# HIV/AIDS EDUCATION IN SOUTH AFRICA: KNOWLEDGE, ATTITUDES AND BELIEFS OF HIGH SCHOOL LEARNERS IN PAARL AND WELLINGTON. 

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#### Abstract

Introduction In South Africa about 1500 people become HIV infected every day. More than half of these new infections occur in young people. HIV/AIDS programmes have been implemented to combat the disease, but yet the incidences are still on the increase.


## Aim

The aim of this study was to determine the knowledge, attitudes and beliefs of high school learners about HIV/AIDS in the Paarl and Wellington area.

## Methodology

This study made use of a quantitative study design, by means of a self-administered questionnaire in order to reflect the knowledge, attitudes and beliefs of high school learners in the Paarl and Wellington areas regarding HIVIAIDS. Convenient sampling was used to obtain a large enough sample size to represent the learner population represented by the high schools in Paarl and Wellington. Data analysis was done using the SPSS version 10.0 to obtain frequencies, means and percentages. Cross-tabulations were done to determine relationships between variables.

## Results

This study confirms that the learners have basic knowledge regarding HIV/AIDS. The learners make use of this knowledge during some stages of their decision-making but a lack of more in-depth knowledge in certain areas may put them at risk of becoming HIV infected. They might not perceive themselves to be at risk. Their beliefs and attitudes in some instances did afford them the opportunity to make certain safer choices regarding their sexual health.

## Conclusion

It is evident that the HIV/AIDS education programmes is making an impact to improve the knowledge of the learners. Further research is however needed to find even more effectives means to provide learners and the rest of the population with more in-depth knowledge regarding HIVIAIDS.

## Key words

knowledge, attitude, beliefs, HIV/AIDS, high school learners

## Introduction

The Joint United Nations Programme on HIVIAIDS (UNAIDS) and the World Health Organization (WHO) reported in 2000 that over a period of 20 years half of the more than 60 million people who had been infected with HIV had become infected between the ages of 15-24 years (UNAIDS and WHO, 2000). Close to five million people were living with HIV/AIDS in South Africa at the end of 2001 (Kenyon, Heywood, Conway and Conway, 2001:162; Dept of Health, 2002). Every day about 1500 people become infected with HIV in South Africa. More than half of these new infections occur in young people (Dickson Tettech, 2000:396).

From the time they become sexually active adolescents and young adults are at high risk of contracting sexually transmitted diseases, including HIV. Turner, Miller and Moses (1989) stated that adolescence is a period of unpredictable behaviour. Lacking the judgment that comes with experience, adolescents often cannot appreciate the adverse consequences of their actions. The vast majority of the world's young people have no idea how HIVIAIDS are transmitted or how to protect themselves against the disease (United Nations Children Fund (UNICEF), UNAIDS and WHO, July 2002). Misconceptions about HIVIAIDS are widespread among young people and may vary from culture to culture (Eaton and Flisher, 2000). In certain cultures it is believed that HIV is spread by mosquito
bites or witchcraft and that one can be cured of it by having sex with a virgin (Groce, Trasi (2004); Meel (2003). As in the rest of subSaharan Africa, the epidemic in South Africa disproportionately affects women. Young women (15-24 years) are four times more likely to be HIV-infected than are young men: in 2005, prevalence among young women was $17 \%$ compared with $4.4 \%$ among young men (Shisana et al., 2005). In countries where the spread of HIV/AIDS is subsiding or declining, such as Thailand and Uganda, it is primarily because young men and women are being given the knowledge, tools and services to adopt safe behaviours (Phoolcharoen, 1998; Asiimwe-Okiror et. al. 1997).

Shisana and Simbayi (2002) reported following the Nelson Mandela / Human Sciences Research Council (HSRC) study of HIVIAIDS - South African National HIV Prevalence, Behavioural Risks and Mass Media Household Survey 2002 that prevention behaviour changes were taking place amongst the South African population due to education about HIVIAIDS. They further stated that since the 1998 Demographic and Health Survey, many more people were practicing safer sex. Most respondents however indicated that they needed more information on matters such as HIV prevention and HIV testing. It is, however, important to note that in this study nearly two-thirds of those who were found to be HIV-positive had not believed they were at risk of HIV infection.

