DOI: http://doi.org/10.4038/joshhm.v6i0.100

Sexual behaviour and correlates for risky sexual behaviour among youth attending government vocational training institutes in Colombo District

Siriwardena LN[1], Abeygunasekera N[2]

Abstract

Background: Youth represent a proportion of the population most exposed to Sexually Transmitted Infections. The study of sexual behaviour patterns and what factors predisposes them for risky sexual behaviour is important in designing targeted interventions for youth.

Objective: To describe socio demographic profile, knowledge on STI, HIV and sexual health and information sources, sexual behaviour and correlates for risky sexual behaviour among youth aged 18-24 years in government vocational training institutes in Colombo District.

Method: Calculated sample size was 420. Stratified random sampling was used to enroll participants. Data was collected through a self-administered questionnaire. Data was analyzed using percentages, chi square test and logistic regression.

Results: Just over half (52%) the sample were males and all had completed Ordinary level examination or beyond. Twenty-five percent of the respondents were sexually active. Nearly 69% had not used a condom at their last sex. Ten percent of males who were sexually experienced had anal sex at their first sexual exposure. Gender, ability to earn, knowledge on STI prevention and contraception, using pornography in the last 12 months and social media to find partners were associated with ever having sex. Male sex and ability to earn were positive predictors of ever having sex and contraceptive knowledge was a negative predictor.

Conclusions: Risky pre-marital sex is present among this study sample. Male sex and ability to earn were positively predictive of ever having sex. Knowledge on contraception was negatively predictive.

Key words: *risky sexual behaviour, youth*

Authors: *corresponding author; [1] Siriwardena LN[1], [1]Acting Consultant Venereologist, STD clinic, Homagama, Sri Lanaka, Email: lasanthi_gunaratne@hotmail.com*
[2] Abeygunasekera N, Consultant Venereologist, STD Clinic, Kalubowila, Sri Lanka

Acknowledgement: *All the participants in the study, my colleagues who helped in this study-Dr.Ajith Karawita, Dr. Dharashanie Wijewickreme, Dr. Nimali Widanage*
Conflict of interest*: Authors claim no conflicts of interest,* ***Funding****: not funded,* ***Originality:*** *This is an original work which has been not published anywhere else*

Full article

Introduction

Youth represent a proportion of the population most exposed to Sexually Transmitted Infections (STIs) due to sexual discovery and initiation. Their eventual engagement in risky sexual behaviour, make them vulnerable to acquire STIs and HIV and unwanted pregnancies.

Behaviours that put an individual at risk of sexually transmitted infections, HIV or unwanted pregnancy are identified as risky sexual behaviour. Early sexual initiation is a known risk factor for all of the above unwanted sexual health outcomes. This vulnerability is due to biological, anatomical and psychosocial factors associated with young age.[1] Unprotected (without a condom) anal, vaginal and oral intercourse is a well-known risk factor for HIV and STIs. Even oral – anal contact without a barrier is known to transmit infection. Incorrect, inconsistent and non-use of condoms during sexual intercourse is a known risk factor for HIV, STI and unplanned pregnancies.[2] Having multiple concurrent partners is also a well-known risk for HIV and STIs.[3]

HIV annual data for Sri Lanka over the past few years show more HIV infections among the 15-24year age group, and HIV transmission through homosexual intercourse is on the rise.[4] Their risk for acquiring HIV is closely related to their sexual behaviour and other risk behaviour. As youth sexual behaviour has not been captured in the national demographic and health survey and the past two BSS (Biologcal and sero surveillance) and IBBS (Integrated Biological and Behaviour Surveillence) adequate information is not available for targeted interventions. Provision of sexual health services to meet the needs of the population requires a measure of understanding of all the elements of sexual health. Therefore, these changing dynamics of HIV epidemiology warrant the need to study sexual behaviour patterns of the youth of today. It is also important to know what factors predisposes them towards risky sexual behaviour.

In Sri Lanka, approximately 35,000 youth get vocational education and training annually through a network of training centers under the Ministry of Youth and Skills Development, the largest training network for vocational training. Nearly 16,000 of the youth enrolled are found in training centers within the district of Colombo.

This study was done to look at sexual behaviour and correlates for risky sexual behaviour among youth aged 18-24 years attending vocational training centers under the Ministry of Youth and Skills Development in the district of Colombo.

Methods

This was a descriptive cross sectional study carried out in vocational training centers under the Ministry of Youth and Skills Development in the district of Colombo. Calculated sample size was 420. There were 27 vocational training centers under 6 institutes in Colombo District. It was assumed that the behaviour patterns with regard to sexual and reproductive health were homogeneous across all institutes. The number of students enrolled at these vocational training centers at the time of the study was 15,942. The sampling frame was students aged 18-24 years enrolled across the 6 institutes. The sample size was then distributed proportionate to the required age group student population, enrolled under each institute. The participants were selected randomly from student registers in each vocational training center. A total of 415 students that fulfilled the inclusion criteria completed the questionnaire and the respondent rate was 98.6%. New recruits and part time students were excluded from the study.

