

NEEDS ASSESSMENT ON SEXUALITY AND REPRODUCTIVE HEALTH EDUCATION OF SECONDARY SCHOOL STUDENTS IN YALA PROVINCE, THAILAND

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ABSTRACT: Sexuality and reproductive health are important knowledge providing in adolescents to develop their life skills. Yala province in the southernmost of Thailand where there are many problems on learning system because of the Southern political unrest. This cross-sectional study aimed to determine socio-demographics, risk behaviors acceptance, attitudes toward premarital sex, and felt needs on sexuality and reproductive health education in 393 secondary school students in Yala province. A self-administered questionnaires was distributed to all participating students. Chi-square and Fisher's exact were used to analyze data. Participants were predominately female (60.8%), with average age 17.3 years old. About 65% of them were Buddhists and mostly studied in Grade 12 (36.6%). Most students stayed in their home as a current residence (74.6%) and mostly with their father/mother (69.2%). Students were more likely to have discussed about sexual and reproductive health with their friends (81.9%). They accepted risk behaviors in moderate level (64.1%). Most students had attitudes toward premarital sex in neutral level (71.2%). Age, risk behaviors acceptance and attitudes toward premarital sex were significantly associated with their felt needs on reproductive health education (p -value < 0.05). Age, religion and risk behaviors acceptance were significantly associated with their felt needs on sexuality health education (p -value < 0.05). Learning programs should be considered to provide students with awareness of risk and negative health outcomes. A qualitative study should be implemented in further research.

Keywords: Needs assessment, Sexuality health, Reproductive health, Adolescent health, Met need, Felt needs

INTRODUCTION

In 2010, more than 2000 illegally aborted fetuses were found at Phai Ngern temple in Bangkok [1]. It has estimated that around 150,000 to 200,000 women across the country are going to private clinics for illegal abortions in every year [2]. In Thailand, the maintenance of reproductive health is a problem [3]. In addition, it appeared that parents were failing to discuss about sexuality with their child [4]. Sexual and reproductive health requires knowledge of normal physiology and

development as well as communication skills [5].

Yala province is in the Southern of Thailand with majority of Muslim populations (75.5%) [6]. There was a study of sexual behaviors of vocational students in Yala municipality showing that about 26.2% of them had premarital sexual intercourse [7]. Education is a vital prerequisite for protecting children from sexual exploitation [8]. Appropriate and well managed reproductive health education programs may make adolescents to appreciate healthy behaviors [9]. However, the violent situations in Yala province such as killing and intimidating teachers and burning schools have mostly affected to all students. Between January

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Table 1 Frequency and percentage of adolescents' socio-demographic characteristics (n=393)

Socio- demographic characteristic	Frequency	%
Gender		
Male	154	39.2
Female	239	60.8
Age		
15 years	6	1.5
16 years	92	23.4
17 years	105	26.7
18 years	162	41.3
19 years	28	7.1
Mean 17.3, S.D. 0.95, Range 15 – 19		
Religion		
Buddhism	254	64.6
Islam	117	29.8
Christianity	22	5.6
School level		
Grade 10	136	34.6
Grade 11	113	28.8
Grade 12	144	36.6

2004 and June 2011, at least 30 school students were killed and 92 injured due to violence. Furthermore, 140 teachers have been killed between December 2008 and June 2011, causing many schools shut down. These situations undermined the secular educational system [6]. Needs assessment of adolescents is crucial in improving adolescents' appropriate knowledge and skills to enable them to develop health and prevent health problems, and to increase access to health services to support their needs [10]. This cross-sectional study aims to study socio-demographic, risk behaviors acceptance, attitudes toward premarital sex, current met need and felt needs on sexuality and reproductive health education of secondary school adolescents in Yala province which most populations are Muslim that information on human sexuality and reproductive health is culturally-sensitive according to Islamic doctrines.

