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Voluntary testing and counselling for HIV. "Are adults in rural communities ready to test?" A descriptive survey

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Abstract

Objective: To describe rural adult preparedness to test for HIV, perceived susceptibility, response to peer group opinion, perceived positive and negative outcome expectations of testing.

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Design: Cross sectional descriptive study.
Setting: Mashonaland West Province, Zimbabwe.
Subjects: Purposive convenience sample; 204 adults, 102 females, aged 18 to 50.
Main Outcome Measures: Stage of preparedness to test for HIV, perceptions of susceptibility, response to peer group opinion, negative and positive expectations about testing.
Results: None of the 204 participants had knowingly been tested for HIV prior to the study; 55.8% had heard about Voluntary Counselling and Testing (VCT) and 21.0% had thought about testing. Of these, 15 (34.8%) had already talked to somebody about testing. When compared with married respondents, significantly more singles expressed preparedness to test for HIV in the next six months (p=0.040). Only 14.2% of respondents expressed willingness to pay for a test. Females worried more than males about "getting HIV in the future" (p=0.019). Singles were more likely to worry about their partners' current HIV status than married and once married respondents (p<0.001). When compared with women, men showed more likelihood of responding to pressure from friends to test for HIV (p=0.039). Strongly articulated fears about testing included being seen by friends at a VCT centre, stigmatisation, violence and stress. Significantly more women than men were fearful that an HIV test would be painful (p=0.006). Similarly, women were more fearful than men about taking an HIV test (p=0.007), the possibility of waiting for the result (p=0.022) and returning for results (p=0.020). Anticipated positive outcomes of testing included getting assistance in the early stage of the disease.
Conclusion: Knowledge of HIV status acquired voluntarily in a psychologically and socially supportive environment will be a significant motivator for individuals and their partners to initiate and maintain safer sexual behaviour. Our study showed some preparedness among adults from two rural communities to test for HIV. While current strategies to promote VCT in urban areas reflect sensitivity to many of the fears of adults expressed in this study, the initiative must be expanded to embrace rural communities. There is a need to build on positive perceptions about testing and embrace a strategy that disables fear, particularly among women. The initiative must go beyond the individual as the primary target and be promoted within the broader context of the community with the assistance of credible opinion leaders. It should also link closely with other services that offer primary prevention, pilot treatment and support activities.

Introduction

AIDS is decimating the Zimbabwe population and it is unlikely that information alone will produce the wave of behaviour change that is necessary to halt this catastrophe. Powerful incentives are required to increase AIDS resistant behaviour. Voluntary Testing and Counselling (VCT) is regarded as an essential component of prevention activities[1] and in 1998, a New Start HIV Counselling and Testing initiative was launched through the National AIDS Co-ordination Programme (NACP) with support from Population Services International (PSI) and the United States Agency for International Development (USAID). Ten "New Start" VCT centres now provide VCT services through public sector clinics and non-governmental and private sector providers. Situated in different parts of the country, these providers offer voluntary and anonymous testing for HIV and importantly, same day results. The initiative is currently expanding to trial sites in rural Zimbabwe. Through this, it is hoped and anticipated that knowledge of HIV status acquired voluntarily in a psychologically and socially supportive environment, will be a significant motivator for individuals and their partners to initiate and maintain safer sexual behaviour.

Despite the investment of considerable effort and resources in HIV risk reduction programmes, we have learned over time that the introduction of new ideas - or innovations in one setting do not in themselves ensure widespread or rapid adoption in another. The difficulty of promoting the female condom in rural settings is one such example. Achieving satisfactory diffusion of an innovation such as VCT therefore requires information and change. At an individual level, the uptake of a health promoting innovation typically requires changes in behaviour or lifestyle practices. At organisational level, the successful uptake of an innovation requires changes in service provision or changes in policies. In order to promote an innovation we therefore need to reach a clear understanding of the factors that pre-dispose "change decisions". We also need to reach an understanding that change decisions are usually motivated or prevented by what may be ostensibly termed "non-health" reasons. At an individual level these include for example, personal beliefs about health risks anticipated fear, social pressure, personal expectations, and personal skills. At the organisational level quality care and the economic and political environment are important enabling or disabling factors.

Although preventive strategies such as VCT have been fairly widely promoted in urban settings[2-4] there is scanty information about the psychological and social state of rural community preparedness to test for HIV. The author supports the view of Desclaux (1977)[5] that "prevention

should be understood on new bases" and that a better understanding of personal perceptions of vulnerability may lead us to generate more focused interventions. In this study we present the findings of a study that measures the stage of preparedness of adult men and women living in rural communities to act on the call to voluntarily test for HIV.

Materials and Methods

The study was carried out in Mhondoro communal lands and M'sengezi resettlement areas of the Mashonaland West Province of Zimbabwe during November 1999. A purposeful convenient method was used to collect data by interview from 204 adults. Two males and two females conducted the interviews in the vernacular using a pre-tested structured closed/open ended questionnaire that took 25 to 30 minutes to complete. Only one respondent was interviewed per household by a trained same sex interviewer. The purpose of the research was explained together with an invitation to participate, the expected duration of the interview and reassurance that the interview could be terminated if desired at any stage. Respondents were also invited to ask questions about VCT on completion of the interview.

In M'sengezi resettlement area data were collected from 144 respondents (72 females) living in proximity to three focal points geographically positioned in the east, west and central part of the area. In Mhondoro Communal Lands, 60 interviews (30 female) were conducted in three Chief headed constituencies.

The questionnaire contained 43 items. Background information and stage of preparedness to test for HIV was measured by eight and 10 questions respectively. On a scale of 'agree', 'disagree' and 'not sure', three items on the questionnaire measured strength of perceived susceptibility to HIV. Three items measured right to know partner's HIV status and a further three measured response to peer group opinions. Perceived positive and negative outcome expectations of testing for HIV were measured by seven and eight items respectively. One open ended response invited respondents to reveal further fears about testing for HIV.

Data were computerised and analyzed using the statistical software Epi Info Version 6.

Frequencies were calculated and ANOVA and Chi-square tests were applied to determine significant levels of association. Statistical significance was measured at the 95% level of confidence.

Results

Demographics.

Table I shows demographic characteristics of the study population.

Table I: Characteristics of the study population

Variable	Total (n= 204)	Male (n=102)	Female (102)	p value
Mhondoro	60 (29.4%)	30 (29.4%)	30 (50%)	
M'sengezi	144 (70.5%)	72 (70.5%)	72 (70.5%)	
Age				
18-29	118 (57.8%)	58(56.9%)	60 (58.8%)	
30-39	50 (24.5%)	23 (22.5%)	27 (26.5%)	0.508
40 and above	36 (17.6%)	21 (20.5%)	15 (14.7%)	
Mean 29.7 years				
SD. 8.9				
Range 18-50 years				
Education				
None	0	0	0	
Primary (up to Grade 7)	72 (35.3%)	35 (34.3%)	37 (36.2%)	
Secondary	127 (62.3%)	65 (64.0%)	62 (60.7%)	0.849
Tertiary	5 (2.4%)	2 (1.9%)	3 (2.9%)	
Marital Status				
Single	60 (29.4%)	40 (39.2%)	20 (19.6%)	
Currently married	116 (56.9%)	59 (57.8%)	57 (55.9%)	<0.001
Once , but not currently married*	28 (13.7%)	3 (2.9%)	25 (24.5%)	

Widows, widowers, divorced.

None of the respondents was employed in the formal sector. Income was seasonal; 57.3% respondents recorded no formal income. With respect to religion, the majority (62.7%) reported being "Christian" with "Traditional" the next most common. Table I shows further background information.

Stage of Preparedness to Test for HIV.

Table II shows preparedness to test for HIV.

Table II: Preparedness to test for HIV.

Variable	Male (n=102)	Female (n=102)	p-value	MARITAL STATUS Single (n=60)	Currently married (n=116)	Once married (n=28)	p value
Already tested for HIV (n=0)	Nil	Nil	Nil	Nil	Nil	Nil	
I have heard people talking about testing HIV test (n=120)	60 (58.8%)	60 (58.8%)	1.00	40 (66.6%)	67 (57.8%(	13 (46.4%)	0.141
I have thought about having an HIV test (n=43)	31 (30.3%)	12 (11.7%)	0.001	19 (31.7%)	22 (18.9%)	2 (7.1%)	0.022
In the last six months, I have thought and talked to somebody about having an HIV test (n=15)*	10 (31.3%)	5 (38.5%)	0.212	8 (40.0%)	6 (26.1%)	1 (50.0%)	0.551
I may be prepared to take an HIV test in the next six months (n=178)	88 (86.2%)	90 (88.2%)	0.675	57 (95.0%)	98 (84.4%)	23 (82.0%)	0.040

Calculations for this variable are based on the number of respondents who said they had "thought" about testing for HIV (n=43).

