Knowledge, attitudes, beliefs and practises (KABP) of adolescents / young adults (15-24 year of age) attending a private general practice, regarding HIV Voluntary Counselling & Testing (VCT)

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DECLARATION

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ABSTRACT

Background

By 2005 an estimated 5.5 million South Africans were living with HIV and the peak prevalence of HIV/AIDS occurs in young people aged 15-24 years. In order to develop prevention strategies aimed at young people, it is important to determine risk behaviours for HIV in this age group. As VCT has been shown to impact on risk behaviours, it is important to determine the accessibility of these services to youth.

Aim

This study assessed the knowledge, attitudes, beliefs and practises (KABP) of young adults, 15-24 years of age attending a private general practise, regarding risks for HIV and accessibility of HIV Voluntary Counselling and Testing (VCT) services.

Methods

This was a cross-sectional study. A self-administered questionnaire was completed by a sample of 100 patients attending a general practice located in Athlone.

Results

Thirty-six of respondents were male and 64 were female. The age range was 15 to 24 years, with a mean age of 20.2 years. The demographic profile of the study population was typical of a formal urban settlement in a traditionally coloured area.

Sixty four percent of respondents reported current or previous sexually activity, of which 89% reported that they had one sexual partner over the preceding three months and 58%, reported not using a condom at their last sexual encounter. The mean age of sexual debut was 16 years. Most respondents could identify safer sexual practices.

While 97% of respondents had heard of HIV, only 33% knew someone who had died of HIV/AIDS. Most respondents knew how HIV was transmitted and 74% felt that they had never put themselves at risk of contracting HIV.

Seventy five percent of respondents had heard of VCT, and 60% had considered having a test. Knowledge regarding the location of VCT testing sites, methods of testing and waiting period for results was generally poor. Most respondents had a favourable impression of staff in the clinic/CHC setting and would return to these facilities for HIV VCT. However 71% reported that they were prepared to pay for a HIV test. Respondents reported that having an HIV test would have a positive effect on sexual behaviour; however, only a third would disclose their HIV test result.

Discussion

Respondents had high levels of awareness of HIV prevention strategies but these did not always translate into the adoption of appropriate behaviours. This disparity between awareness of HIV prevention strategies and actual risk taking sexual behaviour could reflect inadequacies in current HIV education programmes.

Knowledge regarding most aspects of HIV VCT was inadequate, but there was a high willingness to test for HIV. Respondents indicated that they were prepared to pay for VCT. VCT could be used to engage with young adults and impact on behaviour changes. Further studies may be useful to illustrate the potential of VCT as a prevention strategy and to promote the allocation of more resources for this purpose.

1. INTRODUCTION

1.1 Definition of the problem

The HIV/AIDS epidemic has had a major impact in South Africa. According to the Actuarial Society of South Africa, over 4 million out of 47 million people in South Africa were HIV-infected in 2003, giving a total population prevalence of about 11%.[1] The HIV/AIDS epidemic in South Africa is one of the worst in the world and shows no evidence of decline. According to the 2006 Report on the Global AIDS Epidemic, by 2005 an estimated 5.5 million South Africans were living with HIV. This includes 19% of adults aged between 15 and 49 years of age and one in three pregnant women attending antenatal clinics. [2] In the drive to address the epidemic, health promotion by government to prevent HIV has focused on the ABC's, i.e. Abstinence, Being faithful to one partner and the use of condoms during sexual intercourse ("Condomise").

Another important aspect of prevention is Voluntary Counselling and Testing (VCT) for HIV as it has been shown in some settings that VCT promotes behaviour change [3]. VCT should also facilitate access to management and support, i.e. Anti-Retroviral Therapy (ART) where necessary, and support for adherence to the medications, prophylaxis against tuberculosis and other opportunistic infections (OI), family planning counselling and Prevention of Mother to Child Transmission (PMTCT) [4]. The problem is the low uptake of VCT for a number of reasons, with the Department of Health reporting only 690 537 people being counselled and tested in 2003/4.[1] According to a Human Sciences Research Council (HSRC) survey of 11 383 respondents over the age of 15 years, 3 586 (30%) had previously been tested for HIV.[5] The respondents who had an HIV test prior to the survey had a higher HIV prevalence (16%) than those who never had a HIV test (12%), which was a statistically significant difference. This suggests that people more at risk for HIV are more likely to be tested. It is estimated that there are over 2 million people living in South Africa who are HIV positive but do not know their status. [5] The HSRC study also found that HIV testing was most likely to be conducted in the public sector and that satisfaction with the service was high. Most respondents in this study had a HIV test because they wanted to know their status, were feeling ill, were pregnant or as a product of external factors such as applying for insurance or a loan.[5] A low uptake

could be due to a lack of knowledge as well as misunderstandings about HIV/AIDS in the adolescent and young adult community.

1.2 Justification for the study

The impact of the HIV/AIDS epidemic has been devastating in certain areas of the world. Young people between 10-24 years of age account for over 50% of all HIV infections occurring worldwide (excluding transmission from mother to child).[6]

Preventing HIV among young people is particularly urgent in sub-Saharan Africa because youth comprise over 30% of the population and the HIV prevalence in this age group is over 10% in many countries. Almost 10 million men and women between 15-24 years of age in sub-Saharan Africa were living with HIV/AIDS in 2003 and half of all new infections occurred in this age group. [6, 7] In sub-Saharan Africa in 2003 1.7 million young people were newly infected. Over 80% of HIV/AIDS related deaths in the world occur in this region. [8]

In South Africa HIV is spread mainly via heterosexual sexual contact, and an estimated 1 600 new infections occur daily. [2] Surveillance shows that the peak prevalence of HIV/AIDS occurs in young people aged 15-24 years. The prevalence is higher amongst young woman (22-27%) than young men (7-15%). [8, 9, 10]

The South African Department of Health Ante-natal clinic study of 2006, which included 33 000 pregnant women attending 1415 clinics across all nine provinces, estimates that 29% of pregnant woman were living with HIV in 2006. The estimated prevalence among antenatal clinic attendees by province is depicted in the table below and is compared to the figures for 2005. The Western Cape ranks the lowest at 15% with KwaZulu-Natal the highest at 39%, which is higher than the national figure of 29% [11]

Table 1: Estimated HIV prevalence among ante-natal clinics by province [11]

	2005 prevalence %	2006 prevalence %
KwaZulu-Natal	39.1	39.1
Mpungalanga	34.8	32.1
Free State	30.3	31.1
Gauteng	32.4	30.8
North West	31.8	29.0
Eastern Cape	29.5	29.0
Limpopo	21.5	20.7
Northern Cape	18.5	15.6
Western Cape	15.7	15.2
National	**30.2**	**29.1**

Among teenage girls attending antenatal clinics the prevalence rate decreased from 16% in the 2005 survey to 14% in 2006, but this decrease was not statistically significant. A similar reduction was noted for young woman aged 20-24 years, from 30% to 28%. (See table 2) While this could indicate that the epidemic is stabilising, the 2006 survey had a change in methodology in that it included twice as many women and samples were collected from three times as many clinics than in 2005. [11]

Table 2: Estimated HIV prevalence among ANC attendees by age [11]

Age Group (Years)	2005 HIV Prevalence(%)	2006 HIV Prevalence(%)
<20	15.9	13.7
20-24	30.6	28.0
25-29	39.5	38.7
30-34	36.4	37.0
35-39	28.0	29.6
40+	19.8	21.3

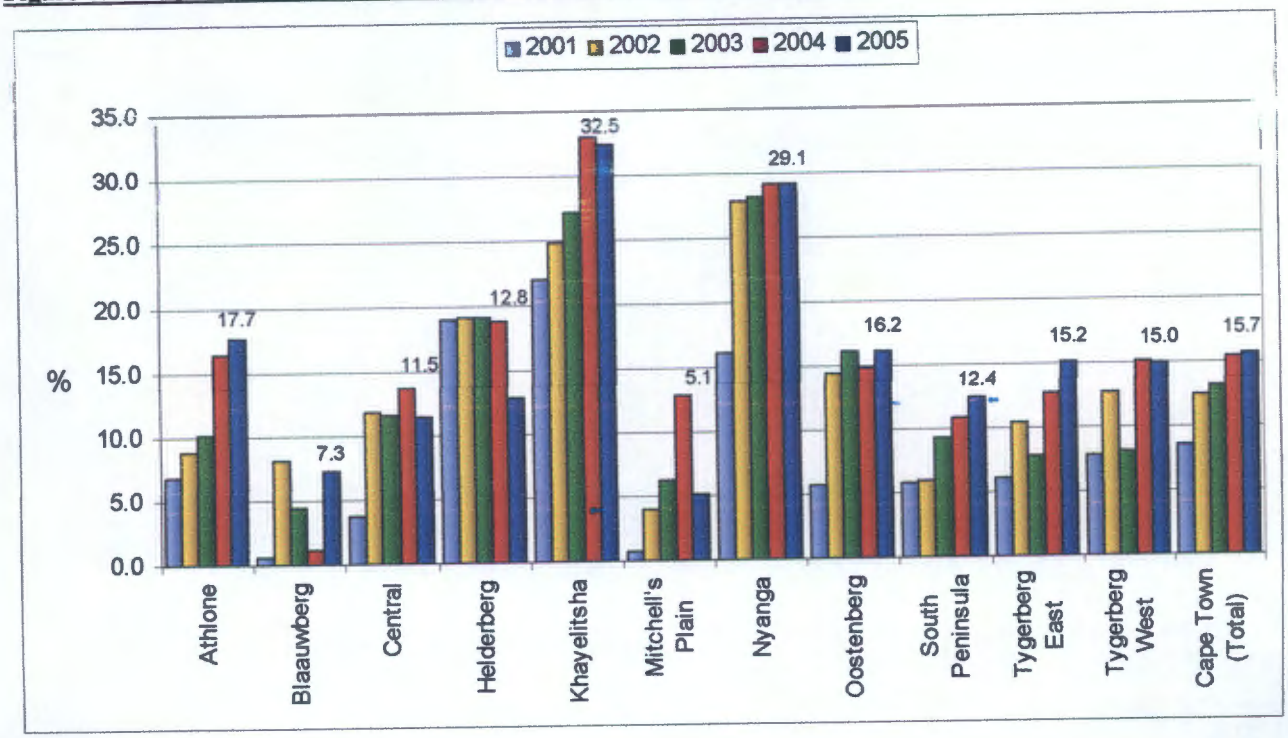
The prevalence of HIV is likely to be higher in sexually active women attending ante-natal clinics and therefore one cannot directly apply these rates to the general population including men, newborn babies and children. [11]