MATERIALS AND METHODS

A cross-sectional study was used to determine the felt needs on sexuality and reproductive health education among Grade 10 – 12 students in Yala province. A purposive sampling was used to select Yala provincial school - the largest number of students coming from all districts of Yala province. Total 1,113 students from the provincial school were invited to participate in this study. A sampling was stratified by Grade and sample estimation was calculated by the formula of Taro Yamane. Then, a random sampling by drawing lots by class of each Grade was made to get the sample size of 393 students.

A self-reported questionnaire was adapted by the researcher from the Illustrative questionnaire for interview surveys with young people [11], Johns Hopkins Bloomberg School of Public Health Center for Communication Programs [12], and from the questionnaire on priorities in reproductive health [13]. The questionnaires consisted of socio-demographic characteristics, risk behavior acceptance, attitudes toward premarital sex and their needs on sexuality and reproductive health education. For the content validity, four experts evaluate by the item objective congruence (IOC), giving a rating of 1 (for clearly measuring), -1 (clearly not measuring), or 0 (uncertain measuring). The content validity by IOC was 1 of each item. A pilot study was conducted in 30 students from another school in Yala municipality to test reliability of risk behaviors acceptance and attitudes toward premarital sex, the summary index of each item was ranging from 1 to 5. The α coefficient was 0.86 and 0.77 consecutively. The final version of questionnaires was modified according to the results of the above tests.

Ethical consent was received from the Ethical Review Committee For Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University. Students were informed about the research and could ask any question until they are no doubt about the study. Then they signed in the informed consents form before answering the questionnaires. All completed questionnaires were placed in sealed envelope and directly placed in a box to assure anonymity of their responses. This study waived the assent of their parents in order to make students feel free to answer.

Table 2 Percentage, mean, and standard deviation of students' acceptance on risk behaviors (n = 393; male = 154, female = 239)

Behaviors	%			Mean	S.D.
	Accepted	Neutral	Unaccepted		
Boy are going out for party, night club or pub					
Male	35.7	55.2	9.1	2.27	0.62
Female	40.6	42.2	17.2	2.23	0.72
Girl are going out for party, night club or pub					
Male	24.7	60.4	14.9	2.10	0.62
Female	18.0	55.6	26.4	1.92	0.66
Smoking in boy					
Male	18.8	56.5	24.7	1.94	0.66
Female	25.1	40.6	34.3	1.91	0.77
Smoking in girl					
Male	11.7	45.4	42.9	1.69	0.67
Female	7.5	42.7	49.8	1.58	0.63
Boy are drinking alcoholic beverage					
Male	24.0	61.7	14.3	2.10	0.61
Female	21.8	53.1	25.1	1.97	0.69
Girl are drinking alcoholic beverage					
Male	13.6	59.8	26.6	1.87	0.62
Female	14.2	52.3	33.5	1.81	0.66
Drug addiction in boy					
Male	5.2	39.0	55.8	1.49	0.60
Female	7.9	28.9	63.2	1.45	0.64
Drug addiction in girl					
Male	6.5	28.6	64.9	1.42	0.61
Female	5.0	25.5	69.5	1.36	0.58
Boy are watching erotic movies					
Male	11.0	73.4	15.6	1.95	0.52
Female	9.6	64.0	26.4	1.83	0.58
Girl are watching erotic movies					
Male	14.3	68.2	17.5	1.97	0.56
Female	7.1	65.3	27.6	1.79	0.55
Boy are having sexual intercourse experience					
Male	14.9	62.4	22.7	1.92	0.61
Female	7.9	60.3	31.8	1.76	0.58
Girl are having sexual intercourse experience					
Male	13.0	57.8	29.2	1.84	0.63
Female	5.9	59.0	35.1	1.71	0.57
Boy have more than one sexual partnerships in a year					
Male	9.7	57.2	33.1	1.77	0.61
Female	8.4	45.6	46.0	1.62	0.64
Girl have more than one sexual partnerships in a year					
Male	7.8	42.8	49.4	1.58	0.63
Female	8.8	32.2	59.0	1.50	0.65
Boy pay money or gifts in exchange for sexual intercourse					
Male	7.8	36.4	55.8	1.52	0.64
Female	6.7	33.0	60.3	1.46	0.62
Girl pay money or gifts in exchange for sexual intercourse					
Male	7.8	29.9	62.3	1.45	0.64
Female	5.0	31.4	63.6	1.41	0.59
Boy receive money or gifts in exchange for sexual intercourse					
Male	4.5	30.6	64.9	1.40	0.58
Female	7.9	29.3	62.8	1.45	0.64
Girl receive money or gifts in exchange for sexual intercourse					
Male	2.6	28.6	68.8	1.34	0.53
Female	3.8	29.9	65.3	1.38	0.56

