The role of voluntary counselling and testing in modifying risky sexual behaviour for HIV infection: Cross-sectional study from the ‘Wellness Clinic’ of a District Hospital in rural Limpopo, South Africa

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Declaration

This serve to declare that:

- The planning, compilation of data and execution of this study is my original work.
- I have not previously, in any form, submitted this research at any University for a degree.
- All sources and references quoted here have been duly acknowledged in the References section.

___________________________
Dr J A Leon Gonzalez

___________________________
Date signed.

Please notice: The signed declaration is attached as a pdf file.
Abstract

**Background:** Voluntary HIV counselling and testing (VCT) is considered one of the key strategies in the prevention and control of HIV/AIDS in South Africa. However its role in modifying risky sexual behaviour among patients tested as HIV-negative (primary prevention) is controversial.

**Objective:** This study was intended to demonstrate the likelihood of VCT reducing risky sexual practices among patients testing sero-negative for HIV infection.

**Methods:** This is a quantitative cross-sectional survey that took place over a period of 3½ months in a district hospital in rural South Africa. A self-administered questionnaire was completed by 54 patients who had VCT and tested sero-negative for HIV infection during the previous 12 months (Study Group). The same questionnaire was filled in by 61 patients who had never received VCT before (Control Group). Both groups consisted of women and men aged 18 years or older. Socio-demographic information, sexual behaviour, willingness to disclose the HIV sero-status with the sexual partner, and readiness to have VCT were asked in the survey. To compare differences between two independent proportions the Pearson Chi-square test was used. Significant results were regarded as a p-value of less than 0.05, which was taken as an indication of association between VCT and the variable being measured.

**Results:** The median age of our sample was 29 years (Interquartile Range 24-40), with most of the respondents (38 %) between the ages of 26 and 35 years. More than 90 % of patients in both groups reported being sexually active. Sexual intercourse with more than one partner was significantly lower in the Study group (p=0.003). Those who had never received VCT before had a higher (although not significant) incidence of episodes of unprotected sexual intercourse and symptoms of sexually transmitted infections (STIs) (81, 9 % and 42, 6 % respectively) when compared to the study group (77, 7 % and 35, 1 %). Most of the participants in both groups did not consider the disclosing of their sero-status an issue of concern for their sexual partner(s). Readiness to receive VCT was significantly higher in the study group (p=0.02).

**Conclusions:** In this study, people who tested sero-negative for HIV through VCT showed a significant decrease in the number of sexual partners as compared to the control group who did not undergo VCT. The VCT group had less unprotected sexual intercourse and less symptoms of STIs than the control group.
**Introduction**

In 2008 the World Health Organization (WHO) reported an estimated 22.4 million people living with HIV infection in sub-Saharan Africa and the number of HIV-related deaths at 1.4 million. Sixty seven percent of patients infected with HIV were living in Southern Africa as well as 68 % of the world's new infections among adults and 91 % of new infections among children. The region accounted for 72 % of HIV related deaths in 2008. The same source mentions that currently, despite treatment scale-up having shown significant achievements, the epidemic continues to outpace the response. Therefore the region needs immediate steps to elevate the priority given to HIV prevention and more importantly to match the prevention strategies with the actual needs. It was estimated that in 2010 sub-Saharan Africa needed almost half of the total global resources to fight the epidemic. In South Africa HIV prevalence is estimated at 10.6 % (5.3 million people). The HIV & AIDS and STI National Strategic Plan for South Africa 2007-2011 recognizes that behavioural change in HIV prevention remains a problem and aims to reduce new infections by 50 % in 2011.

Unprotected sexual intercourse among heterosexual partners is the main form in which HIV spreads in the region. Personal responsibility has been identified as the main determinant of how each individual responds to their sero-status, hence the conviction that the adoption of safer sexual behaviour is paramount in preventing the transmission of the disease.

