# Original Article

# Sexual Behaviors among Health Sciences Undergraduate Students in one of the Universities, Eastern Part, Thailand

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**Abstract** 

**Introduction:** Sexual behavior is one of human activities that varies in different social and cultural contexts.

Such behavior is not only human reproduction, but also social.

Objectives: To find out the sexual orientation, sexual behaviors which were divided by gender, STDs

prevention and contraceptive use behaviors among the 3<sup>rd</sup> year students of a group of health

science program faculties, one of the universities, Eastern part, Thailand.

Methods: During 2013-2014, we surveyed self-reported questionnaires among the 3<sup>rd</sup> year undergraduate

students in the Health Sciences Faculties Group, one of the universities in the Eastern part of

Thailand.

Results: This study included 372 females and 114 males. Approximately 70% of students had a positive

attitude to virginity. Male students had the mean age at first coitus younger than the female ones (male vs. female =  $13.68 \pm 2.12$  vs. $18.48 \pm 2.21$ ). Almost 60% of female students have diverted their sexual desire by exercise. There were 15% and 12% who did not use contraception

when having sex with their lovers and someone another than a lover, respectively.

Conclusions: The sexual behaviors of undergraduate students varied by the genders. Male students had

more sexual activity more than female students. Some students still lacked of the practical knowledge of the efficacy of contraception. These target groups needed to learn more about

life skills in sexuality.

Keywords: sexual behavior, adolescent, University, Thailand

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## Introduction

When we talk about sexual issues in humans, the subject of "sexual outlets" is always one of the most popular issues. These topics are usually cited and discussed not only in medical groups, but also in other disciplines. There are more conflicts and difficulties in talking about these issues, especially in Asian countries, which are mostly religious and pharisaic. Although there have been convivial or cultural barriers for verbalizing or discussing these, there are many channels for expressing or releasing these sexual tensions through many incipient gregarious networks, such as e-mails, websites, weblogs, internet chats and other emerging social network channels.

The notion of "Sexual Outlets" was introduced by Alfred Kinsey when he began his research: "Sexual Behavior in Human Male" in 1948 and "Sexual Behavior in Human Female" in 1953. He indicated six major sexual outlets: masturbation, nocturnal dream, heterosexual petting, heterosexual coitus, gay outlet and animal contact. Most individuals choose more than two kinds of sexual outlets, and someone may prefer all kinds of sexual outlets. His studies discovered that there was a variation in sexual outlets in females more than males.<sup>1</sup>

In the Kinsey research, there were biological and socio-economic variables linked to human sexual behavior: gender, race / culture, marital status, age, academic level, occupation, rural / urban environments. The most important factor was age, which had an impact on the frequencies and patterns of sexual outlets. These may explain why elderly people have more than younger sexual experiences. However, extravagant sexual activity was at risk of unintended pregnancy, sexually transmitted diseases, and unsafe abortion. These undesired outcomes will influence their lifestyle, status, and obligation.

The lack of understanding and experience of sexual intercourse and the adjustment of adolescents are the primary causes that drive these younger

children close to the abyss. They were unfamiliar with any contraception at their first sexual intercourse. In addition, about 1/3 of these circumstances have happened due to coercion.<sup>2</sup> Most information on adolescent sexual and reproductive health in developing countries in sub-Saharan Africa have shown that adolescents remain at risk of sexual behavior. They did not obviously comprehend the protection of sexual health risks.<sup>3</sup> Not only did the amount of unintended adolescent pregnancies increase, but HIV infection also increased.<sup>4</sup>

U.S.A. information, based on the National Survey of Family Growth, showed a fast increase in premarital intercourse and premarital pregnancy due to prior coital activities without contraception. The World Health Organization has suggested creating a list of the current sexualized and stigmat activities for the prevention of early marriages and abortion. Since they intended us to learn more and understand the context of the younger generation. These data will be used to develop the suitable projects that are pleasant but safe. Therefore, these guidelines suggested starting up the projects through education systems or economic & social support program tools.

In East Asia and the Pacific, Demographic and Health Survey (DHS) reports showed the lower rates of contraceptive use, poor understanding and limited access among adolescents to family planning healthcare units compared to adults. However, in reporting the information of the unmarried adolescent group, this research showed restricted outcomes. Most earlier studies usually acknowledged an education as a strategic way to protect premarital sex.8 - 12 But in colleges/universities we still discovered these complicated issues of premarital sex among learners. Not only did these issues happen to developing nations, but they also developed one. Sexual education may not be the only strategic ideal, but it needs to be aligned with social and community contexts and attitudes and build the self-esteem of the younger to recognize and protect themselves from risky

behavior. <sup>9, 13 - 20</sup> Before beginning a strategic plan, you need to understand and update data about their sexuality and sexual activities. They had dynamic flows along the tide of worldwide culture.

In Thailand, one of the Buddhist country's majorities that in the past had a social perspective of premarital sex unacceptable. Nowadays, this faith and values have altered owing to worldwide socialization. Despite the hurried input of sexual education over many years, we have also discovered that adolescents have had poor understanding of sexual knowledge and practices. There was a study of 1,275 students in vocational schools, northern part of Thailand, 1999, and found 48% and 43% of male and female had ever coitus. In the group of students that had sex, it was found that 27% of female students and 17% of male ones said that they had been pregnant and 95% of pregnancies were ended up with abortion. These result indicated that they need the sexual health practice training and effective contraception.<sup>21</sup> A research on young people's risky behaviors in Bangkok in 2001 found that sexual activity was also one of the most dangerous activities such as rape and infection with HIV.22

There was a limited data onto these precarious issues among the undergraduate in the universities in this area. Therefore, we needed to learn them more of various aspects because they have just passed the formal in-classes sexual education and independent stayed away from their home for 2 years at least. These might be the component of the jigsaw that could make you see the large new generation images that grew in the internet age.

