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ABSTRACT
A descriptive questionnaire-based study was undertaken among staff in tertiary institutions in the Eastern Cape Province. The objective of the study was to explore perceived HIV/AIDS impact on duties at work, staff morale, job satisfaction and workload among a proportionate sample of 872 employees in eight randomly selected tertiary institutions. The results of the study showed that HIV/AIDS impacts negatively on duties at work, lowers staff morale and increases staff workload.

Keywords: HIV, AIDS, impact, tertiary institutions, South Africa.

INTRODUCTION
HIV/AIDS remains the primary threat to South Africa’s economic, social and political development. The epidemic is maturing and infection rates still put South Africa squarely in the category of high prevalence countries (Chetty & Michel, 2005). The country has the fastest growing HIV/AIDS epidemic in the world, with more people infected than in any other country (UNAIDS, 2004). The Nelson Mandela/HSRC study of HIV/AIDS (2002) revealed that South Africa, as a country, has the largest number of people living with HIV/AIDS in the world: 14.4% of all people living with HIV/AIDS live in South Africa. The study estimated that of the 5.6 million South Africans living with HIV/AIDS, the highest prevalence is among those aged 15 - 49 years with major differences for males and females. Among South African women aged 25 - 39, the estimated HIV prevalence in 2002 was 17.7%, much higher than 12.8% among males. The epidemic has been increasing steadily as follows: 22.4% in 1999, 24.5% in 2000, 24.8% in 2001 and 26.5% in 2002 (Department of Health, 2003a). The antenatal survey which was conducted in 2002 estimated that one in five South Africans aged 15 - 49 is HIV-positive; of the 10% of 15 - 24-year-olds who are infected, 77% are young women; by the year 2005, 6 million South Africans will be infected with HIV and there will be almost 1 million children under the age of 15 whose mothers will have died of AIDS (Department of Health, 2003b). Dorrington, Bradshaw, Johnson and Budlender (2004) estimated that just over 5 million people of a total 46 million South Africans were HIV+ in mid 2004, giving a total population prevalence rate of 11%. They also concluded that the highest prevalence was among those aged 15 - 49 years with major differences for males and females. Incidence for the total South African population was 1.3% and the total number of orphans was 1126 000. New AIDS cases during 2004 totalled 525 000. Total deaths during 2004 were 701 000; of these non-AIDS deaths were 389 000 and AIDS deaths 312 000, and accumulated AIDS deaths mid-year were 1 212 000.

RÉSUMÉ
Une étude basée sur un questionnaire descriptif a été faite parmi le personnel des établissements d'enseignement supérieur de la province du Cap de l'Est. Le but de cette étude fut d'étudier l'impact du VIH/SIDA perçu sur les fonctions à remplir dans le lieu de travail, le moral du personnel, la satisfaction professionnelle et la charge de travail parmi un échantillon proportionnel de 872 employés de huit établissements sélectionnés au hasard. Les résultats de cette étude ont montré que le VIH/SIDA a un impact négatif sur les fonctions à remplir dans le lieu de travail, qu’il réduit le moral du personnel et qu’il augmente la charge de travail.

Mots clés : VIH, SIDA, impact, établissements d'enseignement supérieur, l'Afrique du Sud.
The percentage of deaths due to HIV/AIDS were as follows: 70% for adults aged 15–49 years, 45% for adults aged 15 years and above, and 42% for children under 15 years of age.

These statistics show that AIDS deaths occur predominantly among workers in their most productive years. Therefore, AIDS deaths lead directly to a reduction in the number of available workers. As younger, less experienced workers replace experienced workers, worker productivity is reduced, which in turn results in a decline in international competitiveness. As the HIV/AIDS epidemic advances, increases in deaths will lead to increased absenteeism or compassionate leave, if this is available, as employees attend funerals for family members, friends and colleagues. The Department of Labour (2003) estimated that a typical employee of a South African company loses about 250 productive days over the course of the illness. The Global Business Council on HIV/AIDS (2002) maintains that with increasing absenteeism companies will experience loss of skills and declining morale which is likely to lower productivity. In addition, UNAIDS (2004) and Rehle and Shisana (2004) indicate that among others, HIV/AIDS threatens productivity due to increased absenteeism, higher recruitment, training and employment benefits and loss of skills, and reverses years of investment in training and education. It claims some of the best leaders, managers and a great number of workers at all levels in the production system. For example, regarding life expectancy, most infected workers will become ill and die within 7–10 years of becoming infected. The Department of Labour (2003), the Nelson Mandela/HSRC (2002) and DPSA (2002) state that the HIV/AIDS epidemic not only threatens the lives of individual employees and employers, but has significant impact on each and every workplace, the effective functioning of the labour market and the national economy as a whole. The epidemic reduces the projected number of people, reduces life expectancy, increases infant mortality, greatly increases the need for health care and increases the need for poverty assistance, exacerbates inequalities, leads to large number of orphans, changes the demographic structure of the population, increases the number of aged people who need care (who have lost adult children), affects income and expenditure patterns, reduces grants, and reduces the ability of households to pay for services, rents and rates.

