

Attitude Towards Sex: Study of Secondary Schoolchildren in Selangor State

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ABSTRACT

Introduction: HIV/AIDS is one of the leading health problems worldwide. There is an increasing rate among the ages between 13 to 49 years old. School based intervention is an important component of community-based interventions for HIV/AIDS and is the best stage to promote abstinence which is best maintained among those not sexually experienced. **Objectives:** This study was carried out to determine attitude towards sex among secondary school children in Selangor state. **Methods:** A cross-sectional study design was used. Four out of nine districts in Selangor state were selected at random. Students were divided according to gender, academic performance (good or poor) with no behavioural problems and students with evidence of behaviour problems (at risk). **Results:** Out of 149 students, the majority (56.4%) were females. The majority of students did not think sex should be discussed in depth and do not speak to parents, teachers, religious teachers, counselors, relatives, doctors or nurses but speak to friends regarding sex. More than half watch pornography. A significantly higher percentage of male students in the weak and at-risk group admit to thinking of intimacy (hugging and kissing) with the opposite gender. A higher number of these students would try sex out of curiosity, for fun, because it was difficult to say 'no' to and that they would like it. A significantly higher percentage will try sex because they did not want to hurt their girlfriends' feeling by saying 'no'. While the majority of students think intimacy will end in sex, a significantly higher percentage of male at-risk students think just talking with the opposite gender will end in sex. The majority of male students responded feeling attracted to the picture of a girl in sexy clothing but a significantly higher percentage of at-risk students also felt attracted to the picture of a girl properly attired. A significantly higher percentage of male at-risk students say parents do not say sex before marriage is wrong and a significantly higher percentage of male students of weak and at-risk groups say girlfriends say sex before marriage is okay. A significantly higher percentage of weak and at-risk students speak to doctors regarding sex and think sex should be discussed in depth. **Conclusion:** Weak and at-risk male students appeared to have a more vulnerable attitude towards sex. This may predispose them to risky sexual behaviours leading to HIV/AIDS. Poor academic performance and behaviour problems may not be different as potential sexual risk predictors. The information obtained will be useful in designing intervention programmes in the prevention of HIV/AIDS.

Keywords: Attitude, Focus Group Discussion(FGD), secondary schoolchildren, Selangor, sexual behaviour

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INTRODUCTION

The estimated number of people currently living with HIV globally has decreased from 40.5 million in 2004^[1] to 33 million in 2007.^[1] In Malaysia, the prevalence of HIV infection had increased from three cases in 1986 to 80,938 cases in 2007. There is an increasing rate among the ages between 13 to 49 years old.^[2]

The silent spread, fatal outcome and lack of a cure or vaccine have all encouraged the implementation of intervention programmes.^[3] Wagner *et al.* reported that school based interventions offer greater access to care and increased potential for improved effectiveness than the more traditional approaches of clinic-based service delivery systems.^[4]

Current World Health Organization programs aim to increase knowledge and to develop skills, positive attitudes and motivation.^[5] In the US, intervention programmes have been initiated since 1987. The results from the surveys by the Center for Disease Control (CDC)'s Youth Risk Behaviour Surveillance System (YRBSS) showed that from 1991 to 1997, risky sexual behaviours decreased in the various cities.^[6] A more recent YRBSS report on the "Trends in the prevalence of sexual behaviours" (1991-2005) however, revealed no change in prevalence of the same health risk behaviours from 2003-2005. The numbers also remained high (CDC, National Trends in Risk Behavior, 1991-2005) indicating many remain at risk.^[7]

While education on AIDS may be effective in teaching factual information about AIDS, it may have little effect on student's future behaviour.^[8] Many times, the information does not seem salient or personally relevant and thus is not used in making decisions related to having sex. Teens report being bored with AIDS education, but suggest needing information that is more relevant to them.^[9] The format of AIDS education may need to be modified to better address adolescents' beliefs and behaviours regarding HIV and AIDS.^[9]

While sex education for general awareness and sexual risk behaviours that lead to teenage pregnancy and STDs including HIV is a must, the other aspect of sexuality including emotional, psychological and physiological may also need to be addressed at the schools. However, implementation of these programmes may face resistance from a society that is still conservative. To prevent the likelihood of adolescents becoming infected with HIV, there is an immediate need for the development of methods for (1) providing all adolescents with age-appropriate and culturally relevant interventions for prevention and risk reduction; (2) identifying high-risk adolescents and triaging them to different levels of care and risk reduction counseling; and (3) providing ongoing medical and psychosocial treatments.^[10] Local studies agree that certain groups of adolescents tend to be at higher risk of engaging in sexual intercourse. This problem should be addressed early by targeting these groups of high-risk adolescents.^[11,12] Existing HIV/AIDS prevention programmes should also be reviewed critically.^[13] Identifying variables that could be used as predictors of risky behaviours may be one step closer to providing relevant intervention for those at risk.

A Malaysian study showed that, adolescent sexual intercourse was significantly associated with (1) socio-demographical factors (age, gender); (2) environmental factors (staying with parents); and (3) substance use (alcohol use, cigarette smoking, drug use).^[11] Many studies have also shown an association between sexual risk behaviours and academic performance.^[14,15,16]

To gain a better understanding of factors that may lead students to risky behaviours related to HIV/AIDS, a focus group approach was considered to obtain information on

underlying issues which may differ from one generation to the next. The focus group discussion (FGD) covered social problems and risky behaviour such as smoking, alcohol and drug abuse, risky sexual behaviour, delinquency and homosexuality and factors such as religion, education, self-esteem and social support groups. To identify potential factors that may be used in recognising students at risk, schoolchildren were stratified according to socio-demographic factors, evidence of behaviour problem and academic performance. This report addresses the response of these students to questions on attitude and practice towards sex.

