,4% in the sample of 2 282 males, and 5,5% in the sample of 4 271 females (aged 20 to 60); mortality peaked between 30 to 34 for females and 35 to 39 for males. What it does confirm is that there are a significant number of deaths from illness amongst educators under the age of 50, an incidence generally taken to be a proxy for AIDS mortality.

In KwaZulu Natal alone, it is estimated that over 60 000 new educators will be required by 2010, simply to hold educator/learner ratios at their present high levels. This equates to almost the total number of publicly-paid educators presently in that system, and would require the universities in that province to increase their gross student intake by over 50% (Badcock-Walters et al, 2001). This raises several important policy issues, including the possibility that educators may have to be trained in less than three years in order to meet this escalating demand. South Africa has recently closed its Educator Training Colleges and transferred responsibility for this function to the University sector.

While enrolment, and therefore demand, is set to decline for the foreseeable future, the supply of trained educators will decline even faster due to existing attrition, direct AIDS impact and the indirect affect of increased competitive demand in the wider workplace due to AIDS-related deaths in the workforce. Thus South Africa may anticipate worsening learner/educator ratios in many areas over time, but as importantly, declining quality due to the loss of qualified and experienced educators.

2.4 Welfare Impacts

The impacts on health and education are significant, there are, however, many other routes through which HIV will affect children (see chapters 10, 11 and 15 of this compilation of studies). Many children in South Africa already live in poverty, in situations which violate many of their basic rights. HIV/AIDS will serve only to worsen their plight. The following section examines the impacts of the epidemic resulting from various channels with a focus on poverty and the impact on children living with HIV infected adults or who have been orphaned.

2.4.1 Poverty

Of the 17 million children in South Africa, about 12 million are classified as living in poverty, according to household income indicators. Most recent estimates of the child poverty rate in South Africa vary between 60% (May et al, 1998) and 72% (Haarmann, 1999). These estimates are based on income poverty lines and only the Haarmann study looks at household spending per child as opposed to household income. Such figures provide a baseline for looking at broad trends but not for assessing children's quality of life. There is a critical lack of data on child poverty trends and causal factors in South Africa.

Cohen (2000) observes: "Individuals, families and communities are impoverished by their experience of HIV and AIDS in ways that are typical for long drawn-out and terminal illnesses. It is a feature of HIV infection that it clusters in families with often both parents HIV positive (who in time experience morbidity and mortality). There is thus enormous strain on the capacity of families to cope with psycho-social and economic consequences of illness, such that many families experience great distress and often disintegrate as social and economic units."

2.4.2 Orphans

There have been many international and national studies looking at the 'orphan problem'. Most concentrate on the issue of scale, the crisis of unmanageability, the imperative of community-based care. Few look at the impact of being orphaned on individual children, on children and adults in the households into which they are 'absorbed'. Studies have examined the wide range of socio-economic impacts experienced by children and families in poor, AIDS-affected families (Whiteside 1998). These point to the all-encompassing breakdown that can begin with the diagnosis or the suspicion of HIV infection in a family.

2.4.3 Child-Headed Households

There is very limited information on child-headed households in South Africa. Households may be headed by employed adult siblings of orphans, by school-going older siblings, by children caring for each other with adult support from another household, or by children caring for a dying parent with no adult support. The Durban-based Children's Rights Centre stresses the need for more reliable information on the whereabouts and situation of orphaned children in order to assess vulnerability and need for support. In cases where a child has become a caregiver to an adult with HIV/AIDS, childhood is effectively sacrificed. As the adult mortality rate peaks there are likely to be many more households of this nature. Already some NGOs and CBOs find themselves offering training and support to children who are fulfilling adult roles at the expense of their own security and development.

2.4.5 Violence, Child Abuse and Neglect

Violence, abuse and neglect of children is on the increase in South Africa. Domestic violence is common among HIV infected families and has become one of the major stumbling blocks to disclosure among married women in South Africa. The fear of disclosure makes it difficult for women to make informed decisions. Women are therefore forced into continued child bearing and breastfeeding which may significantly compromise the health of her children.

Child abuse, including sexual and physical abuse, increased by 117% between 1993 and 1996. In 1998 there were approximately 34 000 reports of crimes against children including rape, incest, kidnapping etc (ACCESS, 2001).

2.4.6 Abandonment/Children on the Streets

Abandonment happens at two levels. The first is the abandonment of the family by a caregiver/breadwinner. It is commonplace to hear of women whose partners or husbands abandoned them when they disclosed their HIV status to the partner. The second is the abandonment of the child. Over the past 3 years, the South African National Council for Child and Family Welfare reported a 67% increase in the number of children abandoned in South Africa (SA National Council for Child and Family Welfare, 1999). This is corroborated by reports of an increase in the numbers of children being abandoned in hospital wards across the country.

It is estimated that 10 000 children live or work on the streets in South Africa (ACCESS, 2001). The Street Children's Forum in Durban runs shelters for children. and have seen a sharp increase in the numbers of children coming to their shelters in the past two years. In addition, whereas before they were dealing with a single child from a family, they are increasingly accommodating whole families of siblings. Many of the children are working in the sex industry.

2.4.7 Food Security

Food security in HIV infected households is affected by reduced household income and increased expenditure on health care which leaves less money available to purchase appropriate food. Preparation of food is also affected by compromised caregiving. The child may also be unable or unwilling to eat due to a range of physical, emotional and psychosocial factors which play a role in appetite suppression.

2.4.8 Household Impacts

The HIV/AIDS epidemic results in many impacts, the majority of which affect children directly or indirectly. Few, however, are as serious and affect children more, than the impact felt at the household level. Here, data from a household survey conducted in one of South Africa's provinces in 2001 is presented and discussed. The study involved a detailed household questionnaire which was administered in two areas, one rural and one urban. In each area households containing an HIV positive adult were sampled and balanced by households not directly affected. The sample of affected households was selected based on referrals from home based care organisations in the area. The non-affected households were randomly selected from each area and screened for negative signs of HIV infection with the use of a questionnaire.

Household size and structure

Although affected households appear to be larger, suggesting a greater supply of labour, dependency ratios are also greater, implying that households affected by HIV/AIDS in fact have a smaller supply of labour than non-affected households, with a larger proportion of the household consisting of children and elderly persons.

Table 2 Supply of Household Labour and Unemployment Levels

	Urban Affected	Urban Non-affected	Rural Affected	Rural Non-affected	Total	Total Affected	Total Non-Affected
Average household size	5.6	4.6	4.5	4.1	4.7	5.1	4.3
Dependency ratio	36.5	32.0	34.3	34.0	34.2	35.4	33.0
Sample size (n)	101	100	101	104	406	202	204
Household composition (%):							
Nuclear family	73.8	83.2	72.2	80.9	77.5	73.0	82.0
Extended family	24.4	15.9	27.3	18.6	21.5	25.9	17.2
Non-related persons	2.2	1.0	0.0	0.3	0.8	1.1	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average unemployment rate (%):							
- Narrow	55.2	48.8	70.1	61.0	57.8	61.6	54.3
- Broad	57.9	50.0	72.5	62.8	59.9	64.2	55.8

In addition, morbidity and mortality occurs more often in affected households compared to non-affected households. 73% of affected households have in the past month been affected by chronic illness, while 20% have lost one household member

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in the six months before the interview. In non-affected households, only 20% and one percent of households have respectively been affected by morbidity and mortality.