In general most studies indicate that a high level of knowledge about HIV/AIDS transmission and prevention exists (Everatt and Orkin, 1993; Richter, 1996; and Shisana and Simbayi, 2002). However, the studies also report that some areas of knowledge about HIV/AIDS are lacking. This leads to misconceptions and risky behaviour. Information for young people regarding HIV/AIDS is often obtained from television, magazines and pamphlets (Peltzer and Seoka, 2002; and Shisana and Simbayi, 2002). To be able to provide effective education programmes that meet the needs of the different population groups, it has become essential to focus research and intervention on groups with different cultural and educational backgrounds.

Given the HIV infection rate in South Africa, it is obvious that South Africa faces a serious problem if no cure for HIV/AIDS is found or a change in sexual attitudes or behaviours is not fostered. Among the youth and young adults the prevalence is high and it is with this in mind that the South African Government has conducted several education campaigns costing millions of rands to alert South Africa about the seriousness of unprotected sexual activities and to provide the youth with knowledge in order to influence attitudes and beliefs. Schools have embarked on HIV/AIDS education programmes as part of the curriculum. Whether these campaigns have had an effect on the youth can only be
ascertained through determining the knowledge, attitudes and beliefs of the young people. The aim of this study was to determine the knowledge, attitudes and beliefs of high school learners about HIV/AIDS in the Paarl and Wellington area. This article will discuss the methodology used for the study as well as the results. It will provide concluding comments on the findings.

## Methodology

## Research setting

Paarl and Wellington are two towns in the Western Cape Province that form part of the Drakenstein Municipal Area. The Drakenstein Municipal area has a population of 200000 (Statistics South Africa, 2001). These two towns account for the majority of the population of 200000 of this area, of which 14\% are aged between 13-18 years (Statistics South Africa, 2001). Four high schools two from each town were selected to participate in this study. Criteria for selection were aimed at providing a large enough sample size to represent the learner population represented by the high schools in Paarl and Wellington.

## Research subjects and sample

The population consisted of 2197 learners. Subjects for the study were adolescents aged between 13-18 years. Consent was obtained from the parents and the participants via a letter requesting parents to express whether they give permission for their child to participate. The participants
were also informed that their participation is voluntary and they are allowed to withdraw at any time. The purpose of the study was explained and confidentiality was assured. Information about HIV/AIDS counselling and testing procedures was made available to all participants.

## Research design and survey instrument

A quantitative cross-sectional descriptive survey was used. A self-administered questionnaire which was adapted from questionnaires used by Uwalaka and Matsua (2002) and Torabi and Yarber (1992) was employed to assess the learners` knowledge, attitudes and beliefs regarding HIV/AIDS.

The section of the questionnaire related to knowledge learners on HIV/AIDS consisted of 11 items requiring them to make a choice between three categories, namely "Yes", "No" and "I do not know". The section assessing the learners` beliefs about HIV/AIDS consisted of four items requiring them to make a choice between responses, namely "Strongly agree", "Agree", "Strongly disagree" ,"Disagree" and "Undecided".

The section dealing with the attitudes of the learners towards prevention of and attitudes towards people with HIV/AIDS consisted of 15 items requiring the learners to make a choice between responses, namely "Strongly agree", "Agree", "Strongly
disagree" , "Disagree" and "Undecided". The learners could thus score a negative, undecided or a positive prevention attitude.

## Data analysis

Knowledge scores were classified according to 3 categories: 1=< 50\% knowledge; 2=50 $-70 \%$ and $3=>70 \%$. The data was coded and captured on a spreadsheet using the Word Excel computer programme and then it was imported into the Statistical Package for Social Sciences (SPSS) version 10.0. Analysis was done to obtain frequencies, means and percentages. Cross-tabulations were done to determine relationships between variables.

## Results

## Socio-demographic characteristics

There were 2197 participants in this study, and 89 questionnaires were excluded due to the questionnaires being incomplete. Thus 2108 questionnaires were completed yielding a response rate of $93 \%$. The respondents' ages ranged from 13-18 years with a mean age of 15.23 years. The malefemale representation was $43 \%$ and $57 \%$ respectively. The majority of the learners were from the town area a ratio of 1:4 (farm:town). Detailed statistics is presented in Table 1 below regarding the demographic data.