The impact of HIV/AIDS among tertiary institutions is also significant. Chetty and Michel (2005) purport that HIV/AIDS has an effect on all the categories of people that make up the university community: students, academic staff, clerical staff, administrative staff and support staff. These effects manifest themselves in a host of different ways. Illness, death, trauma, and reduced capacity to work and study affect both staff and students. Institutions lose students and staff through mortalities. Illness and absenteeism affect productivity.

The pool of skills and knowledge that sustains universities is depleted and the loss of staff and students may ultimately call into question the viability of the institution.

The magnitude of the HIV/AIDS epidemic calls for more studies than ever before, geared toward controlling and limiting the further spread of the disease (SADC, 2002 and World Bank, 2002). One way of achieving this is through conducting impact surveys to inform policy, programme development, advocacy efforts, curricula, strategic plans, financing models, human resource plans and skill succession plans. Against this background, this study explored HIV/AIDS impact among staff in tertiary institutions in the Eastern Cape. This target group was chosen because responses to HIV/AIDS among tertiary institutions have tended to concentrate on prevention and impact management in students served, rather than on employees. Effective responses to HIV/AIDS among employees are also important for responding to other HIV/AIDS-related socio-economic impacts and broader development agendas. It is hoped that this study will enable tertiary institutions to respond to HIV/AIDS in a strategic manner, to identify the scale of expected impacts, pinpoint factors that increase the susceptibility of employees and vulnerability of core functions and allow the development of a well-informed, coherent, prioritised approach to HIV/AIDS based on feasibility, affordability and cost-effectiveness. The study objective was to explore perceived HIV/AIDS impact on duties at work, staff morale, job satisfaction and workload.

**METHOD**

**Design and setting**

A descriptive survey was conducted employing a semi-structured questionnaire to collect data from academic and support staff in the 14 ETDP SETA member...
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tertiary institutions of the Eastern Cape Province, South Africa. The Eastern Cape Province is situated along the south-east coast of South Africa and covers an area of 170 000 km², representing about 14% of the country’s land mass. It has a population size of approximately 7 million, representing 16% (third largest) of the South African population. The non-urban population amounts to nearly 4 100 000, and dense concentrations of rural and peri-urban settlements occur in other districts and areas. The Eastern Cape is one of the provinces with the highest levels of poverty, underdeveloped infrastructure and unemployment (Eastern Cape Department of Social Development, 2004).

Sample and procedure
Fourteen (14) tertiary institutions that were ETDP SETA members were considered for participation in the study. The institutions included two technikons (Border and Eastern Cape technikons), four universities (University of Port Elizabeth, Vista University, Rhodes University and University of Transkei) and eight Further Education and Training colleges (Ikhala, Ingwe, King Sabata Dalindyebo, Port Elizabeth, Lovedale, Buffalo City, King Hintsa and East Cape Midlands). All academic and support staff employed (N = 5 300) in 14 ETDP SETA member tertiary institutions in the Eastern Cape, including permanent, contract, part-time and temporary staff as well as academic and non-academic staff, formed the population of the study. Considering costs, it was difficult to draw a representative randomised sample from the whole target population, which would have involved obtaining lists of employees from each of the 14 institutions and drawing a random sample. Consequently, two universities, one historically black (University of Transkei) and one historically white (Rhodes University), two technikons (Border and Eastern Cape) and four FET colleges (Buffalo City, Port Elizabeth, King Hintsa and Ikhala) were selected at random and by type to participate in the study. Other tertiary institutions, namely four FET colleges (Lovedale, Ingwe, King Sabata Dalindyebo and East Cape Midlands) and two universities (Vista and University of Port Elizabeth) were excluded from the study.

The sampling frame for the eight selected institutions was developed (N = 2 759) and distributed as follows: 84 Ikhala FET, 628 University of Transkei, 80 King Hintsa FET, 368 EC Technikon, 303 PE FET, 690 Rhodes University, 331 Border Technikon, and 275 Buffalo City College. Considering costs, it was difficult to involve all the 2 759 staff members in the study. Therefore a proportionate sample (N = 1 460) was formed and distributed as follows: Ikhala (84), Unitra (314), King Hintsa (80), Eastern Cape Technikon (184), Port Elizabeth College (152), Rhodes University (316), Border Technikon (150) and Buffalo City College (180). The 1 460 staff members were approached by trained researchers, to participate in the study via e-mail, personal consultation, telephone contacts, and fax invitation. These staff members were advised on: (a) their status as volunteers, (b) their right to refuse to answer any question, (c) the legal liabilities of their participation, (d) confidentiality, and (e) the limitations of anonymity due to the nature of the study. Of the 1 460 randomly selected employees across the eight institutions, 872 consented to participate in the study (60% response rate). The remaining staff members (40%) declined to participate in the study. Reasons for not participating included in descending order of importance: concerns about anonymity and confidentiality; questions are too sensitive; questionnaire too long and too personal; too busy with examinations and the merger to complete questionnaires; do not see the need for the study; and not interested in participating.

Questionnaires were then distributed to the 872 staff members by trained researchers. In some cases questionnaires were hand delivered for completion by the respondents and in other cases the researchers interviewed the respondents. Completion of the study questionnaire required about 30 minutes. To encourage participation in the study, each respondent was given a R30 honorarium, which may have influenced the actual participation to increase to 60%. Ethical approval to conduct the study was given by the Faculty Research Committee. The demographic characteristics of the 872 participants included 390 (44.7%) men and 482 (55.3%) women, with a mean age of 40 years (SD = 11.3). Regarding racial groups, 68.7% were African/Black, 22.1% White, 5.2% Coloured and 0.9% Indian (3.4% missing). More than half (59%) were married or co-habiting, 28% were single, 6.9% divorced or separated and 1.7% widowed. They occupied low (35.5%), middle (55.2%) and upper (9.3%) positions; and were skilled (61.5%), semi-skilled (24.5%) and...
unskilled (16.0%). The levels of education were, in descending order, tertiary (59%), high school (33.5%), primary education (4.4%) and no education at all (1.5%).

Measures
A pilot study with five staff members was undertaken at Border Technikon before the questionnaire was administered. The wording of the original questionnaire was subsequently reviewed and modified accordingly. Ambiguity of meaning was eliminated, and clarity, comprehensibility and simplicity of items were ensured. The questionnaire was adjusted in order to accommodate the cultural sensitivity of the participants.

The study measures included the following sections: (i) background characteristics (13 items); (ii) work-related issues (11 items); (iii) impact of HIV (5 items) (Hall & Shisana, 2003).

Data analysis
Researchers submitted all the questionnaires that they had collected from participants to the principal investigator. Each questionnaire was numbered to ensure that data capturers were able to go back to it should there be any queries. The principal investigator created the variables for quantitative data on SPSS version 11.0, after which responses to quantitative questions were entered on SPSS. The data were then cleaned and analysed as reflected in the results section. Responses to qualitative questions were analysed according to guidelines for analysing qualitative data as outlined by Krueger (1994). The researchers paid attention to words and phrases in participants’ own vocabularies that capture the meaning of what they do or say; identified different themes and looked for underlying similarities between them; named and categorised themes (open coding); and made connections between a category and its subcategories (axial coding). Approximately 20% of the data were given to an external researcher to rate the initial codings and a .61 interrater reliability was achieved. The recurrent themes, which emerged in relation to each qualitative question, have been presented in the results section.

RESULTS
The results are divided into the impact of HIV/AIDS on duties at work, workload/job satisfaction, and staff morale as perceived by employees in tertiary institutions.

Perceived HIV/AIDS impact on duties at work
A sizeable percentage of workers indicated that the prevalence of HIV/AIDS had an effect on their duties at work (12.5%), quality of service provided (18.2%), ability to work (12.9%). They indicated that the prevalence of HIV/AIDS among their colleagues has impacted negatively on their duties at work in that it led to an increase in workload, poor quality of service, low morale, high absenteeism, and frustration due to sick/absent staff members (see Table 1).

