

ORIGINAL ARTICLE

Willingness to Accept HIV Testing among Caretakers with a Child Attending the University Teaching Hospital in Lusaka, Zambia

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ABSTRACT

Objective: To determine the willingness to accept HIV testing among caretakers who bring a child to the University Teaching Hospital Paediatric department.

Design: This was a descriptive cross-sectional study that was conducted over a period of two months from September 2009 to October 2009 in the Paediatrics Department admission ward of the University Teaching Hospital.

Main outcomes: The number of caregivers willing to accept HIV testing.

Measures: The variables measured in the study included dependent and independent variables.

Results: All the 241 caretakers approached to participate agreed to take part in the study though only 239 were considered valid during the analysis. 165/239 (69%) were willing to accept an HIV test for themselves. 239/239 (99%) caretakers were willing to have routine HIV testing and counselling as part of the hospital services. 234/239 (98%) of caretakers were willing to have siblings of the child tested. The main fear for not going for voluntary counselling and testing (VCT) or accepting an HIV test was death. 226 of the caretakers interviewed were female and only 15 were male. 233 out of 239 had been tested 157 were prompted to have an HIV test for ANC/MCH reasons compared to 46 who voluntarily went for VCT.

Conclusion: There is a general willingness to accepting HIV testing among caretakers of children attending the University Teaching Hospital Paediatric department, the majority need to be prompted to actually take the test and therefore RTC should be implemented in all health facilities

INTRODUCTION

Just 28 % of Zambian adults aged 15-49 know their HIV status (UNAIDS 2010). Those who do not know they are infected with HIV can spread the virus to many others before they become ill, and without early diagnosis may not get the treatment and care they require. Children have been affected by the AIDS epidemic in Zambia where 120,000 children are estimated to be infected with HIV (UNAIDS 2010). In spite of all efforts put in place in the prevention of HIV, the numbers of adults accessing voluntary counselling and testing has remained low and the HIV prevalence remains high at 14.3% (2007 Zambia Demographic and Health Survey). The 2005 Zambia Sexual and Behaviour Survey showed that only 15% of women and 11% of men have ever been tested for HIV. With all these efforts in place the question that comes to mind is why so few have ever been tested, studies have looked at various factors and none have consistently been associated with testing or not. A study done in Papua New Guinea found that correct answers to more than half the HIV knowledge questions were significantly related to agreement to an HIV test (Waridibo E A et al 2008). Are individuals willing to accept the test.

METHODS

This was a descriptive cross-sectional study whose main objective was to determine willingness to accept HIV testing among caretakers bringing a child to the University Teaching Hospital Paediatric department. 241 caretakers who consented to participate in the study were recruited from the paediatric admission ward a structured questionnaire to collect data was administered. Analysis involved the production and interpretation of frequencies counts, tables and graphs that describe and summaries the data, using SPSS version 16.

RESULTS

All the 241 caretakers approached to participate agreed to take part in the study though only 239 were considered valid during the analysis, 69 % (165/ 239) were willing to accept an HIV test for themselves.

Table 1: Frequencies of caretakers willing to accept HIV testing for both themselves and siblings

Willing to be tested	N(239)	%
Yes	165	69
No	74	31
Willing to test siblings		
Yes	234	98
No	5	2

99% (239/239) caretakers were willing to have routine HIV testing and counselling as part of the hospital services. 98 % (234/239) of caretakers were willing to have siblings of the child tested.

Table 2: Knowledge on HIV, VCT and ART

HIV transmission	Frequency	%
- by sex	238	99.2
- Mother to Child	86	35.8
- through blood	177	73.8
- through contaminated sharps	101	42.1
HIV protection through		
- abstinence	142	59.2
- faithfulness	132	55.0
- condom use	208	86.7
- avoiding contaminated sharps	41	17.1
VCT services available		
- protest counselling	228	95.4
- HIV testing	232	97.1
- post test counselling	227	95.0
Home based care	21	8.8
ART services	95	39.7
PMTCT services	3	1.2

The main fear for not going for voluntary counselling and testing (VCT) or accepting an HIV test was death. 226 of the caretakers interviewed were female and only 15 were male. 233 out of 239 had been tested 157 were prompted to have an HIV test for ANC/MCH reasons compared to 46 who voluntarily went for VCT.

