

Exploring the socioeconomic, demographic and behavioral correlates of gender disparities in HIV testing in India

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Abstract: The existence and rapid spread of HIV and AIDS poses a serious challenge to every nation across the globe. HIV and AIDS have the potential to undermine the massive improvements that have been made in global health over the years. However, the programme of controlling HIV epidemic has underwent tremendous change from Using data from the National Family Health Survey (NFHS-2005-06), we examine the state level differences in gender disparities in HIV testing across major India states. We also examine the effect of salient socio-economic, demographic and behavioral correlates of gender disparities in HIV testing in India. Result indicates large inter-state differentials in HIV testing in India. The use of HIV testing remained notably lower among females than their male counterparts. We also found systematic socioeconomic pattern in HIV testing, as men and women from richest wealth quintile, higher education from urban area were most benefitted than their counterparts.

Background of the study

The existence and rapid spread of HIV and AIDS poses a serious challenge to every nation across the globe. HIV and AIDS have the potential to undermine the massive improvements that have been made in global health over the years. Apart from a being a serious health problem, the multi layered effects of the epidemic on the socio-economic fabric of whole nations, makes HIV and AIDS a potential development threat worldwide. As on January 2006, the Joint United Nation program on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) estimated that AIDS has killed more than 25 million people since it was first recognized on December 1, 1981. It is estimated that about 0.6% of world's population is infected with HIV.

In Indian context, there is a growing concern of this epidemic as it was estimated by National AIDS Control Organization (NACO) that around 5 million people were living in India with HIV. But the recent estimates from a national household based survey data led to a major revision of the estimated prevalence of HIV in India and suggested that around 2.4 million people in India are living with HIV (UNAIDS, 2008). Although the back calculation suggests that HIV prevalence in India may have declined slightly in recent years, but the epidemic is still growing in some regions as well as population subgroups. For example, the HIV prevalence was considerably higher among southern states (especially Andhra Pradesh, Maharashtra, Tamil Nadu and Karnataka) compared to other parts of the country (except north-east) and

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among men (0.36 percent) compared to women (0.22 percent) in the general adult population in India (IIPS and ORC Macro 2007).

Despite of being relatively lower prevalence of HIV among women, evidence suggest women are more vulnerable, across the world, in terms of contracting the infection and the subsequent consequences. Both structural (socio-economic, political) and cultural (traditional norms etc.) factors are responsible for rendering certain sections like women, commercial sex workers, youth, migrants, orphans, children and dependants of family member who are positive more vulnerable (Maman *et al.* 1999). Literature suggests that women, whether, married/single, divorced/widowed, sex workers or seasonal migrants or adolescent girls are most susceptible to the negative impacts. Further, women are biologically more prone to HIV infection than men in terms of any single act of unprotected sex with an infected partner with the male to female transmission of the virus being 2 to 4 times higher than the female to male transmission among such sero-discordant couples. The biological structure of the women thus also renders them more vulnerable than others to HIV/AIDS. Sex disparity in terms of access to education, resources, income political power, coupled with incidences of sexual violence, coercion, social dislocation in conflict situation like war etc. or owing to migration for work, serve to increase the risk of HIV infection among women through unprotected sexual intercourse. As a result, women now account for more than half of those living with HIV worldwide and 60 percent in sub-Saharan Africa. They constitute one-fourth of those infected with HIV in India and one-third in Peru which is indicative of the manner in which sex disparities serve to pose increasing and disproportionate risks to women even in places which have relatively low national prevalence rates (Gupta 2000).

Measures to control the HIV epidemic

In 1992 government launched the National AIDS Control Program-I (NACP-I) to prevent HIV transmission, reduce the morbidity and mortality associated with HIV infection, and minimize the socio-economic impact of HIV infection. In 1999, NACP II was started and its main aim was to change high risk behavior in populations who were at the risk of contracting the infection and spreading it in the general population. The third stage of the National AIDS Control Programme (2007-2012) is meant to provide an integrated package of prevention, care and support and treatment with the aim of reducing incidence - as estimated in the first year of the programme - by 60% in high prevalence states and by 40% in the vulnerable states. Secondly its one of the objective is to strengthen the nationwide Strategic Information Management System. Many HIV- positive people are unaware that they are infected with the virus. The most important measure to lower down the prevalence of disease is providing the knowledge of HIV. The knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce their risks and increase their safe sex practices to remain disease free. For those who are HIV infected, knowledge of their status allows them to take action to protect their partner, to access treatment, and to plan for the future (IIPS and ORC Macro 2007).

Counseling and testing services for HIV have also been a component of HIV prevention and care program in more developed countries since long back. The testing of a pregnant woman is especially important to avoid the newly born children from being infected. In view of the importance of HIV testing in

the overall planning of prevention and control, as well as care and support programmes, the Ministry of Health and Family Welfare has made considerable efforts to increase the accessibility and availability of voluntary counseling and testing centers (VCTC) across the country under NACP-II by increasing the number of VCT centers from 62 in 1997 to 873 by the end of 2005.

Previous literatures and existing gaps

The concept of HIV testing is of recent origin in developing countries and very limited researches are available in this context. Moreover, most of the studies which deal with the HIV testing are carried out in developed countries either in the late 20th century or in the beginning of the 21st century. These studies were very diverse in nature. For example, few researchers have talked about the ethical issues in the HIV testing in low income countries (Rennie and Behets 2006), while some have discussed the extent of acceptability of routine HIV counseling and testing (Wanyenze *et al.* 2008). Their finding revealed that the overall extent of HIV testing was relatively lower and most of the individuals who got tested were not previously tested for HIV-positive. The racial differences in HIV testing was also the area of investigation for some of the authors like Stoskopf, Richter, and Kim (2001). Additionally, studies carried out in Kenya, Tanzania, and Trinidad documented the benefit of VCT for HIV and reported a 43 percent reduction in unprotected sex among people who received voluntary counseling and testing for HIV (Joesoef *et al.* 2001).

However, only few scholars have attempted to show the sex differences in HIV testing. Their main concern was, keeping the vulnerability of HIV among female and further the transmission of disease from mother to children, the very first step is to increase the extent of HIV testing among women. The study carried out by Ompad *et al.* (2002) on ethnic and sex differences in HIV testing among urban, economically-disadvantaged adolescent in Baltimore, Maryland revealed that most of the adolescent were first time tested for HIV. Further, compared to males, females were 1.72 times more likely to be tested for HIV. Study carried out by Snow *et al.* 2008 in Mpumalar Africa shows that the chances of HIV testing increased twice with the increase in the facility provided in the area between 2004 to 2006. Further, the extent of HIV testing was high among females compared to males.

