



Patterns Of Risky Sexual Behavior and Associated Factors Among Undergraduates In The Coastal Region of Kenya

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Summary

BACKGROUND

The majority of students in the institutions of higher learning are single, young adults who easily fall prey to exuberance coupled with adequate freedom in campus life that predisposes them to High Risky Sexual Behaviour. Effective response to the challenges of risky sexual behaviour and mitigation of its negative effects on youth relies mainly on accurate information from the extent of the problem among this age group.

INTRODUCTION

The purpose of this study was to determine the pattern of Risky Sexual Behaviour and the associated factors among first year University students in the Coastal region, Kenya.

METHODOLOGY

A cross-sectional study involving 473 first year undergraduate students was carried out in two public Universities in the coastal region in Kenya. Data was collected using self-administered questionnaire.

RESULTS

Majority of the students were within the age of 17-20 years and a mean age of 19.6 (SD+ 1.79 years). More than half of the respondents (59.4%), had once had sex before. Majority of the students, 195(41.2%) had their first sexual intercourse within the age of 15-19 years, while a total of 67(14%) had their sexual debut at the age of 7-14years. Only 32.5% had used condoms consistently in the last twelve months. The male gender was associated with the history of having had sex, early sexual debut, multiple sexual partners, inconsistent use of condoms and having sex under the influence of alcohol.

CONCLUSION

The respondents were relatively young and had significant Risky sexual behavior exhibited by early sexual debut, multiple sexual partners and low prevalence of condom use. Those in authority need to have a fresh look into the issue of child sexual molestation

Key words: Risky Sexual Behaviour, University Students, Condom Use, Sexual Debut

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Introduction

By 2010, there was an estimate of approximately 4.3–5.9 million youth aged between 15–24 living with HIV globally. Surprisingly, not enough attention has been paid to the adolescent and youth's sexual behavior as they transit to adulthood[1].

The HIV/AIDS epidemic continues to disproportionately affect Sub-Saharan Africa accounting for 70% of all new HIV infections in the year 2012 [2].

Youth aged 15–24 represented 41% of new HIV infections among people aged 15 and above. 79% of these new infections occurring in Sub-Saharan Africa [1]

Unprotected sexual contacts with infected persons was the main mode of HIV transmission. This brought about need to focus on risky sexual behaviour among young people.

Adolescent and youth sexual behaviour is the core of sexuality matters since it affects adult life negatively. The risky sexual practices among youths could include;

- a. Having multiple sexual partners,
- b. Early sexual debut,
- c. Engaging in unprotected sexual intercourse,
- d. Engaging in sex with older partners [3].

Risky sexual behaviour among the youth increases the probability of unintended health consequences such as HIV/AIDS, other sexually transmitted diseases and unplanned pregnancies.

The first year undergraduates, fell in the age group of 15 - 24 years and were at a high risk of engaging in Risky Sexual Behaviour predisposing themselves to HIV/AIDS and other sexually transmitted diseases. Some of the factors contributing to their being vulnerable to a risky group were: age, lack of immediate parental supervision and apparent freedom to experiment with new things like, alcohol, drugs etc.

In the Kenyan context, the environment where Universities and colleges are situated makes the situation even riskier for students. Universities in the coastal region are located in the city and big towns where the sex industry is “vibrant” and the prevalence of HIV/AIDS is high.

Methodology

Design: This was a cross-sectional study.

Study setting and study population

This study was conducted in Pwani University and Technical University of Mombasa. Both are public universities located in the coastal region of Kenya precisely in Kilifi and Mombasa County respectively. 473 first year students from the two Universities were recruited.

Sampling procedure

Multi stage sampling was used to select four schools in each University. One degree program from each school was then selected randomly making a total of four programs from each University. Questionnaires were randomly administered to students in the selected programs until the required sample size was achieved.

Data collection

Data pertaining to sexual behaviour was collected using self-administered questionnaire that included :

1. Basic socio-demographic data.
2. Sexual behaviour of the students including age at first sexual intercourse.
3. Number of sexual partners in the last one year , frequency of condom use with regular partners and irregular partners.
4. Likelihood of engaging in sex while under the influence of alcohol.

Students who needed assistance were assisted and questions were clarified to ensure that the questionnaire was completed correctly.

Data Analysis

Data was entered into SPSS Version 16 spread sheet and analyzed using *Stata Version 13*. Descriptive statistics was done to describe the study population. Bivariate and Multivariate Analysis were employed to identify factors associated with being sexually active. Odds ratio with 95% confidence interval was computed to assess the level of association and statistical



significance. *Chi-square tests* were also used to compare differences in prevalence of Risky Sexual Behaviors between male and females. The statistical significance was set at $p < 0.05$ (two tailed).

Ethical considerations

The research proposal was approved by Moi University school of medicine / Moi Teaching and Referral Hospital Institutional Research and Ethics Committee (IREC) [Formal Approval Number: IREC 000955]. Permission to carry out research was also sought from the National Commission of Science and Technology (NACOSTI) and the University administration of both Universities. Students were

assured of confidentiality and anonymity for any information they gave. Participation in the study was voluntary, and written informed consent was obtained from each participant.