Objectives: to find out the sexual orientation, sexual behaviors which divided by the gender, STDs prevention and contraceptive use behaviors among the third year students of a group of health science program faculties, one of the universities, Eastern part, Thailand.

### Methods

This study design was descriptive type, which collected the data by the anonymous questionnaires, which divided, into 6 parts as the follows, general data, sexual orientation, socio-sexual activity, virginity attitude, sexual outlets, contraception and STD protection behaviors.

The general data questionnaires composed of the follows, gender, the faculty, religion, hometown, marital status of their parents, the person who stayed with, part-time job and present dwelling. The second part was sex orientation that provided the self-reported answer with short answer. The third part was the socio-sexual activity survey which composed of the variety of their sexual activities, such as dating detail, online and offline social sex activity and their sexual counselor. The fourth part was the sex attitude survey by open-ended questionnaires which speculated on the virginity meaning and importance, the suitable age for marry. The next part was their sexual outlets that gathering data by a short answer, multiple choice questionnaires which selected more than one answer, the last part was the contraception and STDs prevention behaviors survey by the open-ended questionnaires about the contraception on the "casual sex" and "sex with lovers", contraceptive choices, preference of healthcare service for STDs.

All of these questionnaires were re-evaluated by the three consultants who are specialized in sexology, research methodology and psychology. We used the Index of Item - Objective Congruence for approval of validity and Cronbach's's Alpha coefficient for reliability. The values of them were 0.67 and 0.74 for IOC and Cronbach's's Alpha coefficient, respectively.

We amassed the data onto undergraduate students in the 3<sup>rd</sup> year of Health Sciences faculty (HSF) group at one University of Eastern part of Thailand during 2013 - 2014. We selected the third year students for the representative target group because they have had the adequate sex

experiences at the University and most of them studied within the campus, while the 4<sup>th</sup> year students had to go to internships outside the university. The target population were 575 students who studied in the following faculties, Nursing, Sports Sciences, Public Health, Thai Traditional Medicine, Allied Health Sciences, and Medicine. There were 486 students (~85 %) agreed to join this study. We collected these data by the questionnaires. All of these questionnaires were re-evaluated by the three consultants who are specialized in sexology, research methodology and psychology. The main University Ethics Committee before proceeding approved this research proposal.

Before beginning the data collection, the researcher and assistants gave the information about this study in the private room of each faculty and had the Q&A open hours for all participants. They were informed about confidentiality, risks/benefits and reassured that these data was protected by rules of the ethics committee of the University under the international principles of research ethics, laws, and regulations. We sent the questionnaires to each participant by a close tight envelope through private box mail. After participants finished the answering, they had to put it in the closed envelope and sealed

up with the special stickers that attached in the envelope together and sent it back to the research office within one week by dropping it through the private mailbox of researcher. These envelopes were only open by the researcher or research assistants. After finishing this study, these data were kept for three years and was destroyed by the research under the medical faculty operation guideline. Informed consent documents that derived from all participants were kept and destroyed as the questionnaires, too. The data were analyzed and represented in frequency, percentage, mode, and mean  $\pm$  standard deviation.

#### Results

About 85% of the population participated in this survey, 114 were male and 372 were female. A mean age was 20.7 (19 - 23 years.). Most data derived from Nursing and Sport Science faculties. The volunteers were virtually entirely Buddhist. Half of them had their hometowns in the city. Their parents'majority status was espoused, and they still lived with their families. During the studying, a moiety of them stayed in dormitories outside the campus. There were 10 % working part-time after class in the evening and weekend time. See Table 1.

Table 1 General data among the undergraduate students of groups of HSF

General data	Number	%
Faculty		
Nursing	153	31.5
Sport Sciences	141	29.0
Public Health	80	16.5
Thai Traditional Medicine	48	9.9
Allied Health Sciences	41	8.4
Medicine	23	4.7
Total	486	100.0

 Table 1 General data among the undergraduate students of groups of HSF (continued)

General data	Number	%
Gender		
Male	114	23.5
Female	372	76.5
Total	486	100.0
Religion		
Buddhism	466	95.9
Islam	12	2.5
Roman catholic	4	0.8
Protestant	3	0.6
Irreligion	1	0.2
Total	486	100.0
Hometown		
Urban in province	211	43.4
Rural in province	209	43.0
Bangkok and surrounding regions	61	12.6
Unspecified	5	1.0
Total	486	100.0
Marital status and family		
Married	373	76.7
Divorced/Separated	68	14.0
Widowed	45	9.3
Total	486	100.0
The persons who usually stay with (all of the	ir life)	
Family	432	88.9
Relative	33	6.8
Friends in boarding school	9	1.9
Friends in dormitory	8	1.6
Others	4	.8
Total	486	100.0
Part-time jobs		
No	408	84.0
Yes	45	9.3
Ever done in the last 3 months	33	6.8
Total	486	100.0
Present dwelling		
Outside-campus dormitory	234	48.3
Campus dormitory	182	37.6
House rentals	47	9.7
Their own houses	21	4.3
Total (Missed data=2)	484	100.0

Their sexual orientation by self-report revealed heterosexuality, bisexuality and homosexuality at 80, 11.3 and 8.8%, respectively. (missing data = 7)

The data on socio-sexual activities showed a half of them had their lovers on the campus life and 40% of them have had an average dating time 3.27  $\pm$  2.49 days/week. They preferred to meet their doters

at the dormitories in campus privately. Approximately 70% of them ever used the cyber world chat or join the sex-issue verbalizes/meetings and preferred to read the sex topic by themselves. They did not relish inquiring sexual health quandaries on the public media. The main counselors of their sex topic were their close friends. See Table 2.