Voluntary counselling and testing (VCT) is universally accepted as the entry point to HIV care and prevention. The counselling sessions are supposed to serve two main purposes: firstly they ensure that patients who test positive for the infection are further directed to appropriate care, and secondly, they should promote safer sexual practices. In achieving this, VCT motivates those who are HIV negative to remain uninfected (primary prevention) and those who are infected to prevent the spread of the disease by adopting safer sexual practices (secondary prevention).

The role of VCT in modifying risky sexual behaviour, for both primary and secondary prevention, has been a subject of research and controversy over the years. The outcomes of four different meta-analyses with research from developed countries, have found mixed results. They showed that VCT seems to modify sexual behaviour in infected individuals, especially in sero-discordant couples, but promotes little or no behaviour changes in individuals who tested sero-negative. A similar analysis that included studies done in Africa reported that VCT recipients in general were less likely to engage in unprotected sex, but did not reduce their number of sexual partners. A randomized controlled trial that took place in 3 developing countries (Kenya, Tanzania and Trinidad) concluded that quality controlled VCT produced significant reduction in risky behaviour and/or the incidence of sexually transmitted infections (STIs). The outcomes of other studies in the region, despite being difficult to evaluate due to different designs, have produced contradictory conclusions. Some have found that VCT clients increased condom use significantly but others established that VCT made no difference to sexual behaviour. A study done in a rural community...
in Zimbabwe showed that patients who tested negative for HIV actually increased their risky behaviour after VCT.¹⁸ Research addressing this subject in rural South Africa is very scarce.

There is an urgent need for preventative interventions to reduce the incidence of HIV in the region. VCT is often the only individual and personalised intervention addressing risky sexual behaviour. The contradictory outcomes from the previous research on the subject require clarification.
Aim and objectives

Aims

The study aimed to find out whether people who tested negative for HIV (through VCT) showed a decrease in risky sexual practices.

Objectives

The objectives were developed on the premise that VCT for HIV is both a tool for diagnosing the infection and also an opportunity to promote safer sexual behaviour.

The objectives of the study were:

1. To investigate the role of VCT in promoting safer sexual behaviour in patients diagnosed as sero-negative for HIV Infection.
2. To investigate how VCT influenced other desirable outcomes like willingness to disclose the sero-status to the sexual partner, and readiness to test for HIV.
3. To establish a baseline profile of risky sexual behaviour in the participants, as reference for further research.
Methods

Study design

This was a quantitative cross-sectional survey that took place over a period of 3 ½ months. A structured self-administered questionnaire was completed by a group of patients who had tested for HIV, through VCT, during the previous 12 months. The same was done by a group of patients who admitted never receiving VCT before and acted as a control group.

Setting

The study took place in the ‘Wellness Clinic’ of Groblersdal District Hospital and its satellite site at Roossenekal clinic, located in Limpopo province in South Africa. We serve a community where 94.7 % of its people live in a rural area. There are high levels of unemployment and a high incidence of infectious diseases such as HIV and TB. In the Wellness Clinic we offer the complete range of services for the prevention and treatment of HIV infection. In our setting VCT is the only individualized preventative intervention addressing the link between risky sexual behaviour and HIV.

Study population

Study group: Participants were patients 18 years and older, who had received VCT between 1 April 2010 and 31 March 2011, and were found to be sero-negative for HIV infection. The VCT register from the Wellness Clinic in Groblersdal District Hospital and Roossenekal Clinic (where the hospital Wellness Clinic team provides an outreach service) was searched and 134 patients were initially selected. Letters of invitation were then sent to them with a brief explanation on the purpose of the study and a request for their participation. A total of 54 patients volunteered to complete the questionnaire (40.2% response rate). Thirty two people presented to the hospital and 22 at the clinic.

Control group: Participants were selected from patients 18 years and older who attended the Out Patient Department (OPD) in the hospital during the period of the survey. Patients in this group had never received VCT before. The invitation to complete the questionnaire was provided in a pamphlet given by the triage professional nurse of OPD. The invitation contained a brief explanation about the purpose of the research and the request to participate, as well as assurances of confidentiality. The same nurse was the provider of the questionnaire to those interested in being part of the study. The first consecutive 130 patients who met the criteria were invited, out of which 61 agreed to participate (response rate of 46.9%).


