The Effect of HIV/AIDS on Sexual Behavior of Young People in Kenya

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Abstract

Context: The population of Kenya is predominantly young with 55 per cent of the population being under the age of 15. More than 50 percent are sexually experienced by age 20. STIs including HIV/AIDS are increasingly becoming common among young people, with up to 60 per cent of all new infections occurring among 15-24 year olds. Yet, vulnerability to these infections is systematically patterned so as to render some young people more likely than others. Gender, socio-economic and cultural status, sexuality and age are important factors structuring such vulnerability.

Today, Kenya is at the beginning of a third stage of the epidemic, which involves the spread to and among the youth, adolescents and young adults. At present, the percentage of new HIV infections among under 20 year olds is 30% female and 20% male. But in five years time the percentage of new infections among the under 20s will have increased dramatically to 40% of all new male infections occurring to those under age 20 and 60% of all new female infections occurring to those under age.

Methods: The main source of information used is taken from the 1998 Kenya Demographic and Health Survey (KDHS). This survey is one of a number of surveys carried out in various countries by Macro International Inc. in collaboration with the Kenyan Central Bureau of Statistics (CBS) and the National Council for Population and Development (NCPD). The DHS includes all women, both married and unmarried of reproductive age (15-49) as well as all men (married and unmarried) who are 15-54 years. To obtain measures of adolescents' sexuality, men and women aged 15-24 years have been used for the analyses presented in this study. Overall, the DHS data are an extensive source of reasonably high quality information. However, inaccuracies in reporting the data especially when it relates to sexual activity may affect the quality of information and this should be taken into consideration when reporting findings.

The measures used in this article include bivariate and multivariate analyses. Bivariate results help us understand sexual behavior, knowledge of HIV/AIDS transmission and condom use. Multivarate analyses provide in-depth analyses on the relationship of sexual activity and risk of acquiring HIV/AIDS on various background characteristics. In order to investigate more vigorously the determinants of sexual behavior, two logistic regression analyses models were conducted. One model was for males and another one for females.

Results: Results have shown that perception of risk and high knowledge about HIV/AIDS do not necessarily translate to behavior change. Even in the face of existing perception and knowledge of self-risk, risk taking behavior (multiple partners, sex with high risk partners, no condom use, healthy-looking person does not have HIV/AIDS, etc), is still high.

Pending the discovery of an effective vaccine or therapy, reduction of risk-taking behavior is the only way in which the spread of the AIDS pandemic will be arrested. On the basis of rationalistic theories of human behavior, behavioral change in response to HIV/AIDS should in part, be the consequence of a sense of personal vulnerability to infection.

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Policy makers, key government officials, church ministers and researchers need to rectify the type of knowledge that young people have on HIV/AIDS. More aggressive educational approach is needed to re-teach them on the misperceptions about HIV/AIDS. In improving their understanding of modes of transmission, difficulty in identification of infected persons by looking at them, and continuing a vigorous campaign on condom use may rectify the AIDS epidemic Kenya is currently facing. Future research is needed to explore other social and cultural contexts and behaviors that influence young people's perception and behaviors, which in turn will influence their livelihoods.

Conclusion: The results from this study will have policy implications that will help the government and key people in formulating policies that will improve sexual behavior among young people. Program officers can be able to identify intervention measures that will directly improve the negotiating patterns and skills among this youth. It will also help in identifying specific ways to reach the youth in terms of providing education and counseling issues such as family planning and STDs/HIV/AIDS. Another unique contribution of this study would be the ability to bring a broader context to these investigations which would take into account the cultural and economic context of social networking among the youth.