Table 3 Prevalence of Illness and Death in Affected and Non-Affected Households

	Urban Affected		Urban Non-affected		Rural Affected		Rural Non-affected		Total		Total Affected		Total Non-Affected		P value
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Households:															
Interviewed	101	100	100	100	101	100	104	100	406	100	202	100	204	100	
Affected by illness (past month)	66	65	19	19	82	81	21	20	188	46	148	73	40	20	<0.001
Affected by death (past 6 months)	16	16	1	1	25	25	1	1	43	11	41	20	2	1	<0.001
Individuals:															
Household members	571	100	455	100	454	100	429	100	1909	100	1025	100	884	100	
Members affected by illness	96	17	23	5	108	24	31	7	258	14	204	20	46	5	<0.001
Deaths:															
Number of deaths	16	36	1	2	26	59	1	2	44	100	42	96	2	5	

Note: The percentages under 'Number of deaths' are not expressed relative to the number of individuals because these persons are not counted as current members of the respective households. The percentages reflect the percentage of total deaths in each of the clusters of households.

Table 4 Income and Composition of Income

	Urban affected	Urban Non-affected	Rural Affected	Rural Non-affected	Total	Total Affected	Total Non-Affected
Average monthly household income (Rands)	1630	2692	948	1596	1727	1296	2147
Average monthly per capita income (Rands)	335	741	232	417	434	285	580
Average monthly adult equivalent income (Rands)	614	1211	397	694	734	508	954
Sample size (n)	99	100	95	99	393	194	199
Composition of income (%):							
Employment income	58.4	67.4	31.1	41.4	49.8	45.0	54.5
Non-employment income	33.9	24.7	40.9	30.8	32.4	37.3	27.7
Remittance income	7.6	7.8	21.7	25.4	15.5	14.5	16.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: The sample sizes differ from the interviewed samples in Table 2 because data were not available for all households.

Income and Expenditure

HIV infections are concentrated among members of the economically productive age group (15 to 49 years). Infection, therefore, often lead to the loss of earners within the household. As expected in this study, affected households were found to be poorer than non-affected households, regardless of whether income is measured at the household or individual level or in adult equivalent terms. The fact that affected households are generally larger than non-affected households means that less

resources are being shared amongst a larger number of persons. Per capita and adult equivalent income in affected households represents only between 50% and 60% of the levels of income in non-affected households.

There are also significant differences in the composition of income of affected and non-affected households. Affected households are more dependent on non-employment sources of income (which consists primarily of government grants) and a lower proportion of their income consists on employment income. This is understandable given that affected households face higher dependency ratios, are more subject to morbidity and mortality and face higher unemployment levels.

As in the case of income, affected households are also poorer than non-affected households when expenditure is used a measure of socio-economic status. Average monthly household expenditure, per capita monthly expenditure and adult equivalent monthly expenditure are lower in the affected group of households than in the non-affected group. Although differences are not that pronounced in terms of total household expenditure, the fact that affected households are larger means that per capita and adult equivalent expenditure is between 60% and 70% of the levels of expenditure in non-affected households.

There were also differences in expenditure patterns. Which gives an indication of how illness and death in general adversely affects expenditure patterns. In the case of illness, a larger proportion of household resources are allocated to expenses on food, health care and household maintenance, while a smaller share goes to expenditure on education, clothing, personal items and durables. Differences in the share of transport and rent in total regular household expenditure are very small. Households affected by death in turn spends relatively more of their available resources on food, health care, clothing and rent and a smaller share on education, household maintenance, transport and personal items compared to households where no death has occurred in the six months before the interview. The differences in the share of durables in total regular household expenditure are fairly small.

Table 5 Expenditure Patterns in Households Affected by Morbidity and Mortality

	Morbidity			Mortality	
	Illness	No illness		Death	No death
Composition of regular expenditure (%):					
Food	51.8	48.0		52.1	49.5
Education	1.8	4.6		1.9	3.5
Health care	4.7	3.0		5.1	3.7
Household maintenance	21.0	19.5		17.7	20.5
Transport	7.2	7.1		6.4	7.2
Clothing	1.9	2.9		4.3	2.3
Rent	1.6	1.4		2.0	1.4
Personal items	2.9	3.7		2.2	3.4
Durables	7.1	9.8		8.4	8.6
Total	100.0	100.0		100.0	100.0

Coping financially

Households generally have three alternatives in terms of coping with changes in income and expenditure, i.e. to borrow money, to utilise savings, or to sell assets. The

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most frequent responses seem to be borrowing, followed by the utilisation of savings and the sale of assets. The following table outlines the level and motivation of debt within the different households.

The purpose for which the households borrowed this money also suggests that the HIV/AIDS epidemic plays a role in causing households to take on increasing levels of debt. A larger proportion of responses by affected households indicated that the money was used to pay for funerals and medical expenses, whereas a larger proportion of non-affected households indicated that the money was used to pay for education, durables and clothing. Similar differences were uncovered in the comparison of expenditure patterns in affected and non-affected households.

Table 6 Role of Borrowing in Risk Management

	Urban Affected		Urban Non-affected		Rural Affected		Rural Non-affected		Total		Total Affected		Total Non-Affected	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Number Total	10	10	10	10	10	10	10	10	40	10	20	10	20	10
	1	0	0	0	1	0	4	0	6	0	2	0	4	0
Borrowed money in past 12 months	19	19	17	17	41	41	31	3	10	27	60	30	48	24
- Affected by illness	12	63	3	18	31	76	9	29	55	51	43	72	12	25
- Affected by death	5	26	0	0	10	24	1	3	16	15	15	25	1	2
Average amount borrowed (Rands)	3082		2623		581		713		1380		1373		1389	
- % of average annual household income	15.3		11.6		20.7		6.9		14.2		18.9		8.5	
- % of current total debt	48.2		68.2		63.7		71.0		64.2		59.2		70.1	
Borrowed to pay for (multiple response):														
Food	4	20	1	5	20	44	20	54	45	37	24	37	21	38
Education	2	10	3	16	2	4	5	14	12	10	4	6	8	14
Durables	4	20	2	11	2	4	3	8	11	9	6	9	5	9
Medical expenses	1	5	0	0	8	18	0	0	9	7	9	14	0	0
Funeral	4	20	2	11	2	4	1	3	9	7	6	9	3	5
Clothing	0	0	2	11	3	7	4	11	9	7	3	5	6	11
Repayment of debt	3	15	3	16	1	2			7	6	4	6	3	5
Household maintenance	1	5	2	11	2	4	1	3	6	5	3	5	3	5
Other	1	5	4	21	5	11	3	8	13	11	6	9	7	13
Total	20	10	19	10	45	10	37	10	12	10	65	10	56	10
		0		0		0		0	1	0		0		0
Borrowed from (multiple response):														
Relative/friend	8	42	6	33	33	81	25	76	72	65	41	68	31	61
Money/micro-lender	8	42	6	33	6	15	5	15	25	23	14	23	11	22
Employer	2	11	5	28	0	0	2	6	9	8	2	3	7	14
Bank	0	0	1	6	1	2	1	3	3	3	1	2	2	4
Stokvel	0	0	0	0	1	2	0	0	1	1	1	2	0	0
Government agency	1	5	0	0	0	0	0	0	1	1	1	2	0	0
Total	19	10	18	10	41	10	33	10	11	10	60	10	51	10
		0		0		0		0	1	0		0		0

Impacts on children

The impacts outlined above have numerous implications for the children living within the two types of households. Two specific issues related to the impact of HIV/AIDS on children were briefly explored in more detail with the aid of this data set. Firstly, the data was used to look at the extent to which the school enrolment of children in affected and non-affected households may differ. A distinction was made between children aged 7-13 (primary school), aged 14-18 (secondary school) and aged 7-18 years (all children of school going age). The second issue explored here is that of orphaned children. The data was used to look at the percentage of children that have lost a mother, mother or father, or both parents, which should give an indication of the extent of the problem, not only in affected households but also in non-affected households, who may also provide shelter to orphaned children. In addition, enrolment of orphans was compared across affected and non-affected households, while the characteristics of those households sheltering orphans were also explored.