Studies related to HIV testing are very scarce in Indian context. Except one or two attempt no one has tried to explore the sex differential in HIV testing in India. A study carried out by Solomon *et al.* (2008) in South India also discussed about the quality of life of those who are suffering from HIV. Finding shows that there persists sex related difference in quality of life domains of person living with HIV/AIDS in south India. Their findings revealed that, the social construct of sex in India, which has evolved over many centuries, makes women more vulnerable to HIV and other sexually transmitted infections. Within male dominated culture, there are multiple societal precursors that leading to continued spread of HIV among women: inability to openly on sex and sexuality, pressures to give birth to a family heir, implicit threats to the marriage when a woman does not bear children, and moral double standards imposed on men and women.

The studies related to HIV testing in India were mainly limited due to the unavailability of household based nationally representative data. The recently conducted NFHS (2005-06) has collected the information on HIV testing and other related issues. The survey pointed out that despite of giving so much importance for HIV counseling and testing and establishing new VCTCs, the extent of HIV testing among

women remained lower than men in India. According to NFHS-3, only 3 percent of women and 4 percent of men have ever been tested for HIV, and some who were tested did not get the result. This result gives an indication about the poor condition of women and suggests an urgent need to investigate the possible reasons behind the lower extent of HIV testing among the female.

Further, this paper is an important contribution to the existing literature because although each nation is making efforts to respond to the challenges posed by this epidemic, however, sex perspective are still not being systematically addressed in policies and programs related to HIV and AIDS. The present paper is an attempt in this direction and tries to explore the barriers in HIV testing among females and males in India. This study is done for all India and with special focus on Maharashtra. Maharashtra is selected for the study because it is one of the highest HIV prevalence in India. Data of last 5 years of BSS indicates that the sex gap in prevalence of HIV/AIDS has been consistently reducing in India especially in case on Maharashtra. Though the government is providing the ICTC centre up to district and below district level, but the utilization of ICTC services is becoming low. Hence, in order to strengthen the care and support programme in the country in general and Maharashtra in particular, there is an urgent need to examine why the utilization/demand for HIV testing is so low and what are the determinants of HIV testing with special focus on sex gap in Maharashtra.

Objectives

The objectives of the present study are:

- (1) To examine the sex difference in HIV testing in India and across the states.
- (2) To examine the sex differences in HIV testing according to selected socio- economic, demographic and behavioral characteristics in India and Maharashtra.
- (3) To analyze the sex differential in knowledge of place of HIV testing by selected background characteristics of respondents in India and Maharashtra.
- (4) To identify the determinants of HIV testing and knowledge of any source of HIV testing among male and female in India and Maharashtra.

Data and Methods

The data for present study has been drawn from National Family Health Survey-3 (2005-06). The NFHS-3 collected the information from a nationally representative sample of 1,09,041 households with 1,24,385 women in the reproductive age group 15-49 and 74,369 men aged 15-54 years. Men are included in NFHS-3 surveys for the first time in India. In six HIV/AIDS high prevalence states i.e. Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu, Manipur and Nagaland and in Uttar Pradesh all men in sampled households were selected for individual interview. In the remaining 22 states all men were interviewed only in the subsample of the households.

The sample in present study includes both women and men aged 15-49 years. In NFHS-3 information is gathered about knowledge and awareness of AIDS, source of information about AIDS, knowledge about modes of getting the transmission and many more. The detailed information is also gathered that whether the respondent has been tested for AIDS or not? When was the last time when

respondent was tested? and the place where testing was done. This information is used in the present analysis.

Bi-variate and multivariate analysis (binary logistic regression analysis) has been applied to fulfill the objectives of the present study. The dependent variables in the analysis are: ever had done HIV test, and knowledge of place of HIV testing. The independent variables are: age of the respondent, place of residence, educational status, regular media exposure, marital status, currently residing with spouse, work status in last 12 months, religion, wealth quintile and caste of the respondents. Other than that the comprehensive knowledge of HIV/ AIDS preventive methods, comprehensive knowledge of HIV/AIDS, sexually transmitted disease in last 12 months, risky sexual behaviour are also treated as independent variable in the analysis.

Findings

Table 1 shows the percentage of men and women (aged 15-49) by ever testing of HIV according to the states. There is huge variation across the states in the country, which can be seen from the female: male ratio in HIV testing. The value of ratio greater than one show that female went more for HIV testing compared to male. For the country as a whole the ratio is 0.85, showing that a larger proportion of males are ever been tested for HIV than the females. Findings from the table reveal that in all the high HIV prevalence states (except Nagaland) as well as in Sikkim and Delhi relatively larger proportion of females had ever been tested for HIV than the males.

The state level differences show that there persists sex differential in HIV testing because in most of the states Female: Male Ratio is less than one. For instance, among the states falling in the Northern region of the country, Haryana (0.21), Rajasthan (0.21), Punjab (0.30), Jammu and Kashmir (0.31) and Uttaranchal (0.41) respectively, except Delhi (1.38). Central states are showing more or less same scenario. In case of Eastern states Bihar (0.15) have the lowest ratio followed by Orissa (0.24), Jharkhand (0.34) and West Bengal (0.40).

In case of Northeastern states Sikkim (1.16) and Manipur (1.00) shows that more females went for HIV testing compared to male counterparts. Findings further shows that most of the states in Northeast are better in terms of HIV testing among females than northern, central and eastern states. In case of Western states Maharashtra (1.01) shows that females are more tested for HIV, while in Goa (0.96) and Gujarat (0.38) more males were tested for HIV. If we move towards southern part of country, table reveals that, females were more tested for HIV than males, i.e. Karnataka (1.82) and Tamil Nadu (1.61). Among the southern states Andhra Pradesh (0.96) and Kerala (0.98) both male and female were almost equally tested for HIV.