The Effect of HIV/AIDS on Sexual Behavior of Young People in Kenya

Background

It has been reported that the Kenyan AIDS epidemic is 21 years old, with the first cases of HIV infection occurring in 1978, in communities living around the shores of Lake Victoria. In its first stage, the infection spread rapidly among high risk groups like commercial sex workers. The next stage was slower and spread into the general adult population, with 20-30% of ante-natal women infected, and 10-30% adult population infected (PCA ,1999; NASCOP, 1999). Almost one third of Kenya's population fall into teenage adolescent category 13-19 years. The average age at first sexual intercourse has not changed significantly over the past 50 years; and over the same period the average age at marriage for both males and females has increased by nearly 5 years (NCPD 1998).

Today, Kenya is at the beginning of a third stage of the epidemic, which involves the spread to and among the youth and young adults. At present, the percentage of new HIV infections among under 20 year olds is 30% female and 20% male. But in five years time the percentage of new infections among the under 20s will have increased dramatically to 40% of all new male infections occurring to those under age 20 and 60% of all new female infections occurring to those under age 20 (PCA 1999; NASCOP, 1999).

HIV/AIDS among Kenyan adolescents is almost entirely by sexual intercourse. Findings show that 98% have been infected by sexual contact. In Kenya, most teenagers report very early sexual debut and various surveys indicate that a quarter of teenage girls are coerced or forced into first intercourse. Very large proportions of Kenyan youths are sexually active, about 90% by age 20 and most intercourse among them is unprotected and with multiple partners with boys being 7 times more sexually active than girls(PCA 1999; NCPD, 1998; Erulkar et al, 1998).

Young girls are often preferred by older men who believe that unprotected sex is less likely to lead to infection, and that sexual intercourse with a virgin will cure a sexually transmitted disease. Young girls living in poverty may find older men attractive because

of their wealth, power and position and thus making them to be at very high risk of HIV infection (Mensch, Bruce and Greene, 1998; PCA 1999; Fapohunda and Rutenberg, 1999).

It has also been documented that urbanization and migration increases opportunities for sexual encounters and provides new models for sexual behavior. The results suggest that urbanization and modernization favor transgression of the more restrictive traditions that exist in the rural areas (WHO, 1995). The Population Council (1999) in a comparative analysis of four cities in Africa found that the median age for sexual debut for both boys and girls was much lower in Kisumu (Kenya), than Ndola (Zambia), Yaounde (Cameroon) and Cotonou (Benin). Again, the percentage of urban teenagers who are sexually active, for the four cities show that Kisumu in Kenya had the highest (Population Council 1999). Findings showed that sexual activity among young people in Kenya is frequently a result of an obligation, a gift, a favor or monetary payment. This is a particularly prevalent practice among poor, unmarried, uneducated, unemployed urban girls by older men (Mensch, Bruce and Greene, 1998; Erulkar et al, 1998).

In a community-based survey some 10 percent of Kenyan adolescent boys (13-19) report previous contact with a commercial sex worker. HIV rates of infection among Kenyan commercial sex workers (and particularly those working in high prevalence places) can often exceed 80% (Cleland and Ferry, 1995; Gibney, DiClemente and Vermund, 1999).

Recent research has shown a strong relationship between HIV infection and male circumcision. The thrust of the evidence is that uncircumcised men are six times more likely to be HIV infected than males who have been circumcised. Among those men who were HIV positive 18% were not circumcised, while 2.6% were circumcised. Women who had their first intercourse with an uncircumcised man were 24 times more likely to be HIV positive (Population Council 1999).

Reproductive health program planners have a difficult time convincing the authorities and the church that reasons for high sexual activity at a young age does not lie in American television. Figures provided by Population Reference Bureau show that teenagers in Kenya are more sexually active than their counterparts in USA. For instance, about 50% of teenagers are sexually active compared to 22% in USA (PRB 1998). Another factor that is fuelling the epidemic is that sexual behavior in Kenya has always involved the occurrence of multiple partners. The 1993 KDHS reported that 50% of unmarried males had more that six lifetime sexual partners, while 65% of currently married monogamous men had had six and more lifetime sexual partners (NCPD, 1994). This study will therefore try and understand the factors influencing young people's sexual behavior in lieu of the HIV/AIDS epidemic.

Data and methods

The main source of information used is taken from the 1998 Kenya Demographic and Health Survey (KDHS). This survey is one of a number of surveys carried out in various countries by Macro International Inc. in collaboration with the Kenyan Central Bureau of Statistics (CBS) and the National Council for Population and Development (NCPD). The DHS includes all women, both married and unmarried of reproductive age (15-49) as well as all men (married and unmarried) who are 15-54 years. To obtain measures of adolescents' sexuality, men and women aged 15-24 years have been used for the analyses presented in this study. Overall, the DHS data are an extensive source of reasonably high quality information. However, inaccuracies in reporting the data especially when it relates to sexual activity may affect the quality of information and this should be taken into consideration when reporting findings.

The measures used in this article include bivariate and multivariate analyses. Bivariate results help us understand sexual behavior, knowledge of HIV/AIDS transmission and condom use. Multivarate analyses provide in-depth analyses on the relationship of sexual activity and risk of acquiring HIV/AIDS on various background characteristics. In order to investigate more vigorously the determinants of sexual behavior, two logistic regression

analyses models were conducted. One model was for males and another one for females. The dependent variable in both models is "ever had sex". The predictor variables including one demographic variable (age), three socio-economic variables, and one socio-cultural variable (religion).

The dependent variable in the first model was initially sex at first intercourse, categorized as "not had sex" and "age at first intercourse". This variable was recorded into "not had sex" and all the ages were combined into "had sex". Tables 10 and 11 show that the effects of the predictor variables on the dependent variable were found to be statistically significant at (p<0.01).

More analyses were carried out in order to determine the predictors of perceived chances of getting HIV/AIDS. Two logistic regression models were conducted. The dependent in both models was "chances of getting AIDS" which is categorized into no risk, small risk, moderate and great risk. The other is "has AIDS" which was dropped from the variable as it had very few cases. The dependent variable was converted into a numerical scale, with the following values 1(no risk), 2(small risk), 3 (moderate) and 4 (high). These were later recorded into 1 (no risk + small risk) and 2 (moderate + high risk). The predictor variables used were similar to those used in the earlier 2 models (for the variable "ever had sex") , which is "use of condoms in the last sexual intercourse".

Bivariate analysis

Table 1 about here

As Table 1 shows, majority of the female youths is in the 15-19 years age group (55percent) and 80 percent of them live in the rural areas. Most of the female youths in the study (61percent) have never been married while 37percent are married or living together. 67% of the female youth are not working. Majority of the male youths is in the 15-19 age group and lives in the rural areas. However the percentage of males who are married is

much lower compared to that of females with a difference of about 30 percentage points. Again like their female counterparts majority of the males are not married and their highest level of education is primary school.

Sexual Behavior

Information about early sexual activity is of obvious value in defining the onset of potential exposure to various types of risks, such as STIs/HIV/ AIDS and unwanted pregnancy. The KDHS (1998) reported lower ages of first intercourse and marriage for older cohorts than younger cohorts. Table 2 shows that 37 percent of men aged 15-24 years who are not married had had sexual intercourse compared to 50 percent females of the same age group.

Table 2 about here

Generally about 10 percent of unmarried females and 22 percent of unmarried males were sexually active in the last four weeks before the survey. Only 12 percent of males and 16 per cent of females had not had sexual intercourse for more than a year. This shows that there is a high level of sexual activity among the unmarried in the Kenyan society.

Table 3 about here

Non-regular and Commercial Sex

In the 1998 KDHS respondents were asked whether they had ever given (men) or received (women) any money, gifts, or favours in exchange for sex.