Based on the South African National HIV Survey of 2005, an estimated 11% of all South Africans over 2 years of age were living with HIV in 2005, and among 15-49 year old people the prevalence rate was 16%. [5]

In mid-2007 the South African Department of Health in collaboration with UNAIDS and WHO, published that an estimated 18% of people aged 15-49 years were living with HIV in 2006 in South Africa. This equates to 5.4 million people living with HIV in 2006. The ASSA 2003 model predicted a similar situation of 5.4 million people HIV-infected people by mid-2006, and further predicts the number to exceed 6 million people by 2015 and 5.4 million people would have died of HIV/AIDS if no successful interventions were introduced. [12]

The sub-district level HIV surveys show wide variation in the HIV prevalence across the health district of Cape Town. The prevalence in Khayelitsha and Gugulethu sub-districts is consistently high in absolute rates and growth rates, but Mitchell's Plain and Athlone have lower absolute rates but very high growth rates, suggestive of emerging sub-epidemics. The greater Athlone sub-district had an HIV prevalence of 17% in 2005 up from 16% in 2004. The demographic profile of this population is similar to that of the Mitchell's Plain sub-district, yet Mitchell's Plain had an HIV prevalence of 5% in 2005. [11] (See Figure 1)

Figure 1: The prevalence of HIV (antenatal survey) by health sub-district[13]



The reasons for the variable growth of the epidemic are not clear and a combination of socio-economic and demographic factors is attributed to the variations. The geographical heterogeneity in HIV trends may reflect the degree of rapid urbanisation and migration. In the Western Cape there has been rapid urbanisation and migration from rural areas and in particular the Eastern Cape and many of these people have settled in the Khayelitsha and Gugulethu areas. [14] Rapid urbanisation and migration are associated with factors such as a lower age of sexual debut, other sexual risk behaviours such as lack of condom use and the presence of sexually transmitted diseases (STI's) other than HIV. Migrants are also likely to live in areas with high population density, be poor and exposed to social deprivation, unemployment, and sexual networks with a high prevalence of HIV, unstable communities and proximity to national roads.

In some settings VCT has been shown to be an effective intervention in the fight against HIV/AIDS, both in the setting of reduced at risk sexual practises and because it identifies HIV-infected persons who can then access care such as HAART, treatment of opportunistic infections and PMTCT.[7] Thus improved access to VCT and increased uptake of testing should impact on HIV prevalence.

Large numbers of people present to both public and private health facilities for the treatment of STI's - 14% of South Africans have presented to clinics with STIs [15] and many are very young indicating a high rate of sexual behaviour, while the large number of young people who present with unplanned pregnancies and for family planning indicates that they are having sexual intercourse at a young age. According to a survey by the Reproductive Health Research Unit, University of Witwatersrand, 68% of young women respondents aged 15-24 years reported being sexually active. Of these, 49% reported being pregnant at some point, and 66% of these women reported that they did not want to be. [16] The national Syphilis prevalence rate among pregnant women attending antenatal clinics was 1.6% in 2005, a decrease from 2004 (2.7%). This rate has declined over the past five years but certain provinces still have relatively high rates, indicating that STI's are still a significant problem contributing to the ongoing HIV/AIDS epidemic. [11]

Thus it was decided to conduct a study on attitudes to VCT in adolescents in a general practice in Athlone. Such a survey will describe the population group at highest risk, and could identify patients at higher risk and identify ways in which the utilisation of

VCT services could be increased. For example, general practices in areas such as these in South Africa could provide VCT and reverse the course of the HIV/AIDS epidemic over the next five to ten years if they focus on prevention efforts amongst young people and ensure that there is sustained sexual behaviour change. [16]

1.3 Aims and objectives

The aim of this study was to identify the Knowledge, Attitudes, Beliefs and Practises (KABP) of adolescents / young adults (15-24 years of age) attending a private general practice with regards to HIV prevention.

The objectives were to:

- Determine the socio-demographics of 15 to 24 year old patients attending a private general practice.
- Determine their risk for HIV/AIDS
- Determine their KABP towards HIV /AIDS.
- Determine their KABP about available HIV VCT.

2. LITERATURE REVIEW

2.1 Risk factors for contracting HIV/AIDS

Simbayi (et al) in 2005 described risk factors for HIV/AIDS among young people under 25 years in a Cape Town township, using community outreach methods of street intercept and facility-based surveying. Results showed that 68% of men and 56% of women reported high-risk sexual behaviours, such as multiple sex partners and infrequent condom use. Respondent's knowledge about HIV transmission was generally high, but myths and misconceptions still existed. For young men, HIV risk factors were associated with fewer years of education, lower levels of AIDS-related knowledge, condom attitudes, and marijuana use. Among young women, HIV risk factors were associated with beliefs that condoms get in the way of sex and their partners dislike condoms. The risk of the sexual transmission of HIV was greatest for persons with STI's, and in particular genital ulcer disease and direct exposure to blood during sexual activity, such as sex during menses or genital bleeding. Exchanging sex for money, drugs, and sex in order to meet other survival needs also conferred higher risk for HIV as these encounters often involved casual partners and were rarely protected by condoms. The study found high levels of AIDS knowledge and AIDS

risk sensitization among men and women reflecting the efforts of education programmes, but there were important deficits in prevention relevant AIDS knowledge. Respondents frequently endorsed beliefs that washing one's genitals after sex reduced HIV risk and one in five men believed that a person could cleanse the body of HIV by having sex with a virgin. The study recommended more intensive behavioural interventions that focused on delaying sexual debut, abstinence, or practising consistent safer sex were most effective when they educate, motivate, and build life skills to develop risk reduction behaviour skills. [8]

Bankole (et al) showed that several economic, social and cultural factors contributed to the vulnerability of sub-Saharan African youths' to HIV/AIDS. Most countries in the region were among the poorest in the world and people living in poverty may place low priority on sexual and reproductive health and may engage in high-risk behaviours. Education can help adolescents avoid HIV/AIDS, but in many countries, fewer than 20% of women aged 15–19 years and fewer than 30% of men this age have more than a primary school education. Among sexually experienced 15–19 year-olds (both married and unmarried), larger proportions of men than of women have had two or more partners in the past year, more than 40% of men in some countries, compared with fewer than 10% of women in almost all countries. Condom use was rare among married 15–19 year olds; it was much more common among unmarried sexually active adolescents, but in some countries, fewer than 20% of women and 40% of men used a condom the last time they had intercourse. Comprehensive national policies must address the provision of sexual and reproductive health information and services and promote gender equality and improve adolescents' protective behaviours to help curb the HIV/AIDS epidemic. [7]

2.2 HIV and sexual behaviour in young adults

The National Survey of HIV and Sexual Behaviour among Young South Africans was a household survey of young people, which included comprehensive sexual and other behavioural information and HIV prevalence among youth by province, gender, age, and other key demographic characteristics. It was conducted in 2003 by the Reproductive Health Research Unit of the University of the Witwatersrand in partnership with the Medical Research Council of South Africa.

The survey found that overall HIV prevalence among 15-24 year olds was 10%. Prevalence was higher among females (16%) than males (5%) aged 15-24 years. Most young South Africans living with HIV/AIDS were female (77%), but HIV prevalence among males and females was roughly equal by 30 years of age. Youth living in urban informal areas had the highest HIV prevalence (17%), followed by rural formal areas (14%), urban formal areas (10%) and rural informal areas (9%).

Overall, approximately two thirds (67%) of young people aged 15-24 years reported having had sexual intercourse. Sexual experience increased with age, with 48% of 15-19 year olds reporting having had sex compared to 89% of 20-24 year olds. Among youth who reported ever having had sex, the mean age of first sex for males was 16 years and 17 years for females. Among sexually experienced young people, 6% reported having been forced to have sex, including 2% of males and 10% of females.

Among sexually experienced young people, 35% reported only having had one lifetime sexual partner. Among young people who reported having had sex in the past 12 months, 56% of males and 88% of females reported only having had one sexual partner in the past 12 months. About half (52%) of sexually experienced youth reported using a condom at last sex. Males were more likely to report condom use at last sex than females (57% compared to 48%).

While general knowledge about HIV/AIDS was high, the survey found a significant underestimation of personal risk. Most young people (94%) knew that there are ways to avoid HIV infection. Most (77%) reported that condoms could be used to prevent HIV. Almost two thirds (63%) indicated that they had changed their own behaviour to avoid HIV; 44% reported having talked to their parents about HIV/AIDS; and 20% reported having been tested for HIV. On the other hand, 62% of HIV-infected young people reported that they thought they were at little or no risk of contracting HIV compared to 73% of HIV negative young people.

The survey shows that young South Africans were at risk for HIV infection, and underscores the disproportionate impact of risk and infection on young women. The results of this survey also showed that HIV prevalence among youth under 25 years may have stabilized. The survey showed that more than two thirds of youth report changing their sexual behaviour because of awareness about HIV/AIDS, and a substantial increase in reported condom usage at last sex. [16]

Hartell (2005) in a review of sexual behaviour among adolescents pointed to the need for further research on the sexual behaviour of this group. The following key findings of this research emerged as the reasons for the high rate of HIV infection among adolescents in South Africa.

Reasons for early sexual debut among youth included peer pressure, curiosity, coercion and material gain. Adolescents appeared to have a high level of awareness about HIV/AIDS but this had not translated into substantial behaviour change. They often had more than one sexual partner and 50% used a condom. Few perceived themselves to be at risk and did not see AIDS as a personal threat, although most adolescents acknowledged the severity of the disease. Failure to practice safe sex was related to pressure to engage in early and unprotected intercourse, pressure to have a child, lack of access to user-friendly reproductive health services, negative perceptions about condoms, low perceptions of personal risk, and low perceived self-efficacy in preventative behaviour.

General knowledge of adolescents about transmission of disease was found to be inadequate. It was found that many young people received conflicting messages about sex and sexuality. Widely believed myths reinforced negative attitudes about safer sex and contraceptive use. Most adolescents made decisions about engaging in sex without having accurate information and access to support and services. They lacked knowledge and negotiation skills in sexual relationships. Many did not acknowledge the disease to be a problem in their area or in their race group.

This study showed that health educators should invite young people to help plan, implement, and evaluate sex and HIV/AIDS programmes within the context of the specific cultural beliefs and values. HIV/AIDS education programmes should emphasize social norms and skills needed for healthy human relationships, effective communication, and responsible decision-making that offer protection from HIV infection. Behavioural interventions for young women should include empowerment and the development of negotiation skills. For young men, respect and support for women and for gender equality, need to be taught.

The use of condoms was seen as important in the prevention of HIV infection and the way condoms were provided influenced adolescents' acceptance and use, and making them more easily accessible would help solve the problem. It showed that abstinence should be made "valuable" to adolescents. Messages that encourage them to abstain or delay sexual activity would help them adopt this attitude. [10]

Simbayi et al investigated the behavioural responses of South African youth to the HIV/AIDS epidemic, by sampling 2430 youth aged 15-24 years. Results of this study showed that South African youths are making positive behavioural responses to the HIV/AIDS epidemic. The age of sexual debut reported in this study was 16 years. Only 7% of the youths indicated that they maintained their virginity to prevent pregnancy, STIs or HIV. The findings indicated that abstinence is not the dominant mode of prevention in this group. The proportion of sexually active youth was 86%. The number of self-reported virgins in rural areas and among white and Indian female youth was high. Twenty five percent of youth reported secondary sexual abstinence (a discontinuation of sex for periods of time after initial sexual experience) over the previous 12 months. This shows that behaviour and delaying sexual debut should be reinforced in HIV health education campaigns to prevent new HIV infections in South Africa. The majority (85%) of youth reported only one sexual partner in the previous 12 months and condom usage was relatively high during their lifetime and at last sexual encounter. These measures indicate that prevention programmes and condom distribution campaigns were effective and should be continued. Only 18% of youth had been tested for HIV. The large majority of youth reported that they had discussed HIV/AIDS with their sexual partner. This combined with increased condom usage suggest youth are engaging in safe sex negotiations on a more equitable basis. Interventions promoting VCT and sexual negotiation skill should be further strengthened. [17]

2.3 The efficacy of VCT

Research has revealed conflicting results on the contribution of VCT to a reduction in risky sexual behaviour in persons infected with HIV. Weinhardt et al (1999) found in a meta-analysis that HIV-infected individuals and sero-discordant couples were more likely to use condoms than those who tested negative; however those who tested negative did not modify their behaviour more than those who were not tested. [18] In a randomised trial (2000) to determine the efficacy of HIV VCT in reducing unprotected intercourse among individuals and sex-partner couples in Nairobi (Kenya), Dar es Salaam (Tanzania), and Port of Spain (Trinidad), individual or couple participants were randomly assigned HIV VCT or basic health information. The

proportion of individuals reporting unprotected intercourse with non-primary partners declined more for those receiving VCT than those receiving health information (men, 35% reduction with VCT *vs.* 13% reduction with health information; women, 39% reduction with VCT *vs.* 17% reduction with health information), and these results were maintained at the second follow-up. Couples assigned to VCT reduced unprotected intercourse with their enrolment partners more than couples assigned health information. Couples in which one or both members were diagnosed with HIV were more likely to reduce unprotected intercourse with each other than couples in which both members were uninfected. All these results were statistically significant. This data supported the efficacy of HIV VCT in promoting at risk sexual behaviour change. [3]

2.4 The uptake of VCT

In the HSRC survey regarding the uptake of voluntary counselling and testing, it was found that VCT was an important strategy for HIV prevention and access to treatment, care and support services. Although overall knowledge of where to access HIV testing services was high, rural respondents and those 50 years and older make less use of, and have less access to VCT services. Of the 11 838 respondents 15 years and older who we tested for HIV in this survey, 3 586 (30%) said they had previously been tested for HIV. About a third of respondents indicated that they had been tested in the past year. Respondents, who have had a HIV test before the survey, had a significantly higher HIV prevalence (16%) than those who have never had an HIV test (13%). It is estimated that there are over two million people living in South Africa who are HIV positive, but do not know their status. The study found that HIV testing was most likely to be conducted in the public sector, and that the overall perceptions of service satisfaction within the immediate testing environment were extremely high. Willingness of individuals to undergo VCT is influenced by a range of factors, including motivation to know one's status, although in a number of instances VCT is a product of factors related to a clinical condition such as tuberculosis and life insurance, pregnancy or illness. [5]

2.5 VCT among youth

Research was conducted in Kenya and Uganda among youth aged 14 to 21 years to identify opportunities for and barriers to providing VCT for youth. The first phase of the study, completed in May 2000, indicated that youth would have liked access to HIV testing and counselling services if the services were confidential and inexpensive and if the results were reported honestly. Most youth who had been tested intended to practise safer sex, such as abstaining from sexual intercourse, practising monogamy, using condoms or reducing the number of sexual partners. Counselling was considered a valued part of the HIV testing. Most youth stated that they would disclose their HIV status after testing, most frequently with their partners or peers, but less than one fourth would share results with their parents for fear of them knowing about their sexual activity. Most of the untested respondents said they would like to be tested for HIV at some point in the future. Service providers interviewed reported that counselling young people required special training and improved youth-oriented referral services. The authors stated that improvements to the programme should include: increased training of service providers in counselling skills for youth about HIV, the use of alternative locations so that youth do not have to risk being seen by familiar adults or family members when seeking VCT, reduced price of testing services, establishment of a functional referral system, improved outreach to schools and youth groups, introduction of VCT at a youth reproductive health centre, and a multimedia campaign to inform youth about VCT. [19]

2.6 Increasing access to and utilisation of VCT and provider initiated HIV testing

A report of the WHO consultation on increasing access to HIV testing and counselling held in Geneva in 2002, stated that people have a right to know their HIV status, and testing and counselling should be widely accessible through innovative, ethical and practical models of delivery. Health-care workers should offer VCT to all those who might benefit from knowing their HIV status and there is an onus on national governments to provide good-quality VCT services. Services should become a routine part of health care, and be integrated with antenatal clinics, or at diagnosis and treatment centres for tuberculosis and STIs. Communities should be helped to reduce the denial, stigma and discrimination that surround HIV/AIDS and mobilize

support for appropriate responses. The traditional model of VCT, which was being implemented in many places with excellent results, required significant commitments in terms of time, resources, infrastructure and trained staff. One-to-one counselling and the time required to provide it are possible disincentives for people who wish to be tested on a more routine and perhaps less conspicuous basis. VCT should be offered whenever a patient shows signs or symptoms of HIV infection or AIDS, or wherever this will aid their clinical diagnosis and management. Under these conditions, the offer of VCT should be considered as the standard of care.

The provision of pre-test information can be done in a group setting, followed by the offer of an HIV test. In so-called "opt-in" approaches, patients have to request the test. The result of HIV testing should always be offered to the person being tested. Along with the result, appropriate post-test information, counselling or referral should be offered according to the result. In "opt-out" approaches they have to specifically decline the test if they do not want it to be performed.

The challenges involved in shifting the provision of VCT from a clinic-based approach to a more routine and widespread public-health model will be considerable, but the potential benefits are enormous. It was estimated that by 2005 there would be up to 180 million people in need of VCT annually in the world. [20]

2.7 Attitude and beliefs towards HIV/AIDS and VCT

A cross-sectional survey of 804 women attending antenatal clinics in Ogun State, Southwest Nigeria was done to determine the knowledge and perceptions of HIV/AIDS among women attending antenatal clinics. Approximately 90% of the women respondents had heard of HIV/AIDS, but only about 27% knew HIV could be transmitted from mother to child; of those, almost 94% believed that HIV existed; in contrast, the majority (64%) believed they were not at risk of HIV infection, and a slightly greater proportion (70%) did not understand the benefits of voluntary HIV counselling and testing (VCT). Almost 90% of respondents were willing to know their status following health education about VCT. Those that were older, attending public hospitals, and with a higher level of education had more knowledge and better perceptions about HIV. The results suggest an urgent need for public health education on HIV/AIDS and the benefits of VCT to control mother to child transmission of HIV, particularly targeting young women and those with little or no education. [21]

AIDS-related stigma was pervasive in some segments of South African society and stigma could impede efforts to promote voluntary counselling and testing and other HIV-AIDS prevention efforts. A study by Simbayi (et al) in 2004 examined whether people felt AIDS was caused by spirits and supernatural forces, AIDS-related knowledge and AIDS-related stigmas. A street intercept survey with 487 men and women living in a black township in Cape Town, South Africa showed that 11% believed that AIDS was caused by spirits and supernatural forces, 21% were unsure if AIDS was caused by spirits and the supernatural, and 68% did not believe that AIDS was caused by spirits and supernatural forces. Further analyses showed that people who believed HIV-AIDS was caused by spirits and the supernatural forces demonstrated more misinformation about AIDS and were significantly more likely to endorse repulsion and social sanction stigmatizing beliefs against people living with HIV-AIDS. Findings suggested that relationships between traditional beliefs about the cause of HIV-AIDS and AIDS stigmas were mediated by AIDS-related knowledge. The study suggested that AIDS education efforts were urgently needed to reach people who hold traditional beliefs about AIDS to remedy AIDS stigmas. [22]

2.8 Future interventions in the province

The provincial government of the Western Cape has proposed an accelerated HIV/AIDS prevention strategy. According to the Department of Health for the period April 2006 to Sep 2006, 160 000 people were tested through the VCT programme, 22 million male condoms and 194 000 female condoms were distributed in the Western Cape. The Peer Education programme had 6 848 peer-educators in place at 194 high schools in the province by June 2006.

Strategic Objectives and targets for HIV prevention, treatment, care and support by 2010 include: reduce HIV prevalence in young people between 15 and 24 years by at least 25%; reduce the transmission of HIV from mother to baby to less than 5% within 2 years in all HIV positive mothers; and provide anti-retroviral treatment to more than 80% of those needing treatment. Supporting Objectives for the Prevention Strategy by 2010 include: achieve annual VCT coverage of 15% of adults greater than15 yrs of age; provide access to accurate HIV & AIDS information to 90% of youth aged 15 – 24 yrs; delay age of sexual debut by 1 year amongst youth; increase annual male condom uptake to 100 condoms per adult male more than15 yrs of age;

increase annual female condom uptake to 10 condoms per adult female more than 15 years of age; and increase STI partner treatment rate to 50%. The province plans to have a 5-fold increase from 33 million to 150 million male condoms per annum by 2010.