METHODS

A cross-sectional study design was used in this study. Four out of the nine districts in Selangor state were selected at random using the table of random numbers. In each of the selected districts, three schools were selected at random from the total list of schools. The school Principal or Vice Principal of Student Affairs of the selected schools were approached directly. A meeting was arranged where information on the project and selection of students were detailed. Participants were recruited based on social demography, that is, age and gender. Two age groups were identified: (i) 13 to 14 years old (Form 1 and 2) known as lower secondary (LS) and (ii) 16 years old (Form 4) known as higher secondary (HS). Students aged 15 and 17 years old (Forms 3 and 5) were not included to exclude students preparing for the Form 3 and Form 5 Government Examinations. Both the genders were included. For the stratification of students based on academic performance and behaviour problems (which included smoking, alcohol and drug abuse, risky sexual behaviour, delinquency and homosexuality), the assistance of school counselors were obtained as they are aware of students performance. Students were then subclassified as:

- i. Good: top 20% in academic performance and who had no behavioral problems
- ii. Weak: bottom 20% in academic performance and who had no behavioral problems
- iii. At risk: students who had behavioral problems.

The 20% cut-off was chosen to create a clear divide between academic performance of students. Permission was obtained from the Ministry of Education to recruit secondary school children in the state of Selangor into this study. Participants for the FGD were selected from the schools based on a voluntary basis of participation. Consent was obtained from parents since they were underaged schoolchildren.

Questionnaire

A power point presentation with graphics and a questionnaire was prepared by a team of researchers from various disciplines including community health, psychiatry, psychology, medicine and others. Questions were prepared in English and then translated into Bahasa Malaysia. The accuracy of the translation was determined by back-translation of the questions to English by a team of three research assistants. Questions were designed to elicit a discussion which was taped as well as recorded by the scribe. However, for the section on attitude and practices toward sex, after adequate briefing on the questions, participants were asked to answer directly into the printed version of the questionnaire

since it was a very private subject. Questions were more attitude based rather than practice to encourage honest responses.

Training of Facilitators

Facilitators consisted of members of the research team and were assisted by a research assistant as a scribe. Facilitators were provided with a Facilitator's Guide which included information on the research and voluntary and confidentiality of all information given. This was to be read out at the beginning of each session. Guidelines also included suggested prompts to help in the flow of discussion.

A session was conducted with a group of voluntary staff from the faculty a week before the actual session which was attended by all facilitators and scribes to simulate the actual session.

FGD Session

The FGD sessions were carried out in tutorial rooms in the Faculty of Medicine and Health Sciences. Students were divided strictly according to gender and behaviour group to induce a more conducive environment. Each group was no larger than 12 students and facilitated by a facilitator and a scribe of the same gender. A whole day session was carried out with breaks in between for rest, meals and prayers.

Data Analysis

Data was analysed using SPSS (Statistical Package for Social Science) version 14 soft ware. Descriptive analyses using cross-tabulation was done for all questions. The statistical tests employed was Fisher's Exact test. A p -value of <0.05 was considered as statistically significant.

RESULTS

Response Rate

Out of the 12 schools selected, 11 agreed to participate in the FGD, giving a response rate of 91.7%. A total of 149 schoolchildren from the eleven schools participated in the study. Table 1 shows the distribution of respondents by age, gender and defined behaviour groups.

In further analysis, the age groups were combined because of the relatively small number of participants.

Attitude of Respondents Towards Sex

Tables 2a-2i show the distribution of respondents to questions related to attitude by gender and behaviour group.

To the question 'Is it wrong to think of sex?' the results showed that the majority (80.5%) of students felt it was not wrong to think of sex. There was no significant difference in the response between the behaviour groups. The results also showed that the majority (85.2%) felt that it was a natural feeling to think of sex. Among the males, 100% of the

Table 1. Distribution of participants according to gender and defined behaviour groups

Class	Form 1-2(LS)	Form 4(HS)	Total
Good			
Male	6	14	20
Female	13	15	28
Weak			
Male	9	13	22
Female	12	20	32
At risk			
Male	8	15	23
Female	10	14	24
Total	58	91	149

students who had no behavioral problems stated that it was a natural feeling to think of sex as compared to 78.3% of the students who had behavioral problems. This difference was statistically significant ($p=0.009$). However, no significant difference was observed among female students.

The majority (65.0%) stated that sex should not be discussed in depth. However, a significantly higher percentage of male student in the weak (55.0%) and at-risk (50.0%) groups think that sex should be discussed in depth compared to the good (15.0%) group ($p=0.02$). There was no significant difference in response among the female students. The students were then asked 'Whom do you prefer to speak to regarding sex?'. A minority of students preferred to speak to their parents (18.3%), relatives (12.3%), teachers (19%), religious teachers (16.4%), counselors (22.1%), doctors (28.7%) or nurses (11.7%) regarding sex. In most instances, there was no difference in response between the good, weak and at-risk students.

However, among the female students who were academically good and who had no behavioral problems, 29.2% preferred to speak to teachers regarding sex as compared to students who were academically poor but who had no behavioral problems (12.5%) and students who had behavioral problems (0.0%). The percentage of male students who did not prefer to speak to religious teachers regarding sex was significantly higher in the at risk group (95.5%) compared to the good (63.2%) and weak (77.8%) groups ($p=0.03$). The majority of upper secondary male students (60.0%) preferred to speak to doctors in contrast to students from the good (23.1%) and weak (30.0%) groups (data not shown).

The majority (78.2%) preferred to speak to friends regarding sex. However, the percentage of male students who prefer to speak to friends regarding sex was significantly lower in the at-risk group (57.1%) compared to good (84.2%) and weak (94.7%) students ($p=0.02$).

Do You Think Talking to the Opposite Gender will end in Sex?

The majority (86.6%) did not think talking to the opposite gender will end in sex. However, a significantly higher percentage of male students from the at-risk group (30.4%) thought

Table 2a. Response to questions related to attitude by gender and behaviour group

Question	Yes N(%)	No N(%)	Behaviour Group	Male		Female	
				Yes N(%)	No N(%)	Yes N(%)	No N(%)
1 Is it wrong to think of sex?	29 (19.5)	120 (80.5)	Good	3 (15.0)	17 (85.0)	3 (10.7)	25 (89.3)
			Weak	4 (18.2)	18 (81.8)	10 (31.2)	22 (68.8)
			At risk	5 (21.7)	18 (78.3)	4 (16.7)	20 (83.3)
2 Do you think it is a natural feeling *p=0.009	127 (85.2)	22 (14.8)	Good	20 (100)	0 (0.0)*	23 (82.1)	5 (17.9)
			Weak	22 (100)	0 (0.0)	24 (75.0)	8 (25.0)
			At risk	18 (78.3)	5 (21.7)	20 (83.3)	4 (16.7)
3 Should sex be discussed in depth? *p=0.02	50 (35.0)	93 (65.0)	Good	3 (15.0)	17 (85.0)*	9 (33.3)	18 (66.7)
			Weak	11 (55.0)	9 (45.0)	6 (20.0)	24 (80.0)
			At risk	11 (50.0)	11 (50.0)	10 (41.7)	14 (58.3)

Table 2b. Response to questions related to attitude by gender and behaviour group

Question	Total		Male		Female	
	Yes	No	Yes	No	Yes	No
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
4 Whom do you prefer to speak to regarding sex?						
i. Parents?	23 (18.3)	103 (81.7)	3 (15.8)	16 (84.2)	6 (25.0)	18 (75.0)
			2 (11.1)	16 (88.9)	5 (20.8)	19 (79.2)
			2 (9.1)	20 (90.9)	5 (26.3)	14 (73.7)
ii. Relatives?	15 (12.3)	107 (87.7)	4 (21.5)	15 (78.9)	1 (4.3)	22 (95.7)
			0 (0.0)	18 (100)	3 (12.5)	21 (87.5)
			3 (13.0)	20 (87.0)	4 (26.7)	11 (73.3)
iii. Friends?	104 (78.2)	29 (21.8)	16 (84.2)	3 (15.8)*	22 (78.6)	6 (21.4)
*p=0.02			18 (94.7)	1 (5.3)	18 (66.7)	9 (24.3)
			12 (57.1)	9 (42.9)	18 (94.7)	1 (5.3)
iv. Teachers?	23 (19.0)	98 (81.0)	3 (15.8)	16 (84.2)	7 (29.2)	17 (70.8)#
#p=0.05			6 (33.3)	12 (66.7)	3 (12.5)	21 (87.5)
			4 (18.2)	18 (81.8)	0 (0.0)	14 (100)
v. Religious teachers?	20 (16.4)	102 (83.6)	7 (36.8)	12 (63.2)*	5 (20.0)	20 (80.0)
*p=0.03			4 (22.2)	14 (77.8)	3 (12.5)	21 (87.5)
			1 (4.5)	21 (95.5)	0 (0.0)	14 (100)
vi. Counselors?	27 (22.1)	95 (77.9)	4 (22.2)	14 (77.8)	4 (16.7)	20 (83.3)
			7 (38.9)	11 (61.1)	6 (25.0)	18 (75.0)
			2 (9.1)	20 (90.9)	4 (25.0)	12 (75.0)

Table 2c. Response to questions related to attitude by gender and behaviour group

Question	Total		Male		Female					
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)				
vii. Doctors?	35 (28.7)	87 (71.3)	4 (21.1)	15(78.9)	7(29.2)	17((70.8)				
							7 (38.9)	11(61.1)	6(24.0)	19(76.0)
							9 (40.9)	13(59.1)	2(14.3)	12(85.7)
viii. Nurses?	14 (11.7)	106 (88.3)	1(5.3)	18(94.7)	1(4.3)	22(95.7)				
							4(23.5)	13(76.5)	2(8.0)	23(92.0)
							4(18.2)	18(81.8)	2(14.3)	12(85.7)

Table 2d. Response to questions related to attitude by gender and behaviour group

Question	Total			Male		Female	
	Yes N(%)	No N(%)	Behaviour Group	Yes N(%)	No N(%)	Yes N(%)	No N(%)
5 Do you think talking with the opposite gender will end in sex? *p=0.02	20 (13.4)	129 (86.6)	Good Weak At risk	0(0.0) 3(13.6) 7(30.4)	20(100)* 19(86.4) 16(69.6)	2(7.1) 4(12.5) 4(16.7)	26(92.9) 28(87.5) 20(83.3)
6 Do you think hugging and kissing with the opposite gender will end in sex?	75 (51.0)	72 (49.0)	Good Weak At risk	8(40.0) 15(68.2) 13(59.1)	12(60.0) 7(31.8) 9(40.9)	13(48.1) 12(37.5) 14(58.3)	14(51.9) 20(62.5) 10(41.7)
7 Do you think sex before marriage is 'cool'?	29 (20.0)	116 (80.0)	Good Weak At risk	4(21.0) 11(50.0) 9(40.9)	15(78.9) 11(50.0) 13(59.1)	2(7.1) 0(0.0) 3(13.0)	26(92.9) 31(100) 20(87.0)

Table 2e. Response to questions related to attitude by gender and behaviour group

Question	Total		Male		Female	
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)
8 Would you try sex if you were asked?	30 (20.7)	115 (79.3)	6(30.0)	14(70.0)	0(0.0)	28(100)
			10(45.5)	12(54.5)	1(3.2)	30(96.8)
			11(52.4)	10(47.6)	2(8.7)	21(91.3)
i. If yes, because of curiosity	23 (85.2%)	4 (14.8%)	4(66.7)	2(33.3)		
			9(90.0)	1(10.0)		
			10(90.9)	1(9.1)		
ii. Do not want to hurt him/her by saying no *p=0.02	17(73.9)	6(26.1)	2(33.3)	4(66.7)*		
			7(100)	0(0.0)		
			8(80.0)	2(20.0)		
iii. Difficult for me to say no	16 (61.5)	10 (38.5)	3(50.0)	3(50.0)		
			4(44.4)	5(55.6)		
			9(81.8)	2(18.2)		
iv. For fun / boredom	15 (57.7)	11 (42.3)	1(16.7)	5(83.3)		
			6(66.7)	3(33.3)		
			8(72.7)	3(27.3)		
v. I am bad	10 (38.5)	11 (42.3)	1(16.7)	5(83.3)		
			3(33.3)	6(66.7)		
			6(54.5)	5(45.5)		

Table 2f. Response to questions related to attitude by gender and behaviour group

Question	Yes N(%)	No N(%)	Behaviour Group	Male	
				Yes N(%)	No N(%)
vi. Release stress	12 (46.2)	14 (53.8)	Good	2(33.3)	6(66.7)
			Weak	5(55.6)	4(44.4)
			At risk	5(45.5)	6(54.5)
vii. Everyone else is doing it	16 (61.5)	10 (38.5)	Good	2(33.3)	4(66.7)
			Weak	6(66.7)	3(33.3)
			At risk	8(72.7)	3(27.3)
viii. I think I will like it	21 (80.8)	5 (19.2)	Good	4(66.7)	2(33.3)
			Weak	8(88.9)	1(11.1)
			At risk	9(81.8)	2(18.2)
ix. Nobody to stop us	13 (50.0)	13 (50.0)	Good	1(16.7)	5(83.3)
			Weak	6(66.7)	3(33.3)
			At risk	6(54.5)	5(45.5)

Table 2g. Response to questions related to attitude by gender and behaviour group

Question	Total		Male		Female	
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)
	Behaviour Group		Yes N(%)	No N(%)	Yes N(%)	No N(%)
b. If no, because:						
i. My parents will be angry *p=0.03	95 (89.6)	11 (10.4)	14(100) 8(66.7) 6(66.7)	0(0.0)* 4(33.3) 3(33.3)	24(92.3) 28(96.6) 15(93.8)	2(7.7) 1(3.4) 1(6.3)
ii. It is against my religion *p=0.01	99 (90.8)	10 (9.2)	14(100) 8(66.7) 6(75.0)	0(0.0)* 4(33.3) 2(25.0)	26(96.3) 28(93.3) 17(94.4)	1(3.7) 2(6.7) 1(5.6)
iii. It is against my values	96 (90.6)	10 (9.4)	14(100) 7(70.0) 5(55.6)	0(0.0) 3(30.0) 4(44.4)	27(100) 29(96.7) 14(87.5)	0(0.0) 1(3.3) 2(12.5)
iv. I will not be respected *p=0.01	93 (89.4)	11 (10.6)	14(100) 7(70.0) 4(50.0)	0(0.0)* 3(30.0) 4(50.0)	25(96.2) 28(96.6) 15(88.2)	1(3.8) 1(3.4) 2(11.8)
v. I can get pregnant	67 (93.1)	5 (6.9)	14(100) 9(75.0) 6(66.7)	0(0.0) 3(25.0) 3(33.3)	24(88.9) 28(96.6) 15(93.8)	3(11.1) 1(3.4) 1(6.3)
vi. I can get HIV/AIDS	100 (92.6)	8 (7.4)	14(100) 9(75.0) 6(66.7)	0(0.0) 3(25.0) 3(33.3)	27(100) 28(96.6) 16(94.1)	0(0.0) 1(3.4) 1(5.9)

Table 2h. Response to questions related to attitude by gender and behaviour group

Question	Total		Behaviour Group		Male		Female	
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)
9 Whom do you know says sex before marriage is okay?								
i. Friends?	53 (38.4)	85 (61.6)	13(65.0)	7(35.0)	10(50.0)	7(35.0)	7(25.0)	21(75.0)
			10(50.0)	10(50.0)	16(72.7)	10(50.0)	9(31.0)	20(69.0)
			6(26.3)	16(72.7)			8(42.1)	11(57.9)
ii. Movies/media?	66 (48.2)	71 (51.8)	13(65.0)	7(35.0)	11(55.0)	7(35.0)	16(59.3)	11(40.7)*
*p=0.05			7(30.4)	16(69.6)	9(45.0)	9(45.0)	8(28.6)	20(71.4)
iii. boyfriend/girlfriend?	46 (33.3)	92 (66.7)	2(10.0)	18(90.0)*	7(30.4)	16(69.6)	11(57.9)	8(42.1)
p=0.008			11(55.0)	9(45.0)	18(90.0)	4(14.8)	4(14.8)	23(85.2)
			9(40.9)	13(59.1)	11(37.9)	9(45.0)	11(37.9)	18(62.1)
							9(45.0)	11(55.0)

Table 2i. Response to questions related to attitude by gender and behaviour group

Question	Total		Male		Female	
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)
	Behaviour Group		Yes N(%)	No N(%)	Yes N(%)	No N(%)
10. Whom do you know says sex before marriage is wrong?						
i. Parents? p=0.02	118 (83.7)	23 (16.3)	19(95.0) 16(80.0) 13(59.1)	1(5.0)* 4(20.0) 9(40.9)	26(92.9) 25(83.3) 19(90.5)	2(7.1) 5(16.7) 2(9.5)
ii. Relatives?	108 (78.3)	30 (21.7)	18(90.0) 14(70.0) 14(16.7)	2(10.0) 6(30.0) 7(33.3)	26(92.9) 20(69.0) 16(80.0)	2(7.1) 9(31.0) 4(20.0)
iii. Friends?	95 (67.9)	45 (32.1)	11(55.0) 13(61.9) 10(47.6)	9(45.0) 8(38.1) 11(52.4)	25(89.3) 21(72.4) 15(71.4)	3(10.7) 8(27.6) 6(28.6)
iv. Teacher?	117 (83.6)	23 (16.4)	19(95.0) 17(85.0) 13(61.9)	1(5.0) 3(15.0) 8(38.1)	26(92.9) 23(76.7) 19(90.5)	2(7.1) 7(23.3) 2(9.5)
v. Religious teacher?	119 (85.6)	20 (14.4)	19(95.0) 18(85.7) 15(71.4)	1(5.0) 3(14.3) 6(28.6)	26(92.9) 23(79.3) 18(90.0)	2(7.1) 6(20.7) 2(10.0)
vi. Counselors?	113 (82.5)	24 (17.5)	18(90.0) 16(80.0) 13(61.9)	2(10.0) 4(20.0) 8(38.1)	26(92.9) 23(82.1) 17(85.0)	2(7.1) 5(17.9) 3(15.0)