Table 2a shows percentage of women and men (aged 15-49) by ever testing of HIV by selected background characteristics. The variation can be seen on both the sexes, women in the age group 25-29 (6.1percent) were more tested for HIV than the other aged groups. While for men in the age groups 25-29 and 30-39 more number of men tested for HIV (5.5 percent and 5.7 percent respectively). Results show that in case of place of residence urban resident were more tested for HIV among both the sexes. Whereas by the level of education we can see ascending pattern; for the testing of HIV among both the sexes i.e. among the women with no education 0.8 percent has been tested whereas for 12 or more years of education there is

10.2 percent women got tested. In case of men with no education 0.8 percent and 12 or more years of education 8.6 percent men were tested for HIV. Those who were regularly exposed to mass media were more tested for HIV among both the sexes. Results reveals that currently married women and men were more (4.0 and 4.6 percent respectively) tested for HIV than the never married and widow/divorced. Those persons currently residing with spouse were more tested for HIV. Table also reveals that women who were not working (past 12 months) got tested more in numbers compared to working counterparts. For the male scenario was a bit different. Compared to non-working male, those men who were currently working got tested more for HIV. While comparing the religions it shows that persons belonging to the other religion (including Christians, Sikhs, and Buddhism etc.) were more tested for HIV as compare to the Hindu and Muslim among both the sexes. Caste wise comparison shows that general people were more tested for HIV than the rest of the population, for women it is 3.8 percent and men 5.2 percent respectively. Findings from the table reveal that affluent persons among both the sexes are more tested for HIV than the poor group.

Table 2b shows percentage of women and men (aged 15-49) by ever testing of HIV according to selected background characteristics in Maharashtra state. Percentage of ever been tested for HIV is higher among younger women in the age group 25-29 (13.2 percent) while among men it is higher for elder men (30-39) 10.7 percent. Also, more urban residents went for HIV testing in comparison to rural counterpart. Compared to national level figure of 10 percent, almost 20 percent of women from Maharashtra went for HIV testing those who were educated up to 12th standard or more. The extent of testing among the women exposed to mass media was also high (9 percent) in Maharashtra compared to national level figure of almost 5 percent. Currently married men (9.2 percent) and women (9.1percent) went more for HIV testing. One important finding that emerged from the table was widowed/divorced/separated/ deserted men went more for HIV testing (9.4 percent) compared to female (4 percent). There was much variation by the religion and caste of person went for HIV testing. Affluent persons went more tested for HIV among both the sexes (13.9 and 12.2 percent respectively).

Table 3a presents the percentage of women and men 15 - 49 by ever testing the HIV according to selected behavioral characteristics for India. Result shows that those women having comprehensive knowledge about preventive methods of HIV/AIDS getting more tested for HIV (6.6 percent) compare to the women who don't have comprehensive knowledge (1.9 percent). Same is the case for men also. However if we see the difference in HIV testing among those who have comprehensive knowledge about HIV/AIDS, more women (approx 8 percent) are getting tested for HIV compare to men (7 percent). There was not much impact of having positive attitude towards people living with HIV/AIDS on HIV testing across the sexes. Almost same amount of men and women got tested who had accepting attitude towards the people living with HIV/AIDS. Women with having any symptoms of sexually transmitted disease (STD) got more tested than males. There was also not much difference among men and women in terms of place of getting tested for HIV/AIDS.

If we consider the case of Maharashtra, the pattern of sex differences in HIV testing was almost same as the national level pattern (**table 3b**), except among those who had any kind of STDs and those who were indulged in the risky sexual behavior. In case of Maharashtra, the extent of HIV testing was lower among those female who had any symptoms of STD and higher among those who had risky sexual behavior. These results were opposite to what we found at the national level.

Table 4 presents the distribution of women and men (15-49 age groups) having knowledge of place of HIV testing across the states within each region. At the national level, the extent of knowledge about the place of HIV testing was much lower among females compared to males. Almost 27 percent of female had knowledge about any place of HIV testing. Out of which 24 percent of female knew that HIV testing can be done at public facilities while 13 percent were aware that it can be done at private place. These figures were comparatively very high for males.

The extent of knowledge of any place of HIV testing among women was highest in Delhi (57 percent) in north region, Madhya Pradesh (25 percent) in central region, Orissa in east region (22 percent), Mizoram (74 percent) in north east, Goa (53 percent) in western region and Tamil Nadu (50 percent). These states were also more favorable to men in terms of knowledge of any place where to get HIV testing done (public, private, and any sources). Result shows that Maharashtra stands at 6th position for women (with 43 percent), and 8th position for men (53 percent) in terms of knowledge about any place where one can get tested for HIV. These comparisons shows that Maharashtra is still lagging behind in terms of knowledge about the place of HIV testing compared to other states. But at the same time the extent of knowledge was comparatively good among female compared to male of other states.

The sex difference in the extent of knowledge about place of HIV testing according to selected background characteristics of the respondent is analyzed in **table 5a**. Result shows that compared to female the knowledge about the place of HIV testing was higher among males. But at the same time we got a remarkable differential in this knowledge within each sex according to different background characteristic. It is clear from the table that younger women (15-29 years), residing in urban areas, having education up to 12 years or more, with regular exposure of mass media, and those who were never married having more knowledge of public, private as well as any place where she can go for HIV testing. Other than that women who were not residing with spouse, currently not working, belonging to other than Hindu and Muslim religion, and who were from general caste have had also better knowledge about the same. Result also depicts that with the increase in wealth, the knowledge about the place of HIV testing also increased. This pattern of variation in the knowledge of HIV testing for men was also similar to women but the difference was only in its magnitude. The sex difference in the knowledge about the place of testing the HIV was also analyzed for Maharashtra. Result depicts the lower level of knowledge among the females, compared to males. Moreover, the pattern of difference across various socio-economic subgroups was same as what we got at the national level.

Table 6 shows percentage distribution of male and female who reported about the last time of HIV testing across the states of India. The overall level of percentage of men and women reported about HIV testing clearly shows that the percentage of female testing for HIV were lower than males in all categories and across all the states who went for testing in the recent time i.e. less than 12 months age. Contrary to that, for majority of the states percentage of female tested in 12-23 months and in 2 years and more bear higher percentages. The state of Tripura (100 percent), Bihar (70 percent), Himachal Pradesh (52 percent), Meghalaya (50 percent), Sikkim (50 percent), and Maharashtra (45 percent) showed higher percentage of females who reported about HIV testing in very recent time period (less than 12 months). Lowest percentages were reported in the states like Mizoram (29 percent) and Kerala (32 percent). Higher percentages of male have reported HIV testing in less than 12 months Jammu and Kashmir (60 percent),

Andhra Pradesh (56 percent) and Rajasthan (54 percent) while states with lowest percentage of male testing in less than 12 months were Bihar (18 percent), Manipur (25 percent), Mizoram (25 percent), Tripura (25 percent) and Madhya Pradesh (28 percent). For the state of Maharashtra, we find the percentage of both men and women reporting about the last time of HIV testing in all the subdivided categories to be higher than the national percentage.

