



HIV knowledge, attitudes and behaviours: The situation at technical, vocational education and training (TVET) colleges in South Africa

Introduction

The HSRC 2012 population-based survey of national HIV prevalence, incidence and behaviour reported that there were approximately 469 000 new HIV infections in 2012 (Shisana et al. 2014). More than one-third of these infections (192 000) were among young people in the 15–24 years age group, with females accounting for 90% of new infections. Among those 25 years and older, 300 000 new infections were estimated, with the highest number of infections among females (175 000) compared to males (125 000). The majority of students in South Africa's public higher education institutions (HEIs) and technical and vocational education and training (TVET) colleges belong to this most affected age group, especially those 18–24 years old (MacGregor 2012). In addition, the impact of HIV/AIDS and associated risk behaviour pose a threat to both students and employees alike. The Higher Education and Training

HIV/AIDS Programme (HEAIDS) is an initiative of the Department of Higher Education and Training (DHET) that is implemented through Universities South Africa (formerly Higher Education of South Africa – HESA) in partnership with the South African College Principals Organisation (SACPO). HEAIDS is therefore a relevant platform from which to provide interventions to prevent new HIV infection, as well as care and support for infected or affected employees and students.

In 2009, HEAIDS commissioned a study on HIV knowledge, attitudes, beliefs and practices at the country's 23 public universities (HEAIDS 2010). The study found that the HIV prevalence rate was about three times higher among students over the age of 25 years than among younger students. Female students were hardest hit, with a prevalence of 4.7%, which was twice the rate for their male peers. On average, HIV prevalence was 1.5% among academic

staff (1.4% and 1.5% among female and male academics, respectively). African academics had the highest prevalence at 5.9%. The study also revealed wide variations in HIV prevalence among HEIs in different regions (HEAIDS 2010).

In view of the high rate of HIV within South Africa's public university sector, HEAIDS commissioned another study, in January 2014, to obtain information that will provide an overview of the situation and also serve as baseline data on knowledge, attitudes and behaviours of students and staff in relation to HIV and AIDS in the TVET sector. The DHET's concern was that the response of many TVET colleges to the HIV epidemic has been inadequate and that the HEAIDS programme should be extended to benefit these institutions. Thus the main purpose of the survey was to obtain empirical evidence to inform policy and the design of HIV interventions in the TVET college sector.

The study population consisted of 658 690 students and 16 000 academic and non-academic staff at 50 TVET colleges nationally. The colleges are housed in 236 campuses in both rural and urban areas. The study utilised a multistage cluster-sampling design to select a sample of campuses across the country. All TVET colleges were represented in this sample, which covered about 70% of campuses. A pre-test survey was conducted to establish baseline measures of students' and staff's level of HIV knowledge, attitudes and behaviours before the HEAIDS intervention, and the plan was to collect the same data after the HEAIDS intervention took place (post-test) in 2016. Only first-year consenting students were included in the sample. Entire classes of students were sampled and a researcher read the questions to the class, with students completing their own questionnaires. Consenting staff members were either interviewed in private by a researcher who completed the questionnaire or

asked to complete the questionnaire themselves. Fieldwork was conducted from June to September 2014.

Key research findings

Background characteristics

Data were collected from 5 651 students and 1 003 staff members, representing 84.9% and 15.1% of the total sample respectively. Overall, there were slightly more female (51.4%) than male (48.6%) participants. The race composition of the respondents was 87.1% African, 6% white and 5.9% coloured. More than half of the respondents were Christian (52.7%), one-third were African Traditionalists, 1.5% were Muslim, 0.9% were Jewish and 11.1% adhered to other, unspecified religions.

The majority of students were African (88.9%), aged 18–24 years (77.6%), female (50.9%) and from urban areas (64%). Similarly, most of the staff members were African (76.7), female (53.9%) and from urban areas (64.9%); they were mostly 24 years and older (89.6%).

A higher proportion of male students (63.1%) relative to female students (49%) reported that they were currently sexually active. Proportionately more students (45.7%) than staff (22.9%) were in a relationship but not living with their partner. More students (22.8%) than staff (16.8%) were living alone. There was no difference between male and female students in terms of relationship status.

