

The Health of our Educators

A focus on HIV/AIDS in South African public schools, 2004/5 Survey

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Report prepared for the
Education Labour Relations Council



Report prepared by a research consortium
comprising the Human Sciences Research Council
and the Medical Research Council of South Africa



Prepared for the Education Labour Relations Council by a research consortium comprising the Social Aspects of HIV/AIDS and Health Research Programme of the Human Sciences Research Council and the Medical Research Council

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FOREWORD

The new millennium has heralded in several challenges at the door of educators and education in general. However, none have been as daunting or as catastrophic as the HIV/AIDS pandemic. Education is one of our most powerful weapons against HIV/AIDS; however, it is also a sector that is labour intensive and therefore most vulnerable to the disease.

Our children are our hope for the future. Our teachers mould them into instruments of social capital, the wellspring of our future. Without the inculcation of the skills and competencies that enhance human potential no developing country can hope to start building the basic social infrastructure that is a prerequisite for generating the levels of economic growth that underpin sustainable development. In South Africa's case the need to timeously address the inequities entrenched by generations of apartheid is more urgent. Thus the country's teachers are the primary agents of social change.

The efficacy of our educational system depends on the efficacy of our teachers. To the extent that its ranks are depleted by teacher deaths, illness, absenteeism, or chronic disabilities due to HIV/AIDS, the education of our children is then put at risk, levels of access to education are reduced, standards of education attained lowered, opportunities for secondary and tertiary advancement reduced, job skills forfeited, and society stunted.

South Africa can ill afford to allow a disease like HIV/AIDS and chronic diseases to deplete its teacher workforce. The seriousness of such an impending catastrophe therefore galvanised the Department of Education (National, Provincial, District), South African Council of Educators and the unions – South African Democratic Teachers' Union, the National Professional Teachers' Organisation of South Africa, Suid Afrikaanse Onderwysers' Unie and the National Teachers' Unions of South Africa – as well as the Human Sciences Research Council-led consortium and its partner, the Medical Research Council, under the auspices of the Education Labour Relations Council to take progressive action in ascertaining the prevalence and impact of HIV/AIDS and tuberculosis on the teacher workforce. This study was originally initiated separately by the South African Democratic Teachers' Union, the National Department of Education and other teacher unions and is a prime example of how key stakeholders can benefit by working together for the common good of their constituency. The management of HIV/AIDS demands a multi-sectoral response of partnerships and collaboration of government, organised labour, non-governmental organisations and so forth. The Education Labour Relations Council and the Human Sciences Research Council were instrumental in facilitating this consensus. The Human Sciences Research Council was able to harness the energies of all the partners, notably the Medical Research Council and other members of the Technical Task Team, throughout the research process and was receptive to ideas generated by the stakeholders without compromising the integrity of research. Consequently it was possible to co-generate knowledge that informs policy. Now the report is tabled to the Education Labour Relations Council and the partners will be required to examine the report and debate the policy recommendations. The value of this initiative will be judged by the extent to which interventions are implemented.

If South Africa cannot curtail the levels of infection and progression of HIV/AIDS among its teachers the consequences will be bequeathed not just to the present generation of learners but to future learners, adding immeasurably and unnecessarily to poverty and social stagnation in future decades.

Dhaya Govender

General Secretary and Co-Chair of the Technical Task Team
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EXECUTIVE SUMMARY

South Africa has a severe HIV/AIDS epidemic. About 5.6 million South Africans, the majority of whom are in the economically active age group, are currently living with the virus. Studies have been conducted to examine the impact of HIV/AIDS on various sectors of the economy, including mining, manufacturing, health and education. The effectiveness and functioning of the public sector is also increasingly threatened by the HIV/AIDS epidemic. The education sector is thought to be particularly affected by HIV/AIDS because both the demand for and supply of educators are affected. Not only do children drop out of school because of HIV/AIDS, thus reducing demand for educators, but educators, school managers and education policy-makers are said to be dying of AIDS, thus reducing supply.