Table 7 shows the result of logistic regression analysis with taking knowledge of any place of HIV testing as the dependent variable. Table shows that irrespective of sex, younger respondent, better educated, having exposure to mass media, from economically better off households and with the comprehensive knowledge of HIV/AIDS were more likely to report about any place where HIV testing can be done. Finding further suggests that rural respondents and those who belonged to Muslim religion have had significantly lower level of knowledge than their urban and other religious counterparts. This result was same for both male and female. The finding of Maharashtra shows that older women were less likely to inform about the place where one can go for HIV testing. Other than that better educated women, women having exposure to mass media, belonging to general category as well as better economic households and those having knowledge of HIV/AIDS were more likely to report about any place where HIV testing is possible. These findings were also valid for males of Maharashtra.

Table 8 shows the result of logistic regression model for ever testing of HIV among females and males according to selected demographic, socio-economic and behavioral characteristic of men and women in India and Maharashtra. For India, females in older age group (30-39, and 40-49), residing in rural areas, and having STIs were less likely to have ever tested for HIV. The likelihood of ever testing for HIV for females increases for those women who had 12 or more years of education (OR= 6.74; $p < 0.10$) as compared to not educated female. Employment, regular mass media exposure, female belonging to Muslim and other religion, female belonging to OBC category, female having comprehensive knowledge of HIV/AIDS prevention method and female having knowledge about HIV/AIDS were more likely to have ever tested for HIV. It is also interesting to note that the likelihood of female to ever get tested for HIV increases with the increase in wealth index as compared to the women belonging to poorest wealth quintile. These results were consistent with the finding of bi-variate analysis. For males, similar patterns are followed; increase likelihood in age, rural residence, increase in the years of education, regular mass media exposure, belonging to other religion and belonging to higher wealth quintiles increases their likelihood of ever getting tested for HIV. Likewise, if we further look into the predictors of HIV testing for the state of Maharashtra, we find, among females belonging to higher age group and belonging to rural residence made them less likely to be ever tested for HIV, where as for females increase in the years of education, belonging to rich and richest quintile and having comprehensive knowledge made them more likely to get tested for HIV testing. For males the increase in the years of education and belonging to rich and richest quintile made them more likely to get tested for HIV.

Findings and conclusions

Using the data from third round of National Family Health Survey (2005-06), this study has made an attempt first time in India to show the extent of HIV testing among females and males and also highlights the significant predictors of HIV testing both at national and sub national levels (with special focus on Maharashtra). Analysis gives an indication that the extent of HIV testing is lower

among females in most of the states. Only South Indian states, along with Maharashtra, Delhi, Manipur, and Sikkim are performing better in terms of HIV testing for females. The extent of testing among female and male widely differed according to their age, place of residence, mass media exposure, household economic status and their work status as well. The extent of HIV testing among women is found to relatively higher among those who had correct comprehensive knowledge about HIV/AIDS and the associated preventive measures as well. It was also observed that knowledge of any place of HIV testing was comparatively lower among females than males, but across the states Maharashtra is performing better in terms of knowledge of females' for place of HIV testing than among other states in India. Other factors like individuals age, educational status, exposure to mass media and the comprehensive knowledge about HIV/AIDS affect positively in terms of knowledge of place of HIV testing for females as well as males. Finding also suggest that in the recent course of HIV testing, females are doing better than the males as more proportion of female went for HIV testing in last 12 months compared to males. These findings suggests that although the extent of HIV testing was lower among females but the more younger, educated and those who were belonging to economically better off household are accepting the HIV testing more openly. From policy point of view it is important to formulate the policies and subsequent interventions focusing on those women who are still behind in HIV testing like, older women, belonging to rural areas, uneducated, and from poor families, in order to make the nation more protected from the growing danger of HIV epidemic.

References

- Gupta, G.R., 2000, “*Gender , sexuality, and HIV/AIDS: The What,the Why, and the How*”, Paper presented at XIIIth International AIDS Conference held at Durban, South Africa during 12 July, 2000.
- International Institute For Population Science and ORC Macro Int., 2007, “National Family Health Survey -3 (2005-06): India Report, Vol.1”, IIPS, Mumbai
- Joesoef, M.R., B. Cheluget, L.H. Marum, C. Wandera, C.A. Rayan, K.M. DeCock, and K Chebet, 2003, “Differential of HIV prevalence in women and men who attended sexually transmitted disease clinics at HIV sentinel surveillance sites in Kenya, 1990-2001” *International Journal of STD and AIDS*, Vol. 14:193-196.
- Joint United Nations Programme on HIV/AIDS, 2006, “Overview of global AIDS epidemic”, assessed at http://data.undids.org/pub/GlobalReport/2006/2006_GR_CH02_en.pdf. *2006 Report on the global AIDS epidemic*.
- Maman S., J. Mbwambo, M. Sweat, N. Hogan, and G. Kilonzo, 1999, “Women’s barriers to HIV testing and disclosure: Challenges for voluntary counseling and testing.” Paper presented at XIth International Conference on AIDS and STDs in Africa held at Lusaka, Zambia during August 12-16, 1999.
- Ompad D.C, S.A. Strathdee, S. Kellam, C. Latin, D.D. Celentano, J. Poduska , N. Ialongo, 2002, “*Ethnic and gender differences in HIV testing among urban, economically–disadvantaged adolescent in Baltimore, Maryland*”. International Conference AIDS held at Johns Hopkins University of Public Health, Baltimore, United States during July 7-12; 2002.
- Rennie S., and F. Behets, 2006, “Desperately seeking targets: The ethics of routine HIV testing in low-income countries”, *Bulletin of World Health Organization*, Vol. 84:52-57.
- S. Solomon, K.K. Venkatesh, L. Brown. P. Verma. A.J. Cecelia, C. Daly, V.S. Mahendra, N. Cheng, N., Kumarasamy, and K.H. Mayer, 2008, “Gender-related differences in quality of life domains of person living with HIV/AIDS in South India in the era prior to greater access to antiretroviral therapy”, *AIDS Patient Care and STDs*, Vol. 22 (12): 999-1014.
- Snow R., M. Madaleni, and M. Poulsen, 2008, “*Are men testing? Sex differentials in HIV testing in Mpumalar Africa*”, Paper presented in XVIII International AIDS Conference, held at Mexico City during 3-8 August 2008.
- Stoskopf, C.H., D.L. Richter, and Y.K. Kim, 2001, “Factors affecting health status in African Americans living with HIV/AIDS”, *AIDS Patient Care and STDs*, Vol. 15(6): 331-338.
- UNAIDS, 2008, Report of the global AIDS epidemic.
- Wanyenze R.K., C. Nawavvu, A.S. Namale, B. Mayanja, R. Bunnell, B. AAbang, G. Amanyire, N.K. Sewankarnbo, and M.R. Kanya, 2008, “Acceptability of routine HIV counseling and testing, and HIV seroprevalence in Ugandan Hospitals”, *Bulletin of World Health Organization*, Vol. 86 (4):302-309.

Table 1: Percentage of women and men 15-49 by ever testing of HIV according to state, India, 2005-06

State	Women		Men		F: M ratio of HIV testing
India	3.2	124382	3.7	69746	0.85
North	1.51	16521	3.65	9878	.41
Haryana	0.9	2314	4.1	1512	0.21
Delhi	6.1	1471	4.4	1102	1.38
Himachal Pradesh	2.7	774	5.5	385	0.50
Jammu and Kashmir	1.1	1219	3.7	702	0.31
Punjab	2.3	3143	7.6	1907	0.30
Rajasthan	0.2	6601	0.9	3726	0.21
Uttaranchal	1.9	999	4.6	544	0.41
Central	0.43	28930	1.6	16525	0.27
Chhattisgarh	0.5	2751	2.0	1490	0.23
Madhya Pradesh	0.5	7225	1.9	4418	0.28
Uttar Pradesh	0.4	18954	1.4	10617	0.30
East	0.48	27915	1.75	14330	.27
Bihar	0.3	9503	2.0	4152	0.15
Jharkhand	0.6	3216	1.8	1703	0.34
Orissa	0.5	4810	1.9	2483	0.24
West Bengal	0.6	10386	1.5	5992	0.40
Northeast	1.2	4913	2.07	2826	0.58
Arunachal Pradesh	3.2	126	3.7	82	0.87
Assam	0.4	3374	1.3	1948	0.30
Manipur	8.5	271	8.5	141	1.00
Meghalaya	0.6	320	1.1	185	0.58
Mizoram	6.5	108	8.2	61	0.79
Nagaland	4.9	163	6.3	96	0.79
Sikkim	2.6	76	2.3	44	1.16
Tripura	0.4	475	1.5	269	0.28
West	5.2	18442	5.82	11289	0.89
Goa	15.2	191	15.9	107	0.96
Gujarat	1.1	6196	3.0	3747	0.38
Maharashtra	7.2	9034	7.1	8331	1.01
South	8.8	27661	6.9	14898	1.28
Andhra Pradesh	8.0	9556	8.3	5269	0.96
Karnataka	8.8	7421	4.8	4238	1.82
Kerala	9.7	3572	9.9	1683	0.98
Tamil Nadu	9.4	7112	5.8	3708	1.61

Table 2(a): Percentage of women and men 15-49 by ever testing of HIV according to selected background characteristics, India, 2005-06

Background characteristics	Women		Men	
	Ever been tested for AIDS	No of women	Ever been tested for AIDS	No of men
Age (in years)				
15-24	2.8	47589	1.6	24994
25-29	6.1	20416	5.5	10850
30-39	3.2	33521	5.7	19044
40-49	1.3	22855	3.6	14855
Place of residence				
Urban	5.7	40816	5.7	25499
Rural	1.9	83565	2.6	44244
Religion				
Hindu	3.1	100148	3.6	57106
Muslim	2.7	16935	3.2	8746
Other religions	5.4	7175	7.5	3878
Caste groups				
SC/ST	2.2	33243	2.4	18913
OBC	3.5	48879	3.6	27219
General	3.8	38483	5.2	21322
Education (in completed years)				
No education	0.8	50636	0.8	12769
<5 years complete	1.6	9766	1.3	6910
5-7 years complete	2.6	18820	2.3	11521
8-9 years complete	3.6	17383	3.1	14397
10-11 years complete	5.8	12887	5.1	10379
12 or more years complete	10.2	14881	8.6	13750
Marital status				
Never married	0.5	25461	2.4	25302
Currently married	4.0	93086	4.6	43499
Widow/divorced/separated/deserted	1.9	5834	2.4	942
Currently residing with spouse				
Yes	4.1	84099	4.6	42134
No	3.2	8919	3.1	1359
Employment (past 12 months)				
No	3.7	71118	1.8	9045
Yes	2.4	52629	4.0	60661
Wealth index				
Poorest	0.5	21718	0.5	11031
Poorer	1.0	23615	1.3	12666
Middle	2.3	25085	2.4	14298
Richer	4.0	26106	4.3	15492
Richest	7.1	27856	8.4	16256
Regular media exposure				
No	0.6	43898	0.6	13694
Yes	4.6	80483	4.5	56049
Total	3.2	124382	3.7	69746

Table 2(b): Percentage of women and men 15-49 by ever testing of HIV according to selected background characteristics, Maharashtra, 2005-06

Background characteristics	Women		Men	
	Ever been tested for AIDS	N	Ever been tested for AIDS	N
Age (in years)				
15-24	5.7	3371	3.5	3141
25-29	13.2	1523	9.6	1264
30-39	7.4	2592	10.7	2310
40-49	4.0	1547	6.8	1616
Place of residence				
Urban	10.9	4586	9.4	4482
Rural	3.4	4448	4.3	3849
Religion				
Hindu	6.8	7112	7.1	6639
Muslim	9.4	1061	6.5	976
Other religions	7.2	853	7.2	717
Caste groups				
SC/ST	4.9	2331	5.1	2068
OBC	6.4	2579	7.1	2305
Others	9.0	4074	8.1	3906
Education (in completed years)				
No education	1.1	2133	1.1	615
<5 years complete	2.0	880	1.1	829
5-7 years complete	3.9	1529	3.1	1177
8-9 years complete	6.8	1719	6.2	2089
10-11 years complete	10.1	1289	9.5	1613
12 or more years complete	20.2	1484	12.7	2007
Marital status				
Never married	1.0	1943	4.1	3397
Currently married	9.2	6606	9.1	4871
Widow/divorced/separated/deserted	4.1	485	9.4	64
Currently residing with spouse				
Yes	9.0	6380	9.2	4671
No	14.7	223	8.7	200
Employment (past 12 months)				
No	8.8	4673	2.8	1115
Yes	5.2	4320	7.7	7210
Wealth index				
Poorest	0.8	853	1.0	659
Poorer	1.0	1213	1.8	1111
Middle	3.5	1567	3.5	1466
Richer	5.7	2182	7.3	2266
Richest	13.9	3220	12.2	2829
Regular media exposure				
No	1.1	2162	0.9	981
Yes	9.1	6872	7.9	7351
Total	7.2	9034	7.1	8331