A high proportion of students (83.1%) and staff (87.4%) identified themselves as heterosexual, 7.3% of students and 5.2% of staff said they were homosexual, and 5.2% of students and 4.4% of staff described themselves as bisexual.

Awareness and knowledge of HIV and AIDS

Although most of the respondents (87%) said that they had heard about AIDS,

awareness about AIDS was significantly higher among students than staff (90% vs 71%; $p = <0.001$). A high proportion of students (96%) and staff (97%) knew that HIV could be transmitted through unprotected sex. A high proportion of students (83.8%) and staff (89.7%) knew that sexually transmitted infections (STIs) put people at greater risk of HIV infection. However, 37.9% of students and 25.4% of staff admitted that they did not know whether having anal sex increased the risk of HIV infection.

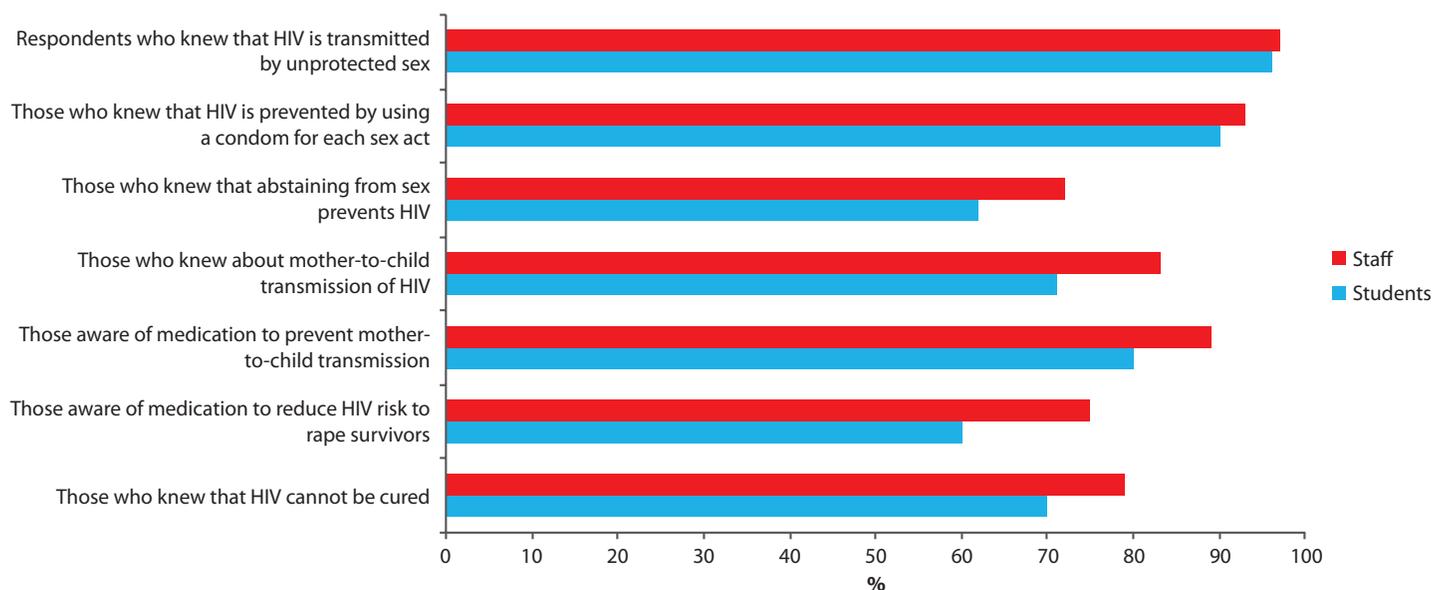
Only 62% of students and 72% of staff knew that people could protect themselves from HIV by not having sexual intercourse. More staff (83%) than students (71%) knew that the HIV virus could be passed from a pregnant mother to her unborn child if the mother was infected. More than two-thirds (70%) of students and 79% of staff were aware that AIDS could not be cured. Only 16.2% of staff believed that AIDS can be cured. There were relatively high levels of awareness and knowledge about biomedical methods of HIV prevention. Only 60% of students and 75% of staff had heard about medication that could help reduce the risk of HIV infection if a woman had been raped (see Figure 1).

