

ATTITUDES AND BEHAVIOR AMONG RURAL THAI ADOLESCENTS REGARDING SEXUAL INTERCOURSE

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Abstract. Early initiation of sexual intercourse has been associated with negative consequences, such as higher rates of unwanted pregnancy and HIV infection. This study examined the attitudes and behavior of rural Thai adolescent students aged 16 to 20 years from northern Thailand regarding sexual intercourse. Differences between participants who previously had sexual intercourse and those who had not were explored. Those who had not previously had sexual intercourse were asked about the reasons why they had not had sex, their future plans for having sex and their dating experiences. More than 70% of participants stated they had not previously had sexual intercourse but one third of this group reported engaging in other sexual behavior. There were significant differences by gender, religion, ethnicity, and household income between those who had previously had sex and those who had not. Among those who had not previously had sexual intercourse, concern for their parents' feelings was the most common reason for delaying intercourse. About two-thirds of this group had plans not to have sexual intercourse until after marriage; nearly half of them reported currently having a boyfriend/girlfriend. Interventions aimed at delaying sexual intercourse should involve adolescents in their design and include their attitudes for delaying intercourse. Because of many gender differences seen in our study, interventions should be designed differently for males and females in rural northern Thailand.

Keywords: attitude, behavior, sexual intercourse, adolescents

INTRODUCTION

Early initiation of sexual intercourse is associated with negative consequences, such as teenage pregnancies, a higher

incidence of sexually transmitted infections, lower rates of condom use, higher numbers of sexual partners and higher rates of HIV infection in the United States (Sandfort *et al*, 2008; O'Donnell *et al*, 2001). Similar findings have also been reported from Zimbabwe (Pettifor *et al*, 2004), South Africa (Pettifor *et al*, 2009), China (Ding *et al*, 2013), Norway (Gravningen *et al*, 2013) and Tanzania (Ghebremichael *et al*, 2009).

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Thailand has the highest rate of HIV infection in Asia with an estimated 1% prevalence rate among those aged 15-45 years. In 2011, 480,000 Thais were living with HIV infection; 43% of them were women (AVERT, 2013). It is important to include delaying sexual debut in HIV prevention programs. Interventions should be based on reasons why Thai adolescents do delay sexual intercourse. These reasons have not been previously reported.

Previous studies of adolescent sexual behavior in Thailand have focused on characteristics of adolescents who engage in early sexual intercourse and neglect those who deferred sex (Podhisita and Pattaravanich, 1995; Isarabhakdi, 2000; Allen *et al*, 2003; Srisuriyawet, 2006). Understanding why some adolescents delay sexual intercourse is useful for designing interventions to delay onset of sexual intercourse. Not having sexual intercourse does not mean a lack of sexual behavior, since there are other sexual activities that do not involve intercourse. It is important to study how those other sexual activities are associated with the decision to have sexual intercourse. Perspectives about intimacy, sexual relationships, dating and future plans for sexual intercourse among adolescents need to be better understood to inform interventions targeting this group.

MATERIALS AND METHODS

Subjects

This study was conducted in 2012 in rural Chiang Mai Province, northern Thailand. Participants were students in their final year of high school (equivalent to the US grade 12) at two rural high schools located 1½ hours drive from Chiang Mai City. The study was explained to the students and parental consent forms were given. After both students and their

parents give informed consent the student were given a self-administered questionnaire to fill out. Exclusion criterion was failure to give consent. The study was approved by the Human Experimentation Committee, Research Institute for Health Sciences, Chiang Mai University.

Data collection

The questionnaire asked about demographics and attitudes and practices regarding sexual intercourse. Students who had not previously had sexual intercourse were asked about their reasons for not having sex, their future plans about having sex, their dating experiences and their plans regarding delaying sexual intercourse. Sexual intercourse was defined as penetrative penile vaginal and/or anal intercourse.

Data analysis

Questionnaire data were entered into Microsoft Access 2003 in duplicate. The data were then exported into SPSS version 15 for analysis (IBM, Armonk, NY). Frequencies and cross tabulations, means and inferences about proportions were then calculated. Differences in responses between males and females were compared.

RESULTS

Sample description

Three hundred fifty-nine students were included in the study; 128 were males. Table 1 shows some respondent demographics by history of sexual intercourse. The mean age of the respondents was 17.3 years. About 90% of the respondents were Buddhist; the remainder were either Christian or Muslim. Three-quarters of the respondents were from northern Thailand; 20% were from a regional ethnic minority. Seventy-nine point seven percent of respondents lived with parents and 69.3% had a household income of

<10,000 Baht (USD300) per month.

Sexual behaviors among participants

Twenty-nine point two percent of respondents stated they had previously had sexual intercourse while the rest had not. Thirty-five point nine percent of the males had previously had sexual intercourse while 25.5% of females had. Nine point one percent of Christian/Muslim respondents stated they had previously had sexual intercourse and 31.3% of Buddhists had. Twelve point nine percent of ethnic minority respondents had sexual intercourse compared to 32.7% of Thai respondents. Family income was associated with having had intercourse: 38.6% of those from a family with a household income >10,000 Baht per month had previously had sexual intercourse compared to 24.1% of those with a household income <10,000 Baht per month. Neither age nor living with parents was significantly associated with having sexual intercourse (Table 1).

Adolescents who had sexual intercourse

The mean age of first sexual intercourse among respondents was 15.8 years. Males had first sexual intercourse at a mean age of 15.9 years, and females at a mean age of 15.8 years (the difference was not significant). Fifteen percent of respondents reported first sexual intercourse before age 15 years, with no differences between male and female participants. The mean number of lifetime sexual partners was 2.6. Males tended to have more sexual partners than females, 3.0 *vs* 2.3, respectively, but this difference was not significant. More than half of those who had sexual intercourse reported having more than one lifetime sexual partner, with no difference by gender.

Adolescents who had not previously had sexual intercourse

Of the 254 respondent who reported

never having sexual intercourse, the most common cited reason for delaying sexual intercourse was concern about their parents' feelings (96.0%). Other reasons were fear of acquiring AIDS/STIs (91.8%), fear of pregnancy (88.2%), social repercussions at school such as blame or gossip (88.5%), believing that sex before marriage was morally wrong (88.2%), and not feeling ready to have sexual intercourse (84.1%). Females were significantly more likely ($p<0.001$) to state these reasons for delaying sexual intercourse than males. Only 9.8% of participants indicated a desire to initiate sexual intercourse but they had not had the opportunity, though this varied by gender with 25.6% of males citing this reason as compared to 2.4% of females (Table 2).

Plans for future sexual intercourse

About two-thirds of those who had not had sexual intercourse stated they planned to delay sexual intercourse until after marriage. A few planned to wait until they were with someone they loved or were engaged to be married. About 15% were uncertain about their plans to have sexual intercourse in the future. Waiting for marriage was the most frequently cited intention by males and females, in 75.6% and 43.9%, respectively. Males were significantly more likely to plan to have sexual intercourse when involved with a partner they loved than females (17.1% *vs* 1.7%). There was no difference by gender among respondent who did not know their plans for sexual intercourse in the future. Three percent of this group planned to have sexual intercourse at the next available opportunity, with only males choosing this response category. A small proportion of participants stated they had no plans for sexual intercourse at all (Table 3).

Dating experiences

Nearly 40% of the group that had not

Table 1
Demographic characteