Pre-marital sex and its predicting factors among Malaysian youths

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Abstract

Introduction: This study aimed to examine the prevalence of pre-marital sex and its predicting factors among youth trainees undergoing a national skill training programme in the state of Malaysia.
Methods: Participants filled up health screening surveys at the beginning of their training period. A total of 1328 out of 1377 trainees were included in the study. Logistic regression was done to determine the potential predicting factors of pre-marital sex among the trainees.
Results: Most trainees were 18 years old (97.1%) and 56% were female and 44% were male. The prevalence of pre-marital sex among trainees of these youths was 4.6%. A total of 6.2% of the female trainees as compared to 2.6% of their male counterpart had had pre-marital sex. Analysis using multiple logistic regression revealed only six significant predictor variables which were religion, race, lover, reading or watching porn, masturbation and bullying.
Conclusion: The prevalence of pre-marital sex amongst Malaysian youths is low as compared to those in developed countries. However, as pre-marital sex and pregnancy outside wedlock are largely socially unacceptable in Malaysia and may be kept hidden from others, the complications and social problems that may follow from this behaviour should be taken into consideration. Measures such as sex education and awareness programmes are needed among youth to curb this phenomenon from becoming a social as well as a public health concern.
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1. Introduction

Adolescent sexual health is considered as one important issue that has reached the level of concern (World Health Organizations, WHO). Youths engaging in sex before marriage may get exposed to social and health problems [1] such as teenage pregnancy and its myriads of complications. In Malaysia where teenage pregnancy is still considered socially unacceptable, cases remain hidden from society until these young girls faced health complications needing inevitable medical attention or authorities caught babies being dumped alive or dead as reported quite frequently in the media lately [2–4]. In fact, it was reported that in Negeri Sembilan there

were nine cases of baby dumping in 2009 [5]. According to the Malaysian Statistic Department [6], the percentages of babies that were born from year 1999 till 2006 by under-aged mother (below 17 years old) were 24.7 % to 28.6%.

Human Immunodeficiency Virus (HIV) infection or Acquired Immunodeficiency Syndrome (AIDS) [1] is another possible complication of sexual practices before marriage or having multiple sex partners. There is also risk of getting sexual infections or sexually transmitted diseases. In Malaysia, the prevalence for this Chlamydia disease for each 100,000 people amounted to 2761.5 which involved young women aged 15–19 years old compared to 1039.5 for women aged 25–29 years old [7]. For young women, they

are most likely to have higher risks for sexual infections because of their biological factors compared to matured women. This happened because the uterus or the cervix cells have not matured and lack of mucus makes the cells susceptible to germs such as Neisseria Gonorrhoeae and Chlamydia Trachomatis [8]. According to the research done by Warner et al. [9], consistent use of condom will be able to control one from being infected by Chlamydia and Gonorrhea.

Previous researches have shown that the percentage of girls having sexual intercourse before marriage was higher compared to boys [10,11]. It was also found that sexual practices among youth before marriage correlate with youths' negative adolescent behaviour such as smoking, drinking alcohol and drugs involvement [11,12]. Since the behaviour is a variable factor, this study was performed to identify the prevalence of pre-marital sex among youths undergoing a national skill training programme in Malaysia and also to evaluate the predicting factors of pre-marital sex among these youths.

2. Methodology

The Research Ethics Committee of National University of Malaysia approved the research. This cross-sectional study was conducted from January till February 2010 which involved health screening data taken from two Youth Training Institutions in Selangor State, Malaysia. Data related to youths' sociodemography, sexual practices and negatives behaviour were taken from trainees' screening health forms which were filled during their registration. A total of 1377 data were obtained and only 1328 of the data were analyzed. This was due to the incomplete data filled by 41 of the trainees and eight of them were married.

Race was categorized into six groups which are Malay, Chinese, Indian, Sabah Bumiputera, Sarawak Bumiputera and others. The religions are categorized as Muslim, Buddha, Hindu, Christian, No Religion and others. For the purpose of standardizing and analyzing, the category for Sarawak and Sabah Bumiputera was categorized under "Others" for race and "No Religion" as "Others" for the religion variable.

The permission to perform this study on the trainees screening data has been granted by the District Health Office which was responsible for the health care of two Youth Training Institutions. Statistical Package for Social Science (SPSS) version 12.0.1 software was used in analysing the data. Analyses using Simple Logistic Regression and Multiple Logistic Regression were done by using the "Enter" method in order to determine factors that predict the trainees to have pre-marital sex.