Table 2 Percentage, mean, and standard deviation of students' acceptance on risk behaviors (n = 393; male = 154, female = 239) (Cont.)

Behaviors	%			Mean	S.D.
	Accepted	Neutral	Unaccepted		
Boy have one night stand experience					
Male	6.5	29.9	63.6	1.43	0.61
Female	5.9	29.2	64.9	1.41	0.60
Girl have one night stand experience					
Male	1.9	29.3	68.8	1.33	0.51
Female	1.3	28.0	70.7	1.31	0.49

Table 3 Attitudes toward premarital sex of students (n = 393; male = 154, female = 239)

Statement	%					Mean	S.D.
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
It is normal in boys to have premarital sex							
Male	15.6	33.8	25.3	20.8	4.5	3.35	1.11
Female	10.9	32.6	24.3	18.4	13.8	3.08	1.22
Girls should be virgins when they are married*							
Male	5.2	43.5	34.4	13.0	3.9	2.67	0.91
Female	14.6	30.5	34.9	10.0	10.0	2.70	1.14
It is nothing wrong with unmarried boys and girls having sexual intercourse							
Male	5.8	24.7	37.7	19.5	12.3	2.92	1.08
Female	5.0	22.2	33.0	19.7	20.1	2.72	1.16
One night stand is acceptable for adolescents							
Male	7.1	33.1	28.0	20.8	11.0	3.05	1.13
Female	6.3	21.3	32.7	16.7	23.0	2.71	1.21
It is normal in girls to have premarital sex							
Male	10.4	18.8	37.0	15.6	18.2	2.88	1.22
Female	3.3	17.2	34.8	21.3	23.4	2.56	1.12
Premarital sex may cause unwanted outcomes such as STIs/HIV, pregnancy*							
Male	11.0	34.4	27.3	20.8	6.5	2.77	1.10
Female	15.5	23.8	33.9	15.5	11.3	2.83	1.20
There is nothing wrong for students to pay money or gifts in exchange for sexual intercourse							
Male	10.4	24.0	33.1	18.2	14.3	2.98	1.19
Female	7.5	17.2	25.1	21.3	28.9	2.53	1.28
There is nothing wrong for students to receive money or gifts in exchange for sexual intercourse							
Male	6.5	21.4	40.9	18.2	13.0	2.90	1.08
Female	5.4	14.2	32.7	19.7	28.0	2.49	1.19
Boy and girl should have sex before they become engaged to see whether they are suited to each other							
Male	2.6	20.1	31.2	32.5	13.6	2.66	1.03
Female	5.9	13.8	33.4	24.3	22.6	2.56	1.15

* Negative statements toward premarital sex

Descriptive analysis, including frequency, percentage and standard deviation were used to analyze the data and the relationship between genders, age, religion, school level, risk behaviors acceptance, and attitudes toward premarital sex and students' felt needs on sexuality and reproductive health education were tested by Chi-square and Fisher's exact.

RESULTS

The participating students were predominately females (60.8%). A large proportion of students were 18 years old (41.3%), ranging from 15 to 19

years old and mean of age was 17.3 years old, Buddhist (64.6%) and studied in Grade 12 (36.6%) in Table 1.

Male students mostly accepted statements of risk behaviors in the topic "Boy is going out for party, night club or pub" (35.7%). Female students accepted statements of risk behaviors in the topic "Boy is going out for party, night club or pub" (40.6%). Most statements of risk behaviors in male were higher than in female students (Table 2).