Table 3(a): Percentage of women and men 15-49 by ever testing of HIV according to selected behavioural characteristics, India, 2005-06

	Women		Men	
	Ever been tested for AIDS	Number of women	Ever been tested for AIDS	Number of men
Knowledge of HIV/AIDS preventive methods				
Yes	6.6	34728	4.9	40243
No	1.9	89653	2.2	29500
Comprehensive knowledge of HIV/AIDS				
Yes	7.9	18795	6.6	20402
No	2.3	105586	2.6	49341
Accepting attitude towards people living with HIV/AIDS				
Yes	5.7	25503	5.8	21443
No	5.0	49780	3.7	36707
Sexually transmitted diseases (STDs) in last 12 months				
Yes	8.2	110	5.9	236
No	7.2	11868	3.7	69396
Risky sexual behaviour				
Yes	2.2	136	4.7	1857
No	4.0	88968	4.6	42346
Place of HIV/AIDS testing in last 12 months				
Public	1.2	1445	1.5	1059
Private	1.9	2377	1.9	1345
NGOs/Other	0.1	130	0.3	196

Table 3(b): Percentage of women and men 15-49 by ever testing of HIV according to selected behavioural characteristics, Maharashtra, 2005-06

	Women		Men	
	Ever been tested for AIDS	Number of women	Ever been tested for AIDS	Number of men
Knowledge of HIV/AIDS preventive methods				
Yes	13.9	3384	8.4	5326
No	3.1	5650	3.8	2108
Comprehensive knowledge of HIV/AIDS				
Yes	15.6	2392	9.2	3695
No	4.2	6642	5.0	3739
Accepting attitude towards people living with HIV/AIDS				
Yes	12.9	2719	10.0	3349
No	6.4	4584	5.4	3516
Sexually transmitted diseases (STDs) in last 12 months				
Yes	8.4	1014	11.8	17
No	7.2	8023	7.1	7396
Risky sexual behaviour				
Yes	16.7	6	8.5	177
No	9.2	6249	9.2	4233
Place of HIV/AIDS testing in last 12 months				
Public	2.3	210	2.5	183
Private	4.6	413	4.2	309
NGOs/Other	0.3	25	0.4	33

Table 4: Percentage of female and male (15-49) having knowledge of place of HIV testing (public, private and any source) across states, India, 2005-06.

State	Female				Male			
	Public	Private	Any	Total	Public	Private	Any	Total
India	24.3	12.8	27.3	124385	45.2	20.2	46.7	69750
North								
Haryana	31.4	16.8	32.7	2314	48.9	15.9	49.9	1511
Delhi	51.3	30.6	56.9	1471	71	22.1	73.5	1101
Himachal Pradesh	33.3	5.8	34.5	775	71.9	20.2	72.5	386
Jammu and Kashmir	10.9	5.1	12.3	1219	27.2	11	28.1	702
Punjab	32.3	21.5	35.2	3143	53.3	24.4	55.9	1907
Rajasthan	22.9	9.2	23.3	6601	50.3	14.8	50.9	3726
Uttaranchal	25.9	10.2	27.6	1000	53.2	24.8	54	544
Central								
Chhattisgarh	14.5	8.3	15.2	2751	50.7	27.2	52	1490
Madhya Pradesh	24.2	11.4	24.9	7225	45.4	23.7	46.7	4417
Uttar Pradesh	15.1	6.1	15.8	18954	41.4	11.9	42.2	10620
East								
Bihar	14.9	10.4	15.9	9503	40.8	21.1	42.9	4152
Jharkhand	8.2	4.9	9.6	3216	19.7	5.9	20.8	1703
Orissa	20.5	4.2	21.5	4809	30.8	5.1	31.2	2484
West Bengal	16.4	4.4	17.6	10386	29.2	11.2	30.3	5992
Northeast								
Arunachal Pradesh	20.8	7.1	22.4	125	30.5	11	30.5	82
Assam	14.1	5.7	15.6	3374	21.8	9.5	24.6	1949
Manipur	59.4	14	63.1	271	70.4	19.1	71.8	142
Meghalaya	16.9	8.4	17.5	320	21.1	13	24.9	185
Mizoram	71.3	10.2	74.1	108	63.3	13.1	63.9	61
Nagaland	25.8	13.5	30.7	163	35.8	18.9	38.9	95
Sikkim	34.2	6.5	35.1	77	43.2	13.6	43.2	44
Tripura	23.8	7.6	25.9	475	35.3	13.8	38.7	269
West								
Goa	40.8	25.7	52.9	117	41.5	16	43.4	106
Gujarat	25.4	17.2	28.2	6196	55.5	35.8	57	3750
Maharashtra	37.1	22.4	43.2	9034	51.2	25.6	52.9	8331
South								
Andhra Pradesh	26.5	19.7	33.9	9556	50.2	32.7	53.8	5270
Karnataka	31	19.8	38.1	7424	48.8	25.9	50.1	4237
Kerala	31.6	16.8	40.9	3572	41.8	12.3	43	1683
Tamil Nadu	43.8	21.4	49.7	7112	67.8	32	69.7	3708

Table 5(a): Percentage of female and male (15-49) having knowledge of place of HIV testing (public, private and any source) by selected background characteristics in India, 2005-06.

