Adolescent Girls Self Reported STI Symptoms and Mothers Perception of Their HIV Risk in an Urban Marketing Lagos, Nigeria

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Abstract: Young women in Sub-Saharan Africa are vulnerable to HIV infection because of their immature reproductive system, difficulty of negotiating condom use and the presence of untreated Sexually Transmitted Infection (STI) as well as the 'culture of silence' on open discussion of reproductive health issues with their parent. The study assesses women account of STI symptoms received from their adolescent girls and their perception of the risk of their daughter contacting HIV infection through heterosexual contact. Interviewer administered questionnaires were used to gather information from 230 women who have adolescent girls selected through stratified random sampling method. Average age of respondent is 42 years and 75.1% are in stable marital relationship while 63% have at least secondary school education. There was low report of STI symptoms from adolescent girls to their mothers (15% for Vaginal discharge, 23.5% for vaginal itching and 4.3% for genital ulcer) and elderly as well as widowed women were found to likely receive the complaint of STI symptoms. Also, 48% of respondents believe that heterosexual contact is the major route of HIV transmission, 90.7% also believe that healthy looking individual could transmit HIV and 53.6% agree that condom could protect their daughters from HIV infection. However, 89.3% believe that abstinence is the best method of protecting their girls from STI and HIV infection. It follows that parent-child communication about STI and condom use need to be reinforced while not undermining mother's traditional belief of abstinence till marriage.

Key words: STI, adolescents, HIV, urban marketing, mothers perception

INTRODUCTION

Sub-Saharan Africa (SSA) is home to 70% of adults and about 90% of children living with HIV/AIDS in the world today. The 2007 AIDS epidemic update put the total adult and children living with HIV/AIDS as 22.5 million. There was 1.7 million new infection in this region, with the average HIV prevalence of 5% and women accounting 61% of total HIV/AIDS infection (UNAIDS/WHO, 2007). Ten million young people between the ages of 15-24 years are living with HIV. Every minute, 6 young people under the age of 25 years become infected with HIV. Of this disease burden among youth, girls and young women are biologically, socially and economically more vulnerable both to infection and unprotected and coercive sex (WHO, 2000).

In year 2001, the WHO estimate of annual incidence of curable Sexually Transmitted Infection (STI) in SSA was 69 million. Sexually active young people are especially vulnerable to sexually transmitted infection. Each day some 500,000 young people, mostly young women are infected with an STI (excluding HIV).

Those who become sexually active at an early age are more likely to change sexual partners and risk greater exposure. Most know very little about this infection and many are reluctant to seek services. Only 17% of sexually active young people use contraception, many are unaware that condoms offer dual protection from unwanted pregnancy and STI while many of them lack the skill to negotiate condom use (UNICEF, 2002).

However, beside the feminization of HIV epidemic in SSA, young women particularly adolescent are primary

target of STI and HIV/AIDS. Adolescent girls are more at risk of getting sexually transmitted infection and HIV because of their inherent factors which include the immaturity of their reproductive tract, inability to negotiate condom use and because they are prone to various form of sexual violence including rape (UNICEF, 2002). Therefore, an effective method of preventing HIV among this age group must take into consideration these peculiarities.

Our primary focus in this study, is one aspect of the social environment-the family. The family obviously has a strong influence on young people's aspirations and values from an early age (Blum *et al.*, 2002). For example, adolescents who learn about their parents' and elders' values regarding premarital sexual activity or contraceptive use are less likely to engage in sexual risk-taking than their peers who are not exposed to their adolescents' values (Adamchak *et al.*, 2000).

Therefore, the study examines the role of mother's in domestic home environment in interacting with their adolescent girls on sexuality and reproductive health issue especially in the detection of common STI symptoms of vaginal discharge, vaginal itching and genital ulcer they might be having and what their attitude and perceptions are about ways of preventing their daughters from acquiring STIs including HIV.

MATERIALS AND METHODS

Study setting: The study population is women involved trading at an urban market, Lagos Nigeria. An estimated population of traders at the market is about 3,000 people consisting of heterogeneous population of males and female in approximated ratio of 1:3.