TABLE 1: Demographic Distribution

| Variable | Age (years) | $\mathbf{n}$ | $\%$ |
| :--- | :--- | :--- | :--- |
| Age | 13 | 304 | 14.4 |
|  | 14 | 466 | 22.1 |
|  | 15 | 476 | 22.6 |
| Gender | 16 | 385 | 18.3 |
|  | 17 | 251 | 11.9 |
|  | 18 | 226 | 10.7 |
|  | Male | 908 | 43.0 |
|  | Female | 1200 | 57.0 |
|  | Farm | 429 | 20.4 |
|  | Town | 1679 | 79.6 |
|  | 8 | 671 | 31.8 |
|  | 10 | 568 | 26.9 |
|  | 11 | 492 | 23.3 |

## Learners` knowledge regarding HIV/AIDS

Questions asked about HIV prevention and transmission in order to determine learners` knowledge regarding HIVIAIDS yielded the following results as illustrated in figure 1: the majority of the respondents (44\%) scored
between 50-75\% while $40 \%$ respondents scored above $75 \%$, which reflects good knowledge. Sixteen percent scored less than $50 \%$ for this knowledge section, which reflects very poor knowledge.

Figure 1: Knowledge scores of learners regarding HIV/AIDS


Figure 2 illustrates that 168 of the respondents who scored less than $50 \%$ on the knowledge section, knew or had contact with someone who was infected with HIV,
whilst in figure 3 it is shown that 170 of the respondents who scored less than $50 \%$ knew someone who had died of AIDS.

FIGURE 2: Knowledge scores in relation to contact of respondents with persons who were HIV infected ( $\mathrm{N}=2108$ )


Figure 3: Knowledge scores in relation to contact of respondents with persons who had died of aids ( $\mathrm{N}=2108$ )


## Learners` beliefs about HIV/AIDS

To assess the beliefs of respondents with regard to HIV/AIDS, the researcher asked respondents to answer four questions. It is important to note that when respondents were asked whether they felt that taking the proper precautions would reduce their chances of getting HIV/AIDS, only $60 \%$ of
the respondents answered positively. In addition, $32 \%$ felt that they could already have been exposed to HIV/AIDS and 48\% agreed that they might be at risk of contracting HIV/AIDS as a result of present health risk behaviour.

Figure 4: Prevention attitude scores


## Learners` attitudes towards HIV/AIDS

Ninety-three percent of the respondents demonstrated a positive prevention attitude (compare figure 4). There was no significant difference between the knowledge, attitudes and beliefs scores ( $p>0.05$; df 105). When investigating individual questions pertaining to knowledge, beliefs and prevention attitudes of the learners, one finds that the more in-depth knowledge regarding HIVIAIDS is lacking. This results in respondents participating in certain risk-
taking behaviours. It is evident in figure 5 that the respondents knew that sexually transmitted diseases increase one`s chances of becoming HIV/AIDS infected but only $23 \%$ of the respondents referred to in figure 6 knew that gonorrhea is a sexually transmitted disease. Furthermore, when the respondents were asked whether they felt that taking the proper precautions would reduce their chances of getting HIV/AIDS, only $60 \%$ gave a positive response. Respondents have shown that they have
adequate knowledge but it would be worthwhile exploring why $30 \%$ of the respondents were still undecided and $25 \%$
agreed that they would dislike the idea of limiting themselves to one sexual partner to prevent infection with HIV.

Figure 5: Knowledge item 1: Gonorrhea is a sexually transmitted disease


Figure 6: Knowledge item 2: sexually transmitted diseases increases you're chances of becoming HIV-infected


## Information mediums regarding HIVIAIDS

The most common medium through which respondents indicated that they received information on HIV/AIDS was the television ( $86 \%$ ), followed by the radio ( $72.2 \%$ ) and the schools (69.4\%). The statistic of note is that $30 \%$ of the respondents indicated that they had not received education or information on HIV/AIDS from their respective schools.

## Discussion

Most respondents had a good knowledge about HIV/AIDS, with no significant difference between the gender and age categories. However, when knowledge questions were categorised into areas of transmission and prevention, it became evident that there were gaps in the learners` knowledge regarding HIVIAIDS prevention behaviours. If knowledge about HIV/AIDS is seen as one of the outcomes of HIV/AIDS education programmes then it seems that the interventions do not adequately inform all the learners between the ages of 13-18 years of age as only $16 \%$ of the respondents had above the 75\% knowledge on HIV/AIDS prevention.