Question	Total		Male		Female	
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)
v. Movie/media?	72 (55.0)	59 (45.0)	10(50.0)	10(50.0)	16(64.0)	9(36.0)
			11(55.0)	9(45.0)	18(62.1)	11(37.9)
			8(38.1)	13(61.9)	9(56.3)	7(43.8)
vi. boyfriend/ girlfriend?	77 (56.2)	60 (43.8)	16(80.0)	4(20.0)	20(74.1)	7(25.9)
			11(52.4)	10(47.6)	13(44.8)	16(55.2)
			8(38.1)	13(61.9)	9(47.4)	10(52.6)

talking with the opposite gender may end in sex in contrast to weak (13.6%) and good (0%) students ($p=0.02$). No significant difference among behaviour groups was observed among female students.

Do You Think Hugging and Kissing with the Opposite Gender Will End in Sex?

Students were divided in their response to this question with 51% agreeing that hugging and kissing with the opposite gender will end in sex. There was no significant difference between the behaviour groups.

Do You Think Sex Before Marriage is 'Cool'?

The majority (80.0%) did not think sex before marriage was 'cool'. No significant difference was observed between the behaviour groups. However, the percentage of male students who said 'yes' was higher in the weak (50%) and at-risk (40.9%) groups compared to the good (21.0%) group.

Would You Try Sex if You Were Asked?

The majority (79.3%) would not try sex if they were asked. No significant difference was observed between the behaviour groups but the percentages of male students in the weak (45.5%) and at-risk (52.4%) groups were higher than in the good (30.0%) group.

The following is the analysis on the options given by students who responded 'yes' to the question "Will you try sex if you were asked?" Female students were not analysed further for behaviour groups because of the low number of respondents.

The majority would try sex out of curiosity (85.2%), because they think they will like it (80.8%), because everyone else is doing it (61.5%), for fun or out of boredom (57.7%) and there was nobody to stop them (50%). For all the above, the responses were higher among male students from the weak and at-risk groups. The majority would also try sex to avoid hurting the feelings of their partners (69.2%). The percentage of response was significantly higher among the weak and at-risk students ($p=0.02$). We also observed that the majority found it difficult to say 'no' to sex (61.5%). This response was higher among male students from the at risk group. The majority, however, did not think they were bad for wanting to try sex (62.1%) nor was it to relieve stress (51.7%). The response was different when compared between behaviour groups as the majority of at-risk students thought they were bad for wanting to try sex and the majority of weak students would try sex to relieve stress.

The following is the analysis on the options given by students who responded 'no' to the question "Will you try sex if you were asked?"

The majority will not try sex because it is against their religion (90.8%), it will make their parents angry (89.6%) and because they feel they will not be respected (89.4%). The percentage of responses was, however, significantly lower among the weak and at-risk students. The majority also will not try sex because they can get HIV/AIDS (92.6%) and it is against their values (90.6%). These responses were also lowest among at-risk students.

The majority of female students (93.1%) will not try sex because they think they can get pregnant. The percentages were not significantly different among the behaviour groups.

Whom Do You Know Says Sex Before Marriage Is Okay?

i. Friends?

The majority of students (61.6%) disagreed that friends say sex before marriage is okay. A decrease in percentage was observed from good to at risk in male students; however an increase in percentage was observed from good to at-risk group in female students.

ii. Movies/media?

Less than half the students (48.2%) think that movie/media states that sex before marriage is okay. There was no significant difference in response between the behaviour groups among male students. A significantly lower percentage of female weak students (28.6%) think that movie/media state that sex before marriage is okay in contrast to good (59.3%) and at-risk (57.9%) groups ($p=0.05$).

iii. Boyfriend/girlfriend?

Only 33% of students agreed that boyfriend/girlfriend says sex before marriage is okay. However, a significantly higher percentage of male students from the weak (55.0%) and at risk (40.9%) groups agreed boyfriend/girlfriend say sex before marriage is okay compared to the good (10.0%) group ($p=0.008$). A non-significant but similar trend was seen among female students.

Whom Do You Know Says Sex Before Marriage is Wrong?

The majority of students agreed that parents (83.7%), relatives (78.3%), friends (67.9%), teachers (83.6%), religious teachers (85.6%), counselors (82.5%), movie/media (55%) and boyfriend/girlfriend (56.2%) say sex before marriage is wrong. In most categories, there was no significant difference in response between the behaviour groups.

However, a significantly lower percentage of students from the at risk (59.1%) group thought parents say sex before marriage is wrong in contrast with the good (95.0%) and weak (80.0%) groups ($p=0.02$).

A lower percentage of male and female students from weak (52.4% and 44.8%, respectively) and at-risk (38.1% and 47.4%, respectively) groups acknowledged boyfriend/girlfriend say sex before marriage is wrong compared to the good (80.0% and 74.1%, respectively) group.

Practice of Respondents

Table 3a-3c show the distribution of responses to questions on practice by gender and behaviour group.

Do You Think of Sex?

More than half the number of students (54.4%) admitted they think of sex. There was no significant difference in response between the different behaviour groups.