In order to scale up prevention activities for school-going youth, the Departments of Health and Education have contracted 15 locally based Non Governmental Organisations to implement a standardised peer education programme in schools, which aims to delay sexual debut, decrease partners, increase condom usage, to encourage abstinence and to encourage early sexual health seeking behaviour. Integrating prevention actions into the ARV treatment programme presents an important opportunity to work with those affected by the virus and reduce secondary HIV transmission. VCT may contribute to decreasing stigma as more people know their HIV status and it is an entry point into care and support. It states that the time taken for testing and counselling will be decreased in health-care facilities. In addition to increasing client and provider initiated testing in health facilities, the number of non-medical testing sites will be increased. Options for expanding non-medical sites include: public/private partnerships in the business sector; mobile services; services at venues frequented after hours; and community "drop in" centres offering a variety of services. The Province will concentrate on increasing access to high quality STI services for all groups. [23]

3. METHODS

3.1 Study setting

This study was conducted in a private general practice in the Athlone Central Business District servicing the areas of Hazendal, Athlone, Kewtown and Sybrand Park. The residential area has a mixture of middle-income freestanding houses, lower income semi-detached flats and the overcrowded backyard informal dwellings. There are high levels of unemployment in this area. Alcohol and drug abuse is common and gangsterism is very prevalent. There are three primary schools and three secondary schools in the area. The practise is located in a transport interchange and therefore patients are also seen from other areas. Most patients do not have health insurance and many also attend the local Community Health Centre in Kewtown. The home

language of most patients is either English or Afrikaans. The practice offers a comprehensive primary care service including HIV testing.

3.2 Study design

This was a cross-sectional study. The study comprised a KABP survey of a sample of patients 15 to 24 years of age attending the practice, over the period May 2006 to December 2006.

3.3 Population and sampling

The population included all young adults aged 15 to 24 years of age who attended the practice from 8:30 am to 5:30 pm.

It was estimated that 50% of young adults aged 15–19 years in this area would have a good knowledge of HIV/AIDS, and be aware of HIV risks and familiar with the ABCs of prevention and VCT. [1] Using the Epi Info STATCALC programme a sample size of 96 was estimated to be required in order to obtain an estimate with 95% confidence and a 10% margin of error.

3.4 Measurement

3.4.1 Instruments

The instrument used was a questionnaire. The questionnaire consisted of forty-two questions, including both open and closed-ended questions. A Likert scale was used to obtain perception of the risk for HIV, experience of service at local clinic, and attitude towards VCT. The confidential questionnaire was conducted in the language of choice of the subject.

The following variables were measured:

Objective	Variables	Measurement
1. To determine the demographics of this at risk population.	Sex, Age, Religion, Suburb, Education level, Employment.	Questionnaire
2. To determine their risk for contracting HIV/AIDS.	Sexually active, Commitment, Marital status, No. partners in last year, Age of first sex, Unplanned pregnancy, Meaning of Safe Sex, STD.	Questionnaire
3. To determine the KABP towards HIV/AIDS	Heard of HIV/AIDS, Aware of at risk behaviour, HIV pos contact, Gen knowledge about HIV, mechanisms of spread, presentation, treatment, prognosis, Prevention strategies	Questionnaire
4. To determine the KABP towards VCT for HIV	Heard of VCT, Where it is available, Method of testing, Considered having test, Factors influencing decision to have test, Reason for last CHC/clinic visit, Service provider attended at CHC/clinic, Service character of service provider, Return to CHC/clinic and why?, Prepared to pay for test, Behaviour change after test, Disclosure of test result	Questionnaire

3.4.2 Possible biases

Sample bias: To avoid selection bias all patients of the requisite age who attended the surgery were included in the population for selection of the sample. Those who did not consent to be included in the study may have been different and this may have biased the sample.

Response bias: Respondents may not have answered the questions accurately or honestly, or may have refused to answer certain questions. . For example, patients may have lied about their perception of service quality at the CHC/clinic if they believe that their response may affect the care they receive (despite the consent form stating otherwise).

Recall bias: In order to limit recall bias all questions related to the previous three months.

Coding bias: Some of the respondents' answers may have been coded incorrectly and this may have introduced bias.

3.4.3 Validity and reliability

In order to test the validity of the questionnaire, it was pre-tested with two different individuals. To ensure the face validity and construct validity of our questionnaire, it was set out in clear and logical order.

3.5 Data capture

The data was captured on the EpiData programme and further analysis was done using EpiData Analysis.

3.6 Strategies for analysis

3.6.1 Data management

The data was coded, double entered, checked for errors.

3.6.2 Data analysis

The analysis consisted of frequency analyses of the variables derived from the questionnaires.

4 ETHICS AND COMMUNICATION

4.1 Ethics

The University of Cape Town's Ethical Committee for research on Human Subjects approved this research. The ethical procedures were as follows:

4.1.1 Consent

The respondents were read a consent letter describing this study. They were asked if they understood the information provided and were then asked to provide written consent. Participants were told that their participation was entirely voluntary and their responses, or lack thereof, would not influence their medical treatment. Participants were free to refuse to participate in the study and were told that they could withdraw from the study at any point if they felt uncomfortable. All participants under 21 years of age were only included if consent was obtained from a parent or guardian.

4.1.2 Protection of privacy and confidentiality

Participants were assured that all information would be confidential and that no names would be included on questionnaires.

4.1.3 Risks and benefits to participants

There were no immediate benefits for subjects. The data will provide information that could be used to make HIV VCT services more accessible to high-risk population groups, which will benefit the community at large. Participation may also make the respondent more aware of the issues related to HIV/AIDS, and act as a stimulus to undergo formal voluntary counselling and testing for HIV.

4.1.4 Stakeholders

The research will be presented to the following groups: study participants, current sites providing HIV VCT services, and the School of Public Health and Family Medicine at the University of Cape Town. A poster summarising the main results of the study will be produced and displayed in the surgery, as a means of communicating with study participants.

4.2 Reporting and implementation

The data will be presented to various stakeholders. The results of this descriptive study will provide stakeholders with information on ways to improve health promotion relating to HIV at public and private sector services and to increase the uptake of VCT.

5. RESULTS

5.1 Background

One hundred young people (15-24 years) agreed to participate in the study of which 36 were men and 64 women. A limitation of the data collection was that a response rate was not noted.

5.2 Respondent demographic profile

5.2.1 Age distribution and gender

The mean age of the respondents was 20.2 years (standard deviation of 2.8), with similar mean for men and women. The median age was 21 years. The age group under 18 years accounted for 29% of the sample, between 19 and 21 years accounted for 36%, and those over 21 years accounted for 35% of the sample. Most of the men fell in the 19 to 21 year old group at 47%, while the female respondents were evenly spread over the respective age groups.

5.2.2 Religion

Most respondents reported belonging to the religions most prevalent in the community. The Christian faith was most reported with categories of Catholic reported at 27% and Protestants at 22%. The Muslim faith was represented at 30% and 9% stated their religion to be spiritual. Only 3% reported being of the Traditional African religion, and 9% reported not belonging to any religion.

5.2.3 Area of residence

The majority of respondents (74%) resided in the immediate surrounding suburbs of the surgery. The breakdown per suburb was as follows: Athlone at 39%, Hazendal at 13%, Bokmakierie at 11%, Garlandale at 4%, Sybrand Park at 1%, Kewtown at 2%,

and Bonteheuwel at 4%. The other 24% were from suburbs, which are not in the immediate vicinity.

5.2.4 Level of education

Most respondents (60%) had completed secondary schooling, and 30% of respondents had a tertiary education, with 21% reporting technicon or college attendance and 9% reporting university attendance.

5.2.5 Employment status

Formal employment was reported by 54% of respondents, while 18% reported being employed in casual labour and 4% sold goods to earn money. 13% and 11% of respondents reported being students or being unemployed respectively.

5.2.6 Marital status

74% of respondents were unmarried and lived with parents. Only 9% reported being married, with 7% living with spouse and 2% reporting spouse living elsewhere. 9% reported being unmarried and living alone. Notably, of the 7% reporting being unmarried and living with partner, all were female.

Table 3: Respondents profile table

Percentages in brackets ()

	Total	**Male**	**Female**
	n=100	n=36	n=64
Age Distribution			
15-18 yrs	29	7(19.4)	22(34.4)
19-21 yrs	36	17(47.2)	20(31.2)
22-24 yrs	35	12(33.3)	22(34.4)
Mean	20.18	20.53	19.98
SD	2.79	2.62	2.89
Median	21		

Table 3: Respondents profile table cont.

Religion	Total	Male	Female
None	9	5(13.9)	4(6.3)
Catholic	27	9(25)	18(28.1)
Protestant	22	6(16.7)	16(25)
Muslim	30	11(30.6)	19(29.7)
Spiritual	9	2(5.6)	7(10.9)
Traditional African	3	3(8.3)	0
Residence			
Athlone	39	17(47.2)	22(34.4)
Hazendal	13	3(8.3)	10(15.6)
Bokmakierie	11	4(11)	7(10.9)
Garlandale	4	0	4(6.3)
Sybrand Park	1	1(2.8)	0
Kewtown	2	0	2(3.1)
Bonteheuwel	4	0	4(6.3)
Other	26	11(30.6)	15(23.4)
Schooling			
Primary School	10	2(5.6)	8(12.5)
Secondary School	60	21(58.3)	39(60.9)
Technicon/College	21	9(25)	12(18.8)
University	9	4(11.1)	5(7.8)
Employment			
Nothing	11	4(11.1)	7(10.9)
Selling goods	4	1(2.8)	3(4.7)
Employed	54	22(61.1)	32(50)
Casual labour	18	5(13.9)	13(20.3)
Student	13	4(11.1)	9(14.1)
Marital Status			
Married living with spouse	7	3(8.3)	4(6.3)
Married spouse living elsewhere	2	1(2.8)	1(1.6)
Unmarried, living alone	9	4(11.1)	5(7.8)
Unmarried, living with partner	7	0	7(10.9)
Unmarried, living with parents	74	28(77.8)	46(71.9)
Divorced/separated	-	-	-
Widowed	1	0	1(1.16)

5.3 Risk Assessment

5.3.1 Sexual activity

64% of respondents reported having had sexual intercourse, 68% of men and 63% of women. Categorising these affirmative responses by age revealed that 11% were in the group 15-18 years of age, 42% in the group 19-21 years of age and 47% in the group 22-24 years of age. Amongst males the highest sexually active group was the 19-21 year old age group, at 54% and amongst females the 22-24 year age group at 52%. (See table 4 below)

Table 4 : Sexually active by age and gender

Percentages in brackets ()

	Total n=64	**Male** n=24	**Female** n=40
Age Group			
15-18 yrs	7(10.9)	2(8.3)	5(12.5)
19-21 yrs	27(42.8)	13(54.2)	14(35)
22-24 yrs	30(46.9)	9(37.5)	21(52.5)

5.3.2 Number of sexual partners

89% (57) of those who reported being sexually active had only one sexual partner in the preceding three months while 75% of sexually active male respondents and 95% of female respondents reported only one sexual partner. Five respondents reported two sexual partners in the preceding three months and only one respondent reported three.

5.3.3 Condom usage

Among respondents reporting to be sexually active (64), 58% stated that they did not use a condom at their last episode of sexual intercourse. 50% of sexually active males and 63% of sexually active females reported no condom usage at last sexual encounter.

5.3.4 Age of first sexual intercourse

The mean age of first sexual intercourse was 16 years, with the mean being higher in men at 17 years and lower in females at 16 years. Only 7 respondents claimed to have initiated sexual activity before 15 years of age, with the youngest age reported being 13 years by a single male respondent. The majority of males (75%) reported first having sexual intercourse at 16-18 years of age while less female respondents (53%) reported first having sexual intercourse at this age. More females reported initial sexual activity in the older age group of 19-21 years (33%) compared to males (8%).

5.3.5 Party to unplanned pregnancy

Overall 38% of sexually active respondents indicated that they had unplanned pregnancies in their sexual partnership. Amongst males, 29% acknowledged being party to an unplanned pregnancy, while 43% of females had an unplanned pregnancy.

5.3.6 Previously diagnosed with STI

Amongst the sexually active group of respondents, 100% of respondents denied ever having had an STI. This was despite having a general description of what would qualify as an STI in the questionnaire.

5.3.7 Meaning of safer sex

All subjects were asked to describe safer sexual behaviour. They were required to identify statements that were most appropriate. A Likert scale was used and responses have been grouped in agree, uncertain and disagree to simplify the analysis. Responses were from all respondents whether sexually active or not.

67% of all respondents agreed that abstinence is a safe sex strategy, while only 53% of males agreed and 75% of females agreed.

94% of all respondents agreed that using a condom at every episode of sexual intercourse is a safe sex strategy. Similar responses to this statement were reported for males at 92% and females at 94%.

91% of all respondents agreed that remaining faithful to one sexual partner is a safe sex strategy. The male group agreed to a lesser extent at 86% and the female group agreed at a higher level of 94%.

With regard to avoiding sex with prostitutes, 88% of respondents agreed that this would be a safe sex strategy, and similar responses were received from males at 86% and females at 89%.

73% of respondents agreed that avoiding anal sex is a safe sex strategy with 68% of males and 77% of female agreeing respectively and 25% of males responding that they were uncertain.

A similar pattern was revealed in the response to the statement regarding avoiding sex during genital bleeding, where 78% of respondents agreed that it was a safer sexual strategy with 67% of males and 81% of females agreeing respectively.

Table 5: Risk behaviour Assessment table

Percentages in brackets ()

	Total	**Male**	**Female**
Sexually active	*n=99*	*n=35*	*n=64*
Yes	64	24(68.6)	40(62.5)
No	35	11(31.4)	24(37.5)
No of sexual partners in previous 3 months			
	n=64	*n=24*	*n=40*
0	2(3.1)	2(8.3)	0
1	57(89.1)	18(75)	38(95)
2	5(7.8)	3(12.5)	2(5)
3	1(1.5)	1(4.2)	0
Condom use in sexually active			
	n=64	*n=24*	*n=40*
Yes	27(42)	12(50)	15(37.5)
No	37(58)	12(50)	25(62.5)
Age of first sexual intercourse			
	n=64	*n=24*	*n=40*
13-15 years	7(10.9)	4(16.6)	3(7.5)
16-18 years	39(60.9)	18(75)	21(52.5)
19-21 years	15(23.4)	2(8.4)	13(32.5)
22-24 years	3(4.7)	0	3(7.5)
Mean	15.99 years	16.71 years	15.62 years
SD	5.7	1.73	6.89

Table 5: Risk behaviour assessment table cont.

	Total	Male	Female
Been party to an unplanned pregnancy	*n=64*	*n=24*	*n= 40*
Yes	24(37.5)	7(29.2)	17(42.5)
No	40(62.5)	17(70.8)	23(57.5)
Ever had an STI	*n=64*	*n=24*	*n=40*
Yes	0	0	0
No	64(100)	24(100)	40(100)

Meaning of Safe Sex (N=100)

	Total			Male			Female		
	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree
Complete abstinence	67	15	18	19(52.8)	9(25)	8(22.2)	48(75.1)	6(9.4)	10(15.6)
Condom at every episode of sex	93	5	2	33(91.7)	2(5.6)	1(2.8)	60(93.8)	3(4.7)	1(1.6)
Faithful to one partner	91	6	3	31(86.1)	4(11.1)	1(2.8)	60(93.7)	2(3.1)	2(3.1)
Avoiding sex with prostitutes	88	7	5	31(86.1)	2(5.6)	3(8.3)	57(88.6)	5(7.8)	2(3.1)
Avoiding anal sex	73	18	9	24(66.7)	9(25)	3(8.4)	49(76.6)	9(14.1)	6(9.4)
Avoiding sex during genital bleeding	78	13	9	26(72.2)	6(16.7)	4(11.2)	52(81.3)	7(10.9)	5(7.8)

5.4 HIV Knowledge and risk

5.4.1 Awareness of HIV/AIDS

The majority of respondents (97%) acknowledged having heard of HIV/AIDS. Only 3% of female respondents claimed never to have heard of HIV/AIDS. 67% of respondents claimed not to know anyone who has died of HIV/AIDS.

5.4.2 Risk behaviour for contracting HIV

74% of respondents did not believe they have done anything that puts them at increased risk for contracting HIV. Similar rates were found among males at 72% and females at 75%.

Among sexually active respondents, 37 (58%) had not used a condom at last sexual intercourse and 24 (38%) admitted to having been party to an unplanned pregnancy. Among this same sub-group, 5 respondents claimed to have had more than one sexual partner in the previous three months, and all of them agreed that they had put themselves at risk of contracting HIV.

5.4.3 General knowledge about HIV/AIDS

In order to ascertain the general knowledge about HIV/AIDS, a series of statements were presented to respondents and their responses were recorded on a Likert scale.

85% of respondents, 86% of men and 84% of women did not believe that HIV is caused by the spirits or supernatural forces and 95% and 86% respectively believed that a healthy looking person can be infected with HIV and that one can get HIV the first time one has sexual intercourse. The responses were similar for men and women.

Although 78% of respondents felt that a woman could give birth to a child infected with HIV, more men (89%) agreed than women (72%). A similar proportion of men and women (15%) felt that AIDS was curable in some cases.

Similar proportions of men and women (72%) agreed that HIV was not spread through eating utensils. Thirty two percent of respondents felt that HIV could be spread at circumcision but 51% were uncertain and 12% thought HIV could be transmitted by insect bites and 37% were uncertain.

Table 6: HIV/AIDS Knowledge & Risk Table

Percentages in brackets ( )

	Total N=100	**Male** n=36	**Female** n=64
Ever Heard of HIV/AIDS			
Yes	97	36(100)	61(95.3)
No	3	0	3(4.7)
Any action risking HIV contraction			
Yes	26	10(27.7)	16(25)
No	74	26(72.3)	48(75)
Know someone who died of HIV/AIDS			
Yes	33	13(36.1)	20(31.3)
No	67	23(63.8)	44(68.7)

Table 6: HIV/AIDS Knowledge & Risk Table cont.

HIV/AIDS knowledge

	Total			Male			Female		
	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree
Caused by spirits/supernatural forces	5	10	85	1(2.8)	4(11.1)	31(86.1)	4(6.3)	6(9.4)	54(84.4)
Healthy looking person can be infected	95	1	4	35(97.2)	1(2.8)	0	60(93.8)	0	4(6.3)
Can get HIV the first time one has sex	86	5	9	32(88.9)	2(5.6)	2(5.6)	54(84.4)	3(4.7)	7(11)
Women can give birth to a child with HIV	78	15	7	32(88.9)	3(8.3)	1(2.8)	46(71.8)	12(18.8)	6(9.4)
AIDS is curable in some cases	15	17	68	5(13.9)	9(25)	22(61.1)	10(15.6)	8(12.5)	46(71.9)
HIV spread through sharing eating utensils	12	16	72	5(13.9)	6(16.7)	25(72)	7(10.9)	10(15.6)	47(73.5)
HIV can be contracted at circumcision	32	51	17	14(38.9)	15(41.7)	7(19.4)	18(28.1)	36(56.3)	10(15.6)
HIV infection by insect bites	12	37	51	4(11.1)	16(44.4)	16(44.4)	8(12.6)	21(32.8)	35(54.7)

5.5 KABP toward HIV VCT

5.5.1 Awareness of VCT for HIV and considered having HIV test

A high proportion of respondents (75%) had heard of VCT for HIV, with similar results from males (72%) and females (77%). However only 60% of total respondents had ever considered having a HIV test, with males slightly higher (66%) than females (59%). Among sexually active respondents 73% had considered having a HIV test, 79% of males and 70% of females.

5.5.2 Knowledge regarding VCT testing sites, method of testing and waiting period for results

Knowledge about sites where VCT is available was variable with 46% of respondents choosing more than one type of facility. In the Athlone area HIV testing is available at the TB/HIV clinic, the community health centre and at some general practitioners.

Most respondents knew that a HIV test involved a blood test, 51% knew that it involved a finger prick test while 24% stated that it involved venepuncture. 22% of respondents were uncertain of the procedure.