Table 2 Socio-sexual activities among the undergraduate students of groups of HSF

Sweetheart (No. (%))	Male	No. female	Total
Yes	90 (78.95)	180 (48.39)	270 (55.56)
No	24 (21.05)	192 (51.61)	216 (44.44)
Total	114 (100.00)	372 (100.00)	486 (100.00)
Dating frequency/week	Mean	SD.	
Total = 270 (Min.=1, Max. = 7)	3.27	2.49	
Popular dating place	Number	%	
Dormitory in campus	100	37.17	
House	45	16.73	
Shopping department store	45	16.73	
Other place in campus	40	14.87	
Restaurant	26	9.67	
Not specified	13	4.83	
Total (missing data = 1)	269	100.00	
Dating patterns	Number	%	
Private	184	68.91	
Dating with friends	75	28.09	
Dating with family members	8	3.00	
Total (missing data = 3)	267	100.00	
Internet chat in "sexual issues"	Number	%	
No	155	31.96	
Yes	330	68.04	
Total (Missing=1)	485	100.003	
Attention of sexual topics conference			
No	161	33.13	
Yes	325	66.87	
Total	486	100.00	

Table 2 Socio-sexual activities among the undergraduate students of groups of HSF (continued)

Reading of sexual topics			
No	165	34.0	
Yes	321	66.0	
Total	486	100.0	
Inquiring of sexual problems			
No	464	95.5	
Yes	22	4.5	
Total	486	100.0	
Sexual issues counselors			
Close friends	313	64.9	
Parent	111	23.0	
Advises teachers	1	0.2	
Doctors	47	9.8	
Internet friends	10	2.1	
Total (missing = 4)	482	100.0	

Their opinions about the values of virginity, 70% of them kept this value as a dignity of their lives and the fourteen percentages thought, "The virginity was the best gift for their spouse". Only ten percentages did not pay any attention to this value. These positive attitudes to virginity value were still dominant in female students. However, in the question of "What do you concern about the virginity of your expected bride/groom?" We found the positive attitude to this point in male students bigger than female ones. Due

to the survey for the opinions "What is an appropriate age do you get married?" Approximately 80% of them chose an age range of "26 - 30 year".

Most male students have ever had an orgasm earlier than female students have. The mode age of first orgasm of male and female students were 15 and 20, respectively and the mean  $\pm$  sd. of male and female students were 13.68  $\pm$  2.12 (range 10 - 20) and 18.48  $\pm$  2.12 (range 12 - 22), respectively. See Table 3.

Table 3 Sexual behaviors of undergraduate student of groups of HSF dividing by gender

Topics	Male student	Female student
Orgasm (No. (%))		
Yes (masturbation or coitus)	109 (95.60)	102 (28.33)
No	5 (4.4)	258 (71.67)
Total	114 (100)	360 (100)
		Missing 12
Age of first orgasm	Total 109	Total 90
		Missing 12
Mean ± sd.	$13.68 \pm 2.12$	$18.48 \pm 2.12$
Min Max	10 - 20	12 - 22
How did you do on your first orgasm? (No. (%))		
Nocturnal dream (wet dream)	54 (49.54)	3 (2.94)
Self-masturbation	43 (39.45)	16 (15.69)
Coitus with heterosexual lovers	7 (6.42)	52 (50.98)
Coitus with homosexual	1 (0.92)	16 (15.69)
Mutual masturbation with friends	1(0.92)	14 (13.72)
Sexual fantasy	1 (0.92)	2 (1.96)
Coitus with prostitute	2 (1.83)	-
Total	109 (100)	102 (100)
What did you do when you have sexual desire? (m	ultiple selection answering	)
Self-masturbation by hands	73 (30.42)	39 (11.57)
Deviate sexual desire by exercise/activities	63 (26.25)	195 (57.86)
Watching Pornography	63 (26.25)	41 (12.17)
Sex fantasy	32 (13.33)	34 (10.09)
Sex phone/internet chat	3 (1.25)	-
Male sex toy	2 (0.83)	3 (0.89)
Female sex toy	1 (0.42)	-
Peeping (voyeur)	2 (0.83)	-
Self-mortification	2 (0.83)	4 (1.19)
Long pillow use	-	11 (3.26)
Water splash/jet	-	9 (2.67)
Animal sex	-	1 (0.30)
Total	240 (100)	337 (100)

**Table 3** Sexual behaviors of undergraduate student of groups of HSF dividing by gender (continued)

Last usual sex in 3 months		
(multiple selection answering)		
Petting (Kissing) but did not reach orgasm	62 (35.43)	91 (38.72)
Fellatio	38 (21.71)	54 (22.98)
Petting till had orgasm	37 (21.14)	39 (16.60)
Cunillingus	30 (17.14)	46 (19.57)
Anal sex with woman	4 (2.28)	-
Anal sex with man	2 (1.14)	5 (2.13)
Animal sex	2 (1.14)	-
Total	175 (100)	235 (100)
Socio-sexual activities		
(multiple selection answering)		
Vaginal coitus	74 (54.01)	144 (55.38)
Cunnilingus with woman	28 (20.44)	33 (12.69)
Cunnilingus with man	-	38 (14.61)
Mutual masturbation	14 (10.22)	22 (8.46)
Fellatio	10 (7.30)	-
Anal sex with woman	4 (2.92)	-
Anal sex with man	4 (2.92)	4 (1.54)
Inguinal/cruel coitus	3 (2.19)	-
Petting with woman		19 (7.31)
Total	137 (100)	260 (100)

The common events accompany by their first orgasm in male was a wet dream but for female was the heterosexual coitus. The next order in both genders was self-maturation; however, in female student event was the coitus with homosexuals, as well. See Table 3.