Method: The study is a descriptive, cross-sectional study done using interviewer administered questionnaire. The questionnaire consist mainly of closed ended questions with few open ended one to give the respondents an opportunity to express their view where necessary. The questions were designed to collect information on sociodemographic characteristics of the respondents and to elicit information about the attitude and perception of mothers to sexually transmitted infection, HIV risk of their adolescent girls and the frequency of sexually transmitted infection symptoms received from their daughters.

Ethical consideration: The informed consent of each respondent was sought before administering the questionnaire. They were told of their freedom to answer any question they want and to refuse an answer to any question they were not comfortable with.

Data processing and analysis: Data was processed and analyzed by weeding the questionnaire to identify and remove incompletely or incorrectly filled questionnaires, coding of open ended questions and analyses of data using epi-info 2002 software. Analyses of this study are mainly descriptive in nature. Simple cross-tabulations (for categorical variables) or mean values (for continuous variables) was done. Pearson chi-square test (for categorical variables) was used to test the statistical significance of the differences observed.

Inclusion/exclusion criteria: Married women and unmarried women who have adolescent girls were interviewed while nulliparous women were excluded from the study.

RESULTS AND DISCUSSION

The mean age of the respondent was 46 years. Majority of the women (75.1%) were in stable marital relationship and 63% of the women had at least secondary school education. Other demographic characteristic of the women is as highlighted in Table 1.

Sexually transmitted infection: Analysis of common sexually transmitted infection symptoms received by the mothers from their adolescent girls revealed that 35 (15%) of 230 respondents got the complaint of vaginal discharge, 54 (23.5%) of 230 respondents got the complaint of Vaginal itching and only 10 (4.3%) of 230 respondent had their daughters complained of genital ulcer. It followed from the above that only few adolescent girls ever report symptoms of sexually transmitted infection to their mothers. This is not surprising because

Table 1: Percentage distribution of the women by their demographic characteristics

Characteristics	(%)
Age (years)	_
20-29	7.4
30-39	28.4
40-49	42.8
≥50	21.4
Marital status	
Married	75.1
Separated	11.4
Widowed	9.6
Single	2.6
Cohabiting	1.3
Educational status	
None	10.1
Primary	26.9
Secondary	49.8
Tertiary	13.2
Religion	
Christianity	65.8
Islam	32.0
Traditional African	2.2

Table 2: Association between adolescents self reported STI syptoms and mothers demographic characteristics

Age	Vaginal discharge		Vaginal itching		Genital ulcer	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
20-29	1 (6.7)	14 (93.3)	2 (13.3)	13 (86.7)	0 (0)	15 (100)
30-39	5 (8.1)	59 (91.9)	9 (14.5)	53 (85.5)	1 (1.7)	59 (98.3)
40-49	11 (12.1)	80 (87.9)	17 (18.1)	77 (81.9)	2(2.3)	86 (97.7)
≥50	15 (37.5)	25 (62.5)	22 (51.2)	21 (48.8)	6 (15.0)	34 (85.0)
	$X^2 = 19.2$; p<0.01		$X^2 = 23.53$; p<0.01		$X^2 = 13.29$; p<0.01	
Education						
None	4 (18.2)	18 (81.8)	6 (26.1)	17 (73.9)	3 (14.3)	18 (85.7)
Primary	11 (19.3)	46 (80.7)	18 (30.5)	41 (69.5)	1 (1.8)	54 (98.2)
Secondry	11 (10.6)	96 (89.4)	18 (16.8)	89 (83.2)	2 (1.9)	102 (98.1)
Tertiary	6 (20.7)	23 (79.3)	10 (33.3)	20 (66.7)	3 (10.7)	25 (89.3)
					$X^2 = 10.1$; $p = 0.02$	
Marital status						
Married	23 (13.9)	142 (86.1)	34 (20.5)	132 (79.5)	7 (2.4)	152 (95.6)
Separated	2 (8.3)	22 (91.7)	6 (23.1)	20 (76.9)	2 (8.0)	23 (92.0)
Widowed	7 (36.8)	12 (63.2)	11 (52.4)	10 (47.6)	0 (0.0)	18 (100)
Single	0 (0.0)	5 (100)	0 (0.0)	5 (100)	0 (0.0)	5 (100)
Cohabiting	1 (100)	0 (0.0)	1 (50)	1 (50)	0 (0.0)	2 (100)
_	$X^2 = 14.28$; p<0.01		$X^2 = 12.85$; $p = 0.012$			

