

Factors Associated with Condom Use among Sexually Active Students of Dar-es-Salaam, Tanzania

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Abstract Self-reported sexual behaviour and condom use of 293 sexually active students in Dar-es-Salaam, Tanzania were studied for their relationship with attitude toward condom and other related factors. The subjects were 187 male and 106 female students in secondary schools and colleges between 16 and 24 years old. Self-administered questionnaire was taken in their classrooms in 1996. Among the sexually debuted students, 24% male and 17% of female students had multiple sex partners at the study time, and 30% and 27% respectively had multiple sex partners during the past one year. Although most students knew that condoms prevent sexually transmitted HIV and 70% believe in effectiveness of condom, however only 46% of them use condom consistently and 85% answered that condom is not reliable to prevent HIV/AIDS. Multiple logistic regression analysis revealed that belief in effectiveness of condom in preventing sexual transmission of HIV was positively associated with condom use (OR, 2.60; 95% CI, 1.43-4.70) while belief that condom can bring disease was negatively associated with condom use (OR, 0.49; 95% CI, 0.29-0.82). Based on these findings, possible ways of promoting condom use in school education are discussed. The messages should focus on adolescent's beliefs concerning condom use.

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Key Words : HIV/AIDS, sexual behaviour, condom use, belief and adolescents

Introduction

The consistent use of condoms is probably the most effective and practical way of preventing sexually transmitted HIV. Because the HIV infection in Tanzania is predominantly transmitted by heterosexual contact with sero-positive partners¹, condom promotion is effective in reducing the incidence of HIV infection among young people. In order to understand the behaviour of young people who do not use condoms, it is essential to determine the factors that predispose condom use and non-use. Studies of adolescent sexual behaviour have demonstrated that many adolescents are having sex² and that a significant proportion of them is practising unsafe sex³. For example, a survey conducted in northern Tanzania among young people between 15-24 years old revealed that condom use among them was only 10% and that misconceptions about condoms restricted use of condoms⁴. Misconceptions that condom is not effective and that condom spreads AIDS are

widespread among young people in Tanzania^{5,6}.

Using the same data which has been reported elsewhere by Maswanya and others⁷, the present paper examined beliefs on condoms and other factors that influence condom use among 293 sexually active students in Dar-es-Salaam, Tanzania.

Subjects and Methods

The details design of this study are described elsewhere⁷. Among 1,041 students answered to the questionnaire, 544 (52.3%) students, 307 males and 237 females, were self-reportedly sexually debuted. Male students were more debuted than female students were (75% versus 40%; OR, 4.45; 95%CI 3.42-5.80). Among them, 293 students, 187 males and 106 females had sexual relationship in the past one year, currently involved in a sexual relationship, and answered for the condom use. These 293 are the subjects of this analysis. Among the male students, 70% had one partner, 13% had

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two partners, and 17% had three or more partners during the past one-year. Among the female students, 73% had one partner, 14% had two partners, and 13% had three or more partners during the past one-year. The number of partners did not change significantly by sex.

Perception for condom and condom use, and knowledge and perception on HIV/AIDS related issues were asked and prevalence among condom users and non-users were calculated. Multiple logistic regression analysis was made to understand factors related to condom use among these sexually active students. SPSS package was used for statistical analyses.

Results

Among the 293 sexually active students, 65% were self-reportedly always using condoms. Condom use did not differ significantly by sex (66% of males and 62% of females, chi-square = 0.592), by number of sexual partners, by age, or by age of sexual debut.

Table shows the prevalence of perception toward condom among the condom users and non-users of each sex. Overall, prevalence of perception that condom is not reliable to prevent HIV/AIDS was as high as 85%, while 77% recognised that condom is effective in preventing sexual transmission of HIV/AIDS. And 71% answered that condom use interferes romance of sex. Prevalence of perception in male students that condom is effective in preventing sexual transmission of HIV/AIDS was more common among condom users than non-users (p<0.001). Perception in male students that condom

can bring disease and that sex partner hate use of condom were more common among non-users than among condom users (both, p<0.05). These tendencies could be seen in female students, but they were not significant. Perception that condom use interferes romance of sex, that condom is not reliable to prevent HIV/AIDS, and that condom is expensive did not differ significantly between the users and non-users in both sexes.