Perceived workload and job satisfaction
The majority of the workers (58.6%) indicated that they had had increased workload in the past year. In an

| TABLE 1. PERCEIVED HIV/AIDS IMPACT ON DUTIES AT WORK |
|-----------------------------------------------|--------|
| **Items**                                      | **%**  |
| Please explain briefly how the prevalence of HIV/AIDS among your colleagues impacts on your duties at work |        |
| I have no knowledge of my colleagues’ HIV status | 77     |
| It has no impact                               | 63     |
| Failure to meet deadlines                      | 45     |
| Less output                                    | 30     |
| Increase in workload                           | 24     |
| Less concentration at work                     | 15     |
| Need for moral support                         | 11     |
| Poor quality of service                        | 7      |
| Low morale                                     | 4      |
| Please explain briefly how the prevalence of HIV/AIDS among your colleagues impacts on the quality of service |        |
| Sickness, low morale, and absenteeism affects quality | 64     |
| Poor quality of service                        | 39     |
| It has no impact                               | 37     |
| Work overload on other workers which affects quality of service | 20     |
| I have no knowledge of my colleagues’ HIV status | 11     |
| Please explain briefly how the prevalence of HIV/AIDS among your colleagues impacts on your ability to work |        |
| It has no impact                               | 61     |
| Low morale or frustration due to sick or absent students/colleagues | 40     |
| Failure to meet deadlines                      | 32     |
| Increased stress                               | 30     |
| I have no knowledge of my colleagues’ HIV status | 26     |
| Loss of team work                              | 15     |
| Increased workload                             | 11     |
| Does the fact that other members of staff may perhaps suffer from HIV/AIDS have an effect on your duties at work? | 12.5   |
| Does the fact that members of staff may perhaps suffer from HIV/AIDS have an effect on the quality of service provided? | 18.2   |
| Does the fact that students may perhaps suffer from HIV/AIDS have an effect on your ability to work? | 12.9   |
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open-ended question participants whose workload had increased were asked for the reasons. The reasons given for the increase in workload included in descending order of importance: additional responsibilities, generally understaffed, increase in student numbers, decrease in staff numbers due to resignation, retrenchment, retirement, sickness and death, poor management, new environment/job and merger. Workers indicated that the increase in workload led to the following, in descending order: increase in stress and fatigue, enhanced performance because they learnt new things, having to work longer hours, lowering the quality of services provided, poor performance of duties, compromised deadlines, administration work getting neglected and low morale (see Table 2).

Almost 50% of the workers indicated that they regularly (32.4%) and often (15%) worked longer hours than the official hours stipulated, without remuneration. The reasons given for that were, in descending order: additional responsibilities/workload, pressure to meet deadlines, commitment to work, preparation of lectures and marking, the nature of the job, understaffed, extra-mural activities, and administration work that has been neglected (see Table 3).

Job satisfaction
The majority (79.5%) of workers indicated that they enjoyed their work and were experiencing job satisfaction. In an open-ended question participants indicated that they enjoyed their work/job satisfaction/fulfilment due to the following reasons, in descending order: enjoying challenges, enjoying the work environment, making a difference in people’s lives, it is their source of income, learning new skills and gaining experience. Those who indicated that they did not enjoy their work gave the following reasons, in descending order: hostile working environment, dissatisfaction with salary, routine and boring work, no career advancement/staff development, work overload, unclear job description and inadequate facilities (see Table 4).
Staff morale

Workers were asked to give their general impression of the morale of the staff in their institutions. Only 36% believed that staff had a high morale. Workers in an upper position (44%) indicated a higher morale in their institution than workers in a low position (32%). A further 28.5% of low position workers and 20.3% of upper position workers were uncertain, as they felt that the atmosphere at work varied from day to day. In an open-ended question, the main reasons given for high morale were, in descending order: good working environment and commitment to work. The reasons, in descending order of importance, given for low morale were uncertainty about the future due to the merger, poor management, hostile working environment, dissatisfaction with salary, work overload/additional responsibilities and lack of incentives/promotions (see Table 5).