Eaton and Flischer (2000) made similar findings in a review of literature on HIV/AIDS knowledge among South African youth. This review of literature included studies conducted in high schools in the Western Cape. They reported that the areas, in which knowledge was best, corresponded to the basic and most publicised features on AIDS: the fact that the disease is sexually
transmitted and that it is eventually fatal for almost all sufferers. However it was also stated in this review that three areas of mediocre or variable knowledge existed, namely knowledge about the dormant, asymptomatic phase of HIV infection; knowledge about prevention; and AIDS "myths" or misconceptions.

The results of this study compare well with the literature as respondents scored well on the basic knowledge: 82\% of respondents knew that sexually transmitted diseases increase one's chances of becoming HIV infected (figure 6). However, it is alarming that only $23 \%$ of the respondents knew that gonorrhea is a sexually transmitted disease (figure 5). The value of these findings thus lies in the fact that prevention can only occur if the participants perceive that they are at risk of contracting a sexually transmitted disease.

A further concern to note is the fact that $80 \%$ of those respondents who scored less than $50 \%$ on the knowledge section knew someone in their community who was infected with HIV or who had died of AIDS (figure 2 and 3). It is of the utmost importance that these respondents should have appropriate knowledge on prevention and transmission of HIV/AIDS in order for them to protect themselves from becoming infected if they should participate in health risk behaviours. However we are aware that knowledge does not necessarily translate into positive behaviour.

According to Everatt and Orkin (1993) fewer than half of the South African youth in the 1990s perceived themselves as being at any risk for contracting HIV/AIDS. Blecher, Steinberg, Pick, Hennick and Durcan (1995) found that fewer than $40 \%$ of their sample felt any risk from HIV/AIDS, and only $9 \%$ perceived a serious risk. In this study it was observed that a high percentage of respondents ( $48 \%$ ) were undecided as to whether they might contract HIVIAIDS at some time in their life. A further $32 \%$ felt that they might have been exposed to HIV/AIDS already. This suggests a need to target these age groups for HIVIAIDS education more intensely as their responses suggested that they were engaging in practices that put them at risk of contracting HIV/AIDS or that they did not have sufficient knowledge to distinguish what potentially risky health behaviours might be.

The majority of respondents had a positive prevention attitude towards the following issues: whether respondents would avoid sex if there were a small chance that their partner might be infected with HIV and whether respondents would dislike the idea of limiting themselves to one sexual partner to prevent infection with HIV respectively. However it is disconcerting that $17 \%$ of the respondents were still undecided and $18 \%$ disagreed with the statement that one should avoid sleeping with a partner if there is a small chance that their partner might be infected. Similarly $30.1 \%$ of the respondents were undecided and $25.4 \%$ agreed that they
would dislike the idea of limiting themselves to one sexual partner. The implications of one HIV positive person having unprotected sex with more than one partner are immeasurable; as such behaviour can have a ripple effect. From these findings it is clear that although overall positive prevention attitude scores can be obtained, the possibility exists that individual issues will elicit findings that need to be addressed.

The study found television to be the medium from which the highest proportion of respondents (86.2\%) had received HIV/AIDS education. This was followed by radio (72.2\%) and education received at schools (69.4\%). It is worth noting that 30\% of the respondents in the current study indicated that they did not receive HIVIAIDS education via their school. This is disconcerting in view of the directive from the Western Cape Education Department to schools to render HIVIAIDS education, as part of their sexual life skills education programmes. If HIV/AIDS education was being implemented at schools the majority of learners should receive most of their education at school. As these young people spend a large proportion of their time at school this would be the ideal place in which to improve their knowledge, beliefs and attitudes regarding HIV/AIDS.

## Conclusion

This study confirms that the respondents have basic knowledge on HIV/AIDS. It is evident that the respondents make use of
this knowledge at some stages in their decision-making. However, the results have also shown that the lack of more in-depth knowledge in certain areas indicates that the respondents may be more vulnerable to making choices that put them at risk of becoming HIV/AIDS infected, because they do not perceive themselves to be at risk. Their beliefs and attitudes in some instances did afford them the opportunity to make certain safer choices regarding their sexual health. Further research is needed to assist in providing means of improving ongoing and in-depth knowledge which can assist learners in selecting safer sexual practices, which could make the prevention of HIV/AIDS not a choice, but a way of life.