Attitudes toward premarital sex

Attitudes toward premarital sex by self-evaluation found that male students had strongly

Table 4 Percentage, mean and standard deviation of adolescents' current met needs on sexuality and reproductive health education (n=393)

Sexuality and reproductive health education	%					Mean	S.D.
	Very strong	Strong	Moderate	Slight	Very slight		
Reproductive health education							
Reproductive anatomy							
Male	24.7	31.8	28.6	10.4	4.5	3.62	1.10
Female	22.6	28.0	35.6	10.9	2.9	3.56	1.05
STIs/HIV							
Male	13.0	26.0	40.3	16.2	4.5	3.27	1.03
Female	6.7	23.8	45.7	19.2	4.6	3.09	0.94
Abortion and its related complications							
Male	5.2	28.6	42.2	15.6	8.4	3.06	0.99
Female	5.4	23.4	37.8	28.0	5.4	2.95	0.98
Contraceptive							
Male	5.2	18.8	37.7	33.1	5.2	2.86	0.96
Female	3.8	23.8	47.3	22.6	2.5	3.04	0.95
Pregnancy							
Male	5.2	22.1	39.0	29.2	4.5	2.94	0.95
Female	4.6	21.8	44.3	23.0	6.3	2.95	0.94
Reproductive physiology							
Male	5.2	27.9	37.1	24.0	5.8	3.03	0.98
Female	7.1	18.8	39.8	30.1	4.2	2.95	0.97
Sexuality health education							
Gender							
Male	9.1	24.0	35.7	27.3	3.9	3.07	1.02
Female	7.1	23.0	36.4	28.5	5.0	2.99	1.00
Sexual orientation							
Male	4.5	23.4	39.6	27.3	5.2	2.95	0.95
Female	3.8	20.9	43.9	27.2	4.2	2.93	0.89
Sexual relationship							
Male	6.5	21.4	41.6	26.0	4.5	2.99	0.96
Female	3.3	20.1	40.6	33.5	2.5	2.88	0.87
Sexual arousal							
Male	9.1	12.3	49.4	26.6	2.6	2.99	0.93
Female	7.1	13.0	48.1	28.0	3.8	2.92	0.92
Sexual abuse							
Male	2.6	16.9	27.3	44.8	8.4	2.60	0.95
Female	5.4	10.5	34.8	41.4	7.9	2.64	0.96

positive agreement on the statement "It is normal in boys to have premarital sex" (15.6%). Female students had strongly positive agreement on the statement "Premarital sex may cause unwanted outcomes such as STIs/HIV, pregnancy" (15.5%). Most statements of attitudes toward premarital sex in male were higher than in female students (Table 3).

The current met needs learning on reproductive health education of adolescents by self evaluation. The results in male found that the current met needs that they strongly agree was "Reproductive anatomy" (24.7%) the mean was 3.62, followed by "STIs/HIV" (13.0%) the mean was 3.27, and "Abortion and its related complications" (5.2%) the mean was 3.06. The results in female found that the current met needs that they strongly agree was "Reproductive anatomy" (22.6%) the mean was 3.56, followed by "Reproductive physiology"

(7.1%) the mean was 2.95, and "STIs/HIV" (6.7%) the mean was 3.09, respectively.

For sexuality health education of male adolescents found that the current met needs that they strongly agree was "Gender" (9.1%) the mean was 3.07, followed by "Sexual arousal" (9.1%) the mean was 2.99, and "Sexual relationship" (6.5%) the mean was 2.99. The results in female found that the current met needs that they strongly agree was "Gender" (7.1%) the mean was 2.99, followed by "Sexual arousal" (7.1%) the mean was 2.9, and "Sexual abuse" (5.4%) the mean was 2.64, respectively (Table 4).