Enrolment

A relatively small percentage of children aged 7-13 were not attending school at the time of the interview (2%), whereas 9% of children aged 14-18 years were not attending school. In total, 5% of children of school-going age were not attending school. The higher non-attendance amongst older children makes sense insofar as these children are more suitable to be employed to do household chores, work or to care for the ill than are younger children.

Table 7 Enrolment Among Children Aged 7-18 Years

	Urban Affected		Urban Non-affected		Rural Affected		Rural Non-affected		Total		Total Affected		Total Non-Affected		P. value
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
No of children aged 7-13 years	95	100	71	100	71	100	62	100	308	100	166	100	142	100	
Not attending school	2	2	1	1	2	3	2	3	7	2	4	2	3	2	0.072
- Male	1	50	1	100	2	100	0	0	4	57	3	75	1	33	0.135
- Female	1	50	0	0	0	0	2	100	3	43	1	25	2	67	0.083
No of children aged 14-18 years	64	100	55	100	63	100	53	100	235	100	127	100	108	100	
Not attending school	3	5	6	11	9	14	3	6	21	9	12	9	9	8	<0.001
- Male	0	0	4	67	2	22	1	33	7	33	2	17	5	56	0.030
- Female	3	100	2	33	7	78	2	67	14	6	10	83	4	44	0.003
No of children aged 7-18 years	159	100	126	100	134	100	115	100	534	100	293	100	241	100	
Not attending school	5	3.1	7	5.6	11	8.2	5	4.3	28	5.2	16	5.5	12	5	<0.001
- Male	1	20	5	71	4	36	1	20	11	39	5	31	6	50	0.012
- Female	4	80	2	29	7	64	4	80	17	61	11	69	6	50	0.061

The differences in school enrolment between affected and non-affected households were not that pronounced, given the relatively small number of children concerned, although the differences in enrolment between affected and non-affected households were statistically significant in the case of children aged 14-18 and of children of school-going age.

Interesting as well is that a larger proportion of children in affected households not currently enrolled were female (60%). In the case of children aged 14-18, which as argued above may be more likely to be taken from school in order to help the household to cope with the impact of HIV/AIDS, 83% of children not attending school were female. This again supports the argument that female children are often employed in caring for ill persons and/or for doing household chores that other household members cannot perform because they themselves are either ill or have to care for the ill.

Orphans

On average, 8%, 27% and 3% of children aged fifteen years and under have respectively lost their mother, mother or father, and both mother and father. This suggests a relatively high incidence of paternal orphanhood (nearly 20%). An almost equal number of orphans are male and female.

Table 8 Number of Orphaned Children

	Urban Affected		Urban Non-affected		Rural Affected		Rural Non-affected		Total		Total Affected		Total Non-Affected		P value
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Total children aged fifteen or under	214	100	149	100	165	100	153	100	681	100	379	100	302	100	
Orphans who lost their mother	29	14	7	5	11	7	7	5	54	8	40	11	14	5	<0.001
- Male	11	38	5	71	7	64	4	57	27	50	18	45	9	64	<0.001
- Female	18	62	2	27	4	36	3	43	27	50	22	55	5	36	<0.001
Orphans who lost one parent	56	26	24	16	51	31	57	37	188	28	107	28	81	27	<0.001
- Male	22	39	10	42	24	47	29	51	85	45	46	43	39	48	<0.001
- Female	34	61	14	58	27	53	28	49	103	55	61	57	42	52	<0.001
Orphans who lost both parents	12	6	3	2	4	2	4	2.6	23	3	16	4	7	2	<0.001
- Male	4	33	3	100	3	75	2	50	12	52	7	44	5	71	0.007
- Female	8	67	0	0	1	25	2	50	11	48	9	56	2	29	0.004

A significantly larger percentage of children in affected households have lost their mother or both parents when compared to non-affected households. The percentage of children in affected households that have lost either parent are slightly higher than that in non-affected households. Hence, the results indicate that although a larger number of orphans are to be found in affected households, that non-affected households also shelter a number of orphans. This is understandable insofar as the

extended family often absorb orphaned children. Furthermore, the sampling of non-affected households only purposively attempted to sample households not affected by HIV/AIDS-related illness at the time of the interview and did not attempt to screen households in terms of the other ways in which households are affected indirectly by the epidemic (e.g. having to give shelter to orphaned children or having to care for friends and family members in neighbouring households). Only one orphaned child that belonged to an affected household was not attending school at the time of the interview. This child was female and had lost her mother.

Orphaned children are sheltered primarily by households that are headed by females, with 76% and 89% of orphans respectively, living in female-headed affected and non-affected households. In the case of non-affected households, the majority of orphans is sheltered by households that are headed by persons that are widowed (68%) or that are divorced or separated (18%). An equally large percentage of affected households that shelter orphans is headed by widows or widowers (65%), while a relatively large proportion of households is headed by married persons (21%). This implies that some affected households in fact already shelter orphans, which mean that these households apart from having to care for older affected members also have to take responsibility for caring for children displaced from their own family by the AIDS epidemic.

Table 9 Demographic Characteristics of Households Sheltering Orphans Who Have Lost at Least One Parent

	Urban Affected		Urban Non-affected		Rural Affected		Rural Non-affected		Total		Total Affected		Total Non-Affected		P value
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	
Number children who lost at least one parent	56	100	24	100	52	100	57	100	189	100	108	100	81	100	
Gender of household head:															
Male	16	29	2	8	10	19	7	12	35	19	26	24	9	11	<0.001
Female	40	71	22	92	42	81	50	88	154	82	82	76	72	89	<0.001
Marital status of household head:															
Married (civil)	19	34	1	4	4	8	1	2	25	13	23	21	2	3	<0.001
Married (traditional)	0	0	0	0	3	6	4	7	7	4	3	3	4	5	0.008
Widow/widower	29	52	18	75	41	79	37	65	125	66	70	65	55	68	<0.001
Divorced/separated	4	7	3	13	0	0	12	21	19	10	4	4	15	19	<0.001
Never married	4	7	2	8	4	8	3	5	13	7	8	7	5	6	0.005
Average household size	7.8		7.0		5.6		5.6		6.1		6.2		6.0		
Average age of household head	55.1		45.8		56.5		55.2		54.3		55.8		52.4		

Conclusions

The devastating impact of HIV infection and the ensuing illness and death have on members of affected households is starkly illustrated. These households face a shrinking supply of labour and income at the same as the need for both increases.