Table 3a. Response to questions on practice, by gender and behaviour group

Question	Total			Male		Female	
	Yes N(%)	No N(%)	Behaviour Group	Yes N(%)	No N(%)	Yes N(%)	No N(%)
1 Do you think of sex?	81 (54.4)	68 (45.6)	Good Weak At risk	14(70.0) 20(90.9) 16(69.6)	6(30.0) 2(9.1) 7(30.4)	13(46.4) 8(25.0) 10(41.7)	15(53.6) 24(75.0) 14(58.3)
2 How comfortable are you talking about sex?	39 (34.2)	75 (65.8)	Good Weak At risk	4(26.7) 10 (58.8) 9(56.2)	11(73.3) 7(41.2) 7(43.8)	5(20.8) 6(21.4) 5(35.7)	19(79.2) 22(78.6) 9(64.3)
3 Do you think of chatting with the opposite gender?	117 (79.1)	31 (20.9)	Good Weak At risk	18(90.0) 19(86.4) 19(82.6)	2(10.0) 3(13.6) 4(17.4)	21(75.0) 20(64.5) 20(83.3)	7(25.0) 11(35.5) 4(16.7)
4 Do you think of hugging and kissing with the opposite gender? * p=0.009 #p=0.04	51 (34.2)	98 (65.8)	Good	6(30.0)	14(70.0)*	1(3.6)	27(96.4)#
5 Do you find her attractive? (Picture of girl-properly attired.) *p=0.000	25 (16.9)	123 (83.1)	Good Weak At risk	2(10.0)	18(90.0)*	5(17.9)	23(82.1)
			Weak At risk	17(77.3) 14(60.9)	5(22.7) 9(39.1)	6(18.8) 7(29.2)	26(81.3) 17(70.8)
			Good	1(4.5) 11(50.0)	21(95.5) 11(50.0)	3(9.4) 3(12.5)	29(90.6) 21(87.5)

Question	Total			Male		Female	
	Yes	No	Behaviour Group	Yes	No	Yes	No
	N(%)	N(%)		N(%)	N(%)	N(%)	N(%)
6 Did you respond differently to this picture? (picture of girl with low neckline/man with bare chest)	77 (52.0)	71 (48.0)	Good Weak At risk	17(85.0) 13(59.1) 18(81.8)	3(15.0) 9(40.9) 4(18.2)	10(37.7) 8(25.0) 11(45.8)	18(64.3) 24(75.0) 13(54.2)
7 Are you most likely to lie about this?	30 (20.4)	117 (79.6)	Good Weak At risk	4(21.1) 4(18.2) 5(22.7)	15(78.9) 18(81.8) 17(77.3)	6(21.4) 8(25.0) 3(12.5)	22(78.6) 24(75.0) 87.5)
8 Do you watch any form of pornography?	74 (50.7)	72 (49.3)	Good Weak At risk	15(75.0) 16(72.7) 17(73.9)	5(25.0) 6(27.3) 6(26.1)	8(29.6) 7(21.9) 11(50.0)	19(70.4) 25(78.1) 11(50.0)

Table 3b. Response to questions on practice, by gender and behaviour group

Question	Total		Male		Female	
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)
	Behaviour Group		Behaviour Group		Behaviour Group	
1 Whom do you speak to regarding sex?						
a. Parents?	23 (16.7)	115 (83.3)	2(10.0)	18(90.0)	7(26.9)	19(73.1)
			1(4.8)	20(95.2)	6(21.4)	22(78.6)
			3(13.6)	19(86.4)	4(19.0)	17(81.0)
b. Relative?	32 (23.9)	102 (76.1)	4(20.0)	16(80.0)	4(16.0)	21(84.0)
			5(23.8)	16(76.2)	6(20.7)	23(79.3)
			7(35.0)	13(65.0)	6(31.6)	13(68.4)
c. Friends?	120 (83.3)	24 (16.7)	15(75.0)	5(25.0)	20(74.1)	7(25.9)
			22(100)	0(0.0)	24(75.0)	8(25.0)
			20(90.9)	2(9.1)	19(90.5)	2(9.5)
d. Teachers?	38 (27.9)	98 (72.1)	6(30.0)	14(70.0)	8(30.8)	18(69.2)
			9(42.9)	12(57.1)	8(25.8)	23(74.2)
			5(25.0)	15(75.0)	2(11.1)	16(88.9)
e. Religious teachers?	33 (24.4)	102 (75.6)	6(30.0)	14(70.0)	6(24.0)	19(76.0)
			6(28.6)	15(71.4)	8(27.6)	21(72.4)
			4(18.2)	18(81.1)	3(16.7)	15(83.3)
f. Counselors?	39 (28.7)	97 (71.3)	3(15.0)	17(85.0)	5(20.0)	20(80.0)
			7(33.3)	14(66.7)	10(33.3)	20(66.7)
			8(38.1)	13(61.9)	6(31.6)	13(68.4)

Table 3c. Response to questions on practice, by gender and behaviour group

Question	Total		Male		Female					
	Yes N(%)	No N(%)	Yes N(%)	No N(%)	Yes N(%)	No N(%)				
g. Doctors? *p=0.008	35 (26.1)	99 (73.9)	2(10.0)	18(90.0)*	3(12.0)	22(88.0)				
							9(42.9)	12(57.1)	9(30.0)	21(70.0)
							11(55.0)	9(45.0)	1(5.6)	17(94.4)
h. Nurse?	17 (13.1)	113 (86.9)	1(5.0)	19(95.0)	1(4.2)	23(92.6)				
							5(25.0)	15(75.0)	2(7.4)	25(92.6)
							7(33.3)	14(66.7)	1(5.6)	17(94.4)

How Comfortable are You Talking About Sex?

The majority of students (65.8%) did not feel comfortable talking about sex. There was no significant difference in response between the behaviour groups; however among male students a higher percentage was observed in the weak (58.8%) and at-risk (56.2%) group compared to the good (26.7%) group.

Do You Think of Chatting with the Opposite Gender?

The majority of students (79.1%) think of chatting with the opposite gender. There was no significant difference between the behaviour groups.

Do you think of hugging and kissing with the opposite gender?

The majority of students (65.8%) did not think of hugging and kissing with the opposite gender. However a significantly higher percentage of male students in the weak (77.3%) and at-risk (60.9%) groups think of the above compared to students of the good (30.0%) group ($p=0.009$). A significantly higher percentage was also observed in the weak (18.8%) and at-risk (29.2%) groups of female students compared to the good (3.6%) group ($p=0.04$).