In this study risky sexual behaviour was said to be present if the participants were having one of the following exposures.

a) penetrative oral, vaginal or anal intercourse or attempt with close genital contact
b) Sex without condoms at last sex
c) Having more than one sexual partner within the last 3 months

Data was collected through a self-administered pre tested questionnaire and the data was analyzed using SPSS version 17.

All categorical variables were analyzed for counts and percentages. Level of knowledge was scored by giving 1 point for the correct response and 0 to incorrect or don't know responses. Cut off scores for level of knowledge was worked out by using the interquartile range for the scores. To ascertain the association and correlation between risky sexual behaviour, chi square and binary logistic regression was performed, with Hosmer Lemshow goodness of fit, with backward elimination to test for model fitness. Variables with p value of <0.05 were considered statistically significant.

Results

Majority of the participants (51%) were in the 18-20-year category and 52% were males. Nearly 89% had completed advance level or above in education. Majority (98%) were never married. Over 87% of them were financially dependent.

Ninety-six percent of the respondents said that they have heard of Sexually Transmitted Infections (STI). Majority (70-80%) had satisfactory or above knowledge on STIs and HIV.

Table 1: Frequency distribution of socio demographic characteristics of the study sample

Category	Sub-category	Count	Percent (%)
Age in years (n=412)	18-20	213	51.3
	21-24	199	48.0
	Total	412	100.0
Sex (n=414)	Female	198	47.8
	Male	216	52.2
	Total	414	100.0
Province of residence (n=408)	Western	359	88.0
	Southern	13	3.2
	Sabaragamuwa	13	3.2
	North western	8	2.0
	Central	7	1.7
	Uva	3	0.7
	Northern	3	0.7
	Northcentral	1	0.2
	Eastern	1	0.2
	Total	408	100.0
Level of Education completed (n=411)	Completed A/L	244	58.8
	Completed certificate/technical course	79	19.2
	Completed O/L	46	11.2
	Completed Diploma	39	9.5
	Other	3	0.7
	Total	411	100.0
Civil status (n=408)	Single (never married)	399	97.8
	Married	8	2.0
	Living together not married	1	0.2
	Total	408	100.0
Financial dependency (n=405)	Yes	354	87.4
	No	51	12.6
	Total	405	100.0

Table 2: Frequency distribution of level of knowledge on STIs, STI prevention and HIV

Knowledge component	Indicator	Count	Percent
STI	Poor	91	22.9
	Satisfactory	226	56.9
	Good	80	20.2
	Total	397	100.0
STI prevention	Poor	31	7.9
	Satisfactory	328	83.2
	Good	35	8.9
	Total	394	100.0
HIV	Poor	90	23.1
	Satisfactory	244	62.7
	Good	55	14.1
	Total	389	100.0

Forty percent of the participants could not name a scientific method of contraception. Nearly 60% of those who were not aware of scientific methods of contraception were females.

Health services was the common source of information for STIs and contraception (30%). Internet was also a preferred source (13% for STIs and 16% for contraception) of information.

Nearly 50% of the participants did not consider the sexual and reproductive health (SRH) education provided in school as sufficient and over 50% considered that school SRH education did not prepare them for their

sexual debut, or to avoid STIs or unplanned pregnancies.

Nearly quarter (25%) were sexually active and 43% of them had had their sexual debut before the age of 18 years. Ninety-three percent of those who were sexually experienced were not married. Sixty percent of those who were sexually experienced had not used condoms at their sexual debut and another 14% could not remember if they had. Nearly 69% had not used a condom at their last sex. Commonest sexual behaviour for sexual debut was oral sex for both males (74%) and females (59%).Ten percent of males who were sexually experienced had anal sex at their first sexual exposure.

Table 3: Frequency distribution of ever having sex and characteristics of first sex

	Frequency (N)			Percentage (%)		
	Male	Female	Total	Male	Female	Total
Have you ever had vaginal, anal or oral intercourse with someone? (n=383)						
Yes	73	22	95	35.8	12.4	24.8
No	131	156	288	64.2	87.6	75.2
Total	204	178	383	100.0	100.0	100.0
Civil status (n=95)						
Single/Never married	73	14	87	100.0	63.6	92.6
Married	0	8	8	0	34.4	8.4
Total	73	22	95	100.0	100.0	100.0
Age at first sex (n=93)						
18 years or below	35	5	40	46.6	23.8	43.0
>18 years	37	16	53	52.4	76.2	57.0
Total	72	21	93	100.0	100.0	100.0
First sex exposure (multiple responses possible)						
Vaginal	22	7	29	30.1	31.8	30.5
Anal	7	11	8	9.6	4.5	8.4
Oral	54	13	67	74.0	59.1	70.5
Other	4	0	4	5.5	0	4.2

Subsequent sexual behaviour following the sexual debut was analyzed for only those who were not married and sexually experienced. One tenth of sexually active males had male partners in the last 12 months but only 2% had engaged in anal sex during the last 12 months. Half the proportion of females who had ever had sex and almost all the males who had ever had sex (98%) had sexual partners in the last 12 months and 7% of them had more than one sexual partner within the last 3 months.