Children in these households face many risks. Expenditure on food, clothing and education fall placing the health and rights of children at risk. After the death of a parent children are faced with great uncertainty. It is at the household level where many of the impacts discussed in this paper begin and it is at this level where many of the responses should focus.

3. Responses

The impacts outlined in the preceding sections have not occurred without response. Individuals, communities, churches, NGO's, businesses and government have responded in various ways. To review all of these would be a major paper in itself. This study focuses on government response, not in anyway to belittle others, but rather to inform the policy recommendations.

3.1 Health Responses

South Africa's first meaningful response to AIDS emerged with the birth of NACOSA (the National AIDS Convention of South Africa). In October 1992, a national conference entitled 'South Africa United Against AIDS' was addressed by Nelson Mandela, and that event launched the process of developing firstly a national AIDS strategy and subsequently an implementation plan.

In October 1994, the Minister of Health in the new democratic government, accepted the NACOSA Plan as the blueprint for the Government's AIDS Programme. Late in 1995, led by the National AIDS Directorate in the Department of Health, five strategies were identified which, in time, were widely embraced by Government and many NGOs.

These were:

- life skills programmes targeted at the youth
- the use of mass communication to popularise key prevention concepts
- appropriate treatment and management of clients seeking treatment for STDs
- increased access to barrier methods and
- the promotion of appropriate care and support.

The National HIV/AIDS and STD Programme was thus operationalised by the National Directorate (mainly concerned with policy) and nine Provincial HIV/AIDS Programmes (mainly concerned with program delivery). In addition, a number of NGOs were either funded or sub-contracted to run projects or to provide services.

The Mission Statement of the National HIV/AIDS and STD Programme was:

“To reduce the transmission of STDs (including HIV infection) and provide appropriate treatment, care and support for those infected and affected, through collaborative efforts within all levels of Government, using the NACOSA National AIDS Plan as the terms of reference. The Programme is committed to challenging prejudice and discrimination wherever it occurs.”

3.1.1 HIV/AIDS/STD Strategic Plan for South Africa 2000-2005

Early in 2000, an HIV/AIDS/STD Strategic Plan (2000-2005) was developed. It stated that all Government Departments, organisations and stakeholders will use this document as the basis to develop their own strategic and operational plans so that all our initiatives as a country as a whole can be harmonised to maximise efficiency and effectiveness. In 2000, a target of R10 per person per year was set as the resource standard or a total of R400 million per year for the whole country.

The strategic plan is designed, not only for the health sector, but rather to guide the country's response as a whole. It is meant as a framework and it was envisaged that it would be used as a basis for the development of strategic and operational plans for government departments and other organisations.

The primary goals of the plan are to:

- Reduce the number of new HIV infections (especially among youth)
- Reduce the impact of HIV/AIDS on individuals, families and communities

Four main areas constitute the Plan:

A Prevention (6 Goals)

1. Promote safe and healthy sexual behaviour.
2. Improve the management and control of STDs,
3. Reduce mother to child transmission,
4. Address issues relating to blood transfusion and HIV,
5. Provide appropriate post-exposure services,
6. Improve access to voluntary HIV testing and counselling.

B Treatment, Care and Support (3 Goals)

1. Provide treatment, care and support services in health facilities,
2. Provide adequate treatment, care and support services in the community,
3. Develop and expand the provision of care to children and orphans

C Monitoring, Research and Surveillance (4 Goals)

1. Ensure AIDS vaccine development,
2. Investigate treatment and care options,
3. Conduct policy research,
4. Conduct regular surveillance.

D Human and Legal Rights (2 Goals)

1. Create an appropriate social environment,
2. Develop an appropriate legal and policy environment.

3.1.2 The National Integrated Plan for Children Infected and Affected by HIV/AIDS and the HIV/AIDS/STD Strategic Plan for South Africa 2000-2005

Piecing together the story about which government policy and planning documents are driving government's response to the impact of HIV/AIDS on children is difficult. This is because there are so many initiatives that have evolved and because the approach is such that it involves input and collaboration from three lead departments

– health, education and social development. Also, theoretically, the policy/planning initiatives are led by national government but it is difficult to establish whether provinces have their own planning documents and what they are. Research suggests, however, that government's mitigation attempts for children are being led by an implementation document titled the 'National Integrated Plan for Children Infected and Affected by HIV/AIDS' and that this in turn is guided by the broader 'HIV/AIDS/STD Strategic Plan for South Africa 2000-2005'.

Having said this, we need however, to note two things:

First, the initiatives in the Integrated Plan are probably not the only initiatives that government is involved in to mitigate the impact of HIV/AIDS on children.

Second, whilst the programmes in the Integrated Plan are targeted mainly at children, children do not constitute the entire target group of the Integrated Plan.

The overall goal of the Integrated Plan is:

'to ensure access to an appropriate and effective integrated system of prevention, care and support services for children infected and affected by HIV/AIDS' (Departments of Education, Health and Social Development, 2000).

This goal was to be achieved through 4 main programmes:

Programme 1: Community-based care and support:

This involves the development of strategies for care of orphans and community-based models of care for people living with HIV/AIDS, focusing on policy development and the piloting of approaches.

Programme 2: Strengthening voluntary counselling and testing (VCT) initiatives.

Programme 3: Life skills and HIV/AIDS education in primary and secondary schools.

Programme 4: Community outreach / community mobilisation.

This involves community-based HIV/AIDS awareness programmes to link and promote the other three initiatives. This programme is to provide the 'thread' that will link the other programmes together. It aims to focus on raising the level of awareness amongst community leaders on HIV/AIDS in general, existing and new HIV/AIDS programmes and activities in the community on how to access services related to HIV/AIDS.

The objectives of the Integrated Plan are described as follows:

- Establishing and implementing integrated community-based care and support programmes for children infected and affected by HIV/AIDS.
- Improving access to VCT services for 12,5% of the population aged 15-49 over three years focussing on youth and rural communities.
- Implementing the life skills and HIV/AIDS education programme in 20% of primary and secondary schools in the first year, a further 40% the next year, and 40% in year three, ensuring 100% coverage by 2002/03.
- Mobilising communities through community-based HIV/AIDS awareness programmes.

An inter-sectoral and inter-departmental approach has been established to implement the Integrated Plan. National government has been involved in conceiving the plan but the plan is for provinces to take the responsibility for actual implementation. The role of the planning document is to give guidelines to provinces, 'Provinces are supposed to develop their own implementation plans within the principles and guidelines stipulated in the national plan' (Departments of Education, Health and Social Development, 2000). The departments that are to take the lead in implementation are health, education and social development.

It is acknowledged that successful implementation of the plan, requires a great deal of communication and co-ordination between the different spheres of government, the different departments at the provincial level and between families, communities and government. This is particularly the case in the home and community based care and support programme. It involves health and social development departments in provinces taking lead roles.

It relies heavily on families and community structures being involved in providing medical and other forms of care.