43% thought the HIV test result would be available immediately, while 26% thought it would take few days and 25% were uncertain of the waiting period

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5.5.3 Factors that influence decision for testing

Only 16% of respondents stated that cost would be a factor influencing their decision to have a HIV test. Similarly only 29% of respondents stated that needing parental

permission would influence their decision to have a test. Accessibility of the site and convenience (59%), confidentiality (59%), attitude of staff (64%), emotional readiness (62%), fear of having to inform sexual partner (50%) and availability of HIV treatment (57%) were factors that were chosen as factors that would influence their decision to test by more than 50% of respondents. Community attitude towards HIV (47%) and fear of discrimination (45%) were selected by less than fifty percent of respondents.

5.5.4 Health worker consulted when last attended clinic and respondents impression of health worker

A doctor was consulted by most respondents (53%) at their last visit to CHC/Clinic and a nurse in 18% of cases. 25% of respondents had never attended a clinic or CHC. Of respondents who attended a clinic between 50 and 70% had a favourable impression of CHC/Clinic staff. Most described staff as being interested (49%), respectful (52%), polite (54%), friendly (54%), communicates well (56%) and listens well (57%).

5.5.5 Factors affecting return to this CHC/clinic for HIV VCT

A large proportion of respondents stated that they would return to the CHC/Clinic for a HIV test because the staff were friendly / caring (81%), it was convenient to attend (76%), there were short waiting times (67%), and because they were able to talk to a peer educator (64%). Only 56% preferred to go to a private general practitioner for a HIV test. Only 29% preferred to go to a traditional healer for a HIV test. 69% of respondents stated that they would return to the CHC/clinic for an HIV test and 71% of respondents said they would have been prepared to pay for an HIV test.

5.5.6 Behaviour change after HIV test and knowing status

80% of respondents who had an imaginary HIV test stated that they would have protected sex following the test, with similar responses from males (75%) and females (84%). Similarly 74% agreed that they would use a condom at every sexual encounter, 85% would insist that their partner have an HIV test and 92% said they would remain faithful to one partner (92%).

5.5.7 Disclosure of HIV test result

Thirty percent of respondents said that they would disclose the result of their HIV test to more than family and sexual partner. Disclosure to family only was selected by 25% and to sexual partner only by 35%.

Table 7: KABP towards HIV VCT table

Percentages in brackets ( )

	Total *n=100*	**Male** *n=36*	**Female** *n=64*
Ever heard of VCT for HIV			
Yes	75	26(72.2)	49(76.6)
No	25	10(27.8)	15(23.4)
Ever considered having HIV test			
Yes	60	22(66.1)	38(59.4)
No	40	14(38.9)	26(40.6)
Where is testing available			
Local clinic	28	8(22.2)	20(31.3)
Community Health Centre	12	4(11.1)	8(12.5)
Private General Practitioner	5	2(5.6)	3(4.7)
Specific Testing Centre	4	3(8.3)	2(3.1)
Hospital	4	1(2.8)	3(4.7)
More than one chosen	46	18(50)	28(43.8)
How is test done			
Blood test – vein	24	12(33.3)	12(18.8)
Blood test – finger prick	51	17(47.2)	34(53.1)
Urine test	2	1(2.8)	1(1.6)
Saliva test	1	1(2.8)	0
Skin test	0	0	0
Uncertain	22	6(16.7)	16(25)
How long to wait for result			
Few days	26	8(22.2)	18(28.1)
Few weeks	6	1(2.8)	5(7.8)
Immediately	43	15(41.7)	28(43.8)
Uncertain	25	12(33.3)	13(20.3)

Table 7: KABP towards HIV VCT table cont.

	Total	Male	Female
Influence decision to have HIV test –yes			
Cost	16	5(13.1)	11(17.2)
Convenient site	59	22(61.1)	37(57.8)
Discomfort from test	48	17(47.2)	30(46.8)
Confidentiality	59	23(63.9)	36(58.1)
Attitude of staff	64	25(69.4)	40(62.9)
Emotional readiness	62	26(72.2)	36(58.1)
Community attitude towards HIV positive people	47	15(41.7)	32(50)
Fear of discrimination	45	15(41.7)	30(46.8)
Fear of having to inform partner	50	18(50)	32(50)
Need parental permission	29	4(11.1)	25(38.7)
Availability of HIV treatment	57	22(61.1)	35(54.8)
Consulted at last clinic/CHC visit			
Doctor	53	20(55.5)	33(51.6)
Nurse	18	4(11.1)	14(21.9)
Health aide	1	1(2.8)	0
Peer educator/counsellor	3	1(2.8)	2(3.1)
Never attended clinic/CHC	25	10(27.8)	15(23.4)

Impression of staff at Clinic/CHC	**Total**			**Male**			**Female**		
	Agree	**Uncert.**	**Disagree**	**Agree**	**Uncert.**	**Disagree**	**Agree**	**Uncert.**	**Disagree**
Knowledgeable	65	24	10	25(69.4)	9(25)	2(5.6)	40(63.5)	15(23.8)	8(12.6)
Friendly	54	22	19	19(52.7)	8(22.2)	9(25)	35(55.5)	14(22.2)	14(22.2)
Interested	49	28	22	18(50)	12(33.3)	6(16.7)	31(49.2)	16(25.4)	16(25.3)
Well qualified	58	36	5	21(58.3)	14(38.9)	1(2.8)	37(58.7)	22(34.9)	4(6.4)
Communicates well	56	24	19	19(52.8)	11(30.6)	6(16.7)	37(58.7)	13(20.6)	13(20.6)
Respectful	52	27	20	17(47.2)	9(25)	10(27.8)	35(55.6)	18(28.6)	10(15.9)
Polite	54	25	20	17(47.2)	10(27.8)	9(25)	37(58.7)	15(23.8)	11(17.4)
Caring for privacy/confidentiality	59	27	13	21(58.3)	11(30.6)	4(11.1)	38(60.3)	16(25.4)	9(14.3)
Honest & direct	65	28	6	20(55.6)	14(38.9)	2(5.6)	45(71.5)	14(22.2)	4(6.4)
Listen well	57	33	9	20(55.5)	14(38.9)	2(5.6)	37(58.7)	19(30.2)	7(11.1)
Able to help	69	24	6	24(66.7)	10(27.8)	2(5.6)	45(71.4)	14(22.2)	4(6.4)

Factors affecting return to clinic/CHC

	Total			Male			Female		
	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree
Friendly/caring staff	81	10	8	33(91.7)	3(8.3)	0	48(76.2)	7(11.1)	8(12.7)
Short waiting time	67	16	16	28(77.8)	7(19.4)	1(2.8)	39(61.9)	9(14.3)	15(23.8)
Youth corner	51	39	9	17(47.2)	16(44.4)	3(8.4)	34(53.9)	23(36.5)	6(9.5)
Place to talk to peer educator	64	27	8	20(55.6)	14(38.9)	2(5.6)	44(69.9)	13(20.6)	6(9.5)
Convenient to attend	76	16	7	29(80.6)	7(19.4)	0	47(74.6)	9(14.3)	7(11.1)
Needed parents permission to attend	24	20	55	8(22.2)	7(19.4)	21(58.3)	16(25.4)	13(20.6)	34(53.9)
Staff not welcome/approve of young people	33	19	47	11(30.5)	9(25)	16(44.4)	22(34.9)	10(15.9)	31(49.2)
Lack of privacy	44	13	42	19(52.8)	3(8.3)	14(38.9)	25(39.7)	10(15.9)	28(44.5)
Embarrassed to go there	30	18	51	7(19.5)	7(19.4)	22(61.1)	23(36.5)	11(17.5)	29(46.1)
No drugs dispensed at clinic	32	31	36	6(16.7)	14(38.9)	16(44.4)	26(41.2)	17(27)	20(31.8)
Prefer traditional healer	11	17	71	3(8.4)	7(19.4)	26(72.2)	8(12.6)	10(15.9)	45(71.4)
Prefer private GP	56	23	20	18(50	10(27.8)	8(22.3)	38(60.3)	13(20.6)	12(19)

Behaviour change post HIV test

	Total			Male			Female		
	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree	Agree	Uncert.	Disagree
Continue unprotected sex	9	10	80	4(11.1)	5(13.9)	17(75)	5(8)	5(7.9)	53(84.1)
Abstain from sex completely	33	32	33	10(27.8)	11(30.6)	15(41.7)	23(36.5)	21(33.3)	19(30.2)
Sex only if using condom every time	74	17	8	28(77.5)	6(16.7)	2(5.6)	46(73)	11(17.5)	6(9.5)
Insist on partner having HIV test before unprotected sex	85	9	5	29(80.6)	5(13.9)	2(5.6)	56(88.9)	4(6.3)	3(4.8)
Remain faithful to one partner	92	3	4	31(86.1)	2(5.6)	3(8.4)	61(96.9)	1(1.6)	1(1.6)

Would you return to facility for HIV VCT?

	Total	Male	Female
Yes	69	20(57.1)	49(77.8)
No	29	15(42.9)	14(22.2)

Would you pay for an HIV test?

Yes	71	22(61.1)	49(76.6)
No	29	14(38.9)	15(23.4)

Disclosure of result with whom?

Family	25	8(22.2)	17(27)
Partner	35	14(38.9)	21(33.3)
Friend	9	3(8.3)	6(9.1)
Colleague	0	0	0
More than one including sex partner	30	11(30.6)	19(30.3)

6. DISCUSSION

This study analysed the demographic profile of adolescents attending a general private practice in Athlone and compared awareness of HIV/AIDS, sexual behaviour risk profile, awareness of VCT for HIV and utilisation of VCT.

6.1 Respondent profile

Subjects in this study had a mean age of 20 years and a range of 15 to 24 years. Most of the respondents were women. This is similar to the profile of adolescents seen at this practice.

The majority of respondents in this study were of the coloured population group as would be expected in a traditional coloured area. This was also reflected by the low response to Traditional African religion as religion practised.

Most of the respondents had completed secondary schooling and were either employed or still studying, with only 11% being unemployed. Most respondents were unmarried but living with parents. These factors reflect a more urbanised population, with maintenance of social institutions such as education, employment and family support structures, which may account for some of the trends in HIV prevalence in this area.