Table 4 about here

21 percent of unmarried females in the age group 15-19 were found to have received gifts or favours in exchange for sex. The corresponding figure for males is 17 percent. The level of sexual favours increases for males with age while it decreases with age for females. This corroborates with other findings which showed that the number of men and women

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having non -regular sex in the last 12 months varied according to the three levels of education that were categorized in the surveys: no schooling, primary education, secondary and more. In most study populations there was a trend towards a higher prevalence among respondents with higher educational level. However, as for premarital sex, the effect of education was more evident for women at the level of primary and secondary education versus no schooling. For men, the effect was more apparent with the passage from primary to secondary and higher educational level. Logistic regression confirmed that the effect of education on casual sex was independent from the other variables (WHO, 1995; Gibney et al, 1999).

Condom Use

Of particular importance for the prevention of the spread of HIV is the use of condoms during sex. Table 5 below shows the distribution of young people and their sexual behavior and whether they used condoms or not.

Table 5 about here

Table 5 above shows that the use of condoms is not yet widespread. 92 percent of females and 63 percent of males did not use a condom in their last sexual intercourse.

Awareness of HIV/AIDS

Table 6 gives further breakdown of levels of awareness/knowledge for the key sub-groups. In the KDHS study, respondents were asked whether they have heard of AIDS. Results showed that general knowledge of HIV/AIDS is very high among both males and females adolescents. However, awareness of AIDS was found. Awareness of HIV/AIDS increases with the level of education, with the biggest difference occurring between those who have never attended school, and those who have primary and secondary education. Those adolescents who are married, residing in urban areas and were late in starting sexual relations were also found to have a higher level of awareness and knowledge than the others.

Table 6 about here

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Table 6 gives the percentage distribution of male and female respondents and various ways they know through which one can avoid getting infected with the HIV/AIDS virus. Although general awareness is high, awareness of ways to avoid getting AIDS is not that high. Only 29 per cent of the women and 30 per cent of the men feel that by abstaining from sex, one can avoid getting AIDS.

Table 7 about here

About 40 percent of the adolescent females feel that by using condoms one can avoid getting AIDS. The response among adolescent males is slightly higher (57%) figure rises slightly to 57 percent for adolescent males. 85 percent responded that they know of a way of avoiding AIDS, however, when asked to mention those ways only 30 percent mention abstaining from sex.

Only 54 percent of males and 5 percent of females think that avoiding sex with prostitutes is a way of avoiding getting AIDS. 16 percent of the females and 27percent of males said that one can avoid contracting AIDS from having multiple partners. Only 0.3 percent of the men and 0.2 percent of the women think that avoiding mosquito bites and seeking protection from a traditional healer are ways through which one can avoid AIDS. 11 percent of males and 19 percent of female adolescents said that a healthy looking person can have AIDS. This demonstrates that male youths do not take seriously the option of avoiding multiple partners to avoid AIDS the way their female counterparts do.

Behavior Change
Table 8 gives the perception of respondents on chances of getting HIV/AIDS depending on certain behaviours. 44 percent of the male adolescents feel that one is at no risk of getting AIDS and 36 percent think that the risk of getting HIV/AIDS is small if one stopped having sexual intercourse. About 17 percent and only 3 percent think that chances of getting AIDS are moderate and great respectively if one stopped sex completely. 23 percent of the males and females said that starting to use condoms provided no risk of

getting AIDS. 28 percent of males and 32 percent of the females thought that having only one sexual partner provided no risk of getting AIDS. 21 percent of adolescent males and 24 percent of females said that reducing the number of one's sexual partners gave no risk of getting AIDS. 61 percent of males and 43 percent of females who said that changing sexual behavior thought that they had no risk of getting AIDS. However, 0.7 percent of the males and 6 percent of the females thought that there is a great risk of getting AIDS if one does not change behaviour.

Table 8 about here

Table 9 about here

These findings show that the relationship between perceived risk and reported behavioral change is rather weak. Those who say that they feel little or no personal risk of HIV infection are almost as likely to report a modification of behavior as those who feel at high risk. One possible reason is that respondents who have changed their behavior now report little or no risk; in other words, low risk perception at the time of survey reflects past behavior change. While this may seem logical, it is not a plausible explanation. Behavioral risk reduction is typically a matter of degree rather than a more radical elimination of risk behavior, thus those who report a change are unlikely to feel themselves free of risk, nor is it plausible that changes in behavior have occurred on a scale implied in this survey.

