



Original Articles/นิพนธ์ต้นฉบับ

Factors Associated with Sexual Intercourse among Female Teenagers in Ubon Ratchathani Province

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Abstract

Background: Sexual intercourse among teenagers has increasingly become a social, economic and health problem. It results in unintended pregnancy, unsafe abortion and sexual transmitted diseases, especially HIV infection. The sexual behaviors among teenagers in Ubon Ratchathani Province may be different from the other provinces and other parts of Thailand.

Objective: To study the rate of and factors associated with sexual intercourse among female teenagers in Ubon Ratchathani Province.

Methods: This cross-sectional survey study aimed to determine factors associated with sexual intercourse among 106 female teenagers aged 15-19 years old in Ubon Ratchathani Province. Data was collected using self-administrated questionnaires.

Results: The results showed that 40.6% of female teenagers have had coitus. The mean age of the first coitus was 17.4 years old. All of their partners were their lovers. Love is the main reason for having first coitus (58.1%) but 9.3% reported that they were forced. Significant factors associated with coitus were age, residence, sexual behavior of close friends, parental marital status and internet communication with strangers. By logistic regression analysis, age and sexual behavior of close friends were the only two factors significantly associated with coitus among teenagers.

Conclusion: The rate of sexual intercourse among female teenagers in Ubon Ratchathani Province was fairly high. Most of the factors associated with sexual intercourse were socioeconomic aspects. Proper source of information about sexual health may help to delay sexual intercourse among female teenagers.

Keywords: sexual intercourse, coitus, teenager

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Background

In Thailand, according to the data from National Reproductive Health Survey in 2009 conducted by the National Statistical Office on random sampling of the nationwide population, 41.4 % of citizens aged 15-24 years old reported ever having had sex⁽¹⁾. Of these, 29% were married and 12.4% were single. Among men aged 15-24 years old, 21.1% were unmarried men reporting ever having had sex. Among women aged 15-24 years old, only 3.4% were unmarried women reporting ever having had sex. The monitoring of sexual behavior among students, according to the data collected yearly by the Ministry of Public Health, revealed that in 2011 less than 5% of the 8th grade students had sex, while almost a quarter of the 11th grade male students and 16% of their female counterparts had sex. This number rises to 41-50% among the 2nd year vocational students, and their first experience of sexual intercourse was at 13-15 years of age⁽²⁾.

In 2009, 54.2% of female adolescents in Ratchaburi Province had experiences of sexual activities, which included 18.5% of coitus⁽³⁾. In 2012, report of behavioral surveillance among vocational students in Thailand showed that the rate of sexual intercourse was 51.1%⁽⁴⁾.

In this study, the researchers studied teenagers in Ubon Ratchathani Province which is located in the northeastern part of Thailand, with a large population of over one million. There were a lot of Buddhist temples in the province and the belief in Buddhism is rather strong. Socioeconomic status is lower than in the central region like Ratchaburi Province. The sexual behaviors among teenagers in Ubon Ratchathani Province may be different from Ratchaburi Province and other parts of Thailand.

Materials and methods

This research is a cross sectional survey study. It was approved for ethical clearance by Ramathibodi Committee on Human Right Related to Research Involving Human Subject. Data was collected from female teenagers aged 15-19 years old by self-administered questionnaires. Purposive sampling was applied by recruiting female teenagers who were living in Amphoe Warincharap, Ubon Ratchathani Province, who had Thai nationality, could read and wrote Thai and agreed to participate in this study. The data was collected from January 1st to March 31st, 2015. The sample sizes in this research were calculated by Cochran's formula⁽⁵⁾ and based on the percentage of female students in vocational schools who had sexual intercourse in the study in 2012⁽⁴⁾. The minimum sample size required was 96 female teenagers. The sample size was increased by 10 percent to 106 samples to cover incomplete data. Data analysis was done using percentage, mean and standard deviation. A Chi-square test, Fisher's exact test and multiple logistic regression analysis were used to test, the hypothesis with the level of significance at $P < 0.05$.

Results

Among 106 female teenagers, who were living in the community of Ubon Ratchathani Province, 43 (40.6%) reported that they ever had coitus. The details of coitus group are shown in the Table 1. The mean age of the first coitus was 17.4 ± 0.91 years old. All of their partners were their lovers. Love is still the main reason for having first coitus (58.1%) but 9.3% reported that they were forced. About seventy percent of teenagers used contraception which mostly were emergency contraceptive pills (46.5%) (Table 1).