Did You Find her Attractive? (Picture of Girl/Boy Properly Attired)

The majority of students (83.1%) did not find the person in the picture attractive. A significantly higher percentage of male students from the at-risk group (50.0%) found the girl in the picture attractive in contrast to the weak (4.5%) and good (10.0%) groups ($p=0.000$). There was no significant difference between the behaviour groups among female students.

Did You Respond Differently to this Picture? (Picture of Girl with Revealing Neckline/ Man with Bare Chest)

Student response was divided for this question with 52% saying 'yes'. There was no significant difference in response between the various behaviour group for both male and female students.

Are You Most Likely to Lie About This? (In Relation to the Previous Question)

Only a small percentage (20.4%) admitted they would lie with regard to the previous question. There was no difference in response between the behaviour groups.

Do You Watch Any form of Pornography?

More than half (50.7%) of the students admitted to watching pornography. There was no significant difference in response between the behaviour groups; however, a higher percentage was observed among female students from the at-risk (50.0%) group compared to good (29.6%) and weak (21.9%) groups.

Whom Do You Speak to Regarding Sex?

The majority of students did not speak to parents (83.3%), relatives (76.1%), teachers (72.1%), religious teachers (75.6%), counselors (71.3%), doctors (73.9%) or nurses (86.9%) regarding sex. In most instances, there was no significant difference in response between the behavior groups. However, a higher number of students in the weak and at-risk groups from both genders speak to counselors regarding sex compared to good students.

A significantly higher percentage of male students from the weak (42.9%) and at-risk (55.0%) groups speak to doctors regarding sex in contrast to the good (10.0%) group ($p=0.008$).

The majority of students (83.3%) talk to friends regarding sex. There was no significant difference in response between the behaviour groups; however, a higher percentage of male students in weak (100%) and at-risk (90.9%) groups speak to friends regarding sex compared to the good (75.0%) group.

DISCUSSION

The Annual Report from the AIDS/STD Division (2004)^[17] reported that HIV transmission in Malaysia is mainly by infection through sharing needles among injecting drug users (IDUs) (75.1%), followed by heterosexual (13.6%) and homo/bisexual route (1.3%). Data collected from 1,942 male drug addicts admitted into Drug Rehabilitation Centres in Peninsular Malaysia in 1998 revealed that while 77% of these drug users had never married, 64% were (ever) sexually active.^[18] This makes it imperative to note that such transmission is often accompanied by sexual transmission and that to focus only on injecting drug use is likely to lead to an ineffective country response.^[19] This is a clear example that shows how interpretation of data becomes misleading when sex remains a taboo subject.

The focus group environment provided a better means to conduct surveys on schoolchildren regarding private matters such as sex since it was more conducive to communicate a complex subject that was not much discussed in the open. Graphical presentation was also able to aid the process. Privacy could be maintained by answering into a printed questionnaire.

The majority of students in our study did not think sex should be discussed in depth. Nonetheless, more than half (50.7%) of the students admitted to watching pornography. The implication of these two statements illustrates the importance of sex education to give factual information about sexuality and to counteract the messages about sexuality presented in pornography.^[20] This study found a significantly higher percentage of at-risk students thought sex should be discussed in depth revealing a subgroup of students who are ready to discuss sex. Students are signaling they want to talk about homosexual relationships and aspects of love and desire^[21] which may also be the intent of our schoolchildren.

We found students do not speak to parents, teachers, religious teachers, counselors, relatives, doctors or nurses regarding sex. However, the majority speak to friends regarding sex. In this study, male students who had behavioral problems did not prefer to speak to friends regarding sex. It is currently their practice and also their preference to speak to doctors if given a choice. A study showed both students and teachers felt the use of

outside speakers were an effective way of teaching sex and relationship education - not only because they were experts in the field, but also due to the degree of 'relational distance'.^[21] Currently, to educate youth, peer-led intervention programmes have been put in practice as it was presumed to have an advantage over traditional adult health educators in that they may be a more credible source of information in sharing key characteristics in behaviour, experience, status or cultural background. Peers are able to reinforce learning through ongoing contact; and that they may be particularly helpful in reaching 'at risk' young people. A systematic review of current reports on peer-delivered health promotion, however, found its effectiveness to be inconclusive. Nevertheless, it would be premature to roll out peer-delivered health promotion as routine practice.^[22]

Of the Malaysian adolescence who had experienced dating (n = 521), 20% have experienced sexual intercourse, 44% have kissed and necked, and 35% have experienced petting while 24% have had no physical intimacies.^[23] In this study, the majority of students think of chatting with the opposite gender; however a significantly higher percentage of students from weak and at risk groups (of both genders) also think of hugging and kissing with the opposite gender. A similar percentage of students in all groups think that hugging and kissing with the opposite gender will end in sex but a significantly higher percentage of males from the at-risk group think that even talking with the opposite gender will end in sex. Thus, different attitudes were observed and the more susceptible attitude of students from the weak and at-risk groups suggests that this should be addressed in intervention programmes.

A higher percentage of male students from the weak and at risk groups would try sex if asked in contrast to students from the good group and unsurprisingly a higher percent think sex before marriage is 'cool'. This result also emphasises the importance that sex education be conducted at the lower secondary school years since successful abstinence is best maintained among those who are not already sexually experienced.^[24]

According to the students, friends, movies and boyfriends/girlfriends say sex before marriage is okay. Parents, relatives, teachers, religious teachers, counselors and even friends on the other hand, say sex before marriage is wrong. When two "socially accepted" standards conflict, a person learns to make judgments based on an individualised sense of conscience. It is important, where this issue is concerned, that the adolescent's sense of conscience be well grounded in the right moral background. Morality is defined as conformity to shared standards, rights and duties. In the majority of people, developing a well-defined sense of morality is a major accomplishment of late adolescence and adulthood.^[25]

Our study showed that for a significantly higher percentage of male students from the at-risk group, parents do not say sex before marriage is wrong. Furthermore, a significantly higher percent from this group (and the weak group) also have friends who said sex before marriage is okay. These findings illustrate the concept that in the development of moral values, many factors influence outcome, some of which are parenting and peer pressure.^[26] The lack of a right balance may result in an undesired outcomes in the vulnerable.