Multivariate analysis

Table 10a about here

Table 10b about here

Table 11a about here

Table 11b about here

For males, the odds ratio of ever had sex, for those who were aged 15-19 years was more than that of males who were aged 20-24 by a factor of 0.20, but for females, the odds ratio is slightly lower at 0.09. This shows that female youths of 15-19 years are less likely to engage in sex compared to males of similar age groups. This suggests that males in Kenya are more likely to initiate sexual intercourse earlier than their female counterparts. This finding has been confirmed by other work (Population Council, 1999).

The odds ratios of ever had sex for male youths whose highest level of education is primary school or none was less than that of males who had their highest level of education at secondary school, by a factor of 0.51. This was not the case for females. The odds ratio for ever had sex for females with not more than primary school is greater than those of female youths who have secondary school education by a factor of 1.92, indicating a highly significant reduction in ever had sex among those with higher level of education. This finding has also been shown by other studies (Erulkar et al 1998; Mensch, Bruce and Greene, 1998). Girls who have secondary school education are less likely to have ever had sex. The reason for this may be due to the fact that they are in school. Therefore, secondary school education is negatively associated with ever had sex.

Table 10a and 10b show that the odds of ever had sex for both males and females who live in urban areas is greater than for youths living in rural areas by factors of 1.45 and 1.12 respectively for males and females.
Cities and urban residence have been associated with premarital sex due to exposure to the cosmopolitan lifestyles and less parental guidance.

Tables 11a and 11b show that the effects of the predictor variables on the dependent variable were statistically significant at ($p<0.001$). The odds of perception of risk for both males and females whose religion was Protestant is greater than for both males and females who are Catholics by a factor of 1.63 and 1.008 respectively. The odds of perception of risks of getting AIDS for males and females who used condoms in the last sexual act is less than for those males and females who did not use a condom in the last sexual act by a factor of 0.96 and 0.81 respectively among males and females.

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This paper has show that both males and females who engage in sex without use of condoms were more likely to have perceived risk of getting AIDS. Males were found to have higher perception of the risk of getting AIDS than women. The odds ratios of perception of the risk of getting AIDS for both males and females whose highest level of education is primary school is less than those of both males and females whose highest level of education is secondary school. Education level raises the awareness of HIV/AIDS, its modes of transmission and preventive measures. Hence, people who are more educated are more likely to feel more at risk of contracting AIDS and would want to take more precautions. Tables 11a and 11b has revealed that adolescents who are not working are younger (15-19) and have lower perception of chances of getting AIDS while those residing in urban areas have a higher perception of the chances of getting AIDS than those in rural areas. This may probably be due to exposure.

Cities are generally associated with less parental control of adolescent sexual behavior, more social mixing and more exposure to modern lifestyles. However it has been demonstrated that rural–urban communication, seasonal migration, sex ratios in urban and rural settings and cultural traditions are all factors that invalidate broad generalizations about rural-urban disparities in sexual behavior patterns. These factors also have different implications for the potential spread of HIV in rural areas.

Discussion

This study shows that the median age at first intercourse is lower than the age of marriage. This gap is characterized by premarital sex, often with multiple partners and also with high risk partners. Findings show that 19 per cent of unmarried females were sexually active in the four weeks prior to the study. 52 per cent were sexually active among the 20-24 year olds. The males who were sexually active were 25 per cent among 15-19 year olds and and 48 per cent among 20-24 year olds. While the level of awareness of condoms is high, use is still considerably low. Another issue that has been shown is low condom use in highly unstable sexual relationships – demonstrating a scenario where an AIDS epidemic can explode to immeasurable numbers in a very short period of time. These findings also

suggest that more needs to be done to influence behavior change to reflect the level of awareness of individuals.