3. Results

The mean age of the trainees was 17.88 years (SD = 0.619). There was no significant difference in age between

Table 1

Socio-demographic characteristics of the Youth Training Institution trainees.

	Number of Trainees (%) n = 1328	
Gender		
Female	744	(56.0)
Male	584	(44.0)
Race		
Malay	601	(45.3)
Chinese	323	(24.3)
Indian	114	(8.6)
Others	290	(21.8)
Religion		
Muslim	741	(55.8)
Buddhism	258	(19.4)
Hinduism	110	(8.3)
Christian	211	(15.9)
Others	8	(0.6)
Occupation		
Students	790	(59.5)
Working	155	(11.7)
Not working	383	(28.80)

gender of trainees, t(1326) = 1.745, p < 0.05. Table 1 shows the socio-demographic factors of the Youth Training Institution trainees. Most of them were girls (56.0%), Malay (45.3%), Muslim (55.8%) and still studying (59.5%). Only a few of the trainees have had sexual practices and negative behaviours which were not more than 28.0% (Table 2).

For sexual practices, 27.7% were in a relationship, 25.3% have read and watched pornographic materials and 12.9% masturbate. Some trainees were involved in negative behaviours such as smoking (24.8%), followed by 17.5%

Table 2

Youth Training Institution trainees distribution in relation to the sexual practices and negative behaviours.

Sexual Practices and Negative Behaviours	Number of Trainees (%) n = 1328			
	Yes		No	
Sexual Practices				
In a relationship	368	(27.7)	960	(72.3)
Watch and read pornographic material	336	(25.3)	992	(74.7)
Masturbation	171	(12.9)	1157	(87.1)
Had sexual intercourse	61	(4.6)	1267	(95.4)
Negative Behaviours				
Smoking	330	(24.8)	998	(75.2)
Drink alcoholic drinks	147	(11.1)	1181	(88.9)
Take drugs	9	(0.7)	1319	(99.3)
Bully	40	(3.0)	1288	(97.0)
Involve in fights	100	(7.5)	1228	(92.5)
Truancy	163	(12.3)	1165	(87.7)
Vandalism	40	(3.0)	1288	(97.0)
Riding motorcycle dangerously/ without license	232	(17.5)	1096	(82.5)
Not using safety helmet/safety belt	211	(15.9)	1117	(84.1)

riding motorcycle dangerously or without license and 12.3% playing truant. However, there were very few trainees involved in vandalism (3.0%) and taking drugs (0.7%).

As a result of the research, it was found that the prevalence of pre-marital sexual intercourse among Youth Training Institution trainees in the State of Selangor was 4.6%. Among female trainees, 6.2% of them had sex and only 2.6% of the male trainees had sex before marriage. Among trainees who had pre-marital sex, 34.4% admitted that they had exchanged partners and 11.5% of them had intercourse with the same sex. Besides, contraception usage while having sex was quite low and only 23.0% of the trainees that had sex admitted that they used contraceptives method or pregnancy prevention while doing it.

From Table 3, it shows that 25.0% of "other religions" trainees had pre-marital sexual intercourse, whereas 5.2% of the Christians had pre-marital sex followed by Muslims (4.9%), Buddhists (4.3%) and Hindus (0.9%). For those who were working, they have higher percentages (9.0%) of pre-marital sex compared to trainees who were still studying or unemployed.

Trainees who were in a relationship, who had sexual practices and who had negative behaviours were found to have higher percentage of having pre-marital sex compared to those who had not. Higher percentage can be seen among trainees that took drugs (44.4%), bullying (27.5%) and those who masturbate (16.4%). These are considered high compared to the percentages of trainees that never take drugs, bullying and masturbates but had sexual intercourse before marriage which were 4.3%, 3.9% and 2.8% respectively. The results of this study were further strengthened by the results that we obtained from the Simple Linear Regression (SLR). It was found that from 17 independent variables, 14 variables were significant except for age, race and religion. However, Multiple Logistic Regression (MLR) showed only six significant predictor variables of having pre-marital sex which were race, religion, have lover, have read or watched pornography, masturbate and bully (Table 4).

Analysis using the SLR showed that female trainees have 2.5 odds of performing pre-marital sex; while the result that we obtained using MLR showed that male trainees have 2.1 odds of having pre-marital sex compared to female trainees. However, the latter is not significant. The race and religion variables which are under the category of "others" have significant Wald value after being analyzed using MLR. "Other races" have 2.8 odds compares to Malay and "other religions" have 11.1 odds compared to Muslim to have pre-marital sex.