When they had sexual desire, the top three of their release were self-masturbation by hand, physical exercises and viewing pornography in male students but in female, the physical exercise was the main outlet and the others were self-maturation and viewing the pornography, but self-maturation in female had the accessories more than men, i.e., long pillow, water splash nozzle. See Table 3.

The top three ranking of their customary sex activities within the last three months were petting only, fellatio and petting with an orgasm in male but the third order in female students was cunnilingus. For other details, please see Table 3.

According to the questionnaires about casual sex, contraception and STDs protection behaviors, there were 170 subjects in 463 students who admitted that they ever had sexual intercourse but 168 students gave these data. There were the similar number of students who chose the contraception every time or sometime whether having sex with lovers or casual sex with anyone except in some students that did not use contraception at all. See Figure 1.

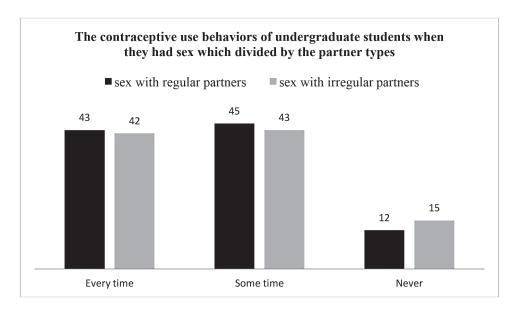


Figure 1 The percentages of contraceptive use among the undergraduate student in a group of HSF when they have had sex with regular partners and sex with irregular partners. There were 168 students giving this data.

135 subjects answered the question of "What is your contraceptive choice when you have sex?"

The popular use was a male condom but there were 20% in coitus interruptus. See Figure 2.

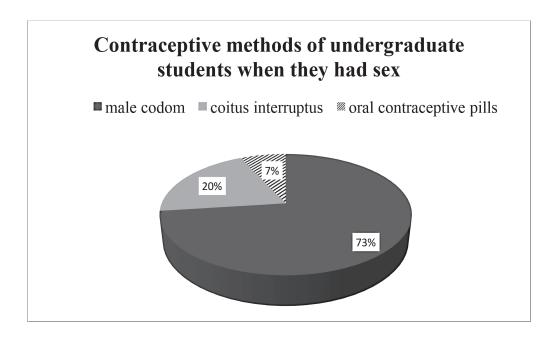


Figure 2 The contraceptive methods among the undergraduate students when they had sex. There were 135 students admitted this answer and most popular method were male condom.

The last question was "What is your healthcare service when you get a sexually transmitted disease?" There were 156/486 subjects who answered this question. The results showed percentage of government hospitals, private clinics, private hospitals, drug stores and hot lines (call centers) at 36, 26, 15, 13 and 6, respectively. The last four percentages were an internet, friends, senior friends and newspaper/magazine columnists.

#### Discussions

Overall, the information showed that 3/4 subjects were female students since the HSF group had a large number of students in nursing faculty in this university. Most students were Buddhist and half of them had their hometown in an urban area. Nearly 80% of their parents stayed together and most students stayed with them. There were only 10% of the study group had a part-time work in the evening and weekend time. A half of the students stayed in dormitory outside the campus and nearly 40% stayed in the campus dormitory. This meant that nearly all students stayed by themselves; therefore, they had the freedom of expression, which they preferred including the sexual activities and sexual orientation. See Table 1

There were the various methods to categorize the human sexual orientation. These classifications depend on sexual attraction and desires based on their sex.<sup>23 - 27</sup> But most previous studies in sexual orientation used self-reported data. Some authorities suggested discrimination scale for assessment and categorization, i.e., Kinsey scale<sup>28</sup>, Klein sexual orientation grid<sup>29</sup> and multidimensional scale of sexuality.<sup>30</sup> However, all scales had advantages and disadvantages. Human sexual orientation is dynamic. It may change by time and situations. In this study, there were 80% of heterosexuality, 11% bisexuality and 9% homosexuality. When compared to the earlier studies, there was a higher proportion

of bisexual and homosexual group than the past.<sup>31-33</sup> However the sexual orientation had the dynamic change and gradation.<sup>24</sup> There was not only the dichotomous or trichotomous type but it had the intensity degrees of sexual orientation which depended on many factors another than the prenatal sex steroid hormone.<sup>23, 24</sup> Therefore, this information in this study might change from time to time or by other circumstances. However, the changes were gradual creeping because it depended on many factors such their families, social and cultures another than their preference.