Table 3: Characteristics of the study participants associated with willingness to accept HIV testing

Characteristic	Willing % (N)	Not willing % (N)
Sex:		
Female	69.1(155)	30.8(69)
Male	4.5(10)	2.2(5)
Marital Status:		
Married	73.5(25)	26.5(9)
Single	68.3(140)	31.7(65)
Number of Children:		
0-1 child	66.7(2)	33.3(1)
2-4 children	72.1(93)	27.9(36)
5-7 children	64(55)	36(31)
8+ children	71.4(15)	28.6(6)
Education:		
Primary	62.2(56)	37.8(34)
Secondary	72.4(76)	27.6(29)
College/University	64.5(20)	35.5(11)
None	100(13)	0
Employment:		
Employed	66.2(45)	33.8(23)
Not employed	70.2(120)	(51)
Residence:		
High density	66.7(102)	33.3(51)
Medium density	74.5(43)	24.6(14)
Low density	69(20)	31(9)
Age:		
-	73.5(25)	26.5(9)
21-30	70.9(83)	29.1(34)
31-40	59.2(42)	40.8(29)
41-50	91.7(11)	8.3(1)
>50	80(4)	20(1)

DISCUSSION

Assessing the willingness to accept HIV testing is an important strategy in determining the gap in knowledge and its relationship with attitudes and practices to HIV prevention.

This study was aimed at investigating willingness to accept HIV test by caretakers for we know that prevention and treatment of HIV begins with testing which allows one to know their status. Not knowing prevents those infected the opportunity of treatment and care in terms of accessing antiretroviral drugs and services such as PMTCT for the prevention of mother-to-child transmission.

The study finding of high levels of willingness to accept HIV testing of 69% of respondents compares to other studies done in other countries. In Uganda, 87% of women sampled in PMTCT programs were willing to

accept HIV testing (FrancisBanjunirwe and Muzoora 2005).

The number of admissions was not included in the questionnaire this might have proved to also lead one to being more likely to accept HIV testing as with an increasing number of admissions one is more likely to consider immunodeficiency.

The other interesting thing to note is that 98% of respondents were willing to test siblings of the child. This is in line with bringing HIV care and treatment to the family and not just the one child that is currently unwell as reflected in the revised recommendations for HIV testing for siblings of a child found to be infected perinatally(HIV Clinical Resource: HIV Testing and Diagnosis in Infants and Children).

A number of studies have looked at factors that may influence acceptability of HIV testing and have in most cases found gender and age among other things such as salary, education, and religion to be associated with accepting VCT (AdmassauMengesha et al 2006,Byamugisha R et al 2010). In this study we found that being male and in the 21 to 30 years age group was significantly associated with willingness to accept HIV testing.

Regarding modes of transmission of HIV the majority of caretakers mentioned sex (99.2 %) and through blood (73.8%). Very few of the respondents thought mother to child was a route of HIV transmission (35.8%) as has been shown in a study done in Tanzania. Government and Non-governmental organisations should therefore emphasize that most of the infections in children are as a result of MTCT.

Regarding preventive measures most of the respondents mentioned condom use (86.7%) followed by abstinence (59.2%) then faithfulness (55%). These findings suggest that health education is still required.

Majority of participants felt that routine HIV testing and counselling should be part of hospital services (99%).This acceptability of routine testing has also been shown in Uganda where 95% of adult patients at a national hospital accepted testing (Nakanjako et al, 2007).

The majority of participants felt that generally most of the members of the community were afraid to test which could be an obstacle to going for VCT. Death was thought to be the leading cause to the fear that the community had to HIV testing.

The fact that antiretroviral drugs, prolong life and are now available should be emphasized in the education and campaign materials and that the life expectancy of one should not be curtailed by a positive result rather by not testing one risks premature death from advanced disease .

