

## **PATIENTS' ATTITUDES TOWARDS ROUTINE HIV TESTING AT ATHLONE HOSPITAL, BOTSWANA**

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### **ABSTRACT**

In Botswana, efforts to increase the coverage of HIV testing include routine HIV testing, where the healthcare provider (rather than the patient) initiates the test. The aim of the study was to assess patients' attitudes towards routine HIV testing and their willingness to undergo HIV tests.

A cross-sectional study was done with 300 conveniently selected respondents who completed self-administered questionnaires to assess their attitudes towards routine HIV testing.

The respondents had positive attitudes towards routine HIV testing and agreed that routine testing should be offered at health facilities to everybody as this could help to control HIV. Most respondents associated HIV testing with prevention and control of HIV. Almost three-quarters of the respondents indicated that patients were testing freely and over a third were satisfied with health services. More than a third of the respondents were unwilling to be tested for HIV.

The implementation of the HIV policy should continue to be monitored in all districts to determine whether healthcare workers understand and implement the policy.

**KEYWORDS:** HIV/AIDS in Botswana, routine HIV testing, voluntary counselling and testing (VCT)

### **INTRODUCTION AND BACKGROUND INFORMATION**

The HIV epidemic poses formidable challenges to development and social progress. Many poor countries are affected by the epidemic (UNAIDS, 2005). HIV/AIDS is a serious socio-economic, cultural and medical issue that threatens especially sub-Saharan Africa (SSA). Approximately 10% of the world's population lives in SSA, but the region is home to 64% of people living with HIV (WHO, 2005). Most SSA nations have a 20% HIV infection rate amongst the adult population. South Africa's HIV infection rate is

21.5%; Swaziland has an infection rate of 38.3%, while Botswana's infection rate is 37.3% (UNAIDS, 2006). Surveys in SSA have shown that 12% of men and 10% of women had been tested for HIV and had received their test results (UNAIDS & WHO, 2007).

Increased access to HIV testing and counselling is essential for ensuring universal access to HIV prevention, treatment, care and support, as endorsed by the G8 countries (Great Britain, France, Germany, China, United States of America, Russia, Italy and Japan) in 2005 and the United Nations (UN) General Assembly in 2006 (UNAIDS & WHO, 2007). Initially, routine HIV testing (RHT) was questioned on the grounds that it might violate individuals' rights and increase discrimination (Rajaraman & Surender, 2006). However, RHT is an essential component of prevention programmes (UNAIDS, 2004). Efforts to increase the coverage of HIV testing include RHT, where the healthcare provider (rather than the client or patient) initiates the test (Collin, 2006). This strategy increases the uptake of testing and reduces the stigma associated with an individual's choice to undergo a test (WHO, 2005).

The World Health Organization (WHO) introduced RHT, which is offered routinely to all patients visiting healthcare facilities. Reilly and Coghlan (2006) argued that some people might be diagnosed with HIV too late to benefit from ART. Research conducted by the Centres for Disease Control and Prevention (CDC) suggests that those who do not know they are infected are responsible for 65% of all new HIV infections in the United States (CDC, 2006). Earlier diagnosis also presents opportunities to provide people with HIV information and tools to prevent HIV transmission (UNAIDS & WHO, 2007). Acorn and Smart (2006) reported that the move towards routine testing could be regarded with caution and resistance by community-based organisations. Offering RHT might cause some people to undergo tests that might result in serious discrimination, stigma and violence. Heywood (2005) indicated that RHT at health facilities could be unacceptable to the public, thereby deterring people from seeking healthcare and negatively affecting the health of the population. Others support the policy on the basis that routine testing at health services would help to de-stigmatise HIV and make it a routine health concern (Weiser et al., 2006).

## **RESEARCH PROBLEM**

Because of the high incidence of HIV related deaths in Botswana, the government saw the need for large numbers of people to be tested, so that they could know their status and be enrolled in HIV treatment programmes. Voluntary Counselling and Testing (VCT) was introduced but did not encourage large numbers of people to undergo the test. VCT is an HIV testing procedure in which an individual initiates the testing voluntarily by requesting a test. Botswana's government saw the need to motivate as many people as possible to undergo HIV testing and to access antiretroviral treatment, care and support, if necessary. However, as VCT did not produce the desired results,

Botswana's government regards RHT as a primary means of testing large numbers of people. However, the reactions of patients to RHT needed to be taken into account. This study attempted to identify patients' attitudes towards RHT at one hospital in Botswana. Based on the research findings, recommendations could be made to provide more consumer-friendly RHT services at this hospital, and probably also at other healthcare facilities.