**Table 1** Characteristics of female teenagers who had coitus (n=43)

Characteristics	No. (%)
Age of the first coitus (year)	
15	2 (4.7)
16	2 (4.7)
17	19 (44.1)
18	16 (37.2)
19	4 (9.3)
Reason of first coitus (answer > 1 item)	
Voluntary	37 (86.0)
- Love	25 (58.1)
- Charming	6 (13.9)
- Trial	6 (14.0)
Involuntary (by force)	4 (9.3)
Under influence (drug or alcohol)	2 (4.7)
Contraception use	
No	13 (30.2)
Yes	30 (69.8)
- Condom	4 (9.3)
- Contraception pill	6 (14.0)
- Emergency pill	20 (46.5)

Table 2 shows the factors associated with coitus among teenagers. Factors which were significantly associated with coitus were age, residence, sexual behavior of close friends, parental marital status, internet communication with strangers and the use of media to arouse sexual desire.

Fifty percent of teenagers aged 17-19 years old had coitus compared with 8.0% of teenagers aged 15-16 years old. All of teenagers who stayed with boyfriends or lovers had coitus compared with 38.2% of teenagers who stayed with parents or relatives. Ninety three percent of teenagers who had close friends with experience of coitus had coitus compared with 67.4% of teenagers who had close

friends with no coitus. Sixty five percent of teenagers whose parents were separate had coitus compared with 33.7% of teenagers who had their parents living together. All of these differences was statistically significant ($P < 0.05$) (Table 2).

Fifty percent of teenagers communicated via internet, mostly with their girlfriends (Table 2). Only 8 teenagers (7.5%) communicated with strangers via internet. The risk of coitus was highest among teenagers who communicated with strangers (100%) which was statistically significant ($P < 0.05$).

Nine teenagers (8.5%) used media on the internet to arouse their sexual desire. Interestingly, the risk of coitus among teenagers who used internet to arouse sexual desire was 0% compared with teenagers who used video/CD or pornographic magazines for the same purpose (44.4% and 44.2%, respectively). The difference was statistically significant ($P < 0.05$).

Table 3 shows significant factors analyzed by logistic regression analysis. Only age (17-19 years old) and sexual behavior of close friend (history of coitus) were the only two factors significantly associated with coitus among teenagers ($P < 0.05$).

Discussion

Among 106 female teenagers who were living in Ubon Ratchathani Province, 43 (40.6%) reported that they ever had coitus. The rate of coitus was rather high when compared with the study of Punsang⁽⁶⁾ who found 10.5% of high-school female students in Angthong had coitus. Laksitanon⁽³⁾ who studied the factors associated with sexual relationships among high school female students in Ratchaburi Province found that 18.5% of adolescents had coitus. In 2012, the study among female students in vocation schools in Thailand showed that the rate of sexual intercourse was 51.1%⁽⁴⁾. This finding was comparable to the study