**Data collection**

Before completing the questionnaire participants in both groups had a briefing session with a trained nurse or a counsellor about its content, as well as the confidentiality surrounding its completion. This was done to target possible misunderstanding or concerns of any origin. Four participants were helped in completing the questionnaire, 3 due to literacy issues and 1 due to poor sight. The consent for participating in the study was also explained in detail and obtained at this point. The invitation letter, the consent to participate and the research questionnaires were made available in English and Sepedi.

The participants filled in the questionnaire in the waiting areas of the Wellness Clinic and OPD. Once finished, it was placed in a sealed box available for this purpose. The opportunity of receiving a VCT session was given to all the participants who agreed to it.

**The questionnaire**

The questionnaire enquired about age, gender, educational level, occupation and marital status in order to have a better understanding of the main socio-demographic characteristics of the participants. The primary outcome of the study was to find out if receiving VCT produced any changes in sexual behaviour in the study group. To serve this purpose, sexual intercourse with a new and/or with more than one partner, symptoms of STIs, condom usage, sexual intercourse while under the influence of alcohol and the existence of pregnancy (or of a pregnant partner) were included in the enquiry. To explore other desirable outcomes of VCT we asked about the willingness to disclose their sero-status to their sexual partners, and readiness to receive VCT on the day of completion of the questionnaire. The incidence of retesting in the study group was also included.

**Data analysis**

The answers to the questionnaire were entered into a Microsoft Excel Spreadsheet for further analysis.

A univariable analysis of the data (collected as continuous and nominal variables) was then performed and the results were plotted in tables and graphs for easy interpretation. To compare differences between 2 independent proportions the Pearson Chi-square test was used. Significant results were regarded as a p-value of less than 0.05; which was taken as an indication of association between VCT and the variable being measured. A sample size of 115 achieves 80% power to detect an effect size (W) of 0.2612 using a 1 degree of freedom Chi-Square Test with a significance level (alpha) of 0.05000. The statistical analysis was done at the Centre for Statistical Consultation at the University of Stellenbosch by using Statsoft Inc. (2007) STATISTICA (data analysis software system), version 8. www.statsoft.com. The statistical methods used to compare variables were as follows: Nominal/Nominal the Pearson chi-square, and for nominal/continuous the ANOVA or t-test.
Ethical considerations

Approval for this research was obtained from the Health Research Ethics Committee of the University of Stellenbosch (Ref N10/10/335) as well as the equivalent body at the Hospital Level.

Access to the database was restricted by a password and made available to the main investigator only, to ensure confidentiality. No data related to personal identification of the participants was collected.
Results

Table 1 shows the age and sex distribution of the study population. The median age was 29 years (Interquartile Range (IQR) 24 - 40) with most participants falling in the age group between 26 and 35 years (38, 2 %). In the study group females accounted for 64, 8 % while males predominated in the control group (57, 3 %).

Table 1: Age groups and sex

<table>
<thead>
<tr>
<th>Age Groups in years/Sex</th>
<th>Study Group (N=54)</th>
<th>Control Group (N=61)</th>
<th>Both Groups (N=115)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>♀</td>
<td>♂</td>
<td>♀</td>
</tr>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>18 – 25</td>
<td>12 (22,2)</td>
<td>4 (7,4)</td>
<td>9 (14,7)</td>
</tr>
<tr>
<td>26 – 35</td>
<td>17 (31,4)</td>
<td>9 (16,6)</td>
<td>6 (9,8)</td>
</tr>
<tr>
<td>36 – 45</td>
<td>3 (5,5)</td>
<td>3 (5,5)</td>
<td>7 (11,4)</td>
</tr>
<tr>
<td>46 – 55</td>
<td>2 (3,7)</td>
<td>3 (5,5)</td>
<td>2 (3,2)</td>
</tr>
<tr>
<td>&gt; 55</td>
<td>1 (1,8)</td>
<td>0 (0)</td>
<td>2 (3,2)</td>
</tr>
<tr>
<td>Total</td>
<td>35 (64,8)</td>
<td>19 (35,1)</td>
<td>26 (42,6)</td>
</tr>
</tbody>
</table>

Table 2 shows the educational, occupational and marital status of the study population. The majority of patients reported achieving grade 6 at school (53, 9%) and 26,9 % passed at least grade 12. Only 2, 6 % never attended school. More than half of the patients were not working or studying (55, 6 %). Those working made up 33 % of participants. Most people were single (60%) with no major differences between the two groups. A fifth (20, 8 %) were married.

