



SUMMARY AND RECOMMENDATIONS



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The four studies presented in this report were meant to answer the following three broad questions:

- To what extent does HIV/AIDS affect the health system?
- What aspects or sub-systems are most highly affected?
- How is the impact going to progress over time?

This section presents our conclusions and recommendations.

1. Impact of HIV/AIDS on the Health System

The HIV/AIDS epidemic will have an impact on the health system through loss of staff due to illness, absenteeism, low staff morale, and also through the increased burden of patient load. The impact is discussed below.

1.1 HIV prevalence in health workers

We found that an estimated 15.7 per cent (CI 95%: 12.2–19.9 per cent) of health workers employed in the public and private health facilities located in the Free State, Mpumalanga, KwaZulu-Natal and North West, were living with HIV/AIDS in 2002. This figure reflects the national HIV prevalence among persons aged 15–49 years, which was 15.6 per cent in 2002 (Shisana et al., 2002). The implication is that South African health workers are equally at risk of HIV infection as the general population. Among younger health workers, the risk is much higher. This group (aged 18–35 years) had an estimated HIV prevalence of 20 per cent (CI 95%: 14.1–27.6 per cent).

This means that, in the absence of anti-retroviral therapy, the country can expect, in the future, to lose at least 16 per cent of its health workers to AIDS. The impact is likely to be felt severely because younger health workers (18–45 years) have higher HIV prevalence ratios than older health workers.

1.2 Absenteeism among health workers

Being sick because of the disease and also serving patients who are ill from an HIV/AIDS-related disease, is likely to increase the stress of health workers. In the survey, we found 16.2 per cent had been treated for stress-related illnesses. Of the 16.2 per cent who were treated, 63.9 per cent had to take sick leave.

1.3 Low staff morale

We found that a third of health workers (33.8 per cent) had low morale due to several factors including stressful working conditions, heavy patient workload, staff shortages and low salaries.

1.4 High HIV prevalence in patients served

We also found that 28 per cent (CI 95%: 22.5–34.2 per cent) of patients served in the public and private health sectors in the four provinces surveyed were HIV positive. These HIV/AIDS patients stayed in hospital longer (mean length of stay: 13.7 days) than the non-HIV/AIDS patients (mean length of stay: 8.2 days). Longer stays are associated with higher costs to health services, putting pressure on funds to provide service to patients.

1.5 Increased patient load

The study results showed that overall there has not been an increase in the mean number of admissions to the medical wards of all patients (AIDS and non-AIDS) reported in 1995, 1997 and 2000. However, based largely on medical records, there has been a very large increase in the mean number of HIV/AIDS-related admissions between 1995 and 2000. The study also found that 94.6 per cent of health facilities indicated that over the last five years there has been an increase in patients seeking clinical care for HIV/AIDS-related illness and 97.1 per cent indicated that the number of admissions for HIV/AIDS clinical care have also increased. We also triangulated by analysing the findings from the health worker survey, which differed slightly from the information obtained from chief administrative officers. We found that 73 per cent of health workers surveyed reported that there was an increase in workload. The heaviest burden fell on professionals (81 per cent). About a third of these health workers indicated the workload increased by 75 per cent of the usual workload in the last year. Interestingly, during this period, the total bed occupancy rates have remained about the same. These results suggest that non-AIDS patients have been 'crowded out' of the health care system to give way to HIV/AIDS patients. This 'crowding out' effect is largely in the public health sector, where the bed occupancy rate remained in the upper 80s or lower 90s. The private hospitals have not been affected as much, although their bed occupancy rates have remained relatively low, increasing from 49.1 per cent in 1995 to 53.6 per cent in 2000.

Given the large increase in HIV/AIDS patients seeking clinical care, we examined whether the health facilities have staff specifically assigned to deal with HIV/AIDS care activities. We found that more than half (54.5 per cent) of health facilities have already assigned staff to deal with this disease. Despite the allocation of staff to manage HIV/AIDS patients, 80 per cent of all managers of health facilities surveyed, expressed the need for more staff to cope with the demand for HIV/AIDS care.

The services to be provided were VCT, clinical management of opportunistic infections, health education, nutrition supplementation, condom supply and education and follow-up to monitor adherence to TB treatment. Less than half of the facilities provided home-based care, and those that did were largely in primary care facilities and in about a third of public hospitals.

We also asked whether health facilities had admission policies for patients presenting with AIDS. Some of the facility managers said they had no admission policies. Others had a policy to treat AIDS patients like all other patients. Others have an open policy of admitting all patients to any other ward, depending on the availability of beds. This depended on whether they have AIDS-related symptoms. Still others had a policy to treat AIDS patients at home, particularly when they were considered to be terminally ill. This inconsistency is not surprising because only 42.4 per cent of all health facilities had their own official HIV/AIDS policy and 13.7 per cent did not even know whether they had an official policy on HIV/AIDS.