The relationship between factors and felt needs on reproductive and sexuality health education

Table 5 shows the statistical significance of the relationship between several factors and the felt

Table 5 Relationship between factors and needs on reproductive and sexuality health

Factors (n = 393)	Reproductive health (%)			<i>p-value</i>	Sexuality health (%)			<i>p-value</i>	
	Low	Moderate	High		Low	Moderate	High		
Gender									
Male	13.0	70.8	16.2	0.312*	22.1	64.9	13.0	0.983*	
Female	17.6	63.6	18.8		22.6	64.0	13.4		
Age									
15 years	0.0	50.0	50.0	0.034**	0.0	50.0	50.0	0.041**	
16 years	14.1	75.0	10.9		21.7	70.7	7.6		
17 years	19.0	61.9	19.0		26.7	57.1	16.2		
18 years	15.4	65.4	19.1		23.5	64.2	12.3		
19 years	14.3	64.3	21.4		7.1	75.0	17.9		
Religion									
Buddhism	14.6	68.1	17.3	0.612*	26.4	62.2	11.4	0.033*	
Islam	19.7	62.4	17.9		13.7	70.9	15.4		
Christianity	9.1	68.2	22.7		22.7	54.5	22.7		
School level									
Grade 10	15.4	72.1	12.5	0.365*	22.8	66.9	10.3	0.642*	
Grade 11	15.9	63.7	20.4		19.5	64.6	15.9		
Grade 12	16.0	63.2	20.8		24.3	61.8	13.9		
Risk behaviors acceptance (male = 154, female = 239)									
Male	Accepted	16.7	75.0	0.335**	38.9	52.8	8.3	0.021**	
	Neutral	13.3	67.6		19.0	19.0	65.7		15.2
	Negative	0.0	84.6		15.4	0.0	92.3		7.7
Female	Accepted	27.3	65.9	0.011*	50.0	47.7	2.3	0.001*	
	Neutral	19.0	61.2		19.7	19.0	66.7		14.3
	Unaccepted	4.2	68.8		27.1	8.3	70.8		20.8
Attitudes toward premarital sex (male = 154, female = 239)									
Male	Positive	9.1	81.8	0.442*	27.3	63.6	9.1	0.672*	
	Neutral	15.2	68.8		16.1	23.2	63.4		13.4
	Negative	5.0	70.0		25.0	10.0	75.0		15.0
Female	Positive	28.6	52.4	0.035*	33.3	52.4	14.3	0.093*	
	Neutral	16.1	69.0		14.9	24.4	64.9		10.7
	Unaccepted	18.0	50.0		32.0	12.0	66.0		22.0

* Chi-square was used to test for the relationship and ** Fisher's exact was used

needs on reproductive health education and sexuality health education.

The relationship found the statistically significant among age and religion and felt needs on sexuality health education (*p-value* < 0.05). 50.0% of 15 years old students desired the felt needs on sexuality health education in high level and 17.9% of those the eldest group. Christian students had the most felt needs on sexuality health education in high level (22.7%) on sexuality health education, followed by Muslim students (15.4%) and the last group was Buddhist students (11.4%).

Risk behaviors acceptance of female students and felt needs on reproductive and sexuality health education were statistically significant but in male students was statistically significant to the felt needs only on sexuality health education (*p-value* < 0.05). Female students in the group of unaccepted on risk behaviors had the most felt needs on reproductive health education, and the last one that had the least felt needs was the group of accepted

on risk behaviors. Both male and female students showed that the most accepted of risk behaviors, the least felt needs on sexuality health education in adolescents.

The relationship between attitudes toward premarital sex in female and felt needs on reproductive and sexual health education were statistically significant (*p-value* < 0.05). Female students in the group of negative to premarital sex had the highest felt needs on reproductive and sexuality health education.

DISCUSSION

The study showed that most students discussed sexual and reproductive health with their friends and lover. This result indicated that friends were the first priority for those students to consult with. Similarly a study by Creel and Perry found that young people in USA learn about sex from their friends (57.8%) and discuss with their lover (38.7%). This finding was comparable that parents

were failing to discuss sex with their child [4].