Despite the dearth of empirically-based studies on the impact of HIV/AIDS on the education sector, the few studies that exist suggest that the impact may be significant, with high morbidity and mortality due to HIV/AIDS and consequently, the attrition of educators predicted. It was for this reason that the South African Education Labour Relations Council (ELRC) – comprising all the unions: the South African Democratic Teachers' Union (Sadtu), National Professional Teachers' Organisation of South Africa (Naptosa), Suid Afrikaanse Onderwysers Unie (SAOU), National Teachers' Unions of South Africa (Natu) as well as the National and Provincial Departments of Education (DoE), commissioned the Human Sciences Research Council (HSRC)-led consortium and its partner, the Medical Research Council (MRC) to undertake a study examining the impact of HIV/AIDS on the supply and demand of educators to the education sector.

Objectives of the study

The study is designed to yield information to assist the government and unions in the ELRC in planning educator supply at national, provincial and district level. The specific objectives of this study are three-fold:

- To determine the prevalence of HIV and tuberculosis (TB) amongst South African educators in the public sector by age, sex of educator, race, qualifications, locality type, learning area and the phase/band of active teaching;
- To investigate the determinants of HIV amongst these educators by age, sex of educator, race, qualifications, locality type, learning area and the phase/ band of active teaching; and
- To determine the attrition rate among educators and reasons thereof.

Research questions

The ELRC commissioned the HSRC-led consortium to investigate the determinants of demand and supply of educators in the public education sector. Such a study is expected to answer several research questions such as:

- What is the prevalence of HIV/AIDS, TB, alcohol and drug use amongst educators in public schools?
- Do educators have higher HIV prevalence ratios compared with the general population of people aged 25 years and older, taking into account key confounders?
- What are the factors driving the HIV and AIDS epidemic amongst educators?
- What is the prevalence of HIV, TB and alcohol use per district council?

- What is the attrition rate among educators, and what are the reasons for attrition (such as sickness, mortality, TB diagnosis, sexually transmitted infections [STIs] and other endemic diseases, history of health service use, hospitalisation, alcohol and drug use and migration)?

Method

Research design

The study employed a triangulation of several research methods. A formative research was undertaken using focus groups and key informant interviews among educators throughout the country (a separate report is forthcoming). The data collected informed the design of the questionnaire. A once-off consultation with HIV/AIDS educators, other researchers and experts from the HSRC-led consortium was held to acquaint the HSRC researchers with current and comparable research work in the country.

A cross-sectional survey among educators and student educators was undertaken, employing the second-generation surveillance method that combines the measurement of behavioural and biological indicators within the same study. A behavioural risks questionnaire-based survey was conducted concurrently with HIV testing to determine the association between the two. Finally, an archival research method was used, where principals or rectors used existing school records to complete questionnaires on the institution.

Informed consent was obtained from educators who agreed to participate in the interview and provide a specimen for HIV testing. In addition, the result of the HIV test of each participant was linked anonymously to questionnaire data using bar codes.

To test the questionnaire, administration and HIV testing method, a pilot study was conducted among 438 educators. Three modes of questionnaire administration and three methods of collecting biological specimens were tested in 33 schools located in North West and Western Cape provinces.

Sample

The sample sites for the study were identified as public schools. For the schools sample, two data sets were available as potential sample frames from which a sample of educators could be drawn. The first was the DoE's School Register of Needs (SRN), which contained data from surveys in 1996 and 2000, and the second, a database extracted from the government's Personnel Salary System (PERSAL) system. The final schools sample of 1 766 schools had a total of 24 200 state-paid educators as potential respondents.

Data collection and access into schools

Nurses registered with the South African Nursing Council (SANC) were employed to conduct the interviews and specimen collections.¹ In total, 436 field workers, including trained nurses, were appointed to conduct the fieldwork.

¹ Only professionally-trained and registered nurses are allowed to draw blood for laboratory testing purposes.

