

# **Socio-Demographic Correlates of HIV Testing among Women in Conflict areas – Northern Uganda**

**By**

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## **Introduction**

HIV Counselling and Testing is vital as it provides an opportunity for those infected to seek medical attention for early symptoms of AIDS related illnesses and to protect themselves and others from further infections. An estimated 80% HIV-infected adults in Uganda are unaware of their sero status and thus unable to access treatment and care. When persons know they are HIV positive, they are less likely to unknowingly transmit the disease to others. (Hays et al, 1994, Higgins et al, 1991, Kilmarx et al..1998, Weinhardt et al., 1999, Wenger et al., 1994). Those who test negative are more likely to change their behaviour to maintain their negative status by using condoms and or by encouraging their partners to test for HIV. In conflict and displacement, women are at increased risk of sexual violence and abuse (Amowitz et al., 2002). According to Gardiner (2001), women are six times more likely to contract HIV in refugee camp than in general population outside of the camp.

Despite the availability of HIV/AIDS testing services in Uganda since 1988, only 15% of adult Ugandans had tested for HIV according to the Uganda HIV/AIDS Sero- Behavioural Survey (2004/5). In Uganda, sero-prevalence for women is 7.5% compared to the males (5.0%). Special attention is paid to Northern Uganda because of the poor sexual and reproductive health indicators like high infant and maternal mortality, poor health and malnutrition as a result of the political turmoil and insurgency that this region has gone through for the past twenty years. HIV prevalence among women in this region is 9% as compared to 7.1% among men.

Understanding the correlates of HIV/AIDS testing among women is an important area of focus if Uganda is to further prevent new infections and to reduce the general HIV/AIDS prevalence rates in its population and to achieve the Millennium Development Goal - Six, Target 1, which talks about reducing and reversing the spread of HIV/AIDS. The main objective of this paper is to investigate the socio-demographic correlates of HIV/AIDS testing among women in conflict areas - Northern Uganda.

## **Methodology**

This study used secondary data collected during the Uganda Demographic Health Survey (2006). This Survey utilized a two-stage sample design. The first stage involved selecting sample points or clusters from a list of enumeration area (EAs) covered in the 2002 Population Census. The second stage of selection involved the systematic sampling of households from the 2002 Census list of households in each cluster. This particular study / paper focused on only women in the reproductive age group (15 – 49 years) found in Northern Uganda. A total of 1,127 women were studied.

The main outcome / dependent variable was a dichotomous measure of whether a woman had ever tested for HIV/AIDS or not. The independent variables included age, education attainment, religion, wealth, residence, marital status, income, abstinence, faithfulness, condom use at last

sexual encounter and consistent condom use. Perceived risk was evaluated through knowledge of someone with HIV/AIDS or someone who died of AIDS and knowledge of HIV prevention measures.

The researcher used STATA for data analysis. Analysis was done at univariate, bivariate (chi-square tests) and multivariate (binary logistic regression) levels. Both bivariate and multivariate analysis were done to establish if there exists any significant association between the dependent and independent variables in the model. The level of significance was at 0.05 that is at a confidence interval of 95%. Basing on the outcome of the logistic regression, the researcher chose the socio-demographic correlates of HIV testing among women in Northern Uganda.

### **Data Findings / Results**

Basing on the findings, 34.4% of women had ever tested for HIV/AIDS in Northern Uganda. Age, residence, educational attainment and marital status were strong socio-demographic correlates of HIV testing among women in Northern Uganda as shown in Table I. This is evidenced by both the findings at bivariate and multivariate analysis with p-values less than 0.05. Furthermore, knowledge of someone who has AIDS or died of AIDS was found to be a strong correlate of HIV testing among women in Northern Uganda. Among the behavioural correlates of HIV testing was number of sexual partners a woman had and condom use at last sexual encounter ( $p < 0.05$ ) as illustrated in Table II.

The never married women are less likely to test for HIV/AIDS as compared to the formerly married ( $p = 0.000$ ). While those aged between 20 to 34 years are also more likely to test for the AIDS virus as compared to those aged 40 years and above. Women residing in urban areas are more likely to test as compared to their counterparts in conflict areas of Northern Uganda ( $p = 0.018$ ). In addition, those with primary education are also less likely to test as compared to those with tertiary or higher education, ( $p = 0.031$ ). It can also be concluded that having knowledge on HIV prevention does not translate into practice or action hence the low levels of testing among women with good knowledge of HIV prevention methods. However, having more than one sexual partner and using condoms at last sexual encounter are also correlates of HIV testing among women in Northern Uganda. The fitted model was significant at a p-value of 0.000.