In 2000/01, the strategy was to be implemented in its entirety (all four programmes) in three provinces, namely Eastern Cape, Mpumalanga and Northern Province. North West, Free State and Northern Cape were to implement three of the four programmes (namely life skills, VCT and testing and community-based care and support). Gauteng, Western Cape and KwaZulu Natal were to implement the life skills and VCT programmes only. (Departments of Education, Health and Social Development, 2000). A district approach is being followed meaning that only one district was to see implementation of the plan (or the components thereof that it had been decided would be implemented in that province) per province. The aim in the initial planning document is to extend all four programmes in every province in districts of need over year two and three of the strategy. By the end of the three year period, it was envisaged that provinces would take financial responsibility for the programmes in the Integrated Plan while districts would take the lead role in delivery.

3.1.3 National Budget Allocations to HIV/AIDS Programs

The National Budget documentation gives us an estimate of the total allocation to HIV/AIDS at the national level. It works out to be a small portion of the total national health budget (3,5%), which in total is R6,611 billion for 2001/02 (Department of Treasury, 2001:123). This figure refers to direct allocations, i.e. the integrated strategy and the AIDS Action Plan.

The estimate is R236 million for 2001/02, increasing to R416 million in 2002/03 and R423.5 million in 2003/04. Table 10 presents the budget allocations (real and nominal) to HIV/AIDS from national government for the next 3 years.

Due largely to the late transfer of funds, in the first year of the IP the provinces only managed to spend 36,5% of the total HIV/AIDS grants available to them. The conditional grant transfers occurred more timeously in the second year, but by midway through this financial year, provinces had only spent 16,8% of their conditional grants. This is however, a probable improvement. The 16,8% is the actual

expenditure and does not include that which is committed or money which has been spent but not yet been recorded by the Department of Treasury. It also does not reflect the spending of money allocated from provincial budgets (Hickey, 2001).

Table 10 National Budget Allocations to HIV/AIDS, 2001/02-2003/04, R millions

	2001/02	2002/03	2003/04
Integrated Strategy (special allocation)	R125.0	R300.0	R304.5
Government Aids Action Plan (on budget of National Department of Health)	R111.4	R116.0	R119.0
Total budget allocation to HIV/AIDS	R236.4	R416.0	R423.5
Real value – 2000 rands	R223.4	R375.8	R366.2

Source: Department of Treasury, Budget Review 2001:133 and 265; Estimates of National Expenditure 2001:309;281; 310; and 368, Supplementary Estimate and Idasa Budget Brief no.62. 2001:2.

Note: We use the Department of Treasury estimates of CPI inflation, presented in Budget Review 2001 to deflate and use 2000/01 as the base year.

3.2 Education Response

Education in South Africa consumes almost a quarter of the national budget and employs or enrolls almost a third of the country's population. Moreover, educator salaries account for well over 90% of the education budget, confirming that HIV/AIDS impact in this sector is of the greatest strategic and budgetary significance.

The main HIV/AIDS activity directly connected with the education system is the life skills and HIV/AIDS education in primary and secondary schools.

3.2.1 Life Skills Programme

The SA Schools Act No. 84 of 1996 regulates amongst other things, admissions and expulsions and provides protection for learners who are infected with HIV. The National Education Policy on HIV/AIDS, Government Notice 1926 of 1998 covers the management of HIV/AIDS in schools. It is based on principles of non-discrimination, confidentiality, education, and measures to manage HIV/AIDS within the school environment.

In 1997, 840 Master Trainers and 9 034 secondary school teachers were trained in life skills and HIV/AIDS and quantities of materials were purchased to resource the schools. This programme was managed by the Department of Health – only recently has the Department of Education taken over as the lead Department. In 1999, the life skills programme was extended into selected primary schools, and piloted in 10 schools in the Free State and 10 in the Northern Province. The roll out of this programme could potentially reach 21 304 primary schools and 8 497 388 primary school learners. Little effort has been made to evaluate the effectiveness of these interventions. Such an evaluation would allow the refinement and appropriate supplementation of the intervention to increase effectiveness.

National Cabinet, on 24 November 1999, approved funds amounting to R450 million for an integrated response to the epidemic focusing on children and youth. In 2000/1,

R75 million was allocated to the integrated strategy – 57% of which was for life skills education.

In support of the life skills programme which primarily targets youth in school, a youth programme (the South African AIDS Youth Programme or SAYP) has been established which targets youth through social mechanisms and youth organisations.

In the area of life skills programmes for the youth, the challenge remains to utilise peer education on a large scale as an effective way to influence adolescent sexual behaviour. Discrete projects, targeting both in-school youth as well as out-of-school youth, offer hopes of success, but these have not been rolled out on any large scale.

3.3 Welfare Response

3.3.1 Family/Community Response

The main measures to reduce the impact of HIV/AIDS on children has clearly been taken by individuals and households, who have taken nearly all of the country's 300000 orphans into their extended families and cared at home for those dying of AIDS-related illnesses. While community workers in different parts of the country see some remaining capacity for absorbing orphans, the support structures on which extended family or community fostering depends are already under severe strain.

3.3.2 Civil Society Response

Among the main responses by AIDS support organisations to the problems faced by AIDS-affected and infected children are to:

- Mobilise caregivers in the community to support the affected children.
- Provide training and support to caregivers.
- Assist caregivers and children to access services and social grants to which they are entitled.
- Lobby and fundraise around the additional needs of children affected by AIDS and poverty.

The first task is central to the survival and well-being of the child but its achievements is increasingly dependent on organisations delivering in all the other areas. Many community-based projects have started out with a specific HIV/AIDS focus but have developed a holistic approach given the spectrum of crisis facing AIDS-affected children. Confronted by huge gaps in service delivery, they are often overstretched in terms of the range of AIDS-affected children's needs – from food security to medication, education to foster care.

3.3.3 Government Welfare Policies for Children

Government has forced individuals, families and communities to shoulder nearly all of the welfare burden of HIV. Very little program development, outside of cash grants, to assist in the welfare of children has been forthcoming.

At present, there are three welfare grants that are available to children. These are the child support grant, the care dependency grant and the foster grant that are paid by provincial social development departments through their social security budgets.

3.3.4 Child Support Grant

The Child Support Grant is currently R110 per child per month. The primary care giver and child qualify if they live in:

An urban area;

- In a formal dwelling and the personal income is below R9 600 per annum.
- In an informal dwelling and the personal income is below R13 200 per annum

A rural area:

- in a formal or informal dwelling and the personal income is below R13 200 per annum

To access it the care-giver must present the bar coded birth certificate of the child and his/her bar coded ID document to the relevant official from the provincial social development department processing the application. Because HIV/AIDS is throwing increasing numbers of children below the income poverty line, the epidemic is making growing numbers of children eligible for the grant.

3.3.5 Foster Grant

The Foster Grant is R410 per child per month. There is also a means test for eligibility. The annual income of the foster parent must not exceed twice the annual foster child grant. Only children that have been placed in the care of foster parents by a court of law are eligible for the grant. Each foster parent or parents can access grants for a maximum of six children. Increasing numbers of children will become eligible for this grant as courts place increasing numbers of children affected by HIV/AIDS in foster care.

3.3.6 Care Dependency Grant

The Child Dependency Grant is R570 per child per month. The means test for this grant is that the combined annual income of the family, after deductions must not exceed R48 000 per annum. This grant is for children with severe mental or physical disabilities, who require permanent home care. There is no specific provision for children with chronic illnesses, including HIV/AIDS.