Table 2 Factors associated with coitus

Factors	Total		P
	Coitus (n=43) No (%)	No coitus (n=63) No (%)	
Age (year)			
15-16	2 (8.0)	23 (92.0)	0.000*
17-19	41 (50.6)	40 (49.4)	
Number of siblings			
1-2	23 (34.8)	43 (65.2)	0.182
≥ 3	20 (50.0)	20 (50.0)	
Order of siblings			
Eldest or only one in family	21 (47.7)	23 (52.3)	0.267
Middle	5 (50.0)	5 (50.0)	
Youngest	17 (32.7)	35 (67.3)	
Accompanied residence			
Parents or relatives	39 (38.2)	63 (61.8)	0.025 ^{a*}
Boyfriends/lovers	4 (100)	0 (0.0)	
Monthly allowance received (baht/month)			
< 1,000-1,500	19 (44.2)	24 (55.8)	0.670
≥ 1,600	24 (38.1)	39 (61.9)	
Sexual behavior of female siblings (coitus)			
Yes	14 (48.3)	15 (51.7)	0.321
No	29 (37.7)	48 (62.3)	
Sexual behavior of close friend (coitus)			
Yes	14 (93.3)	1 (6.7)	0.000*
No	29 (67.4)	62 (98.4)	
Parental marital status			
Living together	28 (33.7)	55 (66.3)	0.013*
Separated (divorced/widow)	15 (65.2)	8 (34.8)	
Relationship with parents			
Good	31 (36.5)	54 (63.5)	0.139
Poor	12 (57.1)	9 (42.9)	
Father's occupation			
Government officer	2 (40.0)	3 (60.0)	1.000 ^a
Farmer	11 (33.3)	22 (66.7)	0.420
Merchant	26 (47.3)	29 (52.7)	0.207
Employee	4 (30.8)	9 (69.2)	0.641
Mother's occupation			
Government officer	0 (0.0)	4 (100)	0.145 ^a
Farmer	11 (35.5)	20 (64.5)	0.640
Merchant	21 (42.0)	29 (58.0)	0.931
Employee	9 (50.0)	9 (50.0)	0.528
Housewife	2 (66.7)	1 (33.3)	0.565 ^a
Leisure time activities			
Reading	8 (34.8)	15 (65.2)	0.523
Listening/playing music	17 (50.0)	17 (50.0)	0.174
Sport	0 (0.0)	6 (100)	0.079 ^a
Video/CD/TV	0 (0.0)	5 (100)	0.079 ^a
Internet	13 (48.1)	14 (51.9)	0.353
Phone chat	5 (45.5)	6 (54.5)	0.754 ^a
Internet communication			
With boyfriend	28 (52.8)	25 (47.2)	0.010*
With girlfriend	13 (52.0)	12 (48.0)	0.183
With stranger	10 (34.5)	19 (65.5)	0.434
Using media to arouse sexual desire			
Video/CD/TV	8 (100)	0 (0.0)	0.000 ^{a*}
Internet	24 (44.4)	30 (55.6)	0.528
Magazine	0 (0.0)	9 (100)	0.010 ^{a*}
	19 (44.2)	24 (55.8)	0.670

*P<0.05; ^aFisher's Exact Test

**Table 3** Significant factors associated with coitus by stepwise logistic regression analysis

Factors	B	S.E.	Wald	Exp (B)	95%CI	P
Age (17-19 years)	2.459	0.859	8.200	0.085	0.016, 0.460	0.004*
Sexual behavior of close friends (coitus)	3.391	1.129	9.019	0.034	0.004, 0.308	0.003*

$R^2=0.38$, * $P<0.05$

of Martinez et al⁽⁷⁾ who found that 46 percent of all high school students, and 62 percent of high school seniors in the United States have sexual intercourse.

Most of the first coitus among teenagers was voluntary (86.0%). This study showed that most of partners with coitus were their lovers (58%). This is accordance with the report by Petkal⁽⁸⁾ that the students have coitus with their friends or lovers.

This study showed that teenagers had coitus earlier than in the past. Mean age of the first coitus among them was 17.42 ± 0.91 years old. This is accordance with the report by Petkal⁽⁸⁾ that mean age of coitus is 14.7 years.

At the present time, Thai teenagers accept western culture more than before and they had coitus with their lovers. Teenagers are at the age that have much sex drive and they now have more freedom than before. About seventy percent (69.8%) of teenagers used contraception which mostly were emergency contraceptive pills (46.5%). The rate of contraception use among teenagers was rather low. They believed that using condoms can reduce sex sensation or interrupt sexual process. Such misconception increases risks of HIV infection and sexually transmitted diseases.

Age was significantly associated with coitus. Older teenagers usually have more coitus and sexual experience than younger teenagers. It was comparable with the study by Youn⁽⁹⁾ who found that respondents' age is significantly associated with the

number of coitus partners. Punsang⁽⁶⁾ found that age is the factor that significantly associated with coitus of high school female students in Angthong Province. Boonyathan⁽¹⁰⁾ reported that age is significantly associated with adolescent pregnancy. A review of existing literature has led to a conclusion that age is correlated with an adolescent pregnancy.

Sexual behavior of close friend was the other significant factor with the highest strength of association when analyzed by stepwise logistic regression analysis ($P < 0.05$). This is in accordance with Punsang's report⁽⁶⁾ that sexual behavior of close friend is the factor associated with coitus of female high school students in Angthong Province. Suwannakeeree⁽¹¹⁾ have studied the behavioral risk of adolescents in institutes or schools in Pitsanulok Province and found that friend is the main factor that influences on sexual behaviors of teenagers. Laksitanon⁽³⁾ who studied sexual relationship among adolescents in Ratchaburi Province also reported that sexual behavior of close friends is a significant factor.