Table 2: Educational level, occupation and marital status

<table>
<thead>
<tr>
<th>Socio-demographic Characteristics</th>
<th>Total (N=115)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
</tr>
<tr>
<td>• Grade 6</td>
<td>62</td>
</tr>
<tr>
<td>• Grade 12</td>
<td>31</td>
</tr>
<tr>
<td>• Technical</td>
<td>7</td>
</tr>
<tr>
<td>• University</td>
<td>1</td>
</tr>
<tr>
<td>• Never passed grade 6</td>
<td>11</td>
</tr>
<tr>
<td>• Never attended school</td>
<td>3</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
</tr>
<tr>
<td>• Working</td>
<td>38</td>
</tr>
<tr>
<td>• Studying</td>
<td>13</td>
</tr>
<tr>
<td>• Not working or Studying</td>
<td>64</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
</tr>
<tr>
<td>• Married</td>
<td>24</td>
</tr>
<tr>
<td>• Single</td>
<td>69</td>
</tr>
<tr>
<td>• Divorced</td>
<td>3</td>
</tr>
<tr>
<td>• Living as married</td>
<td>19</td>
</tr>
</tbody>
</table>
Table 3 (further illustrated in figure 1) compares the sexual behaviour of the study and control groups in the previous 6 months. The vast majority of respondents were sexually active (94.4% for the study group and 90.1% for the control group). Sexual intercourse with more than one partner was significantly lower in those from the VCT group (18.5%) as compared to the control group (42.6%), with a p-value < 0.05. The control group had a higher prevalence of sex without condoms (81.9%) and more symptoms of STIs (42.6%) than the study group; although it was not statistically significant. The reported number of new sexual partners was similar for both groups.

Being pregnant or having a pregnant partner was reported by 27.7% of respondents in the study group compared with 22.9% in the control group. Incidents of sexual intercourse while under the influence of alcohol reached 24.5% in the control group and 22.2% in the study group. In this regard no significant difference was found between them.

Table 3: Pattern of sexual behaviour in the previous 6 months

<table>
<thead>
<tr>
<th>Reported Pattern of Sexual Behaviour in previous 6 months</th>
<th>Study Group (N=54)</th>
<th>Control Group (N=61)</th>
<th>All groups Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>p-value</td>
</tr>
<tr>
<td>Sexually active</td>
<td>51(94.4)</td>
<td>55(90.1)</td>
<td>0.393</td>
</tr>
<tr>
<td>New sexual partner</td>
<td>22(40.7)</td>
<td>25(40.9)</td>
<td>0.997</td>
</tr>
<tr>
<td>More than one sexual partner</td>
<td>10(18.5)</td>
<td>26(42.6)</td>
<td>0.003</td>
</tr>
<tr>
<td>Pregnant / Made somebody pregnant</td>
<td>15(27.7)</td>
<td>14(22.9)</td>
<td>0.420</td>
</tr>
<tr>
<td>STI symptoms</td>
<td>19(35.1)</td>
<td>26(42.6)</td>
<td>0.414</td>
</tr>
<tr>
<td>Sex WITHOUT condoms</td>
<td>42(77.7)</td>
<td>50(81.9)</td>
<td>0.059</td>
</tr>
<tr>
<td>Sex PLUS alcohol</td>
<td>12(22.2)</td>
<td>15(24.5)</td>
<td>0.406</td>
</tr>
</tbody>
</table>
Figure 1: Pattern of sexual behaviour in the previous 6 months
Figure 2 shows the readiness of participants to disclose their sero-status to their partner. Readiness was higher in those who received VCT group (23, 42, 5 %) when compared with the control (16, 26, 2 %). This difference was not significant (p=0.064). The most frequently cited reasons for the unwillingness to disclose were ‘not considering their sero-status to be a concern of their sexual partner’, and ‘fears of abandonment’ (as depicted in figure 3).
Tables 4 and 5 show the pattern of re-testing in those who had VCT before as well as the main reasons for it. Twenty four percent of participants in the study group had VCT more than once. Most of them cited pregnancy and other reasons as the main drivers for retesting.