### **Recommendations**

Access to health services in particular HIV testing services should be increased in rural areas so as to enable more people to access HIV testing services in Northern Uganda. This will enable the rural populations to have access to HIV testing services.

More awareness through Information, Education and Communication messages should be done towards HIV/AIDS testing campaigns. This will help encourage more women to go for routine and voluntary HIV testing especially among those aged 15 – 19 and those aged between 35 - 49 years.

Policy formulation on HIV/AIDS testing should also be tailor made to cater for the people living in emergency settings like camps created as a result of conflict or war.

**Table 1.1: Logistic Regression Model showing HIV Testing Correlates**

<b>Socio-Demographics</b>	<b>Coefficients</b>	<b>Odds Ratio</b>	<b>z</b>	<b>p &gt; z</b>
<b>Residence</b>				
Rural	-0.7907	0.4535	-2.36	<b>0.018</b>
Urban***		1.0000		
<b>Religion</b>				
Catholics	0.4894	1.6313	0.59	0.557
Protestant	0.0258	1.0261	0.03	0.976
Muslim	0.1247	1.1328	0.10	0.919
Pentecostal	0.3117	1.3657	0.36	0.718
Others***		1.0000		
<b>Wealth Index</b>				
Poorest	-0.3047	0.7373	-0.75	0.456
Poorer	-0.3090	0.7342	-0.76	0.449
Middle	-0.0441	0.9569	-0.10	0.921
Richer	0.3725	1.4513	0.75	0.455
Richest***		1.0000		
<b>Age</b>				
15 - 19	0.2921	1.3393	1.06	0.290
20 - 24	0.6917	1.9970	2.98	<b>0.003</b>
25 - 29	0.6053	1.8317	2.53	<b>0.011</b>
30 - 34	0.5034	1.6544	2.14	<b>0.032</b>
35 - 39	0.3778	1.4591	1.52	0.13
40+***		1.0000		
<b>Education Attainment</b>				
No education	-0.9655	0.3808	-1.87	0.061
Primary	-1.0698	0.3431	-2.16	<b>0.031</b>
Secondary	0.4216	1.5243	0.75	0.455
Higher learning***		1.0000		
<b>Marital Status</b>				
Never Married	-1.1060	0.3309	-3.55	<b>0.000</b>
Currently Married	0.0946	1.0993	0.50	0.619
Formerly Married***		1.0000		
<b>Constant</b>	<b>0.5984</b>		<b>0.55</b>	<b>0.582</b>

Overall p-value of model; 0.000

\*\*\* Reference / Categories

**Table II Logistic Regression Model showing Knowledge & Behavioural Correlates of HIV Testing**

<b>Socio-Demographics</b>	<b>Coefficients</b>	<b>Odds Ratio</b>	<b>z</b>	<b>p &gt; z</b>
<b>Knowledge on HIV prevention</b>				
Nil***		1.0000		
Poor	-0.1744	0.8399	-0.30	0.762
Average	-0.4592	0.6318	-0.85	0.393
Good	-0.3525	0.7029	-0.68	0.496
<b>Know Someone with AIDS</b>				
Yes	0.6632	1.9411	3.83	<b>0.000</b>
No***		1.0000		
<b>Behavioural Correlates</b>				
<b>Abstinence</b>				
No abstinence***		1.0000		
1 – 6 months	0.5084	1.6626	0.88	0.379
7 – 12 months	0.7060	2.0258	1.13	0.261
13 – 18 months	-0.1554	0.8561	-0.15	0.877
19 – 24 months	0.6286	1.8750	0.84	0.403
25+ months	-0.2181	0.8041	-0.33	0.743
<b>Number of sexual partners</b>				
One sexual partner	-0.8022	0.4484	-3.33	<b>0.001</b>
Two or more sexual partners***		1.0000		
<b>Consistent Condom Use</b>				
Yes	-2.0096	0.1340	-1.63	0.104
No***		1.0000		
<b>Condom use at last sexual encounter</b>				
No	-0.7815	0.4577	-2.10	<b>0.036</b>
Yes***		1.0000		

Overall p-value of model; 0.000

\*\*\* **Reference Categories**

### **References**

Bond, Lisa, Lauby, Jennifer and Batson, Heather, (2007) “HIV testing and the role of individual and structural level barriers and facilitators”, *AIDS Care*, 17:2, 125 – 140.

Mbago Maurice. (2004). “Socio-demographic correlates of desire for HIV testing in Tanzania.” *Sexual Health*, 1, pp 13 – 21.

Ministry of Health (MOH) (Uganda) and ORC Macro. (2006) “Uganda HIV/AIDS Sero-Behavioural Survey, 2004 – 2005. Calverton, Maryland, USA: Ministry of Health and ORC Macro.