None of the respondents (n=204) had undergone VCT prior to the study. More males (30.3%) than females (11.7%) had "thought" about taking a test (p=0.001). Overall, 68.1% respondents said they would like to talk to somebody about testing for HIV. Of these, 64.7% said they wanted to talk about testing "very soon"; the remaining said "much later". While 59.6% respondents said that initially they would prefer to talk about testing with a health worker, 14.6% respondents said they would initially prefer to talk to "a close friend of the same sex" and 11.1% respondents said "to a relative".

Overall, 87.2% respondents indicated they may be prepared to take an HIV test in the next six months. Interestingly, more single respondents (95.0%) than currently married (84.4%) and once married, i.e., widows/ widowers and divorced respondents (82.0%), expressed preparedness to test for HIV (p=0.040). On willingness to pay for an HIV test, 14.2 % respondents said they would be willing to pay "something" towards the cost.

Perceived Susceptibility.

On the item, "I worry that I may have HIV now" 35.7% respondents agreed. However, on the item "I worry that I may get HIV *in the future"*, 50.9% respondents (n=104) agreed. More females (60.8%) than males (41.2%) were in agreement on this item (p=0.019). When compared with married (41.4%) and once married respondents (60.7%), significantly more (p<0.001) singles (61.7%) said they worried about their partner's current HIV status.

Right to Know HIV Status of Sexual Partner.

Most respondents (86.8%) agreed that, "Couples about to marry should take an HIV test". On the item, "a woman has the right to ask her sexual partner about his HIV status", 64.2% respondents agreed. Significantly more females (68.6%) than males (59.8%) agreed on this item (p=0.045).

Again on this item, significantly fewer (p=0.025) respondents with seven years education or below (20.0%) agreed when compared with respondents who had a secondary or tertiary education (65.3%). In total, 68.6% respondents agreed that "men have a right to ask sexual partners about HIV status".

Response to Peer Group Opinion.

Results are shown in Table III. Further to these results, on the item, "if my friends decided to go for an HIV test, I would do the same," respondents in the age group 18 to 29 years (63.6%) were more likely to agree (p=0.045) when compared with respondents aged 30 to39 years (50.0%) and 40 years and above (38.9%).

Consequence Beliefs About Testing for HIV.

Table IV shows responses to items that measured consequence beliefs about testing for HIV.

In particular we draw attention to sex differences where significantly more females (66.7%) than males (45.1%) said that "getting an HIV test would be emotionally upsetting" (p=0.007). Similarly, more females (60.8%) than males (43.1%) expressed fear about returning to a

Table III: Response to peer group opinion.

Variable	Male (n=102)	Female (n=102)	p-value	MARITAL STATUS Single (n=60)	Currently married (n=116)	Once married (n=28)	p value
Agree that most of my friends think that testing for HIV is not a good idea (n=109)	48 (47.1%)	61 (59.8%)	0.008	24 (40.0%)	70 (60.3%)	15 (53.6%)	0.061
Agree that my friends have never pressured me to take an HIV test (n=154)	80 (78.4%)	74 (72.5%)	0.019	46 (76.7%)	89 (67.9)	19 (67.9%)	0.347
Agree that if my friends decide to go for an HIV test, I would do the same (n=123)	67 (65.7%)	56 (54.9%)	0.039	45 (75.0)	65 56.0%)	13 (46.4%)	0.016

Table IV: Consequence beliefs about testing for HIV.

Variable	Male (n=102)	Female (n=102)	p-value	MARITAL STATUS Single (n=60)	Currently married (n=116)	Once married (n=28)	p value
I am fearful hat getting an HIV test will be painful (n=45)	13 (12.7%)	32 (31.4%)	0.006	10 (16.7%)	27 (23.3%)	8 (28.6%)	0.357
Having to wait for the HIV test result will make me fearful (n=19)	50 (49.0%)	69 67.6%)	0.022	32 (53.3%)	64 (55.2%)	23 (82.1%)	0.044
Going for an HIV test will mean waiting in a long queue (n=80)	42 (41.2%)	38 (37.3%)	0.748	20 (33.3%)	45 (38.8%)	15 (53.6%)	0.240
Getting an HIV test will be emotionally upsetting for me (n=14)	46 (45.1%)	68 (66.7%)	0.007	28 (46.7%)	65 (56.0%)	21 (75.0%)	0.065
I am afraid that friends will see me at the testing centre if I go for an HIV test (n=101)	48 (47.1%)	53 (52.0%)	0.736	31 (51.7%)	53 (45.7%)	17 (60.7%)	0.061
I would be afraid to return to the test centre to obtain the result (n=106)	44 (43.1%)	62 (60.8%)	0.020	28 (46.7%)	61 (52.6%)	17 (60.7%)	0.439

VCT centre to obtain their test result (p=0.020). Of further note in Table IV, is that "once married respondents" i.e. widows/ers and divorcees, (60.7%) were more afraid (p=0.061) than currently married respondents (45.7%) or singles (51.7%) about being seen at a testing centre by friends.