## References

Asiimwe-Okiror, G., Opio, A., Musinguzi, J., Madraa, E., Tembo, G. \& Carael, M. (1997). Changes in Sexual Behaviour and Decline in HIV Infection among Young Pregnant Women in Urban Uganda. AIDS 11, 1757-1764.
Blecher, M., Steinberg, M., Pick, W., Hennick, M. \& Durcan, N. (1995). AIDS - knowledge, attitudes and practices among STD clinic attenders in the Cape Peninsula. South African Medical Journal. 18,1281-1286.
Department of Health (2002). National HIV and syphilis sero-prevalence survey of women attending public antenatal clinics in South Africa 2001. Pretoria: Department of Health.
Dickson-Tetteh, K. \& Ladha, S. (2000). Youth health. South African Health Review 2000. Durban: Health Systems Trust: 393-409.
Eaton, L. \& Flisher, A.J. (2000). Review: HIV/AIDS knowledge among South African youth. South African Journal of Child and Adolescent Mental Health, 12, 97-125.
Everatt, D. \& Orkin, M. (1993). Growing up tough: A national survey of South African youth. CASE

National Youth Survey for the Joint Enrichment Project. Johannesburg: Community Agency for Social Enquiry.
Groce, N. \& Trasi, R. (2004). Rape of individuals with disability: AIDS and the folk belief of virgin cleansing. Lancet, 363, 1663-1664 PMID 15158626
Kenyon, C., Heywood, M., Conway, M and Conway, S (2001). Mainstreaming HIV/AIDS: progress and challenges. South African Health Review. Durban: Health Systems Trust: 161-183.
Meel, B.L. (2003). The myth of child rape as a cure for HIV/AIDS in Transkei: a case report. Medical Science Law 43, 85-88 PMID 12627683
Peltzer, K. \& Seoka, P. (2002) HIV/AIDS Knowledge, Attitudes, Beliefs and Behaviours among Rural South African Youth: Implications for Health Education. African Journal for Physical, Health Education, Recreation and Dance 8(1): 1-25.
Phoolcharoen, W. (1998) HIV/AIDS Prevention in Thailand: Success and Challenges. Science 280(5371): 1873-1874.
Richter, L. (1996). A survey of reproductive health issues among urban black youth in South Africa. Centre for Epidemiological Research in South Africa, Pretoria.
Shisana, O. \& Simbayi, L. (2002). Nelson Mandela/ Human Sciences Research Council (HSRC) Study of HIVIAIDS - South African National HIV Prevalence, Behavioural Risks and Mass Media Household Survey 2002. Cape Town: Human Sciences Research Council 2002. http://www.hsrcpublishers.co.za/hiv.html The Joint United Nations Programme on HIV/AIDS/ World Health Organisation (2000) AIDS campaign with children and young people. (http://www.unaids.org)
Statistics South Africa : Census 2001
http://www.statssa.gov.za/SpecialProjects/Census2 001/Census/Dialog/ Saveshow.asp
Shisana O et al. (2005). South African national HIV prevalence, HIV incidence, behaviour and communication survey. Pretoria, Human Sciences Research Council.
Torabi, M. \& Yarber, W. (1992). Alternate forms of the HIV prevention attitude scale for teenagers. AIDS Education and Therapy 4: 172-182.

Turner, C., Miller, H. \& Moses, L. (1989) eds. AIDS: Sexual Behavior and Intravenous Drug Use. Washington, D.C., National Academy Press, 1989. United Nations Children's Fund / The Joint United Nations Programme on HIV/AIDS Morld Health Organization. Young People and HIVIAIDS: Opportunity in Crisis. Geneva: UNICEF/UNAIDS/WHO(2002). Available at:
www.unicef.org/pubsgen/youngpeople-
hivaids/index.html.
Uwalaka, E. \& Matsuo, H. (2002). Impact Of Knowledge, Attitude and Beliefs About AIDS On Sexual Behavioural Change Among College Students in Nigeria: The Case of the University of Nigeria NSUKKA. West Africa Review Journal: 3(2): 66-82.