The commonest last sexual exposure for unmarried males was cunnilingus (38%), followed by vaginal sex (30%) and fellatio (27%). For unmarried females the last sexual exposure patterns was mainly fellatio and cunnilingus (88%) and one participant had engaged in anal sex. Majority (69%) of the participants had not used a condom at their last sexual exposure.

Table 4: Frequency distribution of type of last sexual exposure for males and females who were not married

		Indicator	Count	Percent
what kind of sexual exposures did you have the last time you had sex	Males	Oro-vaginal sex	24	38.1
		Oro-anal sex	2	3.2
		Oro-penile sex	17	27.0
		Peno-vaginal sex	19	30.2
		Peno-anal sex	1	1.6
		Total	63	100.0
	Female	Oro-vaginal sex	3	37.5
		Oro-penile sex	4	50.0
		Peno-anal sex	1	12.5
		Total	8	100.0
Condom use at last sex (n=74)		Yes	23	31.1
		No	51	68.9
		Total	74	100.0

Only 8% and 6% of those who were sexually active were under the influence of drugs or alcohol at the time of last sex. Thirteen percent had paid money for sex and nearly half of that had received gifts or money for sex sometime in their life. Nearly 5% of those who ever had sex had sex without consent ever in their life. More than half the study population had watched pornography (54%) in the last 12 months and 18% had used social media to seek partners in the last 12 months.

Table 5: Use of pornography and social media to find partners among the study sample in the last 12 months

	Indicator	Count	Percent
Have you watched pornography during the last 12 months? (n=312)	Yes	169	54.2
	No	143	45.8
	Total	312	100.0
Have you used social media to seek partners in the last 12 months? (n=309)	Yes	56	18.1
	No	253	81.9
	Total	309	100.0

There was very strong evidence of association between gender (x^2*=38.743 with 1df; P<0.001)*, ability to generate and income (x^2*=15.952 with 1df; P<0.001*), STI prevention knowledge

(x^2=11.024 with 2df; P<0.001), contraceptive knowledge (x^2=30.127 with 4df; P<0.001) use of pornography in the last 12 months (x^2=28.236 with 1df; P<0.001) and use of social media to seek partners in the last 12 months and ever having sex (x^2=6.012 with 1df; P=0.014).

Table 6: Association of sociodemographic characteristics, STI/HIV and contraceptive knowledge and behaviour factors of youth against ever having sex

	Ever had sex						Sig.
	Yes	%	No	%	Total	%	
Gender							
Male	73	35.8	131	64.2	204	100.0	P<0.001
Female	22	12.4	156	87.6	178	100.0	
Total	95	24.9	287	75.1	382	100.0	
Ability to earn							
Yes	16	53.3	14	46.7	30	100.0	P<0.001
No	71	21.0	267	79.0	338	100.0	
Total	87	23.6	281	76.4	368	100.0	
STI knowledge							
Good	20	27.0	54	73.0	76	100.0	
Satisfactory	54	25.6	157	74.4	220	100.0	P=0.134
Poor	13	15.5	71	84.5	87	100.0	
Total	87	23.6	282	76.4	369	100.0	
STI prevention knowledge							
Good	12	35.3	22	64.7	34	100.0	P=0.004
Satisfactory	75	24.6	230	75.4	305	100.0	
Poor	0	0	27	100.0	27	100.0	
Total	87	23.8	279	75.0	366	100.0	
HIV knowledge							
Good	11	21.6	40	78.4	51	100.0	P=0.077
satisfactory	63	26.8	172	73.2	235	100.0	
Poor	12	14.6	70	85.4	82	100.0	
Total	86	23.4	282	76.6	368	100.0	
Contraceptive knowledge							
No knowledge	14	9.5	134	90.5	151	100.0	P<0.001
Knows 1 method	22	28.9	54	71.1	79	100.0	
Knows 2 methods	39	36.1	69	63.9	113	100.0	
Knows 3 methods	9	39.1	14	60.9	23	100.0	
Knows 4 methods	3	21.4	11	78.6	17	100.0	
Total	87	23.6	282	76.4	369	100.0	
Use of pornography in the last 12 months							
Yes	64	39.0	100	61.0	164	100.0	P<0.001
No	14	11.1	112	88.9	126	100.0	
Total	78	26.9	212	73.1	290	100.0	
Use of social media in last 12 months to seek partners							
Yes	22	40.0	33	60.0	55	100.0	P=0.014
No	55	23.7	177	76.3	232	100.0	
Total	77	26.8	210	73.2	287	100.0	