This study has also shown that while many people belief that behavior change in response to the HIV/AIDS pandemic should be the consequence of a sense of personal vulnerability to infection, this is not the case among this population. In this case, the relationship between perceived risk and reported behavior change is weak. Factors that contribute to engaging in sexual relationships include being older, having secondary school education or higher, and living in rural areas. Factors that influenced the perception of getting AIDS were lower education level and being a Catholic. Use of condoms in the last sexual act lowered the perception of an individual from the risk of getting HIV/AIDS.

Conclusion

This paper set out to explore the link between AIDS-related knowledge, perception and behavior. The argument is that the rational response in people's perception and knowledge about HIV/AIDS will influence their behavior *vis a vis* risk-taking behavior. Results have shown that perception of risk and high knowledge about HIV/AIDS do not necessarily translate to behavior change. Even in the face of existing perception and knowledge of self-risk, risk taking behavior (multiple partners, sex with high risk partners, no condom use, healthy-looking person does not have HIV/AIDS, etc), is still high.

Pending the discovery of an effective vaccine or therapy, reduction of risk-taking behavior is the only way in which the spread of the AIDS pandemic will be arrested. On the basis of rationalistic theories of human behavior, behavioral change in response to HIV/AIDS should in part, be the consequence of a sense of personal vulnerability to infection.

Policy makers, key government officials, church ministers and researchers need to rectify the type of knowledge that young people have on HIV/AIDS. More aggressive educational approach is needed to re-educate them on the misperceptions about HIV/AIDS. In improving their understanding of modes of transmission, difficulty in identification of infected persons by looking at them, and continuing a vigorous campaign on condom use

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may rectify the AIDS epidemic Kenya is currently facing. Future research is needed to explore other social and cultural contexts and behaviors that influence young people's perception and behaviors, which in turn will influence their livelihoods.

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Table 1 : Proportion of youths against some background characteristics, 1998 KDHS

Background factors	Males(n=1427)	(Females=3394)
Religion	28.1	27.4
Catholic	61.0	64.3
Protestant	5.1	5.4
Muslim	5.4	2.0
No religion	0.4	0.7
Other religion		
Age		
15-19	58.2	54.6
20-24	41.8	45.4
Residence		
Urban	15.3	19.9
Rural	84.7	80.1
Knowledge of contraceptives		
Knows no	48.8	5.9
Knows on	0.1	.1
Knows on	8.8	.3
Knows mo	42.3	93.8
Current marital status		
Never married	90.0	61.3
Married/ living together	7.7	36.5
Widowed/ divorced/not living together	2.3	2..3
Respondent currently working		
No	63	67.1
Yes	37	32.8
Education level		
None	1.9	4.2
Primary	67.0	67.6
Secondary	31.1	28.2

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Table 2: Age at first intercourse for male and female Youths aged 15-24, KDHS 1998

	Males(n=1427)	Females(3394)
Not had sex	29.1	36.5
8-14	34.2	12.7
15-19	33.4	40.0
20-24	3.3	9.9

Table 3: Frequency of never married adolescents reporting sexual intercourse, 1998 KDHS.

Period	Males(1285)	Females(2079)
1-30 days	21.6	10.0
1-9 weeks	27.3	18.2
1-18 months	39.1	41.4
More than a year	12.0	15.5

Table 4: Percent distribution of youths (male and female) who gave or received money, gifts or favors in return for sex in the last 12 months, 1998 KDHS

	Females (n=3394)			Males(n=1427)		
	Currently married	Not currently married	Total	Currently married	Not currently married	Total
Age	%	%	%	%	%	%
15-19	4.2	20.9	15.0	-	17.0	16.8
20-24	4.1	18.1	8.5	16.1	18.3	17.9

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Table 5: Proportion of young people who use condoms, 1998 KDHS