The DoE in the various provinces assigned co-ordinators who ensured that schools were informed about the study. The district officers of the DoE and labour unions assisted the HSRC co-ordinators, who consisted of MA and Phd research interns, in making appointments at schools and/or accompanying co-ordinators to schools to address educators. Officials from labour unions helped with advocacy for the study and the nature of the study, which increased participation. The field teams were supported by a national field manager, and a separate project manager who tracked progress of the study. Visiting times to schools were adapted to minimise possible disruption of teaching time.

Findings

Demographic and socio-economic characteristics of the ELRC study sample

The demographic and socio-economic profile analysis of educators in the sample revealed that 68% of the sample of educators consisted of females. The majority of the educators were married. Over three-quarters of the sample were Africans (77%) while less than 5% of the sample were Asians, which is a reflection of the demographic characteristics of South Africa. Self-reported socio-economic status and income distribution suggest that educators were generally well qualified, with a first degree or higher, and had many years of teaching experience, with 70% of educators teaching for at least ten years or longer. About 94% of educators reported that the DoE employed them with the rest (6%) being School Governing Body (SGB) appointments.

Only 27% of educators in the sample said they had a housing subsidy and 67.8% of the educators reported they were members of a medical aid fund. The majority of educators (89%) were members of a trade union. There were disparities in some of the demographic and socio-economic profiles of educators by race and province. The findings showed that there were proportionately more female and male African educators in the low-income category compared with educators in other race groups. On the other hand there were proportionately less male white educators in the medium-income category than male educators in other race groups.

Prevalence of HIV

The results showed that 12.7% of educators who gave a specimen for HIV testing were HIV positive. This percentage includes educators in all provinces, and educators of all ages, sex and racial groups.

In this study, without considering age and race differences, the HIV prevalence was the same for the male and female educators. The results in this study showed that HIV prevalence among educators was highest for those aged 25–34 years (21.4%) followed by those aged 35–44 (12.8%). Older educators (55 years and older) had the lowest HIV prevalence (3.1%). However, differences were observed when the analysis was restricted to women and men aged 25–34 years, with women having higher HIV prevalence. Women were generally more vulnerable to HIV infection because of their biological makeup as well as their low socio-economic status.

Major racial differences in HIV prevalence were observed. Africans had a prevalence of 16.3% compared to whites, coloureds and Indians who had a prevalence of less than 1%. It could be that other race groups knew their HIV status and hence did not give a specimen for HIV testing, but this could not be substantiated. The differences in age distribution among the different racial groups may also account for why African educators had higher HIV prevalence than other racial groups. African educators were more concentrated in the high HIV risk ages, from 25–34 years, than other racial groups. Africans were also more likely than other racial groups to belong to the low socio-economic status. Educators who had low socio-economic status had a much higher HIV prevalence when compared to those in the high socio-economic group. The likely reason why Africans are at the bottom end of the socio-economic ladder is the inferior education they received under the apartheid system.

This study found that educators residing in rural areas and those working in rural schools had higher HIV prevalence than educators residing in urban areas and teaching in urban schools. Educators working in schools located in urban formal settlements had a significantly lower HIV prevalence (6.3%) than those working in urban informal settlement (13.9%) and rural areas (16.8%). Teachers in poorer rural areas fall in the high-income group by local standards, suggesting that income may be an additional risk factor.

The study investigated the HIV prevalence of educators by province where they were teaching, and found significant differences. Educators employed in KwaZulu-Natal and Mpumalanga had the highest HIV prevalence (more than 19%) when compared with all other provinces. The second group of provinces with high HIV prevalence (more than 10%, but under 19%) were Eastern Cape, Free State and North West. The provinces with HIV prevalence under 10% were Limpopo, Gauteng and Northern Cape. Western Cape had the lowest HIV prevalence at 1.1%.