S=significant, NS=not significant, df=degrees of freedom, x^2=chi square

When multivariate logistic regression analysis was done male sex, ability to earn and having knowledge on contraception were predictors of ever having sex amongst this study population. Male gender was 1.56 times more likely to have had penetrative sex and ability to earn was 1.1 times predictive towards engaging in penetrative sex and having knowledge on contraception methods was 1.36 times less predictive towards engaging in penetrative sex.

Discussion

Risky pre marital sexual behaviour was seen in this youth sample despite being exposed to school sexual and reproductive health education and satisfactory knowledge on STIs and HIV. The percentage who were sexually active in this youth group were similar to other studies conducted among university students and national youth corps trainees in Sri Lanka.[5,6] Of those who ever had sex, 43% has had their sexual debut at or before 18 years. In contrast, in the study conducted amongst new recruits of Youth Corps 64% of the sample has had sex at 18 years or below.[5] This may have been due to the higher number of early school leavers in Youth corps.

Oral sex is commonly practiced among the participants. When asked about STI transmission through oral sex only 41% correctly said that STIs could be acquired through oral sex. The reason for oral sex being practiced commonly may be due to the belief that it is safer than vaginal or anal sex. Preference for oral sex among females who were not married and sexually active may also be due to socio cultural beliefs such as preserving virginity. Further, in depth studies are required to find out the reasons for the practice of oral sex among young people.

One tenth of the males in this study sample had anal sex in their sexual debut and one tenth of males had same sex partners in the last 12 months. However, only 2% had engaged in anal sex in the last 12 months. Same sex attraction was low among females and anal sex was also not common. As sexual behaviour studies among young people are scares in Sri Lanka comparability cannot be assessed.

Nearly 69% did not use a condom in their last pre marital sex. Condom use among these youth is very low in comparison to European

studies.[7] Oral sex being considered a safe sexual behaviour may have contributed to none use of condoms. However, this study did not look into barriers for condom use. Further studies are required to identify these barriers.

More than half the sample had used pornography in the last 12 months and 18% used social media to find partners. The impact of social media and pornography on young people's sexual health has not been studied in Sri Lanka. As use of pornography and social media is evident in this group of urban youth, studies on its impact has to be carried out in the future.

In multivariate logistic regression analysis male gender and financial independence was positively predictive of ever having sex and contraceptive knowledge was a negative predictor. HIV and STI knowledge was not predictive of ever having sex. This implies that youth SRH education has to be re-evaluated.

Conclusion

This study proves that risky pre marital sexual behaviours occur among youth aged 18-24 years in an urban setting. More in depth analysis is required into their prevailing sexual behaviour and barriers for condom use. School SRH has been insufficient in preparing them for their sexual debut or to avoid unwanted consequences of sex. Satisfactory knowledge on STIs and HIV per say is not protective. A knowledge on contraceptive use is protective. SRH education and messages have to be more targeted and health care services and internet has to be utilized in targeted interventions. The impact of pornography and utilization of social media for SRH needs in youth is a new area that has to be evaluated.

References

1. Qiaqin M, Kihara MO, Cong L, Xu G, Xiaohong P, Zamani S, Ravari SM, Zhang D, Homma T, Kihara M. Early initiation of sexual activity: risk factor for sexually transmitted diseases,HIV infection, and unwanted pregnancy among university students in China. BMC Public Health 2009;9(111).
2. Alford S. Condom Effectiveness. Advocates for youth 2005.
3. Mishra V,Van Assche B. Concurrent sexual partnerships and HIV infection: Evidence from National Population Based Surveys. DHS working papers 2009.
4. National STD AIDS Control Programme. Annual Report 2016. 2016.
5. Vidhanapathirana J, Wijegoonewardhana N, Fernando M, Nawarathna S, Suranga MA, Premachandra M. Evidence on the knowledge and attitudes of Sri Lankan youth on sexual and reproductive health and their current sexual practices. National STD AIDS Control Programme; 2019. p. 1-46.
6. Perera UAP, Abeysena C. Prevalence and associated factors of risky sexual behaviors among undergraduate students in state universities of Western Province in Sri Lanka: a descriptive cross sectional study. Reproductive Health. 2018;15(1):105.
7. Miranda PSF, Aquino JMG, Monteiro R, Dixe M, Luz A, Moleiro P. Sexual behaviors: study in the youth. Einstein (Sao Paulo, Brazil). 2018;16(3):eAO4265.