Last intercourse used condom	Females(n=3394)	Males(n=1427)
No	91.9	62.6
Yes	7.1	37.3
D.K.	0.5	0.1
Knowledge of condoms		
Never heard condom	7.2	3.6
Knows for Fp only	0.1	5.8
td. Only	11.3	1.3
Knows for Fp & Std.	78.1	89.3
Ever use of condoms		
Never used condoms	86.5	53.5
Used, un	0.4	0.3
Used for Fp only	2.8	3.6
Used for Std. Only	5.4	6.1
Used for Fp & Std.	4.9	36.9
Condoms used when sex with others		
No	79.2	48.4
Yes	20.8	51.6
Heard of condom to avoid aids		
No	20.9	11.0
Yes	78.8	89.0

Table 6: Percentage distribution of Ever heard of AIDS by selected background factors, 1998 KDHS.

Background variables	Females (n=3394)	Males(n=1427)
Education		
None	92.2	96.3
Primary	99.3	98.8
Secondary +	99.9	100
Type of place of residence		
Urban	99.7	99.5
Rural	99.1	99.1
Current Marital Status		
Never married	99.1	99.1
Married	99.3	100
Living together	100	100
Widowed	100	100
Divorced	100	100
not living together	97.9	100
Work status		
No	99.2	98.8
Yes	99.2	99.8

Table 7: Proportion of responses of various ways respondents said they can avoid getting HIV/AIDS, 1998 KDHS.

	Males(n=1427)	Females(n=3394)
Knows of a way to avoid getting AIDS		
NO	10.2	9.8
YES	85.1	79.6
	4.7	10.6
Abstain from sex		
No	69.6	71.3
Abstain	30.4	28.6
Use condom during sex		
No	43.0	61.0
Condoms	57.0	39.0
Avoid sex with prostitute		
No	96.2	94.5
avoid pro.	3.8	5.4
Avoid sex with homosexuals		
No	99.5	99.2
Avoid sex with homosexual	0.5	.7
Avoid blood transfusions		
No	19.1	91.2
Avoid blood transfusions	7.9	8.8
Aids: avoids injections		
No.	87.8	87.8
Avoid injection	12.2	12.2
Avoid kissing		
No.	99.2	97.9
Avoid kissing	0.8	2.1
AIDS: Avoid mosquito bites		
No	99.7	99.8
Avoid mosquito bites	0.3	0.2
AIDS: Protection Traditional healer		
No.	99.8	99.3
Seek Traditional healer	0.2	0.7
AIDS: Avoid multiple partners		
No.	84.1	73.1
Avoid multiple partner	15.9	26.9
AIDS: Be faithful to partner		
No	78.6	75.1
Be faithful to partner	21.4	24.9
Can a healthy person have AIDS	11.9	18.6
No	82.2	75.0

Is AIDS a fatal disease		
Almost never	0.9	0.9
Sometimes	18.8	11.1
Almost Always	78.2	85.3
Don't know	2.1	2.6

Table 8: Percentage distribution of chances of getting Aids and change of sexual behavior among male adolescents, 1998 KDHS (n=1427)

	Chances of getting Aids			
	No risk	**Small**	**Moderate**	**Great**
Stopped all sex				
No	35.5	41.5	17.9	5.1
Yes	44.1	36.2	16.5	3.1
Started using condom				
No	41.2	39.5	15.4	4.0
Yes	22.9	45.2	24.5	7.4
Only one sex partner				
No	39.5	38.3	17.5	4.7
Yes	28.4	47.8	18.4	5.4
Reduced Partners				
No	39.8	41.7	14.5	4.0
Yes	21.1	38.3	32.0	8.6
Stopped Injection				
No	36.7	40.6	18.0	4.7
Yes	18.8	59.4	9.4	12.5
No behavior change				
No	33.4	42.8	18.4	5.4
Yes	61.4	25.5	12.4	0.7

Table 9: Percentage distribution of chances of getting Aids and change of sexual behavior among female adolescents, 1998 KDHS (n=3394)