The majority of female students from all behaviour groups and male students from the good group chose not to try sex because 'My parents will be angry', 'It is against my religion', 'It is against my values' and 'I will not be respected'. However, the same was not

observed among male students from the weak and at-risk groups as significantly lower percentages were found to have responded similarly to these ethical principles. Recognising this group of students and identifying the correct intervention programmes are crucial in ensuring successful prevention of risky behaviour.

As part of normal development, the adolescent stage is also a time of experimentation.^[27] Thus, it is not surprising to find that the main reason students will try sex is out of curiosity. During this stage “they tend to see themselves as invulnerable, yet they are particularly vulnerable at the stage of seeking a sexual partner”.^[27]

Sex can also be a form of risk taking behaviour in adolescents. This study found the majority of students in the weak and at-risk groups would try sex for fun/out of boredom. The reasons are varied and relate to counterphobic dynamics, fear of inadequacy, need to affirm sexual identity and group dynamics, that is, peer pressure. It can also reflect adolescents’ omnipotent fantasies in which they view themselves as invulnerable to harm or injury.^[28] Similar risk-taking behaviour can be explained for drug experimenting, Mat Rempits etc.

Some adolescents in risky group ‘act out sexually other serious psychological problems’.^[29] Friedman and Philips^[30] described how some of these adolescents use sexual behaviour for non-sexual reasons: ‘The adolescent may perceive sexual intercourse as enhancing his or her acceptance by peers, thus allowing for greater independence from adults and their values. Such “independence” may be far broader than issues related to sexuality and be more associated with feelings of parental rejection, poor self concept, past experiences with social or academic failures, and isolation from peers. The result from this study corroborates these findings as it was shown the majority of (male) students in the weak and at-risk group will try sex because they think they were bad.

Our results showed that a higher percentage of students from the weak and at risk groups will try sex because everyone else is doing it and did not want to hurt their partner by saying ‘no’. The adolescent equates sexual activity with more general acceptance and often ‘love’ which unfortunately is frequently an unwarranted assumption. Thus, in the quest for acceptance, the teenager may enter into what is ultimately self-destructive promiscuous sexual behaviour, or she may ‘buy’ affection with sex.^[30] For adolescents, it is important to view themselves through the eyes of their peers, and any deviation in appearance, dress code, or behaviour can result in diminished self-esteem. This is where depending on their cognitive development and environment, sexual and moral attitudes and beliefs and subsequently behaviour can be skewed to what we consider as abnormal but they consider acceptable in order to maintain self-esteem and self-worth.^[19] The strong influence that peers have on adolescence is very certain. Unfortunately, peer pressure both positive and negative behaviour make it imperative that a clear line be drawn between what friends should and should not influence.

Biological make up may affect an individual’s behaviour. The level of testosterone in the body affects sexual desire and a threshold exists that controls sexual parameters and sexual arousal.^[31] In other words, the lower the threshold of sexual arousal, the easier it is to be turned on. The second most reason quoted why students will try sex is “I think I will like it”. While all groups responded equally to a picture of a girl with a revealing neckline,

however, a significantly higher percentage of males from the at-risk group were attracted to a female figure that is properly attired. A higher percentage of male students from the at risk group said they found it difficult to say 'no'.

The relation between testosterone levels and aggressive behaviour is well established. According to a study, sex differences in aggression have a pre-pubertal origin and are maintained during adolescence.^[32] Accordingly, an urban sample of 4,052 adolescents and young adults of both genders, between 16 and 26 years old, showed the percentage of male aggressors was significantly higher than that of the females (35.7% vs. 14.9%) and the percentage of victimisation was higher for the women (25.1% vs.21.7%).^[33] Victimisation and perpetration of intimate partner violence in the last year are positively associated with aggressive behaviour in middle school. Perpetration is associated with early sexual initiation.^[34] This again stresses the importance that adolescence be educated on sex and its possible association with violence. It would also be interesting to determine if there was another meaning when male students in the weak and at-risk group selected the option they will try sex because they think they were bad.

Thus, we found students identified as at risk and in many instances weak students showed differences in sexual attitude and practice compared to the good groups. The lack luster performance of male students in contrast to their female counterparts is already common knowledge and cause for concern. The psychology of this group of students should be analysed deeper as they may have different needs or lack means to gain access to satisfy their needs compared to others. Furthermore, they may be involved in alternative activities including risky behaviours to achieve acceptance. In many instances, this group of men may be able to 'catch up' later as women take a back seat to care for family and children. However, the effect of the early years on male students must not be sidelined as it may have an impact on future relationships in tolerance, respect and honour between the genders.

The rapid social, physical and mental development that occurs during adolescence are important as many of the health behaviours which become manifest in adulthood, such as smoking have their origins in these younger years.^[35] Therefore, this is the best time to influence behaviour while it is being formed. However, information alone does not decrease risk as found in a study where high levels of knowledge of HIV and AIDS do not correlate with decreased high-risk behaviours.^[21]

While the important goal is to counter these peer and personal driven desires with the right knowledge, skills and values, the challenge will be to deliver it in a convincing manner as possible in the hope of tipping the scale away from them wanting to try and give in to sex.

CONCLUSION

This research has provided us with some insight into the attitude and practice of a cross-section of our local secondary schoolchildren toward sex. We found differences in responses when students were divided into groups based on academic performance and involvement in risky behaviours. These results may need to be considered in behavioural intervention

programmes for secondary students against HIV/AIDS. These results may also be important to guide us in making education policies and be relevant to research and academic purposes.

The results are preliminary. The study may be limited due to the small number of subjects that can be included in this kind of study. Since perception and attitude questions made up a large part of the questionnaire, information bias may have affected true answers. The fact that students were uncomfortable talking about sex may also have caused an underestimation in responses. A questionnaire will need to be designed and sent to a larger number of schoolchildren for validation.

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