Hopelessness and Fear.

More women (29.4%) than men (14.7%) agreed that existing marriages would end if the partner tested HIV positive (0.040). Overall, on the item "testing positive for HIV means there is no hope for the future", 54.4% respondents agreed. When compared with single (35.0%) and "once married" respondents (50.0%), significantly more married respondents (65.5%) agreed on this item (p=0.011). Those respondents with secondary and tertiary education (47.7%) were less likely to agree (p=0.009) on this item than respondents with a primary education (66.7%).

On the item, "testing positive means one is doomed to die alone", 18.6% of respondents agreed. More females (26.5%) than males (10.8%) agreed (p=0.014). Interestingly, respondents with primary education (27.8%) were more likely (p =0.043) to agree on this item than more highly educated respondents (13.6%). An analysis of open-ended responses revealed fears about waiting for test outcome, fears about revenge, vengeance, social stigma, and suicide. Women in particular expressed the fear that if they were seen at the VCT centre, their partners may become violent.

Positive Outcome Expectations of Testing for HIV.

Altogether 70.1% of respondents disagreed that the "family will turn against me if I test HIV positive". Although 77.4% of respondents said "being tested positive for HIV means no future pregnancies", there was strong disagreement by 76.4%, respondents that "testing for HIV means that a woman who is currently pregnant should have an abortion".

On items that measured positive outcome expectations for taking an HIV test, there was strong agreement that "one can still assist others" (86.2%) and "get help in the early stages of the disease", (80.3%). Similarly high agreement was reached that even if HIV positive, "one can still plan for the future" (80.8%) and "continue to work and contribute to society" (86.2%). Importantly, 87.2% agreed, "testing positive means one can protect the sexual partner against HIV".

Discussion

In Zimbabwe today it is estimated that upwards of 25%[6] of the adult population is HIV positive and in some sub-populations the estimate is as high as 70%. The VCT initiative provides one good option for primary prevention of HIV. At best it could facilitate decision making and put the brakes on transmission. At worst, however, it will be intrusive and fail.

We interviewed 204 adults in a rural community where there is no experience of VCT. Our findings suggested that there are differences in the way that HIV testing is perceived and weighted. A high percentage of respondents said they might be prepared to test for HIV in the next six months. Interestingly, significantly more single respondents had thought about HIV testing. They also expressed less fear and more readiness to test for HIV than their married and once married counterparts.

On a negative note, we found that women in particular worry about their current and future HIV status and anticipate violence, revenge, and isolation in the event of testing HIV positive. Linked to this was a fear more particularly among "once married" respondents whose risk of HIV infection is likely to be high, that they may be seen by friends at testing centres. Women in our study anticipated more pain from testing and expressed more fear than men about queueing for a test, waiting for the result and returning to learn the outcome. They also expressed more strongly than men the right to know the HIV status of their sexual partner. Encouragingly however, our findings showed that there is a fairly widespread climate of acceptance that there is "life after infection" and we believe that this is a positive reflection of current awareness campaigns and this momentum must be sustained. On another positive note our findings showed that men are likely to seek peer group opinions about testing and we believe that this influence should be built upon when promoting VCT.

Strategies that are currently used to diffuse[7] the concept of VCT in urban centres of Zimbabwe reflect sensitivity to many of the fears expressed by rural adults in this study. However, the challenge now lies in expanding their stage of preparedness to test for HIV from a "contemplative" phase to an "action" stage. In order for this to happen, the VCT initiative in rural areas must go beyond the individual as the primary target; it must be developed and promoted in the broader context of the community and its most credible opinion leaders. The initiative must provide information, but go beyond information and link closely with other services that offer primary prevention, pilot treatment and support activities. It must build on existing positive perceptions about testing and embrace a strategy that confronts and disables fear. It must facilitate personal appraisal of risk, promote decision making and discourage behavioural prevarication. It must also be entirely sensitive to outcomes that will inevitably result in emotional suffering. Finally, the initiative must recognise that VCT in itself is not sufficient to bring about change - the strategy that is used to diffuse this innovation will ultimately create the difference.

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