Attitudes towards people living with HIV

Most students and staff at TVET colleges had positive attitudes towards people living with HIV (PLHIV), but a minority in both groups were unwilling to be associated with or share living space with PLHIV.

- Proportionately more students (21%) than staff (14%) indicated that they did not want to be associated with HIV-positive people. More male students (16.1%) than female students (11%) felt this way, as did more white students (25%) than African students (13%).
- Similarly, more students (24%) than staff (19%) reported that sharing a

Figure 1: Awareness and knowledge of HIV and AIDS among TVET students and staff



house with HIV-positive people would be very difficult for them. More male students (25%) and male staff (22%) felt this way than female students (22%) and female staff (17%).

- More students (20%) than staff (14%) indicated that people who became infected with HIV were promiscuous. More male students (22%) than female students (17%) felt that HIV-positive people should not be allowed to socialise with HIV negative people.

Attitudes to HIV and AIDS treatment

Students and staff at TVET colleges had positive attitudes to treatment for HIV and AIDS. A similar proportion of students (79%) and staff (77%) reported that they trusted that HIV treatment worked. Approximately 80% of students and 82% of staff agreed that HIV treatment would keep an HIV-positive person alive. More than 8 out of 10 respondents rejected the notion that antiretroviral (ARV) medication was poisonous.

Attitudes towards condom use

A substantial proportion of students and staff expressed negative attitudes to condom use. Overall, 40.8% of students

and 43% of staff said that condoms felt unnatural, and nearly one-third of students and staff said that condoms negatively affected sexual climax. Figure 2 shows that more than a quarter of students (26%) and staff (27%) reported that they used condoms only if their sexual partners wanted them to. Furthermore, more male students (40.1%) and male staff (39.6%) than female students (27.3%) and female staff (25.3%) said that condoms should only be used if having sex with a person other than one's main sexual partner.

Patterns of condom use

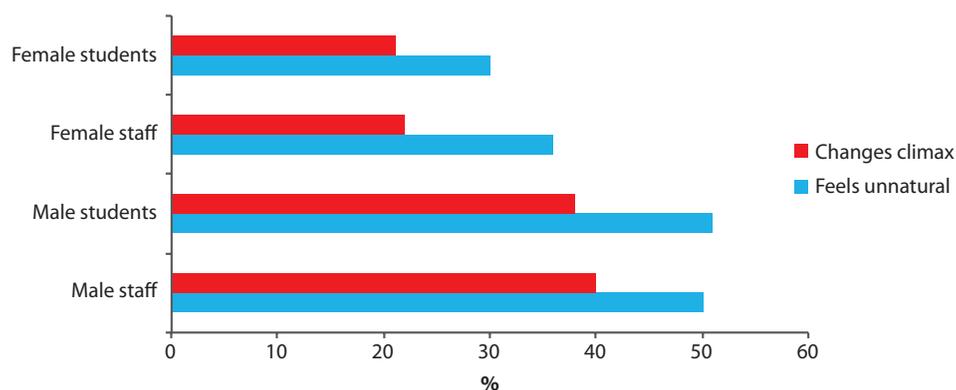
Reported condom use at last sex with a main sexual partner was 55.1% for

students and 34.5% for staff members. Condom use at last sex with a non-regular partner was 75.5% for students and 76.3% for staff, while consistent condom use ('every time') with non-regular partners was less than 60% among both staff and students (57.7% for students and 54.4% for staff). The proportion of consistent condom use ('every time') also hovered around 60% among those who have sex with commercial sex workers (61% for students and 59% for staff).

Male circumcision

The self-reported rate of male circumcision was high: almost two-thirds of male students (66%) and

Figure 2: Attitudes of TVET students and staff to condom use



over half of male staff (54%) said they had been circumcised. Among male respondents, medical male circumcision performed in a hospital was preferred by 76% of students and 85% of staff, while traditional circumcision was supported by 18% of students and 12% of staff. Among the uncircumcised respondents, there was overwhelming support for medical male circumcision, with 93% of male staff and 86% of male students saying they preferred medical circumcision to traditional circumcision for themselves.