Part of the objective of this study was to estimate the HIV prevalence of educators in the district where the school is located. The ELRC requested that data be provided by district for the purpose of planning educator supply at a local level. It is important to note that the HIV estimates presented by district are the best estimates obtained given the small district sample size. Only KwaZulu-Natal, Mpumalanga and Eastern Cape had districts with HIV prevalence among educators that were higher than 20%, numbering 11 out of 54 – eight of these 11 districts were located in KwaZulu-Natal. Another 11 districts had an HIV prevalence among educators that was less than 5%; they were found in the Western Cape, Northern Cape and Gauteng. Overall, the metropolitan districts had low HIV prevalence among educators.

Determinants of HIV/AIDS

Number and age of sexual partners

A substantial body of literature has found a significant association between HIV/AIDS and having more than one sexual partner. This study investigated the sexual behaviour of educators and found that the majority of South African educators reported to have one current sexual partner, and about one in five educators reported not to have had a sexual partner in the previous 12 months. When data were disaggregated by race and sex of the educator, African males had a statistically significant higher rate of self-reported multiple

sexual partnerships than all other sex and race groups. Overall, the rates of self-reported multiple partnership for women in the past year were significantly lower than those reported by men.

Age mixing, where older persons have sexual partners who are significantly younger than themselves, is one of the frequently cited drivers of the HIV/AIDS epidemic. A significantly higher HIV prevalence rate (16.5%) was found among male South African educators who reported to have a sexual partner in the past six months who was more than ten years younger than themselves as compared to those who had a sexual partner who was within ten years of their age (12.4%).

Awareness of HIV status

A large proportion of educators (59%) had undertaken an HIV test prior to this study and of these 92.4% were told their HIV status. Indians (68%) and coloureds (67%) had slightly higher rates of HIV testing than whites (63.4%) and Africans (56.2%).

Condom use

This study found that generally the younger male and female respondents had high condom use compared to their older counterparts. The results showed that the older the respondents the less likely they were to use condoms. HIV prevention campaigns have generally neglected to include the older age groups, leading to the assumption that HIV is not common in this age group. If prevention messages are not targeted to the groups with low prevalence of HIV, there could be a rise in HIV rates among these groups.

Condom use at last sex by race showed that among African females (38.4%) and males (36.3%) condom use was higher when compared to other groups. Whites were lowest users of condoms at last sex, with 9% of females and 10.7% of males reporting using condoms. Condom use was high among females and males from non-urban areas (males 35.8% and females 37.4%) when compared to those living in urban formal (males 25.7% and females 24.4%) and urban informal areas (males 29.8% and females 32.3%). While the rates are still low for all the locality types, accessibility seems to be improving as individuals from urban informal and non-urban areas have higher reports of condom use.

Being HIV positive and consistently using a condom was associated with non-regular sexual partners but not with regular partners. The latter is cause for concern.

Health status

The study revealed that 10.6% of educators reported to have been hospitalised within the last 12 months prior to the study. The most frequently reported diagnoses educators received in the last five years were high blood pressure (15.6%), stomach ulcer (9.1%), arthritis (6.6%) and diabetes (4.5%).

A simple self-reported measure of TB was selected, and it was found that 0.9% of educators reported having been diagnosed with TB within the last five years and 3.2% reported having had a cough that lasted more than two weeks, an indication that they

might have had TB. The low percentage of educators reporting to have TB is likely due to stigma.

Knowledge of HIV transmission

The level of knowledge was high among both female and male educators. There were areas of knowledge, however, where a few of the educators did not have accurate information or did not know about certain issues related to HIV. These included misperceptions about the mode of transmission such as through sneezing, anal sex, oral sex, and breast milk. Some educators also lacked knowledge of anti-retrovirals (ARVs).