Results

Demographic characteristics

Out of the 473 respondents the majority (58.9%) were male. The respondent's age ranged from 17-30yrs with the majority being in the age category 17- 20years. The mean age was 19.6 (SD+ 1.79 years). Other characteristics of the respondents are as shown in *Table 1*.

Table 1: Socio-Demographic Characteristics Of The Respondents Variables

	Frequency	Percentage
University		
Pwani	272	57.5
Technical University of Mombasa	201	42.5
Gender (N=473)		
Male	283	59.8
Female	190	40.2
Age group(N=473)		
17- 20yrs	387	81.8
21-25yrs	79	16.7
26-30yrs	7	1.5
Religion(N=473)		
Protestants	277	58.6
Catholic	135	28.5
Muslim	36	7.6
No religion	4	0.8
Others	21	4.4
Frequency of church/mosque(N=473)		



Every Sunday/Saturday/Friday	315	66.6
Sometimes	73	15.4
Occasionally	56	11.8
Rarely	29	6.1
Source of income(N=473)		
Sponsorship	17	3.6
Parents/well wishers	132	27.9
Higher Education Loan Board	314	66.4
Others	10	2.1
Monthly allowance(N=473)		
1,000-5,000	355	75.1
6,000-10,000	95	20.1
Above 10,000	23	4.9
Current residence(N=473)		
University hostels	309	65.3
Rented room	124	26.2
Parent/relative house	9	8.2
Others	1	.2
Area of the county of High school attended(N=473)		
Urban	174	36.8
Rural	299	63.2
Area of county one resided during high school(N=473)		
Urban	191	40.4
Rural	282	59.6

Respondent's sexual behavior

In this study, more than half of the respondents 281(59.4%), have had sex with before. Majority of the students, 195(41.2%) had their first sexual intercourse within the age of 15 - 19 years, while a total of 67(14%) had their sexual debut from the age between 7 - 14years.

Close to a third of the respondents 32.2 %, had more than one sexual partners in the last one year while only 32.5% used condom consistently in the last twelve months (**Table 2**).



Table 2: Sexual behavior Variables

	Frequency	Percentage
Ever had sexual intercourse (N=473)		
Yes	281	59.4
No	192	40.6
Age at first intercourse (N=473)		
7-14 years	67	14.2
15-19 years	195	41.2
20-24 years	19	4
Not applicable	192	40.6
Sexual partners in the last one year (N=473)		
None	198	41.8
1	123	26
2	58	12.3
3 and above	96	19.9
Current Sexual partners(N=473)		
None	282	59.6
one	105	22.2
Two	44	9.3
Three and above	42	8.9
Condom in the last 12 months (N=473)		
Not applicable	190	40.2
Always	154	32.5
sometimes	67	14.2
Never	62	13.1
Condom use with regular partner(boy/girlfriend, husband/wife) (N=473)		
Not applicable	190	40.2
Always	140	29.6
Sometimes	84	17.8
Never	56	11.8
Ever impregnated or got pregnant accidentally(N=473)		
Yes	35	7.4
No	438	92.6
If the last sexual intercourse was under influence of alcohol(N=473)		
Yes	37	7.8
No	224	47.4
Not applicable	212	44.8



Association Of Social Demographic Characteristics and History Of Having Had Sex

The sex of student, frequency of going to church and location of high school attended was associated with

history of having been sexually active. The female sex, attending church/ mosque frequently and having schooled in the rural area were protective factors against being sexually active (Table 3).

Table 3: Bivariate Associations Of Socio-Demographic Characteristics Versus Being Sexually Active.

Ever Had Sex			
Characteristics	Yes	No	P-value
	n=281	n=192	
University			
Pwani	152(54.1)	120(62.5)	
Tech University of Mombasa	113(40.2)	88(45.8)	0.942
Sex			
Male	190(67.14)	93(32.86)	
Female	91(47.89)	99(52.11)	0.000
Age			
17-20 years	221(57.11)	166(42.89)	
21-25 years	54(68.35)	25(31.25)	
26-30 years	6(85.71)	1 (14.29)	0.065
Religion			
Protestant	164(59.2)	113(40.79)	
Catholic	88(65.19)	47(34.81)	
Muslim	15(41.67)	21(58.33)	



Characteristics	Yes	No	P-value
	n=281	n=192	
Frequency of going to church/Mosque			
Every Sun/Sat/ Fri	182(57.78)	133(42.22)	
Sometimes	54(73.97)	19(26.03)	
Occasionally	23(41.07)	33(58.93)	
Rarely	22(75.86)	7(24.14)	0.000
Monthly allowance			
1000-5000	208(58.59)	147(41.41)	
6000-10,000	57(60.00)	38(40.00)	
Above 10,000	16(69.57)	7(30.43)	0.578
Current residence			
University Hostels	181(58.58)	128(41.42)	
Rented room	78(62.90)	46(37.10)	
Parent/relative's house	22(55.0)	18(45.0)	0.508
Area High school located			
Urban	115(66.09)	59(33.91)	
Rural	166(55.52)	133(44.48)	0.024
Residence during high school			
Urban	119(62.30)	72(37.70)	
Rural	162(57.45)	120(42.55)	0.291



Association Of Gender and Risky Sexual Behavior

More males, 67.6% ($\chi^2 = 17.5$ $p < 0.001$) reported having had sex in their lifetime compared to 32.4 females who had history of having had sex. More males 63% ($\chi^2 = 10.79$ $p < 0.001$) had multiple sexual

partners than the females 36%. Similarly more males 70 % had inconsistent use condom ($\chi^2 = 20.76$ $P < 0.001$) and were more likely to have had the last sexual intercourse under the influence of alcohol. The male gender was associated with the history of having had sex, early sexual debut and having multiple sexual partners (**Table 4**).