## **PURPOSE OF THE STUDY**

The purpose of the study was to assess the attitudes of patients who accessed healthcare services in Athlone, with regard to RHT.

## **RESEARCH METHODOLOGY**

### **Study design and setting**

The cross-sectional study was conducted at the Athlone District Hospital, Botswana, which is located in the town of Lobatse in the southern part of Botswana. The hospital serves a population of about 30,000 people in the Lobatse district and about 60,000 in its catchment area (Ministry of Health, 2003).

### **Population and sample**

The target population for the study comprised all adult men and women (15 years or older) accessing services at the hospital (out-patient department, ophthalmic clinic, dental clinic, infectious disease control clinic (IDCC), health resource centre and sexual reproductive health clinic). The out-patient department serves as the entry point to the hospital and therefore the sampled population was interviewed mainly at the out-patient department.

The sample consisted of 300 patients selected conveniently during a period of one month as they accessed healthcare services at the different service points at the hospital. The sample was calculated using the Epi-Info formula, considering that a population of 60 000 people accessed services from Athlone Hospital, with 50% as an estimated proportion and 45% being the worst value of the proportion, which gave a sample size of 269 at a 90% confidence level. As convenience sampling was used the sample size was increased to 300 respondents.

### **Sampling procedure**

Sampling was done using the convenience sampling method of approaching all eligible respondents who presented themselves at the outpatient department during the month in which data collection was done. The purpose of the research and the procedure was explained to them and those who agreed to participate were asked to complete the questionnaire.

## **Inclusion and exclusion criteria**

All adult men and women aged 15 and older were included in the study, subject to agreement. Children below 15 years and the mentally disabled were excluded from the study.

## **Ethical considerations**

Ethical clearance for the study was obtained from the Research and Ethics Committee of the University of Limpopo (Medunsa Campus), South Africa. Permission to conduct the study was obtained from the Chief Medical Officer of the Athlone Hospital. Permission was also obtained from the Research and Ethics Committee of the Ministry of Health (Botswana). Informed written consent was obtained from respondents. Confidentiality of respondents was maintained at all times. Special permission was obtained from the parents/guardians to include participants from the age of 15 years. Participation was voluntary and respondents were informed that they could withdraw from the study at any stage if they so desired without incurring any penalty whatsoever.

## **Data collection instrument and data collection**

Questionnaires were used to collect data. The questionnaire's first section dealt with demographic details of participants and the second section dealt with their attitudes towards HIV testing. Each question was scored using a 5-point Likert type scale, ranging from strongly agree (5) to strongly disagree (1). The attitudes of patients towards HIV testing had a total of eight items with a range of possible subscales from 8 to 24 (combined answers of 'strongly agree' and 'agree' as positive or "agree" and 'strongly disagree' and 'disagree' as negative or "disagree").

The questionnaire was translated into the local Setswana language. Pre-testing was done using 10 patients from another health facility in order to identify gaps and modify the questionnaire where necessary. No gaps were found. During the pre-test, all respondents were satisfied with the questionnaire and no changes were implemented.

The questionnaire was administered by one researcher at the hospital's service points during March 2008. The questionnaire was administered after explaining to the audience waiting for service and after they had asked questions and understood all aspects of the study. The questionnaire was then given to those who were willing to participate and who met the inclusion criterion. Completed questionnaires were collected at the site.

## **Data analysis**

Data were entered into a Microsoft Excel 2003 spreadsheet and imported to Statistical Package for Social Science (SPSS 17.0.1) software for analysis. The results of respondents' demographics and outcome variables were summarised using descriptive summary measures -- expressed as the mean and standard deviation (SD) and percentages for categorical variables.

## RESEARCH RESULTS

Table 1 shows the demographic profile of the 300 respondents. Of these respondents, 58.0% (n=174) were between the ages of 15 and 34 years, with a mean age of 29.5 years. Most (81.0%, n=243) respondents were female; 185 (62.0%) were single and only 10 (3.0%) were divorced. Most respondents (92.0%, n=275) had received some form of education and 26.0% (n=78) of them had attained tertiary education. Of the respondents, 36.7% (n=110) were unemployed and 1.6% (n=5) were retired.