6.2 HIV knowledge and risk assessment

The majority of subjects were sexually active and 89% of those who were sexually active claimed to have only one sexual partner in the preceding three months. This indicates that adolescents in this community are sexually active but they appear to be at low risk for contracting HIV and other STIs. This could be because the prevalence of HIV is lower in the traditionally coloured suburbs and this could be explained by the degree and extent of urbanisation amongst these areas. Coloured areas are less recently urbanised and more stable than black areas, therefore there is less migration. The Athlone sub-district includes areas such as Gugulethu and Langa, which are traditionally Black areas. The HIV prevalence by area in Athlone sub-district is 18% (See figure 1). The HIV prevalence amongst women attending public sector antenatal clinics in Athlone is more likely to be similar to the other coloured areas such as Mitchell's Plain (5%) compared to Black areas such as Gugulethu (31%). There are a number of risk factors for the high prevalence of HIV in Gugulethu and Langa

including higher sexual risk behaviour, sexual networks, population demographics, unemployment, social deprivation, migration, high population density, and unstable communities. Coloured communities are more stable in terms of these factors. [23]

However the low level of condom use (42%) among respondents both male and female, and the low mean age of sexual debut (16 years) indicate an increased risk of contracting HIV if partners are having sexual encounters outside of the relationship. There may be a small core of individuals at high risk as illustrated by the six respondents who had more than one sexual partner in the preceding three months.

Only 42% of sexually active respondents used condoms at their last sexual encounter, which is less than the 52% reported by the Reproductive Health Research Unit, University of Witwatersrand in 2005 in a survey conducted in South Africa [16] The fact that 38% of respondents admitted to being party to an unplanned pregnancy confirms the lack of condom use, while all respondents denied ever having had an STI. If respondents are in a monogamous sexual relationship, their risk for HIV and STIs is low, compared to those who have exposure to more than one sexual partner, however it is not known whether their partners had other partners.

The results showed that most adolescents in this area had a good knowledge of the ways to prevent HIV and STIs, although they were less aware of the protective effect of abstinence and avoiding sex during menstruation.

Education programmes aimed at HIV prevention use the terms Abstinence, Be Faithful to one partner, and Condomise (ABC of prevention). The pattern of responses reflect that there is a high level of awareness of these strategies but these are not being implemented uniformly and young people are still engaging in high risk sexual behaviours from an early age and not using condoms at every sexual encounter. A high proportion of respondents believed that they had not done anything to put them at risk for contracting HIV, yet 58% of sexually active respondents did not use a condom at their last episode of sexual intercourse. Despite most respondents claiming to have only one sexual partner, this belief highlights the ineffectiveness of current education programmes regarding HIV prevention, with young adults still engaging in risk taking behaviour.

Most subjects knew the ways in which HIV is transmitted. The risk of transmission by insect bites and circumcision generated more uncertain responses. This could possibly be explained by the fact that these factors are not featured prominently in current HIV education programmes. Another consideration is that circumcision done by traditional African rites has potentially a higher risk of HIV transmission compared to in-hospital techniques, because of the reuse of blades and the absence of sterilisation. There were a few subjects from traditionally black areas, and this may account for the uncertainty with regards to circumcision and HIV transmission.

Most respondents were aware of HIV/AIDS, but only a third knew someone who had died of the disease. This could reflect the lower prevalence of HIV in this area compared to the rest of the Western Cape or South Africa.

6.3 KABP toward HIV VCT

75% of all respondents had heard of VCT for HIV. Similarly 73% of sexually active respondents have considered having an HIV test. This study did not quantify the number of respondents who had had an HIV test. The willingness to have an HIV test is a positive outcome, which could indicate that these young people are aware of their risk of contracting HIV, and are educated about strategies to remain negative and the importance of accessing services if they are infected.

Knowledge regarding the specifics of VCT such as location of testing sites, methods of testing and waiting period for results was generally poor. Most respondents chose more than one type of facility where they believed VCT was available, and most believed that it involved some sort of blood test. Only 43% knew the result would be available immediately. This shows that education and promotion campaigns on VCT should be conducted amongst adolescents.

Few subjects responded that cost would influence their decision to go for VCT. Cost could influence the lower prevalence of HIV and reduce the stigmatisation of HIV-infected individuals and encourage the recognition of HIV/AIDS as a chronic medical condition like other chronic conditions such as hypertension. General practitioners should be involved in HIV prevention, in particular VCT for HIV and should provide VCT at reduced cost to young people in order to increase the number of young people

having HIV tests rather than referring them to free VCT services in the public sector. Most subjects rated the factors: the attitude of staff, confidentiality, and the availability of HIV treatment as very important. Services provided by private general practitioners must be comprehensive and of a high standard to fulfil these expectations.

Subjects did not express a fear of discrimination or have concerns about community attitude towards HIV-infected people. This could again reflect the lower prevalence of HIV in this community. It may also show that there is an opportunity for education programmes to prevent the stigmatisation of HIV-infected individuals and encourage the view that HIV/AIDS is a chronic illness that requires community support and involvement to ensure optimal management and control.

Since VCT for HIV is free at public health facilities, the questionnaire attempted to gauge attitudes and beliefs towards these facilities and staff, and the factors that would determine whether a subject would return to the site for VCT. Clinical staff, either a doctor or nurse, attended most subjects, who had attended a state facility. Very few had exposure to peer educators or counsellors. It is uncertain whether this is due to availability of these personnel or if the presenting problem did not need their involvement. At all state run facilities pre- and post-VCT counselling is done by designated counsellors.

Subjects stated that they would return to the public sector clinic for VCT. Reasons included friendly/caring staff and accessibility. This highlights the important impact of staff attitudes towards young people on their decision to present for HIV testing. The availability of a youth corner, an area of the clinic which was designated for younger people in terms of layout, posters, and other youth directed materials, and peer educator were also frequently selected as factors that may influence respondents to attend that facility for VCT. Developing these resources may be a strategy to encourage more young people to present for VCT. A small number of subjects considered parental permission to be an important barrier to testing. Education and awareness programmes should thus be aimed at youth directly so they are empowered to go for testing.

Traditional healers were not selected, but this may be because few members of this community seek care from traditional healers.

Most respondents stated they would change their sexual behaviour if they had a HIV test. They reported that they would use a condom at every sexual encounter, insist that their partner have an HIV test before engaging in unprotected sex and remain faithful to one partner. This indicates that VCT can have a positive effect on behaviour change and should be a preventative strategy in the fight against HIV/AIDS.

Only a third of respondents stated that they would disclose their HIV status to their sexual partner after having VCT. Half of the respondents selected fear of having to inform their partner as a factor that would influence their decision to have VCT. This pattern of response can have major implications for partner tracing and lack of social support network for a person living with HIV and adherence to treatment protocols.

6.4 Limitations of study

The response rate to this study was not quantified although it appeared that the response rate was good but this may have been a limitation of this study. Not all patients in this age category agreed to participate for various reasons, most commonly not having time, not interested or those under 21 years who were not accompanied by a parent in order to give consent.

Respondents may have responded in the way in which the researcher may have expected them to respond and this may have led to information bias. For example most respondents would discontinue having unprotected sex by using a condom at every encounter and insist on partner having HIV test. It is also difficult to ascertain the effect of completing this questionnaire may have had on the respondents' responses to this question, as the reported sexual behaviour differed to that reported in the earlier part of the questionnaire.

The study only considered the respondent's profile and sexual behaviour, and not that of their partners. The description of their risk for HIV is incomplete as their sexual partner's profile in terms of number of partners, previous STI's, condom usage or known HIV status was not included.

7. CONCLUSION AND RECOMMENDATIONS

7.1 Conclusion

This study included a sample of young adults attending a general practise in the Athlone region of Cape Town. Focusing resources towards this part of the population is an important strategy in reducing the spread of the HIV/AIDS. The demographic profile of the study population was typical of a formal urban settlement in a traditionally coloured area, in which the HIV prevalence rate is lower than the average for both the Western Cape and South Africa.

The majority of respondents were sexually active, had early sexual debut, and low levels of condom usage at last sexual encounter but most claimed to have had only one sexual partner in preceding 3 months. Respondents had high levels of awareness of HIV prevention strategies but that these did not always translate into the adoption of appropriate behaviours. This disparity between awareness of HIV prevention strategies and actual risk taking sexual behaviour could reflect inadequacies in current HIV education programmes.

Awareness of the availability of VCT and willingness of respondents to test are encouraging. However, the lack of knowledge regarding the specifics of VCT such a testing sites, methods, and availability of results indicate that education programmes regarding VCT are not effective. Potential positive changes in risk taking sexual behaviour became apparent after participants in this study completed the questionnaire, which could be replicated when young people have HIV VCT, and this potential must be reinforced as an important preventative strategy. A further study which re-examined respondents after having had HIV VCT, would confirm whether HIV VCT made an impact on at risk sexual behaviour or if respondents answered questions in a biased manner.

Interventions should be specifically designed to address barriers that youth face in presenting for VCT. VCT communication directly relates to the theme of hope, incorporating healthy activities (positive living and thinking) and support. Rapid testing and high quality counselling potentially has the capacity to change risk-taking behaviour.

7.2 Recommendations

Abstinence from sex and delaying sexual debut must be made "valuable" to the adolescent, a message that needs to be encouraged more widely. Educators and peers need to be trained to provide effective HIV/AIDS education that is accurate, sensitive to adolescent issues, less intimidating and more accessible.

Young people are not a homogenous group. VCT is an effective entry point for prevention and care services. Strategies to normalise testing by decreasing stigma and discrimination will increase acceptability and decrease barriers to VCT. Programmes should encourage high profile members of society or role models to publicly go for HIV testing.

Strategies must promote appropriate and culturally relevant health education programmes to invite young people to help plan, implement and promote safer sex and HIV programmes. All stakeholders must be taken into account in the construction of these programmes.

Programmes should encompass knowledge and skills such as traditional social norms and values for development of healthy human relationships, effective communication, responsible decision making, and problem solving skills in combating social pressure for having sex. Special consideration must be given to young women in order to address gender inequality, lack of power in decision-making, and social coercion. Young men must be taught respect and support for women as well as gender equality

There must be a perceived benefit to go for VCT. If the individual tests positive, the testing facility must be able to offer or refer on to a centre for further assessment and comprehensive management.