According to the information of the socio-sexual activities of these students found nearly 80% of male students had the lovers while the female ones had only 50%. The average of dating frequency/ week was 3.27 and the popular dating place was a campus dormitory. The dating of adolescents is social customs that is one-step in the psychological development that makes them learn the roles of the romantic relationship, interpersonal context and commitment. 34, 35 The dating is one of sexual activities that the lovers have the opportunities to learn and share each other. They have to balance between the independence and responsibility simultaneously. This study also showed the social dating activity of adolescence that similar to the former, which needed the privacy and convenience especially in the dormitory in campus. Nowadays, there are dating applications on the cell phone but the students did not pay attention about it. They preferred to match with the lovers by themselves. A previous study in U.S.A. showed the sexual risk behaviors and dating application use in young adult users.36

In the information and technology era, anyone can easily access data and information by one click particularly some of curious sex topics but also shamed were afraid to ask, but to use online media to make these more accessible. Nevertheless, how accurate is it? It depends on the user's judgment, which

must be decided. This study found nearly 70% of students ever attended internet chats/talks and read about sexual issues. These factors also influenced on their sexual relationship and behaviors as the previous studies. (14, 15, 17) Therefore, we could apply the sexual explicit media to promote sexual education and prevent sexual risk behaviors as the earlier studies. (37, 38) The data in May 2016 they found most Thai people used social media every day, for instances, Facebook more than 40 millions (60% of the total population) "Line" application more than 33 million, "Instagram" 7.8 million and "Twitter" 5.3 millions. (19) Moreover, more than 70% of internet users were underage of 35 and half of them was at aged "15 - 24". They stayed online average 31.7 hours in February 2012. (10)

So the internet has had a lot of impact on teenage lifestyles and sexual relationships. Due to the ease fo access and less official censorship and control, this way of communication was popular with them. One study categorized internet use into three patterns of internet use as the follows, "social", "sex & games" and "functional" and they found the problematic internet use in "social" and "sex & games" type. The younger users that used the game and sex online were classified as a risky behavior group, which were found in males more than females and this problem was becoming intenser as the age increases. <sup>41</sup> Therefore, coaching and training websites under the law and ethics are essential for teenagers and young people.

Due to the virginity, most students had the good attitudes to the virginity and 15% of them thought that it meant the special gift for their lovers in the marriage day. There were only 10% that did not pay attention to this dignity. These noted that virginity breakdown did not mean only their hymenal changes but also the dignity of their life, honor and self-esteem. These findings conformed to the previous studies that virginity implanted and rooted in each woman.<sup>42</sup> The value of virginity depend on and influence on many factors especially families, social

contraction and cultures. It is still the good strategy for prevention unmarried sex in teenagers. In Thailand, women's virginity still plays a significant role for males. It looked-liked a gift from the lovers. Most of men said, "They would not marry a non-virgin woman" in one study. As Most men in the previous study told that they has had their first coitus with prostitutes. At present, these behaviors were changed. Most men has had their first sex with their lovers or peer because of wide spread of HIV infection and safe sex, but most women reported that they had 1st sex with her spouse partners. These might tell us that most Thai women kept the importance of virginity for their lovers.

According to the sexual behaviors in the Table 3, percentages of male students got the orgasm events more than female ones. This finding was not different from the previous studies in many countries in the world. 15, 16, 45 - 48 It may tell us "this is the instinct of survival of tribe" in the animal. However, human sexual coitus does not only aim for reproduction but also enjoyments and releasing their sexual tensions. This study results showed the first coital age of males earlier than female obviously. There was a study of first sex at early age and found the health risk behaviors and outcome in students subjects who had the early sex before age 14.49 However, they commented that these findings were varied by race or ethnicity. My research also showed the average of early sex of male and female students at  $13.68 \pm 2.12$  and  $18.48 \pm 2.12$ , respectively. Although male students had an early age of first sex, but the major coincidence sexual event were wet dream and self-maturation and there was only 10 percentages in coitus events while more than half of female group had the first sex on the coital events. See Table 3.

Sexual motives have the relationship of sexual behaviors. There were many studies indicated that most women engaged in the sexual behaviors because of love while most men ignored this reason. Therefore, the male sexual behaviors mostly done

by their pleasures. Due to this study, you will see the male sexual outlets were tendency response to their pleasures more than women were. Most female students attempted to do the exercise or other activities when they had a sexual desire. There was self-masturbation when they had a sexual desire for 30% and 10% for males and females respectively. This study also showed that masturbation was notable feature sexual activity in males more than females as the old fashion in the past studies. <sup>50, 51</sup> However, the masturbation rate was less than the Western country. It might be caused by their confidences in self-reports.

When comparing between male and female students for sexual activities within last 3 months, there was in the same percentage of sexual activities between both groups. When asking about the socio-sexual activities, there were the same proportions of the different types of the socio-sexual activities in both groups. These might indicate that there was no gender effect on the socio-sexual patterns.

This study showed that most students who ever had sex concerned about sexual transmitted disease and unintended pregnancy. About 40% of them used contraception every time and 45% used sometime when they had sex with regular/irregular partners, but there were about 15% and 12% did not use contraception with the regular partner and irregular partners, respectively. These might result from their trust in their lover's health more than the other partners might. This finding showed the same results as the previous study that condom use rate was increasing when the adolescent had sex with irregular partners. 52 It might be resulted from the HIV and STD awareness, so they felt insecurity to have sex with prostitutes and appreciated with their girlfriend premarital coitus. 44, 47 However, when consideration on the first coital event, there was the low contraception rates among teenagers especially the sex debut before age 15.53

When we magnified in the details, there were 20% in coitus interruptus and 70% in condom use and the rest was oral contraceptive pills. These findings showed they were at risk of unintended pregnancy in the group of coitus interruptus. There were the previous studies revealed the misinterpretation and lack of awareness of practical contraception use among the undergraduate students, despite good knowledge.<sup>54 - 56</sup> Moreover, one study found the Youngers had the sexual partners more than four and ten in women and men respectively.<sup>57</sup> The study in Thailand also reported that both genders had the sexual partners more than five and a half of them accepted the premarital sex.44 At this point, knowledge and attitudes tuning might be the important role for risky sexual behavior prevention.