Background characteristics	Female				Male			
	Public	Private	Any	Total	Public	Private	Any	Total
Age-group								
15-24	26.4	13.7	29.1	47591	46.3	21.1	48	24997
25-29	25.1	14.9	30.2	20417	47.2	22.3	49.1	10854
30-39	22.8	12.1	26	33522	44.9	19.6	46.2	19046
40-49	21.4	10.2	23.1	22856	42.2	17.8	43.4	14855
Place of residence								
Urban	37.7	22.3	43.3	40817	56.9	28.9	59.1	25504
Rural	17.7	8.2	19.6	83567	38.4	15.1	39.6	44247
Religion								
Hindu	24.6	12.8	27.5	100152	46.0	20.6	47.6	57111
Muslim	18.0	9.6	20.6	16936	38.2	15.9	39.4	8747
Other religion	35.3	21.0	40.4	7174	48.4	22.9	50.5	3878
Caste groups								
SC/ST	18.5	8.6	20.1	33244	37.7	15.5	38.8	18913
OBC	23.5	12.4	26.6	48880	47.8	21.6	49.2	27218
Others	31.4	17.8	27.7	38483	50.3	23.6	52.4	21328
Education								
No education	7.6	3.4	8.3	50637	16.3	5.7	16.9	12770
<5 years complete	16.8	6.9	18.2	9768	28.3	10.9	29.1	6910
5-7 years complete	24.4	10.9	26.7	18820	39.3	15.9	40.4	11523
8-9 years complete	34.3	15.3	37.3	17383	50.0	20.1	51.5	14399
10-11 years complete	45.0	24.5	50.5	12887	60.7	28.6	62.7	10380
12 or more years complete	56.4	38.6	67.3	14882	68.5	35.6	71.4	13754
Marital status								
Never married	33.3	16.6	35.1	25462	48.6	23.1	50.6	25307
Currently married	22.1	12.1	25.6	93089	43.5	18.6	44.8	43501
Widow/divorced/separated/deserted	19.5	8.4	21.3	5834	30.7	11.8	31.6	941
Currently residing with spouse								
Yes	22.6	12.3	26.1	84101	43.2	18.5	44.5	46396
No	17.8	10.4	21.1	8920	49.3	21.9	50.2	1473
Employment (past 12 months)								
No	27.8	14.8	31.2	71122	54.9	25.5	57.0	9045
Yes	19.7	10.1	22.1	52631	43.7	19.4	45.2	60667
Wealth index								
Poorest	6.4	2.2	6.8	21718	19.5	6.1	19.8	11732
Poorer	11.6	4.4	12.5	23616	31.8	10.7	32.9	13446
Middle	20.6	8.8	22.5	25088	43.7	17.4	44.9	15167
Richer	30.6	15.1	34.1	26106	54.4	24.6	56.2	16479
Richest	46.3	29.9	54	27856	64.3	34.5	66.9	17545
Regular media exposure								
No	7.5	3.0	8.0	43898	17.7	5.8	18.2	13695
Yes	33.5	18.2	37.9	80486	51.9	23.7	53.7	56057

Table5(b): Percentage of female and male (15-49) having knowledge of sources of HIV testing (public, private and any source) by selected background characteristics in Maharashtra, 2005-06.

Background characteristic	Public	Private	Any	No of women	Public	Private	Any	No of men
Age (in years)								
15-24	39.6	23.1	44.3	3372	51.3	26.2	53.1	3141
25-29	38.0	24.7	47.9	1523	55.8	29.1	57.9	1265
30-39	34.4	22.0	41.1	2593	51.2	23.9	52.5	2310
40-49	35.5	19.3	39.5	1548	47.3	23.9	49.1	1616
Place of residence								
Urban	43.8	28.6	52.7	4586	55.9	32.2	57.9	4482
Rural	30.2	16.1	33.3	4448	45.7	17.8	47.1	3850
Religion								
Hindu	37.0	22.5	43.1	7112	50.6	19.0	52.5	6639
Muslim	35.4	20.6	41.5	1061	49.6	26.0	50.5	976
Other religions	40.0	23.8	45.8	854	58.4	29.0	60.1	717
Caste groups								
SC/ST	31.8	17.3	35.0	2331	45.6	19.0	46.8	2068
OBC	37.1	21.0	43.6	2579	56.9	26.0	58.6	2305
General	40.3	26.4	47.7	4074	50.8	29.0	52.8	3905
Education (in completed years)								
No education	15.7	7.2	16.4	2133	19.5	5.5	19.7	615
<5 years complete	22.6	10.4	24.4	880	33	12.7	34.2	830
5-7 years complete	35.4	18.1	38.6	1529	41.9	18.1	42.7	1177
8-9 years complete	42.8	20.6	47.4	1719	52.1	23.4	53.5	2090
10-11 years complete	52.8	31.7	60.2	1288	57.8	29.4	59.6	1614
12 or more years complete	58.3	49.8	77.7	1484	67.6	40.5	70.9	2007
Marital status								
Never married	45.7	24.8	47.7	1944	54.6	29.0	56.4	3397
Currently married	35.0	22.0	42.3	6606	48.8	23.0	50.5	4871
Widow/divorced/separated/deserted	32.6	18.7	36.7	485	50.8	22.0	53.1	64
Currently residing with spouse								
Yes	34.5	21.5	41.7	6380	48.8	23.0	50.5	4671
No	46.6	36.6	58.0	224	48.5	27.0	50.0	200
Employment (past 12 months)								
No	43.4	25.9	50.3	4673	56.9	30.0	58.2	1116
Yes	30.5	18.6	35.5	4319	50.3	25.0	52.1	7210
Wealth index								
Poorest	14.8	5.7	14.9	853	27.3	7.3	27.8	659
Poorer	23.7	10	25.1	1213	38.0	12.0	38.7	1111
Middle	30.8	16.4	33.6	1566	47.7	19.0	48.4	1466
Richer	38.0	20.6	42.2	2183	54.9	26.0	56.9	2266
Richest	50.6	35.7	62.7	3220	60.8	38.0	63.5	2829
Regular media exposure								
No	13.8	5.6	14.8	2161	28.2	10.0	28.6	980
Yes	44.4	27.7	52.1	6873	54.3	27.6	56.2	7350

Table 6 Percent distribution of female and male (15-49) who reported about the last time of HIV testing across states, India, 2005-06.

