

## Factors of Non-acceptance of the Routine HIV Test among Patients Attending a District Hospital in Botswana

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**ABSTRACT** The purpose of this study was to assess the willingness to do HIV test and find factors for non-acceptance of routine HIV testing among patients attending Athlone hospital in Botswana. This was a cross-sectional study in which 300 conveniently selected participants completed self-administered questionnaire. Results indicated that the average score for willingness to test was 9.25 (range 1 to 12) and the non-acceptance of the routine HIV test was found to be 24.91 (range of score 1 to 33). Majority (72%) responded positively that patients were testing freely. Almost two-third (64.7%) of the respondents agreed that stigma and discrimination contributed towards refusal to test for HIV. Almost three quarters (73%) feared for positive result and 40.3% agreed that attitude of health care workers was a barrier for RHT. The study found great support and acceptance of routine HIV testing. However there were still concerns of stigma, discrimination and attitudes of health care workers which were discouraging.

### INTRODUCTION

The impact of HIV/AIDS is severe in the Sub-Saharan Africa. Southern Africa were hardest hit countries with Botswana being one of them (UNAIDS and WHO 2007). HIV/AIDS is a serious socio-economic, cultural and medical issue which is threatening the globe especially the Sub-Saharan Africa. Approximately 10% of the world population lives in sub-Saharan Africa, but the region is home to approximately 64% of the world population living with HIV (WHO and UNAIDS 2005). Most sub-Saharan African nations have over 20% adults population infected with HIV that is, South Africa with adult prevalence of 21.5%, Swaziland with 38.3% followed by Botswana by 37.3% (WHO 2006). Surveys in Sub-Saharan Africa have shown that just 12% men and 10% women had been tested for HIV and received the results (UNAIDS and WHO 2007).

Because of the secrecy, fear and stigma attached to HIV/AIDS, many people were not testing until it was sometimes too late to get proper care and treatment. Anti retroviral drugs were

not yet available in most developing countries, and they were not available until 2002 in Botswana (NACA 2004). A Nigerian study found discriminatory attitudes of health care workers towards patients with HIV/AIDS (Reis et al. 2005). According to Alcorn and Smart (2006), the move towards routine or opt-out testing has been greeted with caution and even resistance by community-based organizations. The routine offer of the test may in practice coerce some people to undergo a test of which may result in serious discrimination, stigma and even violence in some settings, especially for women. Heywood (2005) reported to have said that concerns still remain that RHT at health services could be unacceptable to public, thereby deterring health care seeking and harming population health.

### Objectives of the Study

The government of Botswana introduced the routine HIV testing (RHT) policy in early 2004 in an effort to increase the uptake of HIV testing and antiretroviral treatment. The goal being to increase the proportion of individuals aware of their status and to reduce transmission, stigma and provide life saving treatment. Political will and support was available to ensure the success of the RHT programme. There are other views which support the policy such

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as routine testing at health services would help de-stigmatise HIV and make it a routine health concern (Weiser et al. 2006). The aim of the study is to find the risk factor for non acceptance of RHT among patients attending Athlone hospital for health care services.

## MATERIAL AND METHODS

### Study Design, and Setting

The study was a cross sectional study. The study was conducted in Athlone District Hospital, Botswana. The hospital is situated in Lobatse town in the southern part of Botswana. It serves a population of about 30,000 in Lobatse district and about 60,000 in its catchment area (Central Statistics Office 2001).

### Population and Sample Size

The target population for the study comprised all adult men and women (15 years or more) accessing services at the different service points of the hospital (out-patient department, ophthalmic clinic, dental clinic, infectious disease control clinic (IDCC) health resource centre and sexual reproductive health clinic). Since out-patients department forms the entry point of patients to the hospital, sampled population were interviewed mainly at the out-patients department.

The sample consisted of 300 patients selected conveniently in a period of one month as they come to access health care services at the different service points in the hospital. The sample was calculated using Epi-Info from a population of 60000 accessing services from Athlone hospital with 50% as estimated proportion and 45% being the worst value of the proportion which gave a sample size of 269 at 90% confidence level. Since convenience sampling was used to interview the participants, the sample size was increased to 300 participants for incomplete data or refusal to participate in the study.

### Sampling Procedure

Sampling was done by convenience sampling through approaching all eligible participants who presented to outpatient department during the month of data collection. The purpose of the

research and procedure was explained to them and those who consented to participate were asked to complete the questionnaire.