4 Critique of policy response and recommendations for action

Efforts to mitigate the impact of HIV/AIDS on children require the involvement of many sectors of government, civil society and communities. To draw together and co-ordinate such a response, strong and committed leadership is essential. Government's current responses to the impacts have generally been small, scattered and poorly designed. Rollout plans have long time frames and fail to deal with the urgency of the situation. The failure to introduce a widespread intervention to reduce the transmission of HIV from mothers to their children is a clear example of how poor

leadership in South Africa is contributing to the violation of children's rights – in this case the most fundamental, the right to life.

4.1 Health

4.1.1 Analysis of Prevention Responses

As a starting point it is necessary to highlight the awareness versus behaviour change dilemma that remains perhaps the most elusive goal for developing countries seeking to appropriately respond to the HIV/AIDS epidemic.

In general, in South Africa, levels of awareness of HIV/AIDS are high (though some myths and misconceptions persist). There is however little evidence of behaviour change. This is indicative of the complex nature of perceived vulnerability and the lack, particularly for young people and other vulnerable groups, of any real self-efficacy related to sexual decision making.

That stated, how has South Africa responded to the prevention challenges? The critique of key prevention activities by the state and at community level focuses on the period from 1997 to the present.

Amongst the significant prevention achievements in this period are:

The life skills programme

Mass media campaigns

The STD programme

The condom programme

Life Skills Programmes for Youth

One life skills product that has been successfully and extensively used is Stepping Stones, a workshop series designed to promote sexual and reproductive health. It addresses questions of gender, sexual health, HIV/AIDS, gender violence, communication and relationship skills. In doing so it recognises that sexual relationships are always situated within a broader context of relationships with sexual partners, families and the community or society in which people live. These influences substantially determine how people behave.

Mass Media Campaigns

The Beyond Awareness communication campaign, recognising that the levels of awareness around HIV/AIDS were in fact high, took the debate to a more personal level, encouraging people to confront their vulnerability, and linking them to resources such as the AIDS Helpline operated by Life Line.

Beyond Awareness II was a multimedia communication campaign that was conducted in two phases over a three year period (1998-2000). The objectives of the campaign were to:

- Intensify communication of key messages around the HIV/AIDS epidemic directed primarily at youth;

- Develop and distribute communications resources that can support action around HIV/AIDS;
- Promote social action through targeted projects. Specifically these included the AIDS Memorial Quilt Project, a Tertiary Institutions Project and a Media workers Project;
- Build capacity amongst HIV/AIDS communicators and strategists through conducting key research; and
- Conduct appropriate behavioural research in support of HIV/AIDS communication and to evaluate various aspects of the campaign.

STD Management

The interaction between STDs and the risk of HIV infection has been well documented. The presence of an STD dramatically increases the likelihood of HIV infection. The STD programme remains one of the pillars of the National AIDS Programme by ensuring consistent supplies of drugs, promoting awareness and health seeking activities, and training health care providers in both the public and private sectors. Support materials have been produced on sexually transmitted infections and the links with HIV.

Condom Programme

The Department of Health has prioritised condom distribution through a systematic annual procurement programme, supported by distribution through clinics and other sites (71% of condom users report that they obtain supplies from clinics or community health centres). Access to barrier methods, primarily male condoms, has been greatly improved despite some problems with quality control. 150-160 million condoms were distributed free in 1999.

Despite improved access there are still significant barriers to condom use in certain areas and particularly for many youth. A survey conducted recently by Condom Concepts and Latex Surgical Products highlighted that young adults do not trust free condoms and think that they are of inferior quality.

4.1.2 Care of HIV + Women

In reviewing the treatment of childhood HIV/AIDS it is imperative that some attention is given to the care of HIV+ women for a variety of reasons:

- Preventing HIV infection of women precludes possible vertical transmission of infection to their children.
- Appropriate care of pregnant HIV+ women reduces the likelihood of vertical transmission of the virus to their children.
- Mothers are generally the primary caretakers of their children and the care of HIV infected children therefore rests primarily with their mothers.
- Effective care of infected women reduces their morbidity and improves their ability to care for their children irrespective of whether these are infected or not.

The treatment of HIV+ women appears to be a hit and miss affair dependent on the enthusiasm, skills and insights of individual health care workers in both the public and private sectors. There is little evidence of a widespread, coordinated strategy for the treatment of HIV associated illnesses at any level within the public health services.

Unfortunately distribution and subsequent use of recent national guidelines has produced yet another comedy of errors in this country's response to the epidemic. Ninety thousand copies were produced and made available, on request, to interested parties as part of the HIV/AIDS and STD Directorate's "Beyond Awareness" campaign. In KwaZulu-Natal the provincial AIDS Unit received limited numbers of the guidelines, too few for general distribution, and very few health facilities have received copies of the guidelines.

It is well recognised that the production of guidelines is no guarantee that they will be implemented. For this to occur training in their use is required as well as ongoing support and access to the materials prescribed in the guidelines. In 1996, following the development of provincial guidelines, the KwaZulu-Natal HIV/AIDS Clinical Advisory Group conducted a series of workshops in each health region to distribute the guidelines and instruct health staff on their use. Since then, despite a high HIV sero-prevalence in the province and a high turnover of staff, no further distribution of guidelines or training workshops for staff has occurred. Use of the guidelines remains extremely limited as very few health workers have a copy, no training has been conducted in their use over the past five years and an erratic supply of essential drugs precludes use of many of the recommendations in the guidelines.

4.1.3 Anti Retroviral Drugs

One major deficiency in the guidelines is their failure to provide any information regarding the use of anti retroviral drugs. The rationale behind this failure is the belief that these drugs are too expensive, their use too complicated and the tests required for monitoring their use, viral loads and CD4 counts, not widely available (see chapter 14). This deficit has been addressed to some extent by the development of guidelines for ARV therapy in adults by the Southern African HIV Clinicians Society. The society has recognised that treatment cannot always be optimal and the guidelines propose acceptable therapeutic alternatives that are currently more affordable and realistic. At present there is limited use of ARV drugs in the public sector and access is restricted to those patients who are able to purchase the drugs themselves or are fortunate enough to be enrolled in clinical trials.

How should policymakers in developing countries address the difficult issue of making antiretroviral (ARV) drugs widely available? The success of ARV's in developed countries is creating increasing pressure on policymakers in developing countries to provide these drugs for their own populations. Unfortunately, ARVs are very expensive, possibly requiring a lifetime of treatment. Although pharmaceutical companies have cut the price of AIDS medication, South Africa still cannot afford to provide the drugs through the public health system according to Health Minister Manto Tshabalala-Msimang: "The budget I have for medicines is R2-billion. If I were to buy antiretrovirals I would have to forget about everything else." (SAPA-AP, 14 September 2001). Public provision of ARVs may ultimately involve denying

access to treatment and preventive services for those with other illnesses. Thus, it is important to ensure that this type of care is, in fact, cost-effective and sustainable.

Comprehensive treatment with ARV's may turn out to be similar in cost-effectiveness to many other medical treatments common in South Africa, and perhaps more importantly, represent less of a burden to the state's resources than the 'do nothing' alternative (Browne, 2001). The base-case of 'doing nothing' is a real one for many governments: South Africa's Minister of Health has stated that she has no plans to begin treatment of persons living with AIDS, using ARV's, on any significant scale.