We were surprised to find that a mere 19.3 per cent of managers of 220 health facilities surveyed had seen the *2000–2005 National HIV/AIDS Plan*. Some 43 per cent of the public hospital managers had seen it, while only 19 per cent of the PHC centres have

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seen it. Even more surprising was the finding that only 7.8 per cent of private health sector managers had seen this plan. These are the implementers of the health services component of this plan and hence should have had access to this key document. What is encouraging is that 66.5 per cent of health workers had access to the Department of Health's *Guidelines on HIV/AIDS Care*. However, only 38.8 per cent of managers in the private health sector had access to these guidelines.

The absence of uniform admission policies for patients presenting with HIV/AIDS-related illness is likely to impact on the health care system's ability to cope with the increased demand for AIDS care. We observed the 'crowding out effect' in public hospitals and district hospitals, which is probably due to lack of a clear policy on how to manage patients with HIV/AIDS disease. *We recommended that a home-based care policy be adopted as a standard for managing patients presenting with HIV/AIDS-related illness, noting that some are already providing this service. However, families would need to be supported and equipped to manage these patients, so that this policy should not result in dumping of patients on already poor families. The support should include food parcels for families of people living with HIV/AIDS, and provision of disinfectants to prevent infection while handling patients' blood.*

Due to the low percentage of health facilities that have access to the *2000–2005 National HIV/AIDS Plan*, *it is recommended that the Department of Health ensures that each health manager has a copy of the plan. The same is recommended for the Department of Health's Guidelines on HIV/AIDS Care.*

Hospitals that have reduced the length of stay in developed and middle income countries provide antiretroviral therapy for people living with HIV/AIDS. As stated earlier, in a London hospital, the average length of stay of AIDS patients decreased from 16 days in 1992 to 11 days in 1997, and similar changes were reported from other hospitals in industrialised countries (Mocroft et al., 1999). Major causes for the decrease in length of stay are the introduction of (a) prophylactic treatment for PCP in 1989, (b) dual antiretroviral therapy in approximately 1994, and (c) highly effective antiretroviral therapy (HAART) in 1996. South Africa could reduce the burden of HIV/AIDS on public hospitals and district hospitals through the provision of HAART. *We recommended that the public sector provide ARVs for people living with HIV/AIDS whose health status indicates this.*

2 Affected sub-systems of the health care system

The sub-systems of the health care system affected are the primary health care, secondary, tertiary and academic state hospitals (grouped as public hospitals) and the private health system. The results are summarised below.

2.1 Primary health care system

The PHC system is not immune to the impact of the HIV/AIDS epidemic. The study results revealed that 25.7 per cent (CI 95%: 19.8–32.5 per cent) of the patients served in the four provinces were living with HIV/AIDS. The AIDS patients stay longer in district hospitals (mean length of stay: 20.3 days) than non-AIDS patients (mean length of stay: 5.2 days). The cost of PHC services is likely to increase substantially.

2.2 Private health sector

The private sector is also affected because 36.6 per cent (CI 95%: 21.3–55.4 per cent) of the patients were HIV positive. However, the private sector seems to have room to absorb the impact because the bed occupancy rate is still low. The high user rates probably prohibit frequent and extended stays in hospitals. Indeed the private health sector had the shortest length of stay in hospital for both AIDS and non-AIDS patients, 6.3 per cent and 6 per cent respectively.

2.3 Public health sector

The burden on the health care system is felt most in public hospitals, where 46.2 per cent (CI 95%: 37.9–54.7 per cent) of the patients served in the medical and paediatric wards tested positive for HIV. Unlike district hospitals, which keep AIDS patients longer, public hospitals keep their AIDS patients for shorter times. Moreover, the non-AIDS patients stay longer in hospital than the AIDS patients, suggesting that some hospitals have a policy for stabilising and then discharging them.

2.4 Supply of equipment to treat HIV/AIDS patients

When we assessed the capacity of the health care system to cope with HIV/AIDS patients, we investigated the extent to which health facilities were adequately equipped to provide necessary services. The results showed that the private sector followed by primary care facilities were least equipped to provide testing for HIV because 75.5 per cent of the private facilities and 59.2 per cent of the PHC facilities reported never to have HIV test kits in stock. This means that they were more likely to send their patients to be tested elsewhere suggesting that most patients are unlikely to return to the facility to obtain their results. We found 32.1 per cent of the public hospitals not to be equipped with HIV test kits. Rapid testing would increase uptake of VCT services that are being expanded throughout South Africa.