### Inclusion and Exclusion Criteria

All adult men and women of ages 15 years or above were included in the study if they accepted to participate in the study. Children below 15 years and mentally disabled were excluded from the study.

### Ethical Consideration

Ethical clearance for the study was obtained from Medunsa Campus Research and Ethics Committee of the University of Limpopo (Medunsa Campus). Permission to conduct the study was obtained from the Chief medical officer of Athlone hospital. Permission was also obtained from the research and ethics committee of the Ministry of health (Botswana). Informed written consent of participants was obtained. Confidentiality of participants was maintained at all times. To further maintain confidentiality no form of identifiers were in the questionnaires. Participation was voluntary and participants were informed that they can withdraw from the study at any stage of the interview if they so desire without any penalty.

### Data Collection Instrument and Data Collection

Structured questionnaires were used to collect data. The questionnaire was divided into two sections. The first section was demographic, and the second section was related to willingness of patients towards HIV testing and factors for non-acceptance of the test. The responses put in statements which the client chose the one that best described their willingness and non-acceptance. The willingness of patients towards HIV testing and non-acceptance were assessed using a 5 point likert type scale ranging from strongly agree to strongly disagree. The scale was revised for negatively worded questions. The willingness of patients towards HIV testing had a total of 4 items with a range of possible subscale from 1 to 12. For non-acceptance, there were 11 statements with a score ranging from 1 to 33. For data analysis purposes we combined strongly agree and agree as agree and strongly disagree and disagree as disagree.

The questionnaire was translated to the local Setswana language and was pre-tested using 30 patients in another health facility outside Athlone hospital by the researcher to identify gaps and modify the questionnaire appropriately. The questionnaire was then pilot tested and modified to ensure it answered the research questions.

The questionnaire was administered to participants by the first author at all the service points that is; out-patient departments, dental clinic, eye clinic, IDCC, HRC and SRH clinic of Athlone hospital (Botswana) during the month of March 2008. The questionnaire was administered after explaining to the audience waiting for service and after they have asked questions and understood everything about the study. The questionnaire was then given to those who were willing to participate and who met the inclusion criterion and was collected after completion.

### Data Analysis

Data were entered into a Microsoft Excel 2003 spreadsheet and imported to SPSS 17.0.1 for window version for analysis. The analysis results were summarized using descriptive summary measures: expressed as mean (standard deviation) or median (minimum-maximum) for continuous variables and percent for categorical variables.

## RESULTS

Table 1 shows the demographic profile of the 300 participants. Among the participants, over half (58%) were between the ages of 15 to 25 years. Majority (81%) of them were females. The researchers found almost two-third (62%) respondents were single and only 3% were divorced. Most respondents (92%) have received some form of education and over a quarter (26%) of them had tertiary education. Over a third (37%) of the respondents was unemployed and a small number of respondents, 1.7% were retired.

Table 2 summarises respondents' willingness of the RHT. Overall, the respondents were willing to test when offered routine HIV testing as the average score for willingness to test was 9.25 (range 1 to 12). Almost three quarters (74%) of the respondents agreed that health care work-

**Table 1: Demographic information's of the study participants from Athlone hospital, Botswana**

<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Age Distribution</i>		
15 – 24 years	66	22
25 – 34 years	108	36
35 – 44 years	69	23
45 – 54 years	40	13
55 years and above	17	6
<i>Sex</i>		
Male	57	19
Female	243	81
<i>Marital Status</i>		
Single	185	62
Married	84	28
Divorced	10	3
Widowed	9	3
Others	12	4
<i>Educational Level</i>		
None	25	8
Primary	62	21
Secondary	118	39
Tertiary	78	26
Others	17	6
<i>Employment Status</i>		
Unemployed	110	36.7
Employed	131	43.7
Self-employed	36	12
Retired	5	1.6
Others	18	6

ers have counselling skills. Another 72% responded positively that patients were testing freely.

**Table 2: Willingness of HIV test among participants from Athlone hospital, Botswana**

<i>Statements</i>	<i>Agree and strongly agree (%)</i>	<i>Neither (%)</i>	<i>Disagree and strongly disagree (%)</i>
All patients are willing to be tested for HIV	37	23	40
Health facilities have enough personnel to provide test	45	21	34
Health care providers have counselling skills	75	13	12
Patients are testing freely	72	12	16
Average score	9.25		

### Factors that Lead to Non- acceptance of Test

The average score for the non-acceptance of the routine HIV test was found to be 24.91 (range of score 1 to 33) (Table 3). Almost two- third (64.7%) of the respondents agreed that stigma

and discrimination contributed towards refusal to test for HIV. Attitudes of health care workers if negative can be a barrier to testing for HIV. In this study the researchers found that 40.3 % agreed that attitudes of health care workers were a barrier. Almost three quarters (73%) feared for positive result. More than half of the respondents (54.33%) agreed that lack of treatment and support were some of the factors that discouraged patients from accepting the test.