State	Female				Male			
	Less than 12 months	12-23 months	2 years or more	Total	Less than 12 months	12-23 months	2 years or more	Total
India	41.2	20.7	38.2	124385	43.8	19.5	36.6	69750
North								
Haryana	40.0	15.0	45.0	2314	51.6	9.7	38.7	1511
Delhi	41.6	13.5	44.9	1471	34.7	22.4	42.9	1101
Himachal Pradesh	52.4	14.3	33.3	775	45.0	20.0	35.0	386
Jammu and Kashmir	33.3	26.7	40.0	1219	60.0	20.0	20.0	702
Punjab	43.7	22.5	33.8	3143	42.4	19.4	38.2	1907
Rajasthan	30.8	0.0	69.2	6601	54.3	5.7	40.0	3726
Uttaranchal	42.1	21.1	36.8	1000	41.7	8.3	50.0	544
Central								
Chhattisgarh	38.5	15.4	46.2	2751	43.3	20.0	36.7	1490
Madhya Pradesh	42.5	22.5	35.0	7225	28.6	27.4	44.0	4417
Uttar Pradesh	35.9	15.4	48.7	18954	37.8	24.5	37.8	10620
East								
Bihar	70.4	7.4	22.2	9503	18.1	32.5	49.4	4152
Jharkhand	40.0	15.0	45.0	3216	53.3	20.0	26.7	1703
Orissa	33.3	9.5	57.1	4809	45.8	18.8	35.4	2484
West Bengal	37.1	22.6	40.3	10386	34.8	16.9	48.3	5992
Northeast								
Arunachal Pradesh	33.3	33.3	33.3	125	33.3	33.3	33.3	82
Assam	41.7	16.7	41.7	3374	53.8	19.2	26.9	1949
Manipur	43.5	17.4	39.1	271	25.0	16.7	58.3	142
Meghalaya	50.0	0.0	50.0	320	33.3	33.3	33.3	185
Mizoram	28.6	28.6	42.9	108	25.0	25.0	50.0	61
Nagaland	37.5	12.5	50.0	163	33.3	16.7	50.0	95
Sikkim	50.0	0.0	50.0	77	0.0	0.0	100.0	44
Tripura	100.0	0.0	0.0	475	25.0	25.0	50.0	269
West								
Goa	37.9	17.2	44.8	117	41.2	17.6	41.2	106
Gujarat	47.1	11.8	41.2	6196	38.7	23.4	37.8	3750
<i>Maharashtra</i>	<i>44.9</i>	<i>19.7</i>	<i>35.4</i>	<i>9034</i>	<i>46.5</i>	<i>16.8</i>	<i>36.7</i>	<i>8331</i>
South								
Andhra Pradesh	36.8	24.1	39.1	9556	56.4	16.7	26.8	5270
Karnataka	39.1	20.4	40.5	7424	37.6	22.9	39.5	4237
Kerala	32.5	22.5	45	3572	32.9	26.9	40.1	1683
Tamil Nadu	47	21.6	31.4	7112	49.8	16.3	34	3708

Table 7: Logistic regression models showing odds ratio for knowledge of any source for testing of HIV among females and males according to selected demographic, socioeconomic and behavioral predictors in India and Maharashtra , 2005-06

Predictors	India		Maharashtra	
	Female Exp(B)	Male Exp(B)	Female Exp(B)	Male Exp(B)
Age (in years)				
15-24®	1.00	1.00	1.00	1.00
25-29	1.06**	1.15***	0.98	1.20**
30-39	1.00	1.21***	0.88	1.18***
40-49	0.91***	1.27***	0.83*	1.09
Place of residence				
Urban®	1.00	1.00	1.00	1.00
Rural	0.82***	0.86***	1.15	1.12
Religion				
Hindu®	1.00	1.00	1.00	1.00
Muslim	0.97***	0.90***	1.12	1.04
Other religions	1.21***	0.84***	0.97	1.63***
Caste groups				
SC/ST®	1.00	1.00	1.00	1.00
OBC	1.11***	1.10***	0.90***	1.33***
General	1.01	0.93***	1.07***	1.07
Education (in completed years)				
No education®	1.00	1.00	1.00	1.00
<5 years complete	1.83***	1.41***	1.53***	1.49***
5-7 years complete	2.41***	1.92***	2.26***	1.70***
8-9 years complete	3.45***	2.63***	3.24***	2.13***
10-11 years complete	4.39***	3.39***	3.97***	2.52***
12 or more years complete	6.68***	4.37***	7.68***	3.62***
Employment (past 12 months)				
No®	1.00	1.00	1.00	1.00
Yes	1.28***	1.01	1.13*	0.97
Wealth index				
Poorest®	1.00	1.00	1.00	1.00
Poorer	1.53***	1.48***	1.29	1.20
Middle	2.12***	1.85***	1.32	1.43**
Richer	2.31***	2.00***	1.41*	1.74***
Richest	2.65***	2.02***	1.83***	1.93***
Regular media exposure				
No®	1.00	1.00		
Yes	2.31***	1.98***	2.41***	1.48***
Comprehensive knowledge of HIV/AIDS				
No®	1.00	1.00	1.00	1.00
Yes	2.78***	2.20***	2.24***	2.22***

Dependent variable: Knowledge of any source of HIV testing (1), Otherwise (0); Level of Significance- ***: 1%; **: 5%; *: 10%

Table 8: Logistic regression models showing odds ratio for ever testing of HIV among females and males according to selected demographic, socioeconomic and behavioral predictors in India and Maharashtra , 2005-06

Predictors	India		Maharashtra	
	Female Exp(B)	Male Exp(B)	Female Exp(B)	Male Exp(B)
Age (in years)				
15-24®	1.00	1.00	1.00	1.00
25-29	0.94	1.55***	0.92	1.10
30-39	0.49***	1.56***	0.42***	1.10
40-49	0.18***	1.00	0.17***	0.88
Place of residence				
Urban®	1.00	1.00	1.00	1.00
Rural	0.69***	0.95	0.46***	0.93
Religion				
Hindu®	1.00	1.00	1.00	1.00
Muslim	1.46***	0.97	1.28*	1.12
Other religions	1.36***	1.61***	1.14	1.25
Caste groups				
SC/ST®	1.00	1.00	1.00	1.00
OBC	1.37***	1.15**	1.11	1.02
General	1.01	1.19***	1.18	1.14
Education (in completed years)				
No education®	1.00	1.00	1.00	1.00
<5 years complete	1.67***	1.62***	1.70	1.63
5-7 years complete	2.06***	2.12***	1.90**	3.44**
8-9 years complete	3.03***	2.42***	4.13***	4.91***
10-11 years complete	4.42***	3.22***	5.48***	6.00***
12 or more years complete	6.74***	4.05***	9.87***	7.15***
Employment (past 12 months)				
No®	1.00	1.00	1.00	1.00
Yes	1.18***	1.05	1.11	1.30
Wealth index				
Poorest®	1.00	1.00	1.00	1.00
Poorer	1.96***	1.51	1.40	1.06
Middle	2.76***	2.54***	2.31	1.76
Richer	3.04***	3.50***	2.87*	2.75*
Richest	2.97***	4.81***	3.09*	3.47**
Regular media exposure				
No®	1.00			
Yes	2.36***	1.90***	1.73**	2.34**
Knowledge of HIV/AIDS preventive methods				
No®	1.00	1.00	1.00	1.00
Yes	1.11**	0.97	1.47***	1.17
Comprehensive knowledge of HIV/AIDS				
No®	1.00	1.00	1.00	1.00
Yes	1.25***	1.23***	1.16	1.21
Sexually transmitted infections (STIs)				
No®	1.00	1.00	1.00	1.00
Yes	0.84**	1.21*	0.98	0.97

Dependent variable: Ever tested for HIV (1), Otherwise (0); Level of Significance-***: 1%; **: 5%; *: 10%.