of the existing 'culture of silence' between parents and their children on sexuality and reproductive health issues in our environment (Jedede et al., 2003). Table 2 demonstrated the relationship between mothers demographic of characteristics of age, education and marital status and frequency of STI symptoms reported by their adolescent girls. Our analysis of association of age and probability of adolescent girl reporting symptoms of vaginal discharge, vaginal itching and genital ulcer revealed that older women received more symptoms of vaginal discharge, itching and genital ulcer from their girls. Also, women who are widow appear to receive the complaints of vaginal discharge and itching from their girls ($X^2 = 14.28$; p<0.01 and $X^2 = 12.85$; p = 0.012, respectively). This might be probably due to increased bonding between mothers and their adolescent girls following the demise of her husband. On the contrast, no association existed between marital status of respondents and frequency of genital ulcer received by mothers from their adolescent girls. Also, the education of respondents was found not to have significant association with the probability that women will receive STI symptoms from their daughters.

The primary mode of treatment of the symptoms of STI reported to mothers by their adolescent girls was clinic (50%). About 33.9% of the girls visited chemist shop for their treatment, 3.2% seek herbal treatment while 12.9% had no form of treatment.

Mother's perception of HIV risk: When questioned about their knowledge of mode of HIV transmission, 3.1% of mothers knew that HIV could be transmitted through blood transfusion, 1.8% are familiar with mother to child transmission of HIV and only 0.4% of the women believe that sharing sharp objects could be a means of

Table 3: Percentage distribution of the women by their Attituede towards HIV and sexual behaviour (N = 230)

Attitude	Yes (%)	No (%)		
Knows that healthy looking person can	90.70	9.30		
transmit HIV				
Believes Condom can protect agaist HIV	53.60	46.40		
Believes HIV risk increase with	98.20	1.80		
multiple partners				
The best way of preventing daughters from				
getting infected with HIV and STI (N=230)				
(a) Abstinence	89.30			
(b) Condoms	4.40			
c) Reducing sexual partners 3.60				
(d) Does not know	2.70			

transmitting HIV. However, 46.7% of the respondents knew that HIV could be transmitted by at least two of the mode of transmission listed above while majority of respondents 48% believed that heterosexual intercourse is the primary route of HIV transmission.

As highlighted in Table 3, considerable number of women in this study (90.7%), know that a healthy looking individual could be infected with HIV and therefore transmit it while the remaining women (9.3%) are not aware. Knowledge of the mothers' understanding of condom use as a means of preventing their daughter from getting infected with HIV revealed that 53.6% of the women believed that condom will protect their daughters from HIV infection while 46.4% of the women did not think so. Also, 98.2% of the respondents believed that having multiple sexual partners will increase their daughter's risk of HIV infection. Generally, abstinence (89.3%) is preferred over condom use and sexual partner reduction by the respondents as the best way of reducing the daughter's chance of getting infected with sexually transmitted infections and HIV. This is in agreement with the abstinence-plus program (Dworkin and Santelli, 2007) which is spreading across Sub-Saharan Africa.

CONCLUSION

The study confirmed the existing 'culture of silence' between parent and their adolescent on discussion of sexuality and reproductive health. This is evident by the few complaint of STI symptoms mother received from their adolescent girls considering the incidence rate of STI in this region. Also, the proportion of women who has faith in condom as a means of protecting their adolescent girls from contacting HIV and STI is low when viewed in the light of current campaign by donor agencies in this region. Therefore, there is a need for aggressive social marketing of condom while still promoting mother traditional believe of abstinence till marriage for their girls.

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