**Table 1:** Respondents' demographic information (n=300)

Variables	n	%	Variables	n	%
Age distribution			Level of education		
15 – 24 years	66	22.0	None	25	8.0
25 – 34 years	108	36.0	Primary	62	21.0
35 – 44 years	69	23.0	Secondary	118	39.0
45 – 54 years	40	13.0	Tertiary	78	26.0
55 years and above	17	6.0	Other	17	6.0
Mean age	29.5				
Gender			Employment status		
Male	57	19.0	Unemployed	110	36.7
Female	243	81.0	Employed	131	43.7
Marital status			Self-employed	36	12.0
Single	185	62.0	Retired	5	1.6
Married	84	28.0	Other	18	6.0
Divorced	10	3.0			
Widowed	9	3.0			
Other	12	4.0			

Table 2 indicates that the average score for attitudes towards RHT was 20.8 (range: 3-24). This meant that the respondents had positive attitudes towards RHT. Almost all respondents (97.3%, n=292) agreed that testing should be offered at health facilities. Many respondents (88.0%, n=264) agreed that RHT should be done for everybody, whereas 52.0% (n=156) indicated that testing should be done for those at risk. Most respondents (85.0%, n=255) agreed that RHT helps to prevent HIV, while 94.0% (n=282) agreed that RHT helps to control HIV.

**Table 2:** Respondents' attitudes towards RHT (N = 300)

Statements		Neither (%)	Disagree and strongly disagree (%)
RHT should be offered at health facilities	97.3	1.0	1.67
Routine HIV testing should be for all	88.0	6.7	5.3
Routine HIV testing should be for those at risk	52.0	5.3	42.7
Routine HIV testing helps in HIV prevention	85.0	7.0	8.0
Routine HIV testing helps control HIV/AIDS	94.0	4.3	1.7
All health facilities should offer RHT	95.3	3.0	1.7
All patients know about HIV testing	57.0	12.0	31.0
All patients are satisfied with RHT	38.0	28.7	33.3

Table 3 indicates that many respondents were willing to be tested when offered RHT, as the average score for willingness to be tested was 9.0 (range 3-12). Of the respondents, 74.0% (n=222) agreed that healthcare workers had counselling skills and 72.0% (n=216) indicated that patients agreed to RHT testing without coercion or 'freely'. Of the respondents, 40.0% (n=120) were not willing to be tested for HIV.

**Table 3:** Respondents' willingness to undergo HIV testing (N = 300)

Statements	Agree and strongly agree (%)	Neither (%)	Disagree and strongly disagree (%)
Willing to be tested for HIV	37.0	23.0	40.0
Health facilities have enough personnel to provide RHT	45.0	21.0	34.0
Healthcare providers have counselling skills	75.0	13.0	12.0
Patients are testing 'freely' (without coercion)	72.0	12.0	16.0

## CONCLUSION

Most respondents had positive attitudes towards RHT, had adequate knowledge about RHT and would like the policy to be implemented at all health facilities. The majority (97.3%) agreed that RHT should be offered at health facilities. These responses (88%) suggested acceptance of the policy's implementation at the participating health facility.

Of the respondents, 52.0% felt that RHT should be for those at risk. The majority of respondents (85%) indicated that RHT helps to prevent HIV and 94% felt it helps to control HIV.

Of the respondents, 71.7% agreed that patients are being tested 'freely', without coercion from healthcare workers. Few respondents (1.7%) disagreed that RHT should be offered in all health facilities and 33.3% were satisfied with RHT services. However, 40% of the respondents were unwilling to be tested.

## **RECOMMENDATIONS**

Healthcare workers at the participating hospital should be encouraged by the knowledge that most respondents were satisfied with the services and their counselling skills. However, in-service educational efforts should continue to emphasise the importance of RHT.

Means and ways should be found to facilitate the RHT procedures such as using tests with rapid results, rather than sending blood specimens to laboratories. Human and material resources were reportedly sufficient to meet the RHT needs, but these should be monitored on an ongoing basis. Future studies should also investigate the healthcare workers' attitudes towards RHT. Qualitative studies on patients' and healthcare workers' attitudes towards RHT could yield more in-depth data that would reveal persons' lived experiences of RHT in Botswana. Such information could be used to make RHT services more user-friendly.

## **LIMITATIONS OF THE STUDY**

The convenience sample was selected from only one health facility. The results of the study might not be generalised to other centres, which might provide a superior or inferior service. Self-completion questionnaires were used to obtain data. Despite precautions, some respondents might have misinterpreted some questions. More in-depth information might have been obtained if individual interviews had been conducted.

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