There was a study in the U.S.A. teenagers and found the different sexual debut in different ethnicity. There was the late sexual debut among the Asian students. These might be influence by their parents and their communities. In Thailand also, the sex topic talks on the table are impolite and shameful. Most students learned these issues from their peers and online-medias. These might make them misunderstood in the effective contraception methods. Most online-sex media usually sells the sex products and motivate the teenagers to have sex earlier. The electronic tools were hardly to control these Medias. Therefore, the knowledge and attitudes are the good immunization for these Youngers.

Nearly 40% of students preferred to go to the government hospital for the sexually transmitted disease. Because there is a healthcare, service unit inside the University and has 24 hours-services. We also provide the special channel for the campus students. Moreover, there is a teen-friend health working-group of the university hospital, which has had regular activities for risk surveillances and makes public relationships between the hospital and student communities. Approximately 10% of them went to

the drug store; 6% used the hotlines and 4% used internet/media/friends. These meant that they needed the privacy and confidentiality for dealing with their sex problems. In this view, the health care providers should pay attention and provide the variety of sexual health care access. It should be easy but security and confidentiality.

This study concluded that different genders were different sexual activities. Male students still had the more sexual activities than female ones and released the sex tension in their pleasures vis-a-vis female adolescents tried to change their sexual desire for other activities instead. Their sexual orientation in homosexual and bisexual type were slightly increased when compared to the previous studies, however the sexual orientation in human is dynamic changes from time to time. Some students still misunderstood about the practical use of contraception, despite in-class learning curriculum in the secondary school. The online sex-related data also was the good and easily accessed source of these students, and the close friends were still a good source of advice for them.

Strengthening and limitations

This study got the good attendants upon the subjects and had the good system and assisted researchers for gathering the research data. However, this data derived from self-reporting of the subjects that someone might wonder about the reliability. Some questions hinder the respondent's privacy, causing volunteers to feel uncomfortable answering questions. The researcher team corrected this defect by making the confidential and privacy procedures for data collection as much as possible. My consultants and I trained the assisted researchers for data collection and principles of research ethics before beginning this work.

I suggested the furthest investigations into the practical contraceptive use, the sex problem counseling and online data evaluation among the undergraduate student because these data will integrate into the health education plans for the next generation in this university or others.

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#### References

- Kinsey AC, Pomeroy WB, Martin CE. Data from Alfred Kinsey's studies. [Monograph on the internet]. 1948-1953; Monograph on the internet. Available at: http://www.kinseyinstitute. org/resources/ak-data.html#Scope. Accessed Feb, 6, 2015, 2015.
- 2. Blanc AK, Way AA. Sexual behavior and contraceptive knowledge and use among adolescents in developing countries. Stud Fam Plann. 1998; 29:106-16.
- Kinsey's concept of total outlets [Monograph on the internet]. http://www.loveyoursexlife.com/ Articles%20&%20Interviews/EXAMS/Comp%20 Kinsey%20outlets.htm. Accessed 22-12-2013, 2013.
- 4. Dixon-Mueller R. Starting Young: Sexual Initiation and HIV Prevention in Early Adolescence. AIDS Behav 2009;13:100-9.
- 5. Mosher WD. Fertility and family planning in the United States: insights from the National Survey of Family Growth. Fam Plann Perspect 1988; 20:207-17.
- Chandra-Mouli V, Camacho AV, Michaud PA. WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries. J Adolesc Health 2013; 52:517-22.

- 7. Kinsey AC, Pomeroy WR, Martin CE. Sexual behavior in the human male. 1948. Am J Public Health 2003:93:894-8.
- 8. Barrett FM. Sexual experience, birth control usage, and sex education of unmarried Canadian university students: changes between 1968 and 1978. Arch Sex Behav 1980;9:367-90.
- 9. Faulkenberry JR, Vincent M, James A, Johnson W. Coital behaviors, attitudes, and knowledge of students who experience early coitus. Adolescence 1987;22:321-32.
- 10. Wood PL. Teenage Sexuality in Different Cultures. Journal of Pediatric and Adolesc Gynecol 2012;25:228-32.
- 11. Spanier G. Formal and informal sex education as determinants of premarital sexual behavior.

  Arch Sex Behav 1976;5:39-67.
- 12. Wyatt G, Peters S, Guthrie D. Kinsey revisited, part I: Comparisons of the sexual socialization and sexual behavior of white women over 33 years. Arch Sex Behav 1988;17:201-39.
- Anderson K, Koo H, Jenkins R, et al. Attitudes, Experience, and Anticipation of Sex Among 5<sup>th</sup> Graders in an Urban Setting: Does Gender Matter? Matern Child Health J 2011;15:54-64.
- 14. Braun-Courville DK, Rojas M. Exposure to Sexually Explicit Web Sites and Adolescent Sexual Attitudes and Behaviors. J Adolesc Health 2009;45:156-62.
- 15. Brown JD, L'Engle KL. X-Rated Sexual Attitudes and Behaviors Associated With US Early Adolescents' Exposure to Sexually Explicit Media. Communic Res 2009;36:129-51.
- 16. Darling CA, Davidson JK, Sr. Coitally active university students: sexual behaviors, concerns, and challenges. Adolescence 1986;21:403-19.
- 17. Escobar-Chaves SL, Tortolero SR, Markham CM, Low BJ, Eitel P, Thickstun P. Impact of the Media on Adolescent Sexual Attitudes and Behaviors. Pediatrics 2005;116:303-26.