Most of the participants interviewed had been tested for HIV and as reflected in the graph antenatal services prompted most to have the test. This is similar to findings in Botswana where 90% of pregnant women had an HIV test due to the introduction of routine HIV testing as a national policy in antenatal clinics (Nieburg P et al 2004). This finding is similar to various studies that have found that generally the number of people expressing a desire to test (readiness to test) outnumbers the number that actually go ahead and have the test done.

The involvement of both governmental and Non-Governmental Organisations in the fight against HIV/AIDS is important and must be encouraged if we are to win this battle against this epidemic.

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REFERENCES

1. AdmassauMengesha, FitawYohannis, Factors Affecting acceptance of VCT among different professional and community groups in North and South Gondar Administrative zones, North West Ethiopia. *Ethiop.J.Health Dev* 2006;20
2. WaridiboE, V Lobuna, V.Kalebe, M.Kiromat, J.Vince, M.Schaefer, J,Kaldor, Attitudes to HIV testing among carers of children admitted to Port Moresby General Hospital, Papua New Guinea. *Journal of Paediatrics and Child Health* Volume 44, Issue 11 pages 618-621, November 2008

3. Byamugisha, R., J. K. Tumwine, et al. (2010). "Attitudes to routine HIV counselling and testing, and knowledge about prevention of mother to child transmission of HIV in eastern Uganda: a cross-sectional survey among antenatal attendees." *Journal of the International AIDS Society* **13**: 52.
4. Dahl, V., L. Mellhammar, et al. (2008). "Acceptance of HIV testing among women attending antenatal care in south-western Uganda: risk factors and reasons for test refusal." *AIDS care* **20**(6): 746-752.
5. Fabiani .M; Cawthorne. A; Natabi. B; Ayella. E.O; Ogwang. M; Declich.S. Investigating factors associated with uptake of HIV voluntary counseling and testing among pregnant women living in North Uganda *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV* Volume 19, Issue 6, 2007, Pages 733 - 739
6. Francis Bajunirwe and Muzoora M, Barriers to the implementation of programs for the prevention of mother-to-child transmission of HIV: A cross-sectional study in rural and urban Uganda. *AIDS Res Ther.* 2005 **2**: 10[Pub Med]
7. Fylkesnes, K. & Siziya, S. (2004). A randomized trial on acceptability of voluntary HIV counseling and testing. *Tropical Medicine & International Health.* **9**(5), 566-572.
8. H I V a n d A I D S i n Z a m b i a (<http://www.avert.org/aids-zambia.htm>)
9. HIV Clinical Resource: HIV Testing and Diagnosis in Infants and Children, Office of the Medical Director, New York State Department of Health AIDS Institute in collaboration with the Johns Hopkins University Division of Infectious Diseases[Pub Med]
10. HIV/AIDS Multisector Success Stories, USAID-Zambia [hivsuccess.mht](http://www.usaid.gov/pressroom/press-releases/2008/08/20080814_hiv_aids_multisector_success_stories.html)[Pub Med]
11. Hong R, Banta J.E and Kamau J.K Child Survival, *Journal of Community Health* Volume 32 2006
12. Introduction of Routine HIV Testing in Prenatal Care- Botswana, 2004 *MMWR.* 2004; **53**:1083-1086[Pub Med]
13. Kadri AM, Kumar Pradeep. HIV Counselling and testing – entry point for prevention and care: Gujarat Experience *National Journal of Community Medicine* 2010, Vol.1 Issue 1
14. Kamala A, Abound S Knowledge, Attitudes and Practices on HIV Prevention Among Secondary School Students In Bukoba Rural, Kagera Region – Tanzania *Dar es Salaam Medical Students Journal* Vol. 14 No.1 April 2006
15. Kankasa C, Carter RJ, Bulterys M, et al. Routine offering of HIV testing to hospitalized paediatric patients at university teaching hospital, Lusaka, Zambia: Acceptability and feasibility. *J Acquir Immune Deific Syndr* 2009; **51**:202-8
16. Killewo, J. Z., G. Kwesigabo, et al. (1998). "Acceptability of voluntary HIV testing with counselling in a rural village in Kagera, Tanzania." *AIDS care* **10**(4): 431-439.
17. Kipp W, Kabagambe G, Konde-Lule J. HIV counselling and testing in rural Uganda: communities' attitudes and perceptions towards an HIV counselling and testing programme. *AIDS Care* 2002 Oct; **14**(5): 699-706
18. Leslie E. Wolf, Alexis Donoghoe, Tim Lane (2007) Implementing Routine HIV Testing: the Role of State Law *PLoS ONE* **2**(10):e1005. doi:10.1371/journal.pone.0001005[Pub Med]
19. Louise C Ivers, Kenneth A Freedberg and Joia S Mukherjee. Provider- initiated HIV testing in rural Haiti: low rate of missed opportunities for diagnosis of HIV in a primary care clinic. *AIDS Research and Therapy* 2007, **4**:28
20. Lugada E., Jaffar, S., Levin J., Abang B., Mermin J., Namara, G., Grosskurth, H., Mugalanzi, E., Gupta, S. & Bunnell, R. (2009) Comparison of Home- and Clinic-based HIV Counseling and Testing among Household Members of Persons Taking ART: Uganda [online]. *Sixteenth Conference on Retroviruses and Opportunistic Infections* Montreal, Canada, abstract 138, CROI 2009. Available from: <http://www.retroconference.org/2009/Abstracts/34888.htm> [Accessed 5/08/2009].
21. M.M De Paoli, R Manongi and K. I Klepp. Factors influencing acceptability of voluntary counseling and HIV- testing among pregnant women in Northern Tanzania. *AIDS Care* May 2004 Vol. **16**. No. 4 pp411-425