Male students accepted boys who are going out for party, night club or pub, drinking alcoholic beverage and smoking. This finding of their acceptance could be interpreted as a potential for taking risk behaviors. The acceptance of drinking alcoholic beverage and smoking were similar to a study in Iran found that the use of cigarettes, and alcohol were associated with permissive attitudes [14]. A study of reproductive knowledge, attitudes and behavior among adolescent males in Tehran, Iran found that sexual experience was associated with alcohol consumption as the strongest predictors of sexual experience [14]. This study found that both male and female students accepted for risk behaviors of drug addiction in boys and girls in moderate level. An interesting results was that risk sexual behaviors acceptance in female students was higher than in male students regarding both boy and girl who receive money or gifts in exchange for sexual intercourse. The regulation and control students by school should be considered such as give them information on reproductive and sexuality health education. This study did not investigate sexual intercourse experience. However, a previous study of sexual behaviors of vocational students in Yala municipality found that they used to have sexual intercourse about 26.2% [7], Another study reported that 18.9% of Muslim youth in three southern provinces of Thailand had sexual intercourse and approximately 50% of males and 11% of females reported having had sexual intercourse at least once in their lifetime with a significant proportion reporting multiple sexual partnerships [15]. Religion itself has also become more diverse, moving away from the common classifications of Buddhist, Christian, Hindu, Jew and Muslim [16].

Attitudes toward premarital sex of both male and female students by self evaluation found that one of statements which they agree was "It is normal in boys to have premarital sex. The statement that they agreed may make it easier for them to have premarital sex. A survey study in Thailand found that 98% of male and 70% of female Thai youth sexually experienced ever had premarital sex [17]. Likely a study in Song Khla province, Thailand reported that 9.3% of the sample had an initial sexual relationship between 12-19 years of age [18]. A survey study in secondary school students and vocational schools across Thailand found that attitudes towards premarital sex in students were acceptable especially among males [10].

The relationship between acceptance and attitudes toward premarital sex in our females had statistically significant relation with felt needs on reproductive health education. This risk behaviors acceptance is similar to that of a study on socio-demographic, behavioral, and psychosocial factors associated with sexual activity among high-school students [15].

Sexuality health education found that religion, risk behaviors acceptance of both male and female students had statistically significant relation with felt needs on sexuality health education. A study found that sexual and reproductive health requires knowledge of normal physiology and development, healthy expressions of sexuality, an understanding of the consequences of sexual and reproductive behaviors [5].

There were limitations of this study. The purposive to selection of the largest provincial school does not represent secondary school in Yala province.

CONCLUSION

Students accepted risk behaviors in moderate level and reported that their attitudes toward premarital sex were in neutral level. The highest mean of both male and female students' attitudes toward premarital sex was on "It is normal in boys to have premarital sex". The relationships between factors and felt needs on reproductive and sexuality health education showed that age was associated with felt needs on reproductive and sexuality health education, acceptance of risk behaviors and attitudes toward premarital sex were associated with felt needs on reproductive health education in female students and religion and acceptance of risk behaviors among both male and female students were associated with felt needs on only sexuality health education. In addition, qualitative studies using focus group and/or in-depth interview should be conducted to gain a deeper understanding of students' sexual and reproductive health felt needs.

RECOMMENDATION

Students accepted risk behaviors in moderate level and reported that their attitudes toward premarital sex were in neutral level. The highest mean of male students' attitudes toward premarital sex was on "It is normal in boys to have premarital sex".

According to the study results, life skills are most necessary for students to practice safe sex and prevent STIs/HIV, unwanted pregnancy, abortion with related to complications. Sexual and reproductive health education programs with a

focus on life skills, information and attitudes are necessary to promote suitable behaviors that prevent STIs/HIV and unwanted pregnancies. In addition, qualitative studies using focus group and/or in-depth interview should be conducted to gain a deeper understanding of students' sexual and reproductive health felt needs.

According to these consequences, the appropriated knowledge of reproductive and sexuality health education should be considered to provide in these students.

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