**Table 4: Patients in the study group who tested more than once**

<table>
<thead>
<tr>
<th>Study Group (N=54)</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCT more than once</td>
<td>13 (24,0)</td>
</tr>
<tr>
<td>VCT once</td>
<td>41 (75,9)</td>
</tr>
</tbody>
</table>

**Table 5: Main cited reasons for retesting in VCT group**

<table>
<thead>
<tr>
<th>Cited Reasons for Retesting (N=13)</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risky sexual encounter</td>
<td>4 (30,7)</td>
</tr>
<tr>
<td>Concerns about partner’s status</td>
<td>4 (30,7)</td>
</tr>
<tr>
<td>Want to know status on a regular basis</td>
<td>1 (7,6)</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>7 (53,8)</td>
</tr>
<tr>
<td>Other</td>
<td>10 (76,9)</td>
</tr>
</tbody>
</table>
Figure 4 shows the expressed readiness to have VCT at the time of completing the questionnaire. Most respondents in the study group were ready for another session of VCT (42, 77.7%) when compared to those who never had VCT before (35, 57.3%). The difference between the two groups was statistically significant (p=0.02). Those who refused VCT cited being sure about their sero-status (25, 60.9%) and/or being scared of the results (16, 39.0%) as the most common reasons.

**Figure 4: Readiness for VCT (On completion of the questionnaire)**

![Readiness for VCT](image)
Discussion

Pattern of sexual behaviour in the previous 6 months

Our patients were mostly young, with levels of both education and employment being higher than average for the province of Limpopo.\textsuperscript{19} Taking into account that our sample was not representative of the general population we believe that this finding cannot be extrapolated to the district as a whole. Only 20\% of the participants were married. No equivalent data for the province was available for comparison.

The combination of young age with an active sexual life, as found among the respondents, gives us good grounds to explore risky sexual behaviour. Of particular relevance was that sexual intercourse with more than one partner at a time (known as a concurrent relationship), was significantly lower in those who had received VCT and coincides with outcomes from previous studies.\textsuperscript{20,21} The importance of this finding is directly related to the known fact that unprotected sex in the context of concurrent sexual relationships is largely seen as responsible for the spread of the epidemic in Southern Africa.\textsuperscript{22,23,24} Emanating from this reality is the strong recommendation about the development of programmes focusing on partner limitation, as a key component of HIV prevention in the region.\textsuperscript{25}

Consistent condom use is considered an effective method of protecting against HIV and other sexually transmitted diseases.\textsuperscript{26,27} In our hospital this concept is at the core of VCT practice; yet we found that regular condom use, despite being higher in the VCT group, was alarmingly low when compared with two previous national surveys done in our country during 2003 and 2005.\textsuperscript{3,28} Other studies in Africa have yielded different and sometimes contradictory outcomes. Some have found that after VCT the use of condoms was increased mainly among females, while others reported improvement for all the participants in general.\textsuperscript{29,14} Two studies done in the region on sero-discordant couples found that VCT produced a sustained, but imperfect use of condoms in one,\textsuperscript{30} while a prospective cohort research study in Kenya described increased condom use after VCT and a parallel decrease in the number of sexual partner and symptoms of STIs.\textsuperscript{20} The availability of condoms is not considered a problem in our district. The low use of condoms among our respondents deserves further research.

Symptoms of STIs were reported more often by those who never had VCT before, but once again were generally high for both groups when compared with previous data from South Africa.\textsuperscript{28} This does not come as a surprise given the high incidence of unprotected sexual intercourse found among the participants. The relevance of this finding derives from the synergy between STIs and HIV \textsuperscript{31} and the association between HIV transmission risks and high unsafe sexual practice risks that have been closely attributed to patients with STIs.\textsuperscript{31,32}

The incidence of new sexual partners was similar for both groups, as was the practice of sexual intercourse while under the influence of alcohol. These risky sexual behaviours provides a potential new opportunity to contract HIV infection.\textsuperscript{33,34,35}

Pregnancy is an indicator of unprotected sexual intercourse and therefore carries risks of HIV transmission, especially for those who do not know their or their partners sero-status.\textsuperscript{36} Patients in the VCT group
reported a slightly higher incidence of pregnancy in their relationships over the last 6 months, perhaps related to confidence in their sero-status. Pregnancy was the main cited reason for retesting in the study group, probably as a result of the prevention of mother-to-child transmission program (PMTCT) and not as a self-perceived risk of HIV infection by the pregnant woman or her sexual partner. Apart from pregnancy, other known motivators for testing, like risky sexual encounters and concerns about partner’s status were also reported by the respondents who re-tested.37

Readiness for VCT

Patients who had received VCT were more likely to accept the test, possibly due to their familiarity with the experience or the perceived certainty about been HIV negative from the previous test. Fears about the outcome of the test, confidentiality issues, stigma and discrimination have all been associated with reluctance to test for HIV 38 and could also explain why a relatively high number of patients refused it in the control group. Participants of a study done in a peri-urban area in our province identified casual and unprotected sex as the main motivator for VCT. They also cited fears of the test results and discrimination as the main barrier to testing.39

Willingness to disclose sero-status to sexual partner

Willingness to disclose one’s sero-status to one’s sexual partner is a desired outcome of VCT and is also considered a key component of HIV prevention.40 Ideally, disclosure should produce safer sexual practices and at the same time increase awareness in the untested partner which should lead to a secondary increase in VCT uptake.41,42,43,44 To our disappointment the readiness to disclose among patients in the VCT group was lower than expected since most of the respondents did not consider this information of concern to their partners. Fears about losing economic support, abandonment, physical and/or emotional abuse, discrimination and disruption of family relationships are other potential risks and barriers to disclosure45 and could also explain our findings. Counselling of the sexual partner has been advocated as a means to improving disclosure.42,43,46 Most of our patients received VCT separately from their partners (data from our VCT unit). This is probably related to the same fears mentioned earlier.
Limitations of the study

- Our sample was respondent driven with a relatively low response rate in both groups. Transport related difficulties could explain this fact in the study group. Unwillingness to take the trouble to fill in the questionnaire or spend more time at the hospital may have put off others. Literacy was probably not an issue as help was provided for filling in the questionnaire, though some may have been too shy to ask for assistance.

- The participants in the study group were chosen retrospectively and contacted by post, while the control group was recruited in the hospital OPD. This may have led to selection and participation bias. The people who had received VCT before may have had this because they were worried about previous unsafe sexual practices. The control group attended OPD for general health issues and are less likely to have come to hospital for reasons related to sexual behaviour.

- The data about sexual behaviour in this study was self-reported which always carries some bias around the veracity of the answers. We tried to circumvent this problem by making the questionnaire self-administered which hopefully led to more truthful answers.

- Finally, the assessment of behavioural changes occurred over a short period of time hence the long term impact would need follow-up and further research.
**Conclusions**

In this study, people tested sero-negative for HIV through VCT showed a significant decrease in the number of sexual partners and to a lesser extent in the incidence of unprotected sexual intercourse and symptoms of STIs as compared to the control group. If further research could prove that the VCT counselling of sero-negative persons led to a decrease in the number of concurrent sexual relationships, then the role of VCT in promoting safer sexual practices would be vindicated.