- 18. Fisher WA, Grenier G, Watters WW, Lamont J, Cohen M, Askwith J. Students' sexual knowledge, attitudes toward sex, and willingness to treat sexual concerns. J Med Educ 1988;63:379-85.
- 19. Juhasz A, Kaufman B, Meyer H. Adolescent attitudes and beliefs about sexual behavior. Child Adolesc Social Work J 1986;3:177-93.
- 20. Techasrivichien T, Darawuttimaprakorn N, Punpuing S, et al. Changes in Sexual Behavior and Attitudes Across Generations and Gender Among a Population-Based Probability Sample From an Urbanizing Province in Thailand. Arch Sex Behav 2016;45:367-82.
- 21. Manopaiboon C, Kilmarx PH, van Griensven F, et al. High rates of pregnancy among vocational school students: results of audio computer-assisted self-interview survey in Chiang Rai, Thailand. J Adolesc 2003;26:517-30.
- 22. Ruangkanchanasetr S, Plitponkarnpim A, Hetrakul P, Kongsakon R. Youth risk behavior survey: Bangkok, Thailand. Journal of Adolescent Health 2005;36:227-35.
- 23. Balthazart J. Minireview: Hormones and human sexual orientation. Endocrinology 2011; 152:2937-47.
- 24. James WH. Biological and psychosocial determinants of male and female human sexual orientation. J Biosoc Sci 2005;37:555-67.
- 25. Lippa R. A New Look at the Causes and Correlates of Sexual Orientation. Sex Roles 2011; 65:442-3.
- 26. Ostovich J, Sabini J. Timing of Puberty and Sexuality in Men and Women. Arch Sex Behav 2005;34:197.
- 27. Pattatucci AML, Hamer DH. Development and familiality of sexual orientation in females. Behav Genet 1995;25:407-19.
- 28. Sell RL. Defining and Measuring Sexual Orientation: A Review. Arch Sex Behav 1997;26:643-58.

- 29. Weinrich JD, Snyder PJ, Pillard RC, Grant I, Jacobson DL, Robinson SR, et al. A factor analysis of the Klein sexual orientation Grid in two disparate samples. Arch Sex Behav 1993;22:157-68.
- 30. Snell WE, Fisher TD, Walters AS. The multidimensional sexuality questionnaire: An objective self-report measure of psychological tendencies associated with human sexuality. Annals of sex research 1993;6:27-55.
- 31. Sandfort TG, Bakker F, Schellevis FG, Vanwesenbeeck I. Sexual orientation and mental and physical health status: findings from a Dutch population survey. Am J Public Health 2006; 96:1119-25.
- 32. Seto MC, Kjellgren C, Priebe G, Mossige S, Svedin CG, Langstrom N. Sexual coercion experience and sexually coercive behavior: a population study of Swedish and Norwegian male youth. Child Maltreat 2010;15:219-28.
- 33. Smith AMA, Rissel CE, Richters J, Grulich AE, de Visser RO. Sex in Australia: Sexual identity, sexual attraction and sexual experience among a representative sample of adults. Aust N Z J Public Health 2003;27:138-45.
- 34. Hansen DJ, Christopher JS, Nangle DW. Adolescent Heterosocial Interactions and Dating. In: Van Hasselt VB, Hersen M, eds. Handbook of Social Development: A Lifespan Perspective. Boston, MA: Springer US; 1992;371-94.
- 35. Rostosky SS, Welsh DP, Kawaguchi MC, Galliher RV. Commitment and Sexual Behaviors in Adolescent Dating Relationships. In: Adams JM, Jones WH, eds. Handbook of Interpersonal Commitment and Relationship Stability. Boston, MA: Springer US; 1999;323-38.
- 36. Sawyer AN, Smith ER, Benotsch EG. Dating Application Use and Sexual Risk Behavior Among Young Adults. Sex Res Social Policy 2018; 15:183-91.

- Doubova SV, Martinez-Vega IP, Infante-Castañeda C, Pérez-Cuevas R. Effects of an internet-based educational intervention to prevent high-risk sexual behavior in Mexican adolescents. Health Educ Res 2017;32:487-98.
- 38. Villarruel AM, Varas-Díaz N, Hanlon A, Betancourt E, Lozano AJ, DiNapoli L. Use of Web-Based Parent–Adolescent Health Promotion Program Among Puerto Ricans. Nurs Res 2018; 67:473-84.
- SCB. Digital and SME business. Omni Channel [Monograph on the internet]. 2016; https:// scbsme.scb.co.th/sme-inspiration-detail/SCB\_ Omni. Accessed 27 September, 2016.
- 40. Trends in the use of social media by youth in Thailand. [monograph on the internet]. 2016; http://www.wikigender.org/wiki/trends-inthe-use-of-social-media-by-youth-in-thailand/. Accessed September, 27, 2016.
- 41. Reiner I, Tibubos A, Hardt J, Müller K, Wölfling K, Beutel M. Peer attachment, specific patterns of internet use and problematic internet use in male and female adolescents. Eur Child Adolesc Psychiatry 2017;26:1257-68.
- 42. Castañeda D. Virginity Unmasked: The Many Meanings of Virginity. Sex Roles 2015;73:83-5.
- 43. Ford NJ, Kittisuksathit S. Destinations unknown: the gender construction and changing nature of the sexual expressions of Thai youth. AIDS Care 1994:6:517-31.
- 44. Techasrivichien T, Darawuttimaprakorn N, Punpuing S, et al. Changes in Sexual Behavior and Attitudes Across Generations and Gender Among a Population-Based Probability Sample From an Urbanizing Province in Thailand. Arch Sex Behav 2016;45:367-82.
- 45. Agardh A, Emmelin M, Muriisa R, Ostergren PO. Social capital and sexual behavior among Ugandan university students. Glob Health Action 2010;27:3.