DISCUSSION

Perceived HIV/AIDS impact on duties at work

A sizeable percentage of workers indicated that the prevalence of HIV/AIDS had an effect on their duties at work (12.5%), quality of service provided (18.2%), ability to work (12.9%). They indicated that the prevalence of HIV/AIDS among their colleagues has impacted negatively on their duties at work in that it led to an increase in workload, poor quality of service, low morale, high absenteeism, frustration due to sick/absent staff members, thus resulting in declined productivity. The results in this regard support those of previous studies that overall productivity of the workforce declines due to HIV/AIDS (Arndt & Lewis, 2001). For example, USAID (2002) found that AIDS reduced the productivity of African businesses by both increasing the cost of production and decreasing the productivity of African workers. Rising production costs for business not only affect current profit margins, but also future profits by reducing the investment capacity for increasing productivity, expansion, research and development, and workforce training and support. Studies in Zambia (Smith & Whiteside, 1995), Kenya (Roberts, Rau & Ernery, 1996; Roberts & Rau, 1995), Botswana (Greener, 1997), Zimbabwe (Bollinger & Stover, 1999; Moore, Sly, Montgomery & Rehman, 1999), Malawi (Jones, 1996) and South Africa (Morris & Cheevers, 2000; Morris, Burge & Cheevers, 2000) have found that reduction in productivity is among the largest HIV-related costs faced by companies. Productivity will decline given changes in the age profile and the related losses of labour, skills and experience losses of skills and experience in the economically active population (15 – 65 years) (Arndt & Lewis, 2001). The loss of productivity clearly reduces Africa’s competitive advantage (USAID, 2002). Declining levels of

### TABLE 4. JOB SATISFACTION

| Job satisfaction | % |
|------------------|---|
| Do you enjoy your work and experience job satisfaction/fulfillment? | 79.5 |
| Yes, because: | |
| I enjoy the challenges | 45 |
| I enjoy the working environment | 43 |
| I make a difference in people’s lives | 37 |
| I earn a good salary | 34 |
| I learn new skills | 14 |
| I am gaining experience | 14 |
| No, because: | |
| Hostile working environment | 17 |
| Inadequate salary | 16 |
| Routine and boring work | 12 |
| No career advancement/staff development | 11 |
| Work overload | 10 |
| Unclear job description | 4 |
| Inadequate facilities | 4 |

### TABLE 5. STAFF MORALE BY POSITION AT WORK

| What is your general impression of the morale of staff at your institution? | Position at work |
|--------------------------------------------------------------------------|------------------|
| High morale | Low morale | Uncertain |
| Total | Low | Middle | Upper |
|------------------|---|---|---|
| High morale | 36.2 | 32.4 | 35.3 | 43.8 |
| Low morale | 30.3 | 29.9 | 26.5 | 32.8 |
| Uncertain | 33.5 | 28.5 | 30.1 | 20.3 |

| Reasons for high morale | | |
|--------------------------|---|---|
| Good working environment | 99 |
| Commitment to work | 27 |

| Reasons for low morale | | |
|------------------------|---|---|---|---|
| Uncertainty about the future due to the merger | 75 |
| Poor management | 33 |
| Hostile working environment | 33 |
| Dissatisfaction with salary | 24 |
| Work overload/additional responsibilities | 9 |
| No incentives/promotions | 6 |

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Productivity due to increased absenteeism and organisational disruption lead to declining profits, unless production costs are declining at an even faster rate. Declining and fluctuating productivity makes it difficult for a company to meet supply demands from consumers, thus influencing its overall growth and development. The Department of Labour (2003) maintains that a decline in productivity discourages foreign investment and adversely affects consumer and business confidence. Therefore, it is critical that the tertiary education sector becomes aware of the HIV/AIDS problem and takes immediate steps to mitigate its impact. Such steps should include workplace peer education programmes, condom distribution, voluntary counselling and testing, STI treatment and treatment for HIV-related opportunistic infections.

**Perceived workload**

It was found that 58.6% of workers surveyed reported that there was an increase in workload due to the fact that they were understaffed, that there was a decrease in staff numbers due to resignation, retrenchments, retirement, sickness and death, as well as additional responsibilities due to the merger. Workers indicated that the increase in workload led to poor performance of duties, compromised deadlines, lowered quality of service provided, increased stress and fatigue, neglect of administration work, longer hours of work, and low morale. Almost 50% of the workers indicated that they regularly (32.4%) and often (15%) worked longer hours than the official hours stipulated without remuneration. The reasons given for that were: to update administration work, additional responsibilities/workload, extramural activities, pressure to meet deadlines, commitment to work, understaffing and the nature of the job. However, the majority of them (79%) indicated that they were satisfied with their jobs. The present study’s results are in line with those of previous studies (Badcock-Walters, Desmond & Heard, 2003; Hall & Shisana, 2003; Klinghorn, Steinberg & Whiteside, 2001; Rosen, Simon, Thea & Vincent, 2000). In some companies, healthy employees were increasingly working extra hours to compensate for the time lost by their absent (sick) colleagues. In so doing, not only did companies pay more in overtime, but interviewed workers also pointed out that they were overworked and exhausted. Working longer hours produced stress among employees and was responsible for a decline in both the quantity and quality of the final product. It could therefore be concluded that HIV/AIDS increases employee workload. Strategies to manage increased workload among employees should be developed.