4.1.4 Programme for the Prevention of Mother-To-Child Transmission (MTCT) of HIV

The need to introduce a MTCT prevention programme in South Africa was first recognised in 1988 when a proposed programme was costed on behalf of the Department of Health. The total cost for introducing this programme - including supplementary staff, staff training, test kits, drugs at a discounted price and milk formula – in all antenatal clinics in the public sector throughout the country was R 80 million. The department considered this figure excessive and the proposal was not pursued.

Plans for the implementation of a national MTCT prevention programme are now at an advanced stage. The programme is to be introduced in at least two sites in all nine provinces as a two-year pilot project to resolve funding and logistical problems before the widespread introduction of the programme throughout the country. The programme incorporates voluntary counselling and testing to identify HIV+ women, antenatal interventions, modified midwifery and infant feeding practices and treatment with Nevirapine. An HIV test is a pre-requisite for access to Nevirapine and ongoing medical support of the HIV+ woman and her infant including free milk substitutes for six months, vitamin supplements and prophylaxis for opportunistic infections.

4.1.5 Care of HIV Infected Children

The response to meeting the needs of HIV+ children has been similar to that experienced by women adults and little evidence of a coordinated treatment strategy exists.

Provincial and national guidelines for the management of HIV+ infants and children have been developed. In some instances the production of these guidelines has been supported by one-off training workshops for health care workers. However no sustained programmes seem to exist for the ongoing distribution of guidelines or training of health care workers.

No objectives exist in national strategic plan relating specifically to the treatment of HIV+ children however children are included as recipients of care and treatment strategies. The current status of child targeted responses is similar to that outlined above with respect to HIV+ women:

- Local guidelines on the management of HIV infected children as well as on the uses of ARV drugs have been developed.
- These guidelines are however not widely available.
- Training programmes on the use of these guidelines do not appear to exist.
- Support services and structures for the successful implementation of the guidelines are also inadequate.

Home based models of care have been found to be very effective in reducing rate of hospitalization and length of stay in hospital, reducing the impact of HIV/AIDS on primary health care services, reducing the costs and providing support for the family and increasing compliance to treatment regimes (Johnson et al, 2001).

However, it is not surprising then that this model is being promoted by policy makers, but the existing health system lacks the infrastructure and resources to provide the necessary training and support to home based carers (Whiteside and Sunter, 2000).

4.2 Education

According to the South African Population Census in 1996, stated that there were an estimated 1,3 million children between the ages of 7 and 18 out of school, with the provinces of the Eastern Cape and KwaZulu Natal the worst affected. There is however no information on the reasons for this figure, which equates to more than 10% of the enrolled school population. Thus the advent of AIDS-related morbidity and mortality, will build on already high levels of voluntary or enforced exclusion, aggravating the impact on education and contributing to the decline in enrolments, transition rates and output from the system.

The delivery of education services will in future have to integrate the impact of both HIV and AIDS in every aspect of activity and budgeting, with mid-level impact scenarios the probable default position until more reliable data is available. The planning of the renovation and building of classrooms and schools will require fresh appraisal of local demographics, for example, as will the rationalisation and merger of under-utilised facilities, such as small and farm schools. The provision of potable water, sanitation and health and counselling services will take on a new significance and may reorder planners' traditional priorities and goals.

It can no longer be business as usual, given that in some districts enrolments may decline to less than half their historical levels in some grades, yet still exhibit unacceptably high learner/educator ratios due to teacher morbidity and mortality.

4.2.1 Overall Government Education Response

Clearly, an adequate response to the threat of HIV/AIDS requires both a systemic and sustainable management response and the parallel address and improvement of appropriate curricula, sexual and reproductive health education and relevant materials development, in order to effect behaviour change.

The impact on systemic capacity on the scale evidenced in KwaZulu Natal has yet to be understood or factored into the thinking of education leaders and managers in the country. The quantification of the extent of the problem in the sector has only

recently only begun. The real impact will be on consequent economic growth and national development, and will be felt for two to three decades to come. What is therefore required is that management of the education budget is reviewed and redesigned to account for these impacts, at every level of the process.

For the public education system to survive as an effective delivery mechanism for teaching and learning, it is simply vital that its administrators take a long term view of the impact of HIV/AIDS. The existing high attrition rates for educators and managers will be exacerbated directly by HIV/AIDS. Consequent conditions and service ratios may therefore condemn declining cohorts of learners to deteriorating quality and standards of achievement, for the foreseeable future. This situation can however be mitigated – to a greater or lesser extent – through recognition and understanding, enlightened planning, management reform and improved classroom practice and school discipline. This process has not yet begun.

4.2.2 Education Management and Mitigation: Next Steps

A widely acknowledged problem exists in the separation of powers between the National and Provincial departments, with the latter being responsible for implementation. This often results in a disconnection between the expressed intent of the National Department of Education and the capacity and will of the provincial departments to implement and operationalise.

In the case of HIV/AIDS, a number of provincial departments have begun to react appropriately to the scale of the challenge, notably Gauteng and KwaZulu Natal. But few of these departments have the knowledge and capacity to take the design of countermeasures forward, and as a matter of the greatest urgency must initiate a review of their comparative circumstances and undertake a strategic planning process designed to manage and mitigate impact on their systems.

Some of these important issues which need immediate attention include: increased educator and management attrition, reduced educator training, increased service ratios, declining fee income and reduced transition rates and output.

Educator Mortality

Data on educator mortality in South Africa was captured for the first time in 2000, for the 1999 education year. The results for KwaZulu Natal, the first province to be analysed, reported 424 deaths from a sample of 6 553 educators employed in the surveyed schools. These results indicate mortality rates of 8,4% in the sample of 2 282 males, and 5,5% in the sample of 4 271 females (aged 20 to 60); mortality peaked between 30 to 34 for females and 35 to 39 for males. These rates are far ahead of any projection or trend that has been evidenced elsewhere. In Zambia, by way of example, the educator mortality rate, at 3,5%, is 75% higher than the general adult mortality rate of 2%.

However, what it does confirm is that there are a significant number of deaths from illness amongst educators under the age of 50, an incidence generally taken to be a proxy for AIDS mortality.

Educator Training

In a sector that employs over 350 000 educators, with attrition rates running as high as 7% in some areas, this will have considerable financial and institutional implications, particularly since South Africa has recently closed its Educator Training Colleges and transferred responsibility for this function to the University sector. Growing prevalence rates in student intakes will also be a significant factor.

In KwaZulu Natal alone, it is estimated that over 60 000 new educators will be required by 2010, simply to hold educator/learner ratios at their present high levels. This equates to almost the total number of publicly-paid educators presently in that system, and would require the universities in that province to increase their gross student intake by over 50%.

Service Ratios

While enrolment, and therefore demand, is set to decline for the foreseeable future, the supply of trained educators will decline even faster due to existing attrition, direct AIDS impact and the indirect affect of increased competitive demand in the wider workplace due to AIDS-related deaths in the workforce. Thus South Africa may anticipate worsening learner/educator ratios in many areas over time, but as importantly, declining quality due to the loss of qualified and experienced educators. Even where these ratios may appear acceptable, educators may not be functioning effectively and may mask deeper problems of contact and quality. Ironically, learner/classroom ratios may also worsen due to small school rationalisation and the inevitable effect of multi-grading, necessitated by the temporary or permanent absence of educators.