According to the result that we obtained, it was found that trainees who were in a relationship significantly have 5.1 odds to have pre-marital sex compared to those who were single. Reading, watching pornography and bullying behaviours have 4.1 and 6.1 odds in having pre-marital sexual intercourse compared to trainees that do nothing. Besides,

high Wald values which were 11.9 and 8.4 showed that these two variables play important roles in predicting trainees' pre-marital sex activities in MLR analysis.

Table 3
Youth Training Institution trainees distribution between pre-marital sex and socio-demographic factors and negative behaviours.

	Pre-Marital Sex			
	Yes (%) n = 61		No (%) n = 1267	
Gender				
Female	46	(6.2)	698	(93.8)
Male	15	(2.6)	569	(97.4)
Race				
Malay	27	(4.5)	574	(95.5)
Chinese	14	(4.3)	309	(95.7)
Indian	1	(0.9)	113	(99.1)
Others	19	(6.5)	271	(93.5)
Religion				
Muslim	36	(4.9)	705	(95.1)
Buddhism	11	(4.3)	247	(95.7)
Hinduism	1	(0.9)	109	(99.1)
Christian	11	(5.2)	200	(94.8)
Others	2	(25.0)	6	(75.0)
Occupation				
Students	25	(3.2)	765	(96.8)
Working	14	(9.0)	141	(91.0)
Not working	22	(5.7)	361	(94.3)
In a relationship				
Yes	44	(12.0)	324	(88.0)
No	17	(1.8)	943	(98.2)
Watched /Read Pornographic Material				
Yes	43	(12.8)	293	(87.2)
No	18	(1.8)	974	(98.2)
Masturbation				
Yes	28	(16.4)	143	(83.6)
No	33	(2.8)	1124	(97.2)
Smoking				
Yes	36	(10.9)	294	(89.1)
No	25	(2.5)	973	(97.5)
Drink alcoholic beverages				
Yes	17	(11.6)	130	(88.4)
No	44	(3.7)	1137	(96.3)
Take drugs				
Yes	4	(44.4)	5	(55.6)
No	57	(4.3)	1262	(95.7)
Bullying				
Yes	11	(27.5)	29	(72.5)
No	50	(3.9)	1238	(96.1)
Involve in fights				
Yes	15	(15.0)	85	(85.0)
No	46	(3.7)	1182	(96.3)
Truancy				
Yes	22	(13.5)	141	(86.5)
No	39	(3.4)	1126	(96.6)
Vandalism				
Yes	5	(12.5)	35	(87.5)
No	56	(4.4)	1232	(95.6)
Riding Motorcycle dangerously/without license				
Yes	24	(10.3)	208	(89.7)
No	37	(3.4)	1059	(96.6)
Not wearing safety helmet/safety belt				
Yes	23	(10.9)	188	(89.1)
No	38	(3.4)	1079	(96.6)

Table 4
Factors that relates to pre-marital sex among Youth Training Institution trainees.

