

ASSOCIATION BETWEEN PERCEIVED HIGH RISK BEHAVIOR and THE USE of CONDOM as A PROTECTIVE MEASURE for HIV/AIDS PREVENTION AMONG UGANDAN WOMEN and MEN

Mian B. Hossain

The first documented cases of AIDS in Uganda were reported in October 1985. Early case, however, was seen in 1982 in a fishing village along the shores of Lake Victoria. Since then the Uganda has been in the front line of the AIDS epidemic in many ways: it was one of the first countries to report AIDS cases; and one of the first to observe a decline in HIV prevalence. Uganda's HIV prevention programs have become a model for many developing countries attempting to curtail HIV/AIDS.

During the 1990s, Uganda has been experiencing in reduction of new HIV cases. The March 1998 HIV/AIDS surveillance report indicated that as of end of 1997, a cumulative total of 53,306 AIDS cases had been reported (STD/AIDS Control Program, 1998). By the end of 1999, there were 55,861 reported clinical AIDS cases, which represent a small proportion of all cases. At the same time, 1.4 million persons were estimated to have affected by AIDS (MOH, 2000).

Since there is no treatment for HIV/AIDS, the main strategy for fighting against the disease has been prevention through several behavioral means. These means could be faithful to one sexual partner, using condom and abstaining from sex. As a strategy, for not having infected with HIV, recent Demographic and Health Survey (DHS) documented that, in Uganda 13 percent of women and 17 percent of men ever use condom (UDHS, 2000). It also documented that 11 percent of women and 15 percent of men are ever abstained from sexual relations.

Since the beginning of HIV epidemic in early 1980's identification of risk factors remains the main focus of HIV prevention studies. Multiple partnership, casual sex and unprotected high-risk sexual encounter are considered the primary risk factors for sexual transmission of HIV. No study, however, analyzed the factors that are protecting the Ugandan men and women from HIV/AIDS.

The objective of the study is to examine the association between the HIV risk behavior and the use of condom as a measure for HIV prevention using Ugandan Demographic and Health Survey (UDHS 2000) data. The major objectives of the 2000 UDHS were to collect and analyze data on fertility, marriage, sexual activity, fertility preferences and use of family planning methods. The 2000 UDHS is a nationally represented survey of 7,246 women age 15-49 and 1,962 men aged 15-54. However, the survey was limited to 41 districts out of 45 districts in the country. The data collection for the 2000 UDHS took place from late September 2000 to March 2001. The sample was drawn through a two-stage design.

According to 2000 UDHS, almost 88 percent of women know about condom as a method of contraception. About 54 percent of women reported that they have knowledge about periodic abstinence. About 50 percent of the women and 65 percent of the men in Uganda report 'abstain from sex' is one of the ways to avoid HIV/AIDS. About 54.4 percent of the women and 72.3 percent of the men in Uganda report 'use of

condoms' is one of the ways to avoid HIV/AIDS. About 49 percent of the women and 43 percent of the men in Uganda report 'limit sex to one sexual partner/stay faithful to one partner' is one of the ways to avoid HIV/AIDS (UDHS, 2000).

We have used to separate logistic regression models for men and women. The dependent variable is 'ever used condom to avoid AIDS' among those who ever have had sex. About 7 percent of the women reported have 'ever used condom for avoiding AIDS', whereas about 15 percent of the men reported have 'ever used condom for avoiding AIDS'.

We used two logistic regression models to see the gross and net effects of one attitudinal and two perceived behavioral variables on the 'ever used condom to prevent AIDS' for men and women each. Demographic and social variables were controlled for in the regression model 2.

The odds of ever use of condom for preventing HIV/AIDS is almost 5 times among women who reported 'use of condom during sex' is one of the ways to avoid HIV/AIDS (Table 1). The odds is more than 3 times among men who reported 'use of condom during sex' is one of the ways to avoid HIV/AIDS (Table 2). The odds of ever use of condom for preventing HIV/AIDS is more than 2 times among women who reported 'sex with reduced number of partners' is one of the ways to prevent HIV/AIDS. These associations are statistically significant. However, no significant association is observed for men who reported 'sex with reduced number of partners' is one of the ways to prevent HIV/AIDS.

These findings have policy implications. If the behavior of using condom and perform sex with minimum sexual partner by the men and the women can be maintained, HIV/AIDS can be prevented. The National Family Planning in Uganda needs to address the need to increase the supply of condoms so that the Ugandan will have more access to condoms. Protective measures are the best to prevent HIV/AIDS.

Table 1: Odds ratios for the logistic regression estimates of the association between perceived sexual behavior with reduced number of partner and the ever use of condom to avoid HIV/AIDS among Ugandan women who ever have had sex, UDHS 2000.

Covariates	Odds Ratios	
	Model 1	Model 2
Attitude		
Use condom during sex to avoid AIDS:		
Yes	4.71***	2.80***
No (RC)	1.00	1.00
Perceived Behavior		
Sex with reduced number of partners will prevent HIV/AIDS:		
Yes	2.42***	2.13***
No (RC)	1.00	1.00
Sex only with one partner will prevent HIV/AIDS:		
Yes	1.10	1.01
No (RC)	1.00	1.00
Background characteristics		
Age:		
15-19	-	2.75***
20-29	-	2.34***
30-39	-	1.50
40 and above (RC)	-	1.00
Region:		
Central	-	1.94***
Eastern	-	1.66**
Northern	-	0.90
Western (RC)	-	1.00
Place of residence:		
Urban	-	2.40***
Rural (RC)	-	1.00
Education:		
No education (RC)	-	1.00
Primary	-	1.77**
Above primary	-	2.83***
Religion:		
Catholic	-	1.17
Protestant (RC)	-	1.00
Muslim and other	-	1.20
Approve FP:		
Yes	-	1.81**
No (RC)	-	1.00
House has electricity:		
Yes	-	1.62***
No (RC)	-	1.00
Intercept	-2.64***	-5.39***
-2 Log likelihood (d.f)	3938.84 (3)	3918.80 (16)

Significance: * p < 0.05; **p < 0.01; *** p < .001

Table 2: Odds ratios for the logistic regression estimates of the association between perceived sexual behavior with reduced number of partner and the ever use of condom to avoid HIV/AIDS among Ugandan men who ever have had sex, UDHS 2000.

Covariates	Odds Ratios	
	Model 1	Model 2
Attitude		
Use condom during sex to avoid AIDS:		
Yes	3.57***	2.30***
No (RC)	1.00	1.00
Perceived Behavior		
Sex with reduced number of partners will prevent HIV/AIDS:		
Yes	1.20	1.25
No (RC)	1.00	1.00
Sex only with one partner will prevent HIV/AIDS:		
Yes	0.67**	0.72*
No (RC)	1.00	1.00
Background characteristics		
Age:		
15-19	-	3.49***
20-29	-	2.97***
30-39	-	1.45
40 and above(RC)	-	1.00
Region:		
Central	-	0.71
Eastern	-	0.49***
Northern	-	0.39***
Western (RC)	-	1.00
Place of residence:		
Urban	-	2.21***
Rural (RC)	-	1.00
Education:		
No education (RC)	-	1.00
Primary	-	1.19
Above primary	-	2.13*
Religion:		
Catholic	-	1.01
Protestant (RC)	-	1.00
Muslim and other	-	0.91
Approve FP:		
Yes	-	2.68***
No (RC)	-	1.00
Intercept	-1.068***	-2.713***
-2 Log likelihood (d.f.)	1782.23 (3)	1777.53 (15)

Significance: * p < 0.05; **p < 0.01; *** p < .001