Substance use

About 59.5% of students and 57.5% of staff indicated that they consumed alcohol. Use of other habit-forming substances at TVET colleges was confined mainly to marijuana (11% of students and 5% of staff). However, a small proportion of students and staff indicated the use of crack cocaine (2% of students and 1% of staff) and Mandrax, tik, nyaope and wunga (each of which was used by 1% of students and 0.6% of staff members).

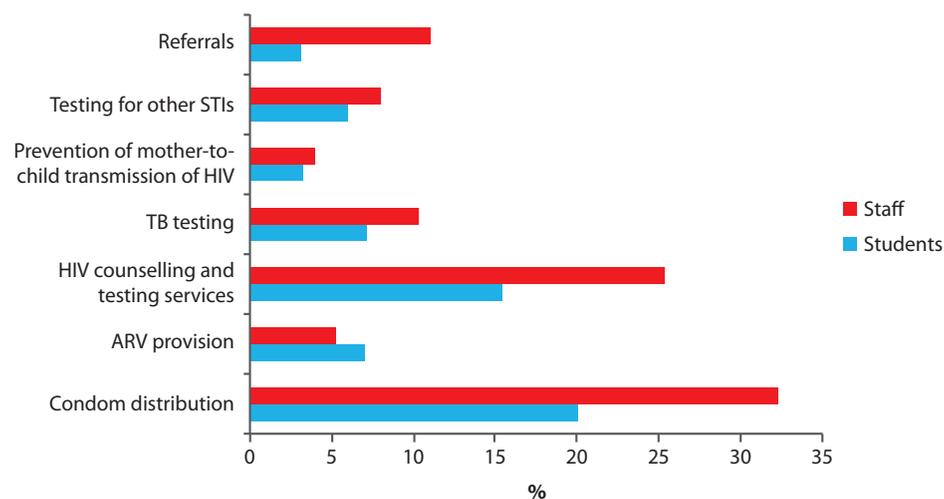
Pregnancy

Students and staff presented contrasting pictures in relation to pregnancy-related experiences. Among staff, 70% of respondents said they had been pregnant or made someone pregnant. Two-thirds of these pregnancies were planned, while 10% had led to an abortion. Among students, 31.7% had been pregnant or made someone pregnant, and only a small proportion of these pregnancies (25%) had been planned. Among students, 16% said they or a sexual partner had had an abortion.

Existing services at TVET colleges

Condom distribution and HCT were the most commonly mentioned services available at TVET colleges. On condom distribution 32% of staff and 20.1% students indicated that condoms were being distributed, and on HCT 25.4% of

Figure 3: HIV-related services provided for students and staff at TVET colleges



staff and 15.5% of students indicated that these services were available. The figures for ARV provision and testing of other STIs and TB were lower.

Sources of information

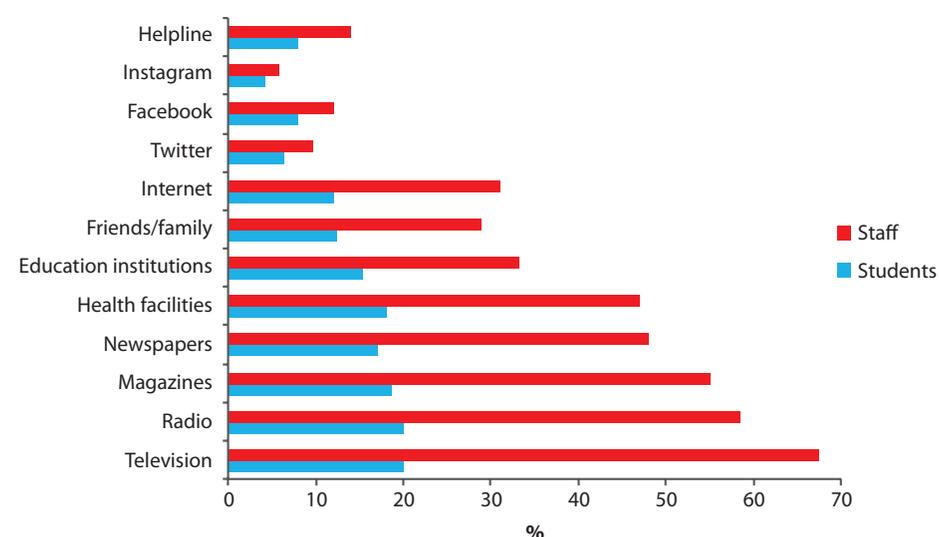
Only one in five students said they obtained information on HIV prevention and treatment from any type of media or health facilities, and even fewer from their education institutions (Figure 4). Online and social media were not widely used. While staff members used the mass media quite extensively for HIV and AIDS information, only a minority of students did the same. For example,

68% of staff members used TV, 59% used radio and 48% used newspapers to access information on HIV. The figures for students were 20% for TV, 20% for radio and 17% for newspapers. Only 15.3% of students and 33.3% of staff mentioned education institutions as a major source of information.