Factor	SLR				MLR			
	Wald	p value	Crude Odds Ratio (Crude OR)	95% Confidence Interval (CI)	Wald	p value	Adjusted Odds Ratio (Adj. OR)	95% Confidence Interval (CI)
Age	3.6	0.059	1.4	(1.0; 1.9)	2.4	0.125	1.4	(1.0; 2.1)
Gender								
Male	10.3	0.001	0.4	(0.2; 0. 7)	2.9	0.091	2.1	(0.9; 5.2)
Female			1.0				1.0	
Race	7.6[a]	0.054						
Chinese	0.0	0.911	1.0	(0.5; 1.9)	2.1	0.152	3.6	(0.6; 21.4)
Indian	2.7	0.103	0.2	(0.0; 1.4)	0.0	0.941	1.2	(0.0; 146.0)
Others	1.7	0.196	1.5	(0.8; 2.7)	4.7	0.031	2.8	(1.1; 7.1)
Malay			1.0				1.0	
Religion	9.3[a]	0.055						
Buddha	0.2	0.698	0.9	(0.4; 1.7)	0.0	0.997	1.0	(0.2; 6.1)
Hindu	2.8	0.092	0.2	(0.0; 1.3)	0.2	0.650	0.3	(0.0; 40.9)
Christian	0.0	0.834	1.1	(0.5; 2.2)	1.0	0.323	0.6	(0.2; 1.8)
Others	5.1	0.025	6.5	(1.3; 33.5)	4.8	0.029	11.7	(1.3; 107.1)
Muslim			1.0				1.0	
Occupation	10.7[a]	0.005						
Working	10.3	0.001	3.0	(1.5; 6.0)	2.1	0.147	1.9	(0.8; 4.4)
Not working	4.3	0.037	1.9	(1.0; 3.4)	0.8	0.382	1.4	(0.7; 2.7)
Student			1.0				1.0	
Have lover								
Yes	54.7	<0.001	7.5	(4.2; 13.4)	22.9	<0.001	5.1	(2.6; 9.8)
No			1.0				1.0	
Watched/read pornographic material								
Yes	57.9	<0.001	7.9	(4.5; 14.0)	11.9	0.001	4.1	(1.8; 9.3)
No			1.0				1.0	
Masturbation								
Yes	42.7	<0.001	6.7	(3.9; 11.4)	7.0	0.008	2.7	(1.3; 5.6)
No			1.0				1.0	
Smoking								
Yes	33.8	<0.001	4.8	(2.8; 8.1)	1.8	0.184	1.6	(0.8; 3.4)
No			1.0				1.0	
Drink alcoholic beverages								
Yes	13.8	<0.001	3.4	(1.9; 6.1)	0.1	0.771	1.1	(0.5; 2.6)
No			1.0				1.0	
Take drugs								
Yes	13.0	<0.001	17.7	(4.6; 67.7)	3.1	0.080	4.8	(0.8; 27.4)
No			1.0				1.0	
Bullying								
Yes	25.0	<0.001	9.4	(4.4; 19.9)	8.4	0.004	6.1	(1.8; 20.6)
No			1.0				1.0	
Involve in fights								
Yes	18.0	<0.001	4.5	(2.4; 8.5)	0.3	0.569	0.8	(0.3; 2.0)
No			1.0				1.0	
Truancy								
Yes	24.3	<0.001	4.5	(2.6; 7.8)	0.2	0.643	1.2	(0.5; 2.8)
No			1.0				1.0	
Vandalism								
Yes	4.1	0.042	3.1	(1.2; 8.3)	1.2	0.276	0.5	(0.1; 1.8)
No			1.0				1.0	
Riding motorcycle dangerously/ without license								
Yes	17.2	<0.001	3.3	(1.9; 5.6)	1.4	0.236	1.6	(0.7; 3.6)
No								
Not wearing safety helmet/ safety belt								
Yes	18.0	<0.001	3.5	(2.0; 6.0)	1.8	0.182	1.7	(0.7; 3.6)
No			1.0				1.0	

[a] Likelihood ratio Test (LR).

Youth Training Institution trainees who were working and not working have 1.9 odds and 1.4 odds of having pre-marital sexual intercourse compared to trainees that were still studying. The results did not reach significant level in MLR analysis. Other variables such as smoking, drinking alcohol beverages, taking drugs, fighting, playing truant, vandalism, riding motorbike dangerously or without license and lastly not wearing safety helmet and belt have obtained the same results which were not significant predictor variable for pre-marital sex.

MLR analysis showed *Nagelkerke R Square* coefficient value as 0.342 which means that all six predicting factors (variable with p value < 0.05) explained 34.2% of the variance in the dependent variable. *Hosmer and Lemeshow* tests (Chi Square = 5.282, p value = 0.727) showed that the data that we obtained were matched with the logistic model. There was no multicollinearity among independent variable (Variance-inflation factor — the highest VIF is at 1.630, with standard error less than 1.0).

4. Discussion

The prevalence of pre-marital sex among Youth Training Institution trainees was low compared to youths at Negeri Sembilan, which was 5.4% [13] and it was still low if compared to other countries [11,12,14]. Through this study, the percentage of female trainees who had pre-marital sexual intercourse was higher than male trainees. This phenomenon was similar to a study done among youths in Seremban, Malaysia [13]. Even though the overall percentage was low compared to overseas studies, the average overseas studies showed that boys have more sexual experience than girls [11,15,16]. Although it was found that Asian adolescents have a conservative attitude towards pre-marital sexual practices, the percentage of them practicing sex before marriage was found to be higher among the female trainees in this study. This indicates that girls are now being more open minded in reporting their sexual practices than before. Going through globalization and modernization, youths now are more prone to adapt the western lifestyle which they tend to label as trendy, modern and developed. This shows their liberal acceptance and attitudes towards pre-marital sex behaviour [17]. This scenario is followed by the societies' tolerance in accepting pre-marital sexual practices and cohabitation as a norm of a developing country as is the case in developed countries. Study showed that majority of the respondents had sex with their lover or their friends [11,18] instead of doing it with prostitutes. This might be because of their knowledge on the high risks of HIV and AIDS infection if they have sex with prostitutes [11,19]. Therefore this leads to the increase of young girls who are in a relationship to be involved in this kind of sexual practices. Nowadays, to

have and to keep their virginity until they are married may not be an important value to them.