Alcohol use among South African educators

Alcohol abuse has serious health and social consequences. This study found that 75% of educators reported that they had abstained from alcohol in the past 12 months. Twenty per cent of the educators were classified as low-risk drinkers, and 5.3% high risk-drinkers according to the Alcohol Use Disorder Identification Test (AUDIT) scores (high risk was defined as 8 and more scores on the AUDIT). Of all racial groupings, male coloured educators (18%) and male African educators (16%) reported the highest levels of high-risk alcohol use. White male educators were most frequently low-risk drinkers (71%) when compared to male educators in all other racial groups. This may be a reflection of the culture of alcohol use in these communities. Furthermore, it seems that the younger the educator was, the more likely they were to use alcohol in a risky way. The age group 25–44 years among male educators reported the highest levels of high-risk drinking (15.9–16.4%) as compared to 45–54 year old male educators (12.5%).

Compared with educators who are non-drinkers or low-risk drinkers, high-risk drinkers reported a higher number of unhealthy days in the month prior to the survey, and more days of being absent from work in 2003. It is crucial to examine alcohol use and its relation to health-related quality of life. The rationale is that high-risk drinking may influence the health status of educators, which has an impact on quality of education.

Potential for attrition

The study revealed that 55% of educators intend to leave the education profession with two-thirds of this group being technology, natural sciences, economics and management educators. Some of the reasons for wanting to leave the education profession include low job satisfaction and job stress. If low job satisfaction and job stress can be addressed, in particular, potential attrition can be reduced. Furthermore, violence in education institutions may deter educators from coming to school and may contribute to attrition. The three major forms of violence experienced by educators in the past 12 months included instances where a learner or educator had been found carrying weapons into the educational institution (22%), assault (18%) and fights involving weapons (14.4%). Violent events at the educational institution seemed to have had an impact on the morale of educators and increased their probability of leaving the profession. Educators with a higher violence index score rated the morale at their school as lower than those with a low violence score, and educators with a higher violence score more often thought of leaving their profession.

Recommendations

The study was commissioned by the ELRC, comprising the DoE and the unions, mainly because of lack of adequate information for planning in the education sector. The unions and the DoE had separate but overlapping terms of reference for the study. Through discussion it was possible to combine the terms of reference for the study into one comprehensive research investigation that was agreeable to all parties. For this reason, the recommendations are specific to either or both parties and yet their implementation would require participation of the key relevant stakeholders from parties, the Council and tertiary institutions, donor agencies and, where applicable, domestic and international scientists.

1. Behaviour change and HIV prevalence

The key behavioural determinants of HIV infection were lack of condom use, HIV-positive status, multiple partnerships, alcohol use and age mixing. It is recommended that the DoE, working with unions and non-governmental organisations (NGOs) develop HIV prevention programme targeted at educators, given that they are a captive audience. The messages should not only be about using condoms, faithfulness and abstaining but should increasingly address the issues of serial monogamy and HIV testing before engaging in unprotected sex, and having sexual partners within ones' age group.

2. Increase HIV prevention knowledge

The DoE, with the participation of the unions, should design educational campaigns that place more emphasis on anal sex and oral sex in prevention campaigns to ensure that this form of sex is not considered as safe because it is not mentioned frequently as part of HIV awareness programmes. Priority for HIV prevention should be targeted at districts with a high HIV prevalence of 20% or more.

3. Target districts with high HIV prevalence

The observation that the HIV prevalence among educators is highest in 11 districts implies that the DoE should target its efforts in this area. The intervention could include improvements of conditions that are unfavourable to HIV transmission.

4. Improve self-efficacy skills

It is crucial that educators be given the skills to prevent themselves from becoming infected. It is therefore recommended that the DoE and the unions work together to design an education programme that will equip educators with skills to negotiate safe sex, especially young recently qualified educators.

5. Prevent transmission of HIV from those already HIV positive

To prevent new HIV infections, it is recommended that the DoE work closely with unions, NGOs and scientists to design an intervention programme to prevent HIV transmission from HIV-positive educators, using the healthy relationship model that has been shown to reduce new infections.

6. Discourage migratory practices that result in separation from support/family structures

It is recommended that the DoE and the unions develop a structured programme for deployment of educators to specific areas; this would entail a deliberate effort to place teachers near their homes rather than leaving it to chance. Where this is not possible, to facilitate deployment by supporting educators and encouraging them to migrate with families.