Conclusion

The survey reveals that there is a fair amount of knowledge about HIV among respondents, but that some students lack an understanding of their personal risk for contracting HIV. This is evident in the figures on self-reported condom

Figure 4: Main sources of HIV and AIDS information provided by institutional programmes for students and staff at TVET colleges



use at last sex and on unplanned pregnancies, which may indicate that a high proportion of students and staff engaged in unprotected sex with their regular sex partner.

Rates of condom use at last sex for students and staff were consistent with rates reported in the HSRC 2012 population-based survey (Shisana et al. 2014) and the HEAIDS 2010 study (HEAIDS 2010). However, reported rates of *consistent* condom use in this study are considerably higher than those in the 2012 HSRC study. The proportion of TVET students who reported the use of condoms 'every time' was higher than the proportion of those who used a condom at last sex; however, positive attitudes about condom use were lacking for a substantial number of respondents.

Furthermore, a minority of respondents indicated that they were aware of HIV services on campus (e.g., HIV counselling and testing services; condom distribution). Similarly, only a small proportion of respondents indicated that their college was a source of HIV information. These survey findings highlight major gaps in the provision of HIV-related services and information on TVET campuses.

Recommendations

Given all the HIV-related programmes that exist under HEAIDS across TVETs, it is a matter of concern that only a minority of respondents said that there were HIV-related services and educational sources available on their campus. We therefore recommend that HEAIDS, in partnership with TVET colleges, develops appropriate programmes to build knowledge and shift attitudes and behaviours in accordance with the above findings. These interventions should include, but not necessarily be limited to, the following:

Strengthen the structural role of the TVET sector in preventing HIV.

TVET colleges contribute to HIV prevention simply by providing tertiary education options for large numbers of young people. Research indicates that retaining young people, especially young women, in formal education reduces their risk of HIV infection.

Develop wellness clinics for biomedical HIV prevention, care and treatment.

Attention must be given to the development of campus-based wellness clinics that have a strong focus on sexual and reproductive health, given the life stage of students. Every campus should be assisted to establish a clinic or expand an existing facility so that it can offer the full spectrum of primary HIV care and a range of HIV and TB services. Health and wellness centres located in TVET colleges must be linked to accredited sites that offer support for persons living with HIV and AIDS.

Implement sexual and reproductive health services on TVET campuses.

Put in place sexual and reproductive health programmes that target TVET colleges and emphasise education and promotion of sexual health. These programmes should provide information and services related to pregnancy prevention, family planning, infertility services, diagnosis and treatment of STIs, cervical cancer, promotion of sexual health and sexual counselling.

Harness the power of health education and communication to stimulate change.

Communication is a dynamic, interactive process capable of shaping attitudes, influencing the culture of communities and mobilising people to take action. TVET colleges can benefit from local experience in the field of social- and behaviour-change communication. Suggested actions for TVET colleges include:

- become part of national HEAIDS initiatives, such as the HEAIDS First Things First (HIV/STIs/TB) programme to promote HIV counselling and testing and contraceptive choice among students;
- promote interest in the new scented and coloured condoms that government is sponsoring and providing to TVET students;
- affiliate to national HIV campaigns – such as Brothers for Life for men, the HEAIDS Women's Health Empowerment Programme, and Rise Young Women's Clubs – and help them grow; and
- access advice; plan and implement unique campus communication initiatives, allowing students to engage with and shape campaigns.

Create a solid, inclusive management team for the development of HIV programmes.

At college level, development of HIV programmes should involve college management, student leadership, trade union representatives and, where possible, representatives of partner organisations, such as the provincial health department and relevant non-governmental organisations.

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