22. M. Kominami, K. Kawata, M. Ali, H. Meena and H. Ushijima, Factors determining prenatal HIV testing for prevention of mother to child transmission in Dar Es Salaam, Tanzania, *Paediatrics International* 2007 49, 286-292[Pub Med]
23. Measure DHS 2006 HIV/AIDS survey indicators database
24. Ministerial Press Release Official Release of the 2007 Zambia Demographic and Health Survey Results
25. Msellati, P., A. Juillet-Amari, et al. (2003). "Socio-economic and health characteristics of HIV-infected patients seeking care in relation to access to the Drug Access Initiative and to antiretroviral treatment in Cote d'Ivoire." *AIDS* 17: S63-S68.
26. Nakanjako D, kanya M, Kyabayinze D, Mayanja-Kizza H, Freers J, Whaten C, Katabira E, Acceptance of Routine Testing for HIV among Adult patients at the medical Emergency Unit at a National Referral Hospital in kampala, Uganda. *AIDS Behav* 2007 11: 753-75[Pub Med]
27. Nguyen, T. A., P. Oosterhoff, et al. (2008). "A hidden HIV epidemic among women in Vietnam." *BMC public health* 8: 37.
28. Nigatu, R, Seman.K.2011 Attitudes and practices on HIV preventions among students of higher education institutions in Ethiopia: The case of Addis Ababa University.2011
29. Paediatric ART Training Course 2007
30. Shemshedin O, Jemal H. VCT uptake and associated factors among teachers from Harari Administrative Region Ethiopia. *J. Health Dev.* 2009;23(3) 199-205
31. Thabo T.F, Social and psychological factors associated with willingness to test for HIV infection among young people in Botswana, *AIDS Care*, April 2006; 18(3): 201-207[PubMed]
32. UNAIDS (2010) Report on the global AIDS epidemic. Geneva. Available from: http://www.unaids.org/globalreport/Global_report.htm [Accessed 04/01/2011].
33. UNAIDS Voluntary Counselling and testing (VCT) P12:2000.
34. UNICEF 2008.
35. WHO 2002. Increasing access to knowledge of HIV status: conclusions of a WHO consultation, 3-4 December 2001.
36. Wolff, B., Nyanzi, B., Katongole, G., Ssesanga, D., Ruberantwari, A. & Whitworth, J. (2005). Evaluation of a home-based voluntary counseling and testing intervention in rural Uganda. *Health Policy and Planning*. 20(2), 109-116.
37. Zambia Sexual Behaviour Survey 2005, Central Statistical Office, Zambia[Pub Med]