7. Establish health workplace programme

It is recommended that the DoE and donor agencies establish and manage a workplace programme specifically to provide a comprehensive prevention and treatment programme for all illnesses (including HIV/AIDS and TB), but ensuring confidentiality for educators. Such a programme would include stress reduction and involve counselling, assessment of workload and adjustment thereof, blood pressure and diabetes screening and treatment.

8. Eliminate gender disparities

To reduce gender disparities and reduce the rate of spread of HIV it is recommended that the DoE, the tertiary institutions and the unions join hands with civil society to create a social environment that discourages men from engaging in risky behaviour that puts them and consequently women at risk of HIV. All parties to work towards capacity building and development of women through increased opportunities for promotion and improvement of educational qualifications.

9. Reduce alcohol misuse

With respect to alcohol use, it is recommended that the DoE work closely with the unions to develop an alcohol prevention campaign targeting male educators to reduce high-risk drinking.

10. End violence in schools

The study found that violence at school was common, with the problem differing by province. It is recommended that the DoE should work together with the South African Police Service to increase security at schools for all educators and students.

11. Potential attrition

Low job satisfaction can be addressed through negotiation on conditions of service between the DoE and the labour unions in the ELRC. With respect to job stress, the discussion between the DoE and the unions may entail teaching methods and administrative issues. The DoE should also consider providing support to educators, especially those who have not been teaching outcomes-based education (OBE) who report having difficulty adapting to the new system.

12. Database management

To draw the sample for the study required access to information on the geographic location of schools and the number of teachers employed at each school. There were serious difficulties in developing a sampling frame for the study due to lack of unique identifiers allowing educators to be linked to specific schools, as well as duplicate records; thus it was not easy to compile the total numbers of educators at schools. It is therefore recommended that the South African Council of Educators (SACE) develop a web-based system that will allow district managers to update information on school locations and attributes on a regular basis. ABET Adult basic educational training

LIST OF ABBREVIATIONS



AIDS	Acquired Immune Deficiency Syndrome
ARRM	AIDS Risk Reduction Model
ARV	Anti-retroviral
ASSIST	Alcohol Smoking and Substance Involvement Screening Test
ATEE	Assessment Technology and Education Evaluation
AUDIT	Alcohol Use Disorders Identification Test
CADRE	Centre for AIDS Development, Research and Evaluation
CI	Confidence interval
CLS	Contract Laboratory Services
Cv _r	Coefficient of relative variation
DHS	Demographic and Health Survey
DoE	Department of Education
EAP	Employee Assisted Programmes
EEPR	Employment and Economic Policy Research
ELRC	Education Labour Relations Council
EMIS	Education Management Information System
FET	Further Education and Training
FL	Foundation languages
GHS	General household survey
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
HEI	Higher Education Institutions
IDU	Injection drug use
ISCO	International Standard Classification of Occupations
MOS	Measure of size
MRC	Medical Research Council
Naptosa	The National Professional Teachers' Organisation of South Africa
Natu	National Teachers' Unions of South Africa
NGO	Non-governmental organisation
OBE	Outcomes-based education
PERSAL	Personnel Salary System
PPS	Probability proportional to size
PSU	Primary sampling unit
SACE	South African Council of Educators
Sadtu	South African Democratic Teachers' Union
SAHA	Social Aspects of HIV/AIDS and Health
SAMM	Surveys, Analyses, Modelling & Mapping

THE HEALTH OF OUR EDUCATORS

SANC	South African Nursing Council
SAS	Statistical Analysis System
SE	Standard error
SGB	School Governing Body
SAOU	Suid Afrikaanse Onderwysers' Unie
SASA	South African Schools Act
SPSS	Statistical Package for Social Scientists
SRN	School Register of Needs
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TB	Tuberculosis
TTT	Technical Task Team
USU	Ultimate sampling unit
VCT	Voluntary counselling and testing
WHO	World Health Organization