**Table 3: Factors that lead to non acceptance of test**

<i>Statements</i>	<i>Agree and strongly agree (%)</i>	<i>Neither agree nor disagree (%)</i>	<i>Strongly disagree (%)</i>
Stigma and discrimination contribute to refusal to test	64.66	11.34	24.00
Attitudes of health care workers discourage patients to test	40.34	21.33	38.33
Health care workers coerce patients to test	24.66	20.67	54.67
Over emphasis on confidentiality deter patients from testing	35.00	18.34	46.66
Lack of confidentiality discourage patients from testing	65.33	10.33	24.34
Offering RHT without giving time to rethink make patients reluctant to come for results	56.34	11.66	32.00
Lack of counselling make patients reluctant to come for results	63.33	8.34	28.33
Fear of positive results make patients not to come for results	73.00	10.00	17.00
Assumption of not being at risk discourage patients from coming for results	67.66	11.00	21.34
Lack of treatment and support discourage coming back for results	54.33	12.67	33.00
The same day results encourage acceptance of results	78.34	9.33	12.33
Average score		24.91	

## DISCUSSION

In this study the researchers addressed the willingness of patients to test for RHT and factors for non-acceptance of the test. It appears

there are still patients who are not willing to test (40%). In a Ugandan study it was reported an increase in uptake of RHT who were offered the test opted to test (Wanyenze et al. 2008). According to a population based study conducted in Botswana mentioned that people with stigmatizing attitudes towards people living with HIV and AIDS were less likely to be tested (Weiser et al. 2006). Researchers have reported that there were fears associated with testing. They also indicated that the autonomy of patients to freely decline or accept testing could be undermined or undermine the principles of HIV testing namely consent, counselling and confidentiality (the 3c's) and so violate human rights (Collini 2006; Csete and Elliot 2006).

In this study, almost half of the respondents agreed that health care facilities had enough personnel to provide HIV test. This means that there could be problems in capacity of health facilities and health personnel to provide the test. Adequacy of staff, equipment and space can go a long way in encouraging people to test. Majority of the respondents mentioned that health care workers have counselling skills. Counselling is important in HIV testing as information has to be given to individuals in order for them to make informed decision whether to test or not. In the previous study conducted in Botswana found that 96% of the respondents in their study reported having received pre-test counselling and 90% received post test counselling (Weiser et al. 2006). In another study conducted in Botswana it was reported that some respondents criticised testing logistics especially poor counselling procedures which are barriers for some who went to do RHT (Rajaraman and Surrender 2004).

The respondents were said to have declined testing because of inadequate counselling which was compounded by the videos shown at the testing centres about distressed people living with HIV/AIDS. In the same study, though, some expressed preference to test at testing centres rather than health facilities giving reasons that counselling was specialised and intensive.

There were 71.66% of the respondents who agreed that patients are testing freely without any pressure from health care workers. These responses show self motivation to test and accepting encouragement from others to test (Rajaraman and Surrender 2004). In another study, researchers have reported that 90% of

women tested after introduction of RHT the first 3 months as compared to 75.5% before the introduction of RHT and there was no reduction of women coming for prenatal care and those coming back for the results (Seipone et al. 2004). The thought of vertical transmission of HIV to the babies could be motivating mothers to test since vertical transmission is reduced from 35% - 40% to 5% -10% (CDC 2004).

### LIMITATIONS

The sample was selected from only one health facility. The results of the study may not be generalised to other centres besides those at Athlone, which may be providing services in a better or worst manner.

### CONCLUSION

The study has indicated that there is generally support for RHT to the contrary of the concerns that it is not accepted by communities. There are still fears associated with stigma and discrimination especially for women who may be abused due to their HIV status.

### RECOMMENDATIONS

Implementation of policy especially where ARVs are available, can help in reducing stigma, transmission of the virus and so controls the spread of HIV. The stigma free programmes should be offered where people are encouraged to disclose their status and are supported and contests for those living positively cascaded to villages as well through talk shows and the media.

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