The impact of VCT on the willingness to disclose the sero-status to the sexual partner was not satisfactory. On the other hand, having received VCT before improved the readiness to test for HIV.
Implications and Recommendations

VCT continues to be a valuable tool in the primary prevention of HIV infection and should be promoted and implemented with this aim in mind. Further research about quality aspects surrounding the VCT sessions and its conflicting outcomes for different risky sexual behaviours (as found among our patients) is recommended. Of particular concern are aspects related to the correct and consistent use of condoms.
References


2. UNAIDS. What countries need: Investments needed for 2010 targets; 2009.


6. Moore PE. The importance of voluntary counselling and confidential testing for HIV in the work place. Assignment presented for the fulfilment of the requirements for the degree of Master in Philosophy (HIV/AIDS Management); December 2007.Stellenbosch University.
   Available from: http://scholar.sun.ac.za/handle/10019.1/3432


Appendix

Appendix A

Research Questionnaire

Dear Madam/Sir, by completing this questionnaire you will be helping us to assess the effectiveness of Voluntary Counselling and Testing for HIV (VCT) in diagnosing HIV infection and also in modifying sexual behaviour. Your honesty in completing the following questions is extremely important and is highly appreciated. Please take time reading every question and let us know if there is anything you do not understand so that we can clarify it for you.

As you know, the completion of this questionnaire is absolutely confidential and NO PERSONAL DETAILS OR INFORMATION FROM YOU WILL EVER BE DISCLOSED TO ANYONE. We thank you in advance for your response and deeply appreciate your contribution.

Please choose your answers by drawing a circle around them.

Questions

A. Have you ever been tested for HIV infection?
   1. Yes
   2. No

B. Can you tell us your date of birth? _________

C. What is your gender?
   1. Female
   2. Male

D. What is your marital status?
   1. Married
   2. Single
   3. Divorced
   4. Widow / widower
   5. Living as married

E. What is your current occupation? (Chose one of the following)
   1. Work far from home
   2. Work close to home
   3. Study far from home
   4. Study close to home
   5. Not currently working or studying

F. With regard to your educational level, mark which one applies to you (Choose one of the following)
   1. I attended school and passed grade 6
   2. I attended school and completed High school
   3. I attended school and completed a technical diploma
   4. I attended school and completed a University degree
   5. I attended school but never passed grade 6
6. I never attended School

G. DURING THE COURSE OF THE LAST 6 MONTHS:
   1. Have you had sexual intercourse with anyone?
      1. Yes
      2. No
   2. Have you had sexual intercourse with a new partner?
      1. Yes
      2. No
   3. Have you had sexual intercourse with more than one partner?
      1. Yes
      2. No
   4. Have you fallen pregnant or made your partner pregnant?
      1. Yes
      2. No
   5. Have you received medical treatment for any of the following problems: Genital Sores or rash, Discharge from your genitals or any other genital infection?
      1. Yes
      2. No
   6. Have had sexual intercourse with a partner without using a condom?
      1. Yes
      2. No
   7. Have you had sexual intercourse with a partner while under the influence of alcohol?
      1. Yes
      2. No
   8. Have you tested for HIV infection more than once?
      1. Yes
      2. No
   9. If your answer to the previous question is Yes, what was the reason? (Choose one or more answers from the following list)
      1. I was doubtful of the first result
      2. I engaged in risky sexual intercourse
      3. I’m concerned about the HIV status of my partner
      4. I want to know my status on a regular basis
      5. I fell pregnant
      6. Other reason (Please specify):

H. Would you go for Voluntary Counselling and testing today?
   1. Yes
   2. No

I. If your answer is NO can you tell us why? (Choose one or more reasons from the following list)
   1. I’m scared of testing
   2. I’m sure about my status and don’t need to test
   3. I don’t trust the test results
   4. I know the status of my partner
   5. Other reason (Please specify):
J. Would you ever discuss your HIV test results with your sexual partner?
   1. Yes
   2. No

K. If your answer is NO could you tell us why? (Choose one or more reasons from the following list)
   1. I am afraid of him/her reacting with violence
   2. I do not trust him/her enough to talk about it
   3. I do not believe he/she has to know since this concerns only me
   4. I do not think he/she will understand
   5. I am afraid he/she will leave me
   6. Other reason (Please specify):
      _______________________________________________________
      _______________________________________________________
      _______________________________________________________