	Chances of getting Aids			
	No risk	Small	Moderate	Great
Didn't start sex				
No	34.3	36.3	20.9	8.5
Yes	53.5	34.7	7.2	4.3
Stopped all sex				
	39.8	36.1	17.1	6.8
Yes	36.4	33.0	16.0	14.6
Started using condom				
No	40.0	35.7	16.8	7.2
Yes	23.2	41.5	26.8	8.5
Only one sex partner				
No	44.4	35.0	14.2	6.1
Yes	31.6	37.3	21.8	9.3
Reduced Partners				
No	40.5	36.0	16.4	6.9
Yes	23.7	33.9	28.0	14.5
Stopped Injection				
No	39.8	36.0	16.8	7.2
Yes	30.8	25.0	32.7	11.5
No behavior change				
No	38.8	36.2	17.3	7.5
Yes	42.8	34.4	16.3	6.4

Table 10a:Logistic Regression modules for males who have ever had sex (n=1329)

	B	SEβ	P	EXPβ
Age 15-19 20-24 (ref)	-1.5848	0.0002	0.0000	0.2050
Education level No education + primary Secondary education (ref)	0.6802	0.0002	0.0000	0.5065
Religion Protestant Muslim Catholic (ref)	0.0430 -0.0654	0.0001 0.0003	0.0000 0.0000	0.9579 0.9367
Type of residence Urban Rural	0.1135	0.0002	0.0000	1.1202
Work status Not working Working (ref)	-1.2219	0.0002	0.0000	0.2947
Constant	3.2714	0.0002	0.0000	

Table 10b:Logistic Regression modules for females who have ever had sex (n=3107)

	β	SEβ	P	EXPβ
Age 15-19 age 20-24 (ref)	-2.3223	0.0001	0.0000	0.0980
No education + primary education Secondary education (ref)	0.6540	0.0001	0.0000	1.9232
Religion Protestant Religion Muslim Religion (Catholic)	0.0989 -0.5296	0.0005 0.0002	0.0000 0.0000	1.1040 0.5889
Work status No Work status Yes (ref)	0.7903	0.0001	0.0000	0.4537
Urban Rural (ref)	0.3735	0.0001	0.0000	1.4528
Constant	2.0116	0.0001	0.0000	

Table 11a: Logistic Regression models for males using chances of getting AIDS as the dependent variable (N=929)

	β	SEβ	P	EXPβ
Age 15-19 20-24 (ref)	-0.0020	0.0002	0.0000	0.9064
Education level None + primary Secondary +(ref)	-0.0983	0.0002	0.0000	0.9980
Religion Protestant Muslim Catholic (ref)	0.4896 -0.4598	0.0002 0.0005	0.0000 0.0000	1.6317 0.6314
Type of residence Urban Rural (ref)	-0.1887	0.0002	0.0000	0.8280
Work status Working Not working (ref)	-0.4879	0.0002	0.0000	0.6139
Condoms Yes Condoms No (ref)	-0.0384	0.0002	0.0000	0.9623
Constant	-0.8416	0.0002	0.0000	

Table 11b: Logistic Regression model for females using chances of getting AIDS as the dependent variable (N=2054)

	B	SEβ	P	EXPβ
Age 15-19 20-24 (ref)	-0.1711	0.0001	0.0000	0.8428
Education level None + primary Secondary plus (ref)	-0.2348	0.0001	0.0000	0.7908
Religion Protestant Muslim Catholic (ref)	0.0085 -0.1679	0.0001 0.0002	0.0000	1.0086 0.8455
Work status Not working Working Yes (ref)	-0.2523	0.0005	0.0000	0.7770
Type of residence Urban Rural (ref)	0.1342	0.0001	0.0000	1.1437
Using condoms Using Not using (ref)	-0.2104	0.0002	0.0000	0.8103
Constant	-0.3437	0.0001	0.0000	

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