Positive attitude by attending health professionals is also of benefit. Judgmental and unfriendly service providers will only serve to inhibit young people to present for HIV VCT.

One way to increase VCT may be to seek state-private partnerships where the state subsidises the cost of HIV tests in the private sector. These programmes must be better utilised and expanded so that VCT can be more accessible.

The accessibility of testing facilities needs to be improved e.g. operating on weekends and after hours, making services more youth-friendly, but the strategy must involve counsellors and the target groups to ensure long-term viability and functioning of such services.

Development and implementation of supportive national guidelines and policies are needed with specific reference to young people. These must clearly address legal issues surrounding age of consent for VCT, as well as the provision of high quality, affordable and confidential sexual and reproductive health information and services. These include improved access to condoms, diagnostic and treatment of HIV/AIDS and other STI's.

8. APPENDICES

8.1 Consent Form

Dear participant:

I am conducting a survey amongst young people attending my practise. The purpose of the survey is to learn what young people understand about Voluntary Counselling and Testing for HIV. This information may help us to understand some of the health needs of the youth in this area.

I would like you to complete a confidential questionnaire. Some questions are personal, but your answers will not be shown to anyone. They will only be used to assist us in learning more about the knowledge, attitudes, beliefs and practises of young people. We especially want your answers because if everyone who is selected participates, our information will be more useful.

Risks and Benefits to Participants

There are no foreseen risks to the participant but some of the questions may make you feel uncomfortable. You are not obligated to participate, but we do appreciate your time and response and you may withdraw from the survey at any time, even after completing this form. This will in no way affect my professional relationship with you. The time required to complete this survey is about 30 minutes.

The immediate benefits are limited but the intention is to provide information that could make HIV VCT services more accessible to this population group. Participation may also make you, the respondent more aware of the issues related to HIV/AIDS, and may act as a stimulus to undergo formal voluntary counselling and testing for HIV.

If you have any anxieties about the issues raised in the questions please feel free to raise them with the researcher who will assist with counselling or refer you to an appropriate counselling service.

If you have any questions, please do not hesitate to ask at any time. Please keep a copy of this letter so you will know how to contact me in the future.

My contact details are: Dr AA Esack P O Box 302 Athlone 7760

Tel 021 696 2997

If you understand what I have explained to you and I have your permission to continue, please indicate this by signing this form below.

Thank you for agreeing to participate in this study.

Signature of Participant	Signature of Researcher	Date

Signature of Parent/guardian if participant under 21 years

Research at University of Cape Town that involves human participants is overseen by the Research Ethics Committee. Questions or problems regarding your rights as a participant should be addressed to Dr. M. Blockman, Health Science Faculty, Research Ethics Committee, University of Cape Town, Tel: (021) 406 6338, email:preaward@curie.uct.ac.za

8.2 Questionnaire [24, 25]

Background information

For office use

1. Sex of respondent (circle one answer) 1. Male 2 Female

2. How old were you on your last birthday? Age: .....years

3. What is your religious denomination?
(circle one answer)

1. None
2. Catholic
3. Protestant
4. Muslim
5. Buddhist
6. Hindu
7. Spiritual
8. Jewish
9. Traditional African
10. Other .....

4. In which area/suburb do you live?
(circle one answer)

1. Athlone
2. Hazendal
3. Bokmakierie
4. Garlandale
5. Sybrand Park
6. Kewtown
5. Langa
6. Bonteheuwel
7. Other.....

5. What is the highest level of schooling that you have completed?
(circle one answer)

1. No Schooling
2. Primary school
3. Secondary school
4. Technikon/college
5. University

6. What have you done in the last month to earn money for yourself?
(circle answer/s)

1. Nothing
2. Selling goods
3. Employed
4. Casual labour
5. Student

7. Regarding marital status, are you currently:

(circle one answer)

1. Married living with spouse
2. Married, spouse lives elsewhere
3. Unmarried, living alone
4. Unmarried, living with partner
5. Unmarried, living with parent/s
6. Divorced or separated
7. Widowed

Risk Assessment

8. Are you currently or have previously been sexually active?

(circle one answer)

1.Yes 2.No

If Yes continue with question 9

If No skip to question 14

9. How many sexual partners have you had in the past 3 months?

.....

10. At the last episode of sexual intercourse did you use a condom?

(circle one answer)

1. Yes 2. No

11. How old were you when you first had sexual intercourse?

.....years

12. Have you had or been party to an unplanned pregnancy?

(circle one answer)

1.Yes 2.No

13. Have you ever had a sexually transmitted illness?

(Genital discharge, ulcers, or sores, or diagnosed with Gonorrhoea, Chlamydia or Syphilis by clinic or doctor) Circle answer:

1.Yes 2.No

If yes, Details of problem, when it occurred, what treatment was received.....

.....

14. What does safe sex mean to you?

To the following statements, please choose a number closest to your response:

Strongly agree	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
1	2	3	4	5

14.1 Abstaining from sex completely [ ]

14.2 Using condom at every episode of sexual intercourse [ ]

14.3 Being faithful to one sexual partner [ ]

14.4 Avoiding sex with prostitutes [ ]

14.5 Avoiding anal sex [ ]

14.6 Avoid having sex during woman's menses or other genital bleeding [ ]

HIV/ AIDS knowledge & risk

15. Have you ever heard of HIV/AIDS? ☐

(circle answer)

1.Yes 2.No

16. Do you think that you have done anything that puts you at risk for contracting HIV? ☐

(circle answer)

1.Yes 2.No

17. Do you know someone who has died of HIV/AIDS? ☐

(circle answer)

1.Yes 2.No

To the following statements, please choose a number closest to your response:

Strongly agree	**Agree**	**Uncertain / Don't know**	**Disagree**	**Strongly Disagree**
1	2	3	4	5

18. HIV / AIDS is caused by the spirits or other supernatural forces [ ]. ☐

19. A healthy-looking person can be infected with HIV. [ ] ☐

20. A person can get HIV/AIDS the first time he or she has sex. [ ] ☐

21. A woman who has HIV can give birth to a child with HIV. [ ] ☐

22. AIDS is curable in some cases. [ ]

23. HIV infection could be passed through sharing eating utensils with someone who has AIDS. [ ]

24. A person can contract HIV/AIDS at the time of circumcision. [ ]

25. A person can get HIV through mosquito, flea or bedbug bites. [ ]

KABP towards HIV VCT

26. Have you ever heard of Voluntary Counselling and Testing (VCT) for HIV? (circle answer)

1.Yes 2. No

VCT for HIV is a voluntary test, offered free at certain sites, no parental permission is required, is confidential, and counselling is given before and after test.

27. Have you had or considered having a HIV test? (circle answer)

1.Yes 2.No

28. Where do you think it is available? (circle answer/s)

1. Local clinic
2. Community Health Centre (Day hosp)
3. Private General Practitioner
4. Specific testing centre
5. Hospital
6.Other.....

29. How do you think a test is done? (circle answer/s)

1. Blood test from vein puncture
2. Blood test from finger prick
3. Urine test
4. Saliva test
5. Skin test
6. Don't know/unsure

30. How long do you think you would have to wait for a result? (circle answer)

1. Result available within few days
2. Result available within few weeks
3. Result available immediately
4. Unsure/ don't know

31. Which of the following factors would influence your decision to go for a HIV test ? (circle answer)

	Yes	No
31.1 Cost	1	2
31.2 Convenient site	1	2
31.3 Discomfort from test	1	2
31.4 Confidentiality	1	2
31.5 Attitude of staff	1	2
31.6 Emotional readiness	1	2
31.7 Community attitude towards HIV pos people	1	2
31.8 Fear of discrimination	1	2
31.9 Fear of having to inform partner	1	2
31.10 Need parent permission	1	2
31.11 Availability of treatment for HIV/AIDS	1	2

32. Who did you talk to or see at your local clinic or Day hospital, the last time you attended? (*circle all that apply.)*

1. Doctor
2. Nurse
3. Health aide
4. Peer educator /counsellor
5. Other *(specify)*: _____
9. Have never attended Clinic or Day hospital

33. What is your impression of the staff at your local clinic or day hospital, even if you have not actually attended?

To the following statements, please choose a number closest to your response:

Strongly agree	**Agree**	**Uncertain / Don't know**	**Disagree**	**Strongly Disagree**
1	2	3	4	5

1. Staff is knowledgeable [ ]
2. Staff is friendly [ ]
3. Staff is interested in you [ ]
4. Staff is well-qualified [ ]
5. Staff communicates well [ ]
6. Staff is respectful [ ]
7. Staff is polite [ ]
8. Staff is caring about your privacy/ confidentiality [ ]
9. Staff is honest and direct [ ]
10. Staff listens well [ ]
11. Staff able to help you [ ]

34. Would you return to this facility for HIV Voluntary Counselling and Testing VCT? (circle answer)

1. Yes 2. No

35. Which of the following factors would affect you returning to the local clinic or day hospital?

To the following statements, please choose a number closest to your response:

Strongly agree	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**
1	2	3	4	5

35.1 Friendly/caring staff [ ]
35.2 Short waiting time [ ]
35.3 Youth corner [ ]
35.4 Place to talk with peer educators [ ]
35.5 Convenient to attend [ ]
35.6 Needed parent's permission to attend [ ]
35.7 Staff does not welcome/approve of young people [ ]
35.8 Lack of privacy [ ]
35.9 Embarrassed to go there [ ]
35.10 No drugs dispensed at clinic [ ]
35.11 Prefer to go to the traditional healer [ ]
35.12 Prefer to go to private GP [ ]

36. Would you be prepared to pay for an HIV test? [ ]
(circle answer)
1.Yes 2.No

37. If you had an HIV test and knew your status whether positive or negative, would you change your behaviour in any of these ways [ ]
1.Yes 2.No

37.1 Have unprotected sex in the future [ ]
37.2 Abstain from sex [ ]
37.3 Have sex only if using a condom every time [ ]
37.4 Insist on partner having a HIV test before having unprotected sex [ ]
37.5 Remain faithful to only one sexual partner [ ]
37.6 Other behaviour change, please specify.....[ ]

38. If you had an HIV test, who would you share your result with? ☐

(circle answer)

1. Family member
2. Sexual partner
3. Friend
4. Colleague
5. Other (specify)_____

Thank you for your participation.

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