Table 4: Bivariate Association Of Gender and Risky Sexual Behavior

Risky sexual behaviour	Male	Female	X2	P-value
Ever Had sex	n=283	n=190		
No	93(32.86)	99(52.11)		
Yes	190(67.14)	91(47.89)	17.45	0.000
Sexual partners in the last 12 months				
None	102(51.52)	96(48.48)		
One	85(69.11)	38(30.89)		
More than one	96(63.16)	56(36.84)	10.79	0.000
Use of condoms in the last 12 months				
Not applicable	90(47.37)	100(52.63)		
Always (consistently)	103(66.88)	51(33.12)		
Never / Sometimes (inconsistently)	90(69.77)	39(30.23)	20.76	0.000
Last sexual intercourse under influence of alcohol				
Not applicable	102(8.11)	110(51.89)		
No	157(70.09)	67(29.91)		
Yes	24(64.86)	13(35.14)	22.31	0.000



Discussion

Majority of the respondents were within the age range of 17 - 20 years and with a mean age of 19.6 (SD + 1.79 years) and most of them had engaged in sex.

That suggesting that, despite the fact that, first year students are relatively young, majority are sexually active. This was in agreement to the findings of other studies done in Nigeria which showed more than half of the respondents were sexually active [8]

Respondents' age at first sexual intercourse revealed that, among the sexually active, 23.6 % had their first sexual intercourse between the age range of 7 - 14 years.

Some of those under-aged youth might have been tricked into the act without their consent. A problem that affects the victim's psychological, social and health consequences in the present and in the future. This calls for the attention of those in authority to have a fresh look into the issue of child sexual molestation

Further, studies have shown that early onset of sexual intercourse is associated with increased lifetime prevalence of multiple sexual partners, risk of exposure to sexually transmitted infections including HIV/AIDS and unwanted pregnancies [6,7, 9,14]

Despite the fact that a third of the respondents had more than one sexual partner, in the year 2014, only 32.5% accepted having used condoms consistently. While 13.1 % sexually active individuals reported that they had never used a condoms. That predicted, several health risks for this group of students.

For instance, having multiple sexual partners increased the risk of HPV infection among females, due to cervical immaturity; and thus the risk of cervical cancer [11]

Similarly unprotected sexual activity can lead to sexually transmitted infections and their consequences. Studies show that, less than half of sexually active young people use condoms, even though, in addition to pregnancies, unprotected sex is the greatest risk factor for HIV transmission Worldwide [15].

Condom use is a critical element of combination prevention and one of the most efficient technologies available to reduce the sexual transmission of HIV when used correctly and consistently[2].

Low rates of condom use among youths have also been reported in other studies[4, 17].

Our study shows significantly more males than females reported having had sex, initiation of sex before age 15, having more than one sexual partners and inconsistent use of condoms in the last one year. The findings are similar to those of a study done in Swaziland [5].

The study by Buseh showed that, significantly more males than females reported current sexual activity, initiation of sex before age 13 and having had four or more sexual partners in their lifetimes.

While the gender variations are common across various studies, this must be interpreted with caution. This is because young women have a reputation of underreporting their sexual practices, unlike their male counterparts who over report sexual practices[13].

Nonetheless, globally (excluding China), 11 per cent of adolescent girls were sexually active before the age 15. The main result of the early sexual activity being 16 million births by adolescent girls occurring every year [11].

Limitations

One of the limitation of this study is that, data collection relied on students' self-report about sexual practices by use of anonymous questionnaires. Even in anonymous survey questionnaires where confidentiality was stressed, data collected about sexual matters through surveys suffer from what is known as social desirability bias.

Instead of reporting on their actual sexual conduct, subjects generally tend to give responses that are "morally acceptable" [5].

However, this method of data collection has been used widely in similar studies and therefore the results can be compared with those from other regions.



Conclusion and Recommendation

The respondents exhibited a Risky Sexual Behavior as many had their first sexual intercourse below 18 years of age. A significant number had sex without any form of protection despite the fact that they had multiple sexual partners. Public Awareness Programme and targeted behavioral change interventions are therefore recommended for this group of students in our Institutions of Higher Learning.

Those in authority should have a fresh look into the issue of child sexual molestation since these under - aged might have been tricked into the act without their consent. This problem might affect the victim's psychological, social and health being in the present and in the future. Thus, the consequences are dire.

Competing Interests

The authors declare that they have no competing interests.

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