**Perceived HIV/AIDS impact on staff morale**

In the current study the epidemic was found to have a negative impact on workplace morale as a third of the workers (33.8%) indicated that they had low morale. When asked to give their general impression of the morale of the staff in their institutions, only 36% of the staff believed that workplace morale was generally high. Among others, the reasons given for low staff morale included stressful working conditions, uncertainty about the future and increased workload. Low morale affects job performance. The findings in this regard are in line with those of previous studies. Coombe (2000) found that HIV-positive teachers were likely to loose interest in furthering professional development. It was also found in the current study that HIV/AIDS had an impact on staff duties at work (12.5%), quality of service provided (18.2%) and ability to work (12.9%). Staff members indicated that the prevalence of HIV/AIDS among their colleagues had impacted negatively on their duties at work in that it led to an increase in workload, poor quality of service, low morale, high absenteeism, frustration due to sick/absent staff members. Previous studies found that the morale of teachers who are not infected is likely to fall as they deal with sickness, and the mortality of colleagues, relatives and friends (Coombe, 2000). Educators will have to take on additional work to assist colleagues who are not well. On the other hand, other additional responsibilities will include counselling and caring for learners who are either HIV-positive or affected by HIV/AIDS through a sick parent/s, or relatives. These additional stresses result in low workplace morale. In smaller companies, the effects of these losses are amplified. Badcock-Walters et al. (2003) found that issues of declining health and increased rate of absenteeism impacted on ability to teach. Educators who are HIV-positive, but have not developed full-blown AIDS, will not always work to their full potential (Kelly, 2002). In fact, it is estimated that
repeated sickness could lead to such educators loosing about 6 months of teaching time during the infection period, before terminal illness. However, this estimate does not consider availability and provision of appropriate medication. On average, an HIV-positive person who has no access to medication (antiretroviral) could die within 7 years of infection (Coombe, 2000). It can therefore be reiterated that the HIV/AIDS epidemic has a negative impact on workplace morale. One way to ensure high workplace morale is to establish a workplace policy that explains how the needs of infected workers should be addressed. Such a policy should promote a positive relationship among infected workers, their employer and their colleagues.

CONCLUSION

Overall, the purpose of this study was to assess the perceived impact of HIV/AIDS on tertiary institutions in the Eastern Cape. The findings generally confirm trends in existing data, i.e. HIV/AIDS has a negative impact on tertiary institutions in much the same way as it does on other institutions. The disease impacts negatively on duties at work, increases workload, and lowers staff morale in tertiary institutions (DPSA, 2002; Kagavivi & Othula, 2003) as in the labour market (Abt Associates, 2000; Department of Labour, 2003; HEARD, 2000; Klinghorn, Steinberg & Whiteside, 2001). It is therefore imperative for tertiary institutions to respond to HIV/AIDS for their own benefit and that of their broader stakeholders. In the face of one of the greatest socio-economic challenges and the worst epidemic for 600 years, the tertiary education and training sector, which is the primary mechanism for the development of the future human resources, must respond decisively. Early action will reap tremendous savings in both economic and human terms.

Decision makers must be prepared to pursue policies that can mitigate the social and economic impacts. The financial benefits of pushing further into the future the types of costs analysed above are only a subset of the overall gains to a company of investing in keeping its workforce as healthy as possible for as long as possible. By implementing HIV/AIDS management strategies, skilled and experienced employees will be retained longer. This would then reduce the time that managers and supervisors would spend coping with employee deaths and high turnover rates. It would also reduce the impact on morale, motivation and concentration among the rest of its workforce of having colleagues fall sick and die. A company that invests in activities to prevent new infections will for each infection averted, save the full amount which would have been lost when an employee becomes infected. These savings represent the return on its investment. A holistic approach to the management of HIV/AIDS that covers future projections, quantifies direct and indirect costs involved, customises managed care products, effective intervention and awareness programmes, human resource planning, effective communication strategy and counselling and support is the only solution to curb this malady. Health-care provision, such as treatment of STIs, can help reduce infection rates. Provision of antiretroviral therapy, though costly, can help prolong the lives of employees and hence provide long-term benefits to the company.

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