Declining Fee Income

South Africa has been very successful in developing a method of 'Resource Targeting' to identify the poorest schools in the country and has established a means of redirecting resources to compensate for comparative and historical disadvantage. Notwithstanding this, pressure on household income will impact the payment of both compulsory and voluntary school fees and levies, and will reduce ability to pay for textbooks, uniforms, school lunches and transport. The net effect will be to render many schools 'insolvent', given that large numbers of these depend on this income for a range of expenses, from administration to extra educator salaries – often in order to maintain acceptable learner/educator ratios. There are already widespread reports from schools and School Governing Bodies in this regard, citing 'bankruptcy' due to large-scale defaulting on payments by parents. Notwithstanding the State's commitment to provision and resourcing, it should be noted that these school and related fees can be extremely high, and it may become necessary to allocate emergency or supplementary funding to address the problem.

Transition Rates and Output

Drop out rates can be expected to increase, while quality in the classroom declines due to temporary and permanent educator absence and loss of contact time. This may mean that the number of learners making the transition from the primary to secondary

phase may be expected to decline, or at the least, for the quality of those making the transition to decline. This impact will also be aggravated by the proportionally greater decline in the number of girls retained in the system, given that they have constituted the majority of learners in the higher grades.

This implies that that South Africa's incremental improvement in Matriculation rates may be at risk and even reversed, both in terms of quality and quantity. Moreover, this may be a medium to long-term phenomena, since it is apparent that enrolment in the first grade is also showing real decline and that the system is contracting at an unexpectedly high rate. Output from the system, in the form of demand for tertiary and further education, has historically exceeded supply, but this demand may now be reduced both by the drop in the real number of learners qualifying for entrance and those able to pay for such higher education.

4.3 Welfare

4.3.1 Community Capacity

In 1997 the World Bank declared "community-initiated care provided at home, while often shifting costs from the national taxpayer to the local community, also greatly reduces the cost of care."

The experience of many community-based organisations in South Africa is that it reduces the cost of care to the state in the short term, but increases the cost to the family and community, in terms of time, energy, emotional and material resources to insupportable levels. Further, a strategy for state and community support that does not require children to become terminal care providers under the euphemism of 'home-based care' is urgently needed.

4.3.2 Effectiveness of Government Responses

There is a yawning gap between policy formulation and implementation. Government policy with regard to the care of AIDS orphans, according to Deputy Director of HIV/AIDS in the Department of Social Services and Population, Sakina Mohammed, is to concentrate on "empowering the community to take care of orphans". The state has placed a moratorium on setting up new homes and is concentrating instead on foster care. Ninety four percent of institutional places for children have been closed but there has not been a proportionate shift in funding to support foster care. Despite governments moratorium on the building and registration of institutions, new ones are appearing with the support of church groups, NGO's and the private sector. Institutions are a short term solution with long term negative implications for child welfare. Effort needs to be made to redirect funds and energy to the support and development of community based models of care.

The other main government response to HIV/AIDS that has a major negative impact on child welfare is a focus on home-based and community-based care of people living and dying with AIDS – without adequate state support. The South African Government has committed line ministries to providing a continuum of care for vulnerable children and expresses commitment to integrating HIV/AIDS care and

support across sectors. However, there is little coordination at national or provincial level and at grassroots level there is fragmentation at best, and non-delivery, at worst.

4.3.3 Government Welfare Policies for Children

Due to general service delivery problems and shortcomings in the part of the social security system focused on children, the welfare system is failing to reach most children, especially orphans. The inability of grants to reach many children is indicated by the SOCPEN data on the number of beneficiaries.

Table 11 Number of Beneficiaries of Child Specific Grants

	Number of Beneficiaries	
	March 2000	March 2001
Foster grant	49 088	52 642
Care dependency grant	23 705	31 452
Child support grant	201 968	757 728

Source: Department of Social Development, SOCPEN database, April 2001.

Children's rights and welfare organisations nationally argue that ensuring access to existing benefits is an essential and urgent step, while implementing a Basic Income Grant and targeting special assistance to especially vulnerable children. Children are only eligible for one grant in any period. There is a perverse incentive in the system in that in poor communities, families have the incentive to place the child in foster care so that the larger FG can be accessed rather than the smaller CSG.

4.3.4 Why the Social Security System Must Be Redesigned to Reach More Children

About 750 000 children receive the primary grant – the Child Support Grant. But, there are around 4 million children living below the poverty line. So this means that only 18% of children that are desperately in need of income support, receive the grant that they are entitled to. Bearing in mind the link between HIV and income poverty, a large portion of the children in need and who are not receiving the grant will be suffering from HIV/AIDS impacts described earlier.

Clearly, government has been making progress in trying to ensure that the grant is paid to children in need– the number of beneficiaries of the Child Support Grant increased by 275% between March 2000 and March 2001. But, it is struggling in this regard. The key implementation problems explaining why few children qualifying for the Child Support Grant are receiving it are (Thorn, 2001):

- Lack of transport and money to get to the relevant government social development office and start the application process (particularly in rural areas).
- Lack of physical infrastructure.
- Denial of the grant because the surname of the child on the Road to Health Card is not the same as the caregivers (a situation that is common when the primary caregiver is the grandmother).
- Lack of birth certificates and identification documents.
- Lack of information about the availability of the grant.

The average time taken for processing grant applications will have to be speeded up. In addition, the nature of the safety net has to be redesigned if government is to stay true to its plan to deliver income support to children. The current social security system is fragmented and non-comprehensive, with too many children fall between the gaps.

The key shortcomings in the design of the social security system that are ensuring that it is unable to catch sufficient children are:

- The age limit on the child support grant. Only children aged zero to six receive the grant but many of the orphans and other children in need are between the ages of six and 19.
- The need for the care-giver to supply the birth certificate of the child when applying for all the child specific grants. After the death of a parent or parents it may be difficult to access the document and commonly the surnames of the grandmother and child are different.
- The nature of the process involved in deciding which children are eligible for the Child Dependency Grant. To become eligible for the grant, a child has to be classified as requiring permanent home care due to his or severe mental or physical disability. The 'permanent home care' criteria is very exclusionary and in practice, the decision for giving a child eligibility is subjective.
- The requirement that the Foster Grant only be given to foster care-givers after the court has placed the children in the care of these care-givers and the fact that the number of foster children is limited to six. Foster mothers outside the formal system commonly look after more than six children.

A process is currently underway to redesign the social security system, including the child specific part of it. In May 2000, Cabinet appointed a Committee of Inquiry into a Comprehensive Social Security System to develop a framework and policy options for social security in its broad sense of social protection. The Committee is expected to present its report to Cabinet by late 2001. The committee's brief includes making recommendations for the redesign of the child specific portion of the system with particular reference to ensuring that it catches orphans. The committee is consulting with civil society in developing its recommendations. There has been talk of merging the three child specific grants into a grant of R250 per child per month that applies to all children, aged zero to 17, and having additional grants to service children with special needs such as children with particular disabilities including HIV infection and AIDS. The importance of linking income payments to free schooling and health care, and food vouchers has also arisen. However, children made vulnerable by HIV/AIDS are at the moment only the potential beneficiaries of the three grants outlined above.

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