Teenage is a period of time when friends are very important. Teenagers are closer and more loyal to friends than to their parents or family members. In addition, this is the age when they begin to interest in people of the opposite sex and look for a special person to date with. Therefore, being accepted by peers and peer groups are very important in teenager's life.

In conclusion, the rate of coitus among teenag-

ers in Ubon Ratchathani Province is lower than that of the teenagers in vocation schools in Thailand, but rather high when compared with teenagers in the other provinces. Age and sexual behavior of close friend are the factors associated with coitus among teenagers. Proper source of information about sexual

health may help to delay sexual intercourse among female teenagers.

Conflict of interest

The authors declare that there was no conflict of interest in this study.

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ปัจจัยที่มีความสัมพันธ์กับการร่วมเพศของวัยรุ่นหญิง ในชุมชนจังหวัดอุบลราชธานี

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ภาควิชาสูติศาสตร์-นรีเวชวิทยา คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล

บทคัดย่อ

ความเป็นมา: การร่วมเพศในวัยรุ่นเป็นปัญหาทางสังคม เศรษฐกิจและสุขภาพที่สำคัญ เพราะทำให้เกิดการตั้งครรภ์ไม่พึงประสงค์ การแท้งที่ไม่ปลอดภัย และโรคติดต่อทางเพศสัมพันธ์โดยเฉพาะการติดเชื้อเอดส์ พฤติกรรมทางเพศของวัยรุ่นในจังหวัดอุบลราชธานีอาจจะแตกต่างจากส่วนอื่นๆ ของประเทศไทย

วัตถุประสงค์: เพื่อศึกษาอัตราและปัจจัยที่เกี่ยวข้องกับการร่วมเพศของวัยรุ่นหญิงในจังหวัดอุบลราชธานี

วิธีวิจัย: การศึกษาครั้งนี้เป็นการวิจัยเชิงสำรวจแบบภาคตัดขวาง กลุ่มตัวอย่างเป็นหญิงอายุ 15-19 ปีที่อาศัยอยู่ในจังหวัดอุบลราชธานี จำนวน 106 คน เก็บข้อมูลโดยใช้แบบสอบถาม

ผลการศึกษา: ผลการศึกษาพบว่ากลุ่มตัวอย่างมีอัตราการร่วมเพศ ร้อยละ 40.6 อายุเฉลี่ยของการร่วมเพศครั้งแรกคือ 17.4 ปี บุคคลที่มีการร่วมเพศด้วยครั้งแรกทั้งหมดได้แก่ คนรัก เหตุผลที่มีการร่วมเพศส่วนใหญ่เกิดจากความรักร้อยละ 58.1 ร้อยละ 9.3 เกิดจากถูกบังคับ ปัจจัยที่มีความสัมพันธ์ต่อการร่วมเพศอย่างมีนัยสำคัญทางสถิติ ได้แก่ อายุของวัยรุ่น ที่พักอาศัย การมีเพื่อนสนิทที่เคยมีเพศสัมพันธ์ สถานภาพสมรสของบิดามารดา การพูดคุยทางอินเทอร์เน็ตกับคนแปลกหน้า เมื่อวิเคราะห์ถดถอยแบบพหุโลจิสติกพบว่า มีเพียงปัจจัยสองปัจจัยคืออายุและการมีเพื่อนสนิทที่เคยมีเพศสัมพันธ์ที่มีความสัมพันธ์ต่อการร่วมเพศในวัยรุ่นอย่างมีนัยสำคัญทางสถิติ

สรุป: อัตราการร่วมเพศของวัยรุ่นหญิงในชุมชน จังหวัดอุบลราชธานีมีค่อนข้างสูง ปัจจัยที่มีความเกี่ยวข้องกับการร่วมเพศส่วนใหญ่เป็นปัจจัยเกี่ยวกับเศรษฐกิจและสังคม การรับข้อมูลข่าวสารเรื่องเพศที่ถูกต้องอาจจะช่วยลดอัตราการร่วมเพศในวัยรุ่นได้

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