Among male students, 88% acknowledged that AIDS is a very serious disease in Tanzania, 89% knew that AIDS has no effective treatment, 90% knew that condom use is the best effective method for preventing HIV infection, 66% knew that HIV positive people can look healthy, 90% knew that having multiple sexual partners increases the risk of HIV infection, and 91% knew that zero-grazing (maintaining only one sexual partner) is effective way of preventing HIV infection. However, there was no significant difference in answers for these questions among condom users and non-users.

Among female students, 87% acknowledged that AIDS is a very serious disease in Tanzania, 88% knew that AIDS has no effective treatment, 76% knew that condom use is the effective method for preventing HIV infection, 70% knew that HIV positive people can look healthy, 85% knew that having multiple sexual partners increases the risk of HIV infection, and 95% knew that zero-grazing is effective way of preventing HIV infection. Again, there was no significant difference in answers for these questions between condom users and non-users.

There was no difference of prevalence of

Table. Prevalence of perception of condom and condom use

Perception of condom	Prevalence (%)							
	Male				Female			
	User (n=124)	Non-user (N=63)	Odds ratio	p*	User (n=66)	Non-user (n=40)	Odds ratio	P
Condom is effective to prevent HIV/AIDS.	85.6	63.5	0.74	<0.001	81.8	65.0	0.79	ns
Condom can bring disease.	31.5	50.8	1.61	<0.05	34.8	52.5	1.51	ns
Sex partner hate use of condom.	30.8	48.3	1.57	<0.05	31.1	38.5	1.24	ns
Condom is not reliable to prevent HIV/AIDS.	84.0	85.9	1.02	ns	86.4	84.6	0.98	ns
Condom use interferes romance of sex.	74.2	83.6	1.13	ns	58.7	74.4	1.27	ns
Condom is expensive.	14.4	18.8	1.31	ns	26.2	15.0	0.57	ns

Chi-square test; ns, not significant

smoking, drinking, disco going, and taking pills between condom users and non-users. Knowledge on HIV transmission and that of prevention did not differ between the two groups.

Among male students, 77% of condom users and 61% of non-users answered that they discuss AIDS issues with parents (chi-square = 5.351, $p < 0.05$). Among female students, 67% of condom users and 85% of non-users answered to discuss AIDS issues with religious leaders (chi-square = 4.307, $p < 0.05$). There was no other significant difference of information sources and people of consultation between condom users and non-users.

Multiple logistic regression analyses were conducted to see the factors related with condom use by using the following factors as independent variables; 1) awareness of seriousness of AIDS, 2) knowledge on incurability, 3) radio as an information source, 4) TV as an information source, 5) parents as an information source, 6) religious leaders as an information source, 7) the belief on usefulness of condom in prevention of HIV infection, 8) number of sexual partners in the past one year, 9) misconception that condoms bring disease, 10) perception that one's partner hate condom use, 11) perception of being at high risk, 12) willingness to take care HIV positives. Sex was also included into the equation. Only two variables were significant. Perception on usefulness of condom in prevention of HIV infection was related with condom use (OR, 2.60; 95%CI, 1.43-4.70; $p < 0.01$). Misconception that condoms bring disease was inversely related with condom use (OR, 0.49; 95%CI, 0.29-0.82; $p < 0.01$). Other factors were not included into the logistic regression model.

Discussion

Although abstinence and mutual non-grazing are effective means of eliminating risk of HIV infection, many students are actually sexually active and have multiple sex partners. Therefore, condom use is the main pragmatic method of preventing transmission of HIV among sexually active students. Many students in other studies⁽⁸⁾⁽⁹⁾ thought that condom is not important for HIV. These answers were not so popular in this study, but still strongly related with condom use. AIDS education on effectiveness of condom use and on denying misconception for condom use is still very important.

Although majority of students in this study acknowledged seriousness of AIDS in Tanzania as well as effectiveness of condom in the prevention, one third of sexually active students did not always use condom. Many students answered that condom is effective but not reliable. This is because they don't know how to properly use condom. This is because they have not been educated for condom use. Therefore, they are not yet convinced of safety of condom use. Needed are practical ways of translating knowledge and risk perception of HIV/AIDS into action of condom use. Needed is pragmatic education to use condom. Condom use was associated positively with discussion with parents and negatively associate with discussion with religious leaders. This suggests the importance of involving parents and religious leaders in condom promotion education.

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