Most health care facilities stocked syringes and needles, protective clothing and gloves most of the time. However, nearly one in five private sector health facilities did not have protective clothing and gloves to prevent infections or cross-contamination.

Only 65 per cent per cent of all health facilities have adequate supply of sterilising equipment 75–100 per cent of the time. The survey showed that 30 per cent of PHC facilities never stocked sterilising equipment. This may not be the disinfectant of choice. The absence of sterilising equipment in a health care facility indicates that patients are at risk of contracting (hospital-acquired) nosocomial infection. Nosocomial infections are a problem worldwide, especially in developing countries where most health care facilities have inadequate, or lack any, infection control systems in place. Low temperature sterilisation is an essential tool for the sterilisation of heat labile clinical and diagnostic equipment such as endoscopes and surgical instruments. Disinfectants and frequent hand washing are among the most simple and applicable ways of reducing nosocomial infections. Health workers also indicated that they did not obtain sufficient training in infection control systems. *For the health care system to cope adequately with HIV, it is critical that infection control systems be significantly improved.*

2.5 Drug supply system

The burden on the public health care system is also felt in the drug supply system. Drugs were available to treat opportunistic infections and not for prolonging life. The only ARV's available (NNRTI and NRTI) were for prevention of transmission of HIV from mother to child and/or for post-exposure prophylaxis. The private sector was better equipped with ARVs for treating patients.

The health care system is better equipped to treat TB patients. All the anti-TB drugs surveyed were generally available at over 80 per cent of all the facilities 75–100 per cent of the time.

Antibiotics were generally available to treat most infections related to HIV/AIDS. However, the supply of antiviral agents for treatment of serious viral opportunistic infections such as herpes, and cytomegalovirus (CMV), was generally very low in all facilities, with the private facilities having the highest availability of these agents.

Proper medical management of HIV/AIDS requires that the government revise the Essential Drugs List and treatment guidelines to include the drugs shown to be unavailable.

To manage HIV/AIDS effectively in South Africa, we recommend that a national treatment plan be developed and implemented to reduce the burden of HIV/AIDS on the health sector. The elements of such a plan would include:

- *Distribution of the National AIDS plan to all public and private health care facilities;*
- *Training of health workers to manage HIV/AIDS;*
- *Staffing ratios;*
- *Availability of supplies;*
- *Drug availability including ARVs;*
- *Treatment guidelines;*
- *Funding of these services; and*
- *Mortality of health workers.*

3. Progression of the impact of HIV/AIDS over time

Elsewhere in this report we projected that South Africa will have 416 580 new AIDS cases in 2003. In all, we projected that since the beginning of the epidemic in 1990, South Africa will have had 2 064 900 new AIDS cases. Some of these people will have died by now. We projected that in 2003, half of these patients will seek care in the public health sector for HIV/AIDS related illness. The impact of such a large number of people seeking clinical care in the public health facility for one disease is substantial.

For this reason, it is *recommended that antiretroviral therapy, nutrition supplementation coupled with food security, and home-based care, should be the package provided to people with AIDS who are seeking care.* This service would be provided in addition to the standard care described earlier.

Mortality of health workers due to AIDS

We earlier reported that in a probability random sample of health workers in the public and private sectors – working in primary, secondary or tertiary hospitals – an estimated 15.7 per cent tested positive for HIV antibodies. This figure is similar to the 15 per cent estimated amongst South Africans generally aged 15–49 years in a national household survey undertaken in 2002 (Shisana, Simbayi et al. 2002). 'Projections based on different stages of the epidemic suggest that a country with a stable 15 per cent prevalence can expect that each year between 1.6 and 3.3 per cent of its healthcare providers will die from AIDS' (Tawfik & Kinot 2003). This implies that a cumulative five-year mortality rate of health workers would be between 8 and 16 per cent. The study estimated that 5.6 per cent of health workers who died between 1997 and 2001 were due to HIV/AIDS-related illness. If another 7.5 per cent of deaths due to TB associated with AIDS are included, then, according to the registration data, an estimated 13 per cent of health workers died from HIV/AIDS-related illness during this period. If the guideline used by Tawfik and Kinoti (2003) is applied, then South African health workers are probably dying at the rate that is within the expected range.

Based on the findings of this study, *it is recommended that a human resource plan for the South African health sector should consider the attrition of health workers due to AIDS-related mortality, and more nurses should be trained to compensate for this.* This is particularly so in view of the tendency of international agencies to aggressively recruit South African nurses.