- 46. Alzate H. Sexual behavior of Colombian female university students. Arch Sex Behav 1978;7:43-54.
- 47. Alzate H. Sexual behavior of unmarried Colombian University students: A five-year followup. Arch Sex Behav 1984;13:121-32.
- 48. Leigh BC, Morrison DM, Trocki K, Temple MT. Sexual behavior of American adolescents: results from a U.S. national survey. J Adolesc Health 1994:15:117-25.
- 49. Kaplan DL, Jones EJ, Olson EC, Yunzal-Butler CB. Early age of first sex and health risk in an urban adolescent population. J Sch Health 2013; 83:350-6.
- Halpern CJT, Udry JR, Suchindran C, Campbell
   B. Adolescent Males' Willingness to Report Masturbation. J Sex Res 2000;37:327-32.
- 51. Reece M, Herbenick D, Schick V, Sanders SA, Dodge B, Fortenberry JD. Background and considerations on the National Survey of Sexual Health and Behavior (NSSHB) from the investigators. J Sex Med 2010;7:243-5.
- 52. Ostergaard L. Sexual behaviour of adolescents before and after the advent of AIDS. Genitourin Med 1997;73:448-52.

- 53. Magnusson BM, Masho SW, Lapane KL. Early Age at First Intercourse and Subsequent Gaps in Contraceptive Use. J Womens Health 2012; 21:73-9.
- 54. Bello FA, Olayemi O, Fawole AO, et al. Perception and Practice of Emergency Contraception among Female Undergraduates of the University of Ibadan, Nigeria. J Reprod Health Med 2009; 20:113-21.
- 55. Golbasi Z, Kelleci M. Sexual experience and risky sexual behaviours of Turkish university students. Arch Gynecol Obstet 2011;283:531-7.
- Repossi A, Araneda JM, Bustos L, Puente C, Rojas
   C. [Sexual behavior and contraceptive practices among university students]. Rev Med Chil 1994; 122:27-35.
- 57. Reinisch JM, Sanders SA, Hill CA, Ziemba-Davis M. High-Risk Sexual Behavior Among Heterosexual Undergraduates at a Midwestern University. Fam Plann Perspect 1992;24:116.
- 58. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, et al. Age of sexual debut among US adolescents. Contraception 2009;80:158-62.

## บทคัดย่อ

พฤติกรรมทางเพศของนิสิตระดับปริญญาตรี สาขาวิทยาศาสตร์สุขภาพ มหาวิทยาลัยแห่งหนึ่งในภาคตะวันออก ประเทศไทย กิตติ กรุงไกรเพชร

ภาควิชาสูติศาสตร์ – นรีเวชวิทยา คณะแพทยศาสตร์ มหาวิทยาลัยบูรพา

บทน้ำ: พฤติกรรมทางเพศเป็นกิจกรรมของมนุษย์อย่างหนึ่งซึ่งมีความหลากหลายแปรเปลี่ยนไปตามบริบททางสังคม

และวัฒนธรรม พฤติกรรมดังกล่าวไม่ได้มีนัยแค่การสืบพันธุ์แต่ยังสื่อแสดงความหมายทางสังคมด้วย

วิธีการศึกษา: วัตถุประสงค์ของการศึกษา ได้แก่ การสำรวจความชุกของรสนิยมทางเพศ พฤติกรรมทางเพศที่จำแนกตามเพศ

ภาวะ การป้องกันโรคติดต่อทางเพศ การคุมกำเนิด โดยศึกษาเชิงสำรวจในกลุ่มนิสิตระดับ ปริญญาตรี ชั้นปีที่ 3 ของกลุ่มคณะวิทยาศาสตร์สุขภาพ ของมหาวิทยาลัยแห่งหนึ่งในภาคตะวันออกของประเทศไทย ในปี

พ.ศ. 2556-2557 โดยการใช้แบบสอบถามแบบตอบเอง

ผลการศึกษา: นิสิตหญิง 372 คนและชาย 114 คนเข้าร่วมในการศึกษานี้ พบว่าร้อยละ 70 ของนิสิตมีค่านิยมเชิงบวกต่อคุณค่า

ความบริสุทธิ์ของคู่รัก นิสิตชายมีค่าเฉลี่ยอายุของการร่วมเพศครั้งแรกน้อยกว่าเพศหญิง และมีพฤติกรรมทาง เพศที่หลากหลายกว่าเพศหญิง ร้อยละ 60 ของนิสิตหญิงเมื่อมีความต้องการทางเพศมักใช้ทางออกอื่นแทนโดย การออกกำลังกาย นิสิตร้อยละ 15 และ 12 ไม่คุมกำเนิดเมื่อมีการร่วมเพศกับคู่รักและบุคคลอื่นที่ไม่ใช่คู่รัก

ตามลำดับ

สรุปผลการศึกษา: พฤติกรรมทางเพศยังมีความแตกต่างกันในระหว่างเพศ โดยเพศชายมีกิจกรรมทางเพศที่หลากหลายกว่าเพศ

หญิง นิสิตบางส่วนยังขาดความเข้าใจถึงวิธีการคุมกำเนิดอย่างถูกวิธี กลุ่มเหล่านี้ต้องการอบรมในเรื่องทักษะ

การใช้ชีวิตในเรื่องเพศวิถีเพิ่มมากขึ้น

คำสำคัญ: พฤติกรรมทางเพศ, เยาวชน, มหาวิทยาลัย, ประเทศไทย