In Malaysia, to have pre-marital sex is a taboo since it is conflicting with local culture. Most religions especially Muslim prohibit it followers to do the activities that can lead to adultery, let alone by committing it [20]. Therefore, religion is found as one of the predictor factor to sexual practices before marriage among Youth Training Institution trainees [10,16,21]. However, the information on trainees' religion belief is not enough because the questionnaire does not assess the extent of trainees' interests in religion and their adherence in practicing the religion. This is because the conservative attitude towards sex is closely related to their belief and devotion to religion, especially for Asian women [17].

Other than that, the occupational status of the trainees also plays some role in this issue because most young people that have no income or low education tend to be sexually active [15]. This happen because for those who have jobs, they have more time especially during their off days to mingle around. Lack of attention from parents for this group might lead to the reason why they are involved in sex before marriage since they are no longer living with their parents.

According to Langille [22], there were three factors that influenced young people to practice sex (individual, family and other factors). Individual factor includes the attitudes, future plans and also drug abuse. Referring to the previous researches [11,13,19,23], it was found that there are significant relationships between individual factor such as smoking, taking drugs, drinking alcoholic beverages, riding motorbike dangerously, truancy, fighting and vandalism with having pre-marital sexual intercourse. There are also correlations of pre-marital sex with reading or watching pornography and masturbation. Furthermore, researches done before showed that masturbation act is related to having many sexual partners, being unsatisfied or lack of their sex life. This act also related with the alcohol intake and the access to pornographic material [24] just to increase lust and achieve orgasm.

Bullying was also considered as one of the predicting factors for pre-marital sex among the trainees. This might actually be related to other factors that are not studied here such as the relationship with parents because the bullies were usually found to have relationship problems with their parents and other family members [25]. Bullies also tend to have a lower learning performance in school compared to those that are not being bullied [26]. Those with lower academic performance have higher tendency to drop school, lack of participation in school activities, not ambitious or have low self-esteem which leads to pre-marital sexual activities and teen pregnancy [27,28]. This bullying attitude may cause the male trainees to force their partner to have sex. Research that was done in Turkey [29] presented that bullies does not only bully verbally and physically, but also sexually and the victims were usually fellow students.

From this study, it is observed that trainees under the category of "other races", "other religions", have partners, had access to pornographic materials, masturbating and bullying, were noted to have high possibilities of practicing sex before marriage. There are also other factors that are not being looked into in this research such as family factors, household integrity, the presence of parents to observe their children activities [12,13,30] as well as influence of brothers and sisters [31,32]. Besides, other factors such as friends' influence [12], trainees' educational level and socio-economy [19,27,28], sex educations in school, health services and also the influence of the authorities should also be studied as these factors affect greatly the sexual activities among youths. Apart from the lack of factors researched in this study, one of the questionnaires used to gather the data was not constructed in optimal format. The questionnaire SKR-1 NS (Male) and SKR-2 NS (Female) only requested a respondent to mark in a single check box to indicate they are in agreement with the statement which reflects their condition or practice or leave it blank to indicate vice versa, thus providing respondent with an opportunity to just leave the space blank without having to select 'Yes' or 'No' even though the question may be of relevance to their practice. This may have contributed to the low number of prevalence of sexual practices, including premarital sex and other negative behaviours.

5. Conclusion

From this study, it was found that the prevalence of premarital sex among Youth Training Institution trainees was still low compared to the neighbouring countries and developed countries. However, this issue needs to be emphasized considering the high percentages of pre-marital sex among female trainees compared to male trainees. The risk of pregnancy and infectious diseases which in turn lead to complications and social problems should be taken into consideration. Since most of the trainees are aged around 18 and 19 years old and they are school leavers, control over access to pornographic materials has to be tightened. Responsible parties must always monitor the pornographic material sales and business dealers should have the sense of responsibility in preventing social issues by not selling the materials to the teenagers. For pornographic materials from the internet, parents and internet cafe owners must take precautions in preventing teenagers from accessing websites that may affect their moral values. Not to forget that sexual educations that teach about healthy sex and the boundaries of youth social interactions can be done with or without formalities by parents, teachers and local religious leaders. This is to handle all the issues that are related to masturbation, bullying and overly intimate relationships between lovers. Therefore, the effectiveness of the prevention action needs all the support especially from parents, family, the societies, non-government organizations and the government. Although this study indirectly reflects the

practices of trainees before they joined the training institutions, the Youth Training Institution can educate them with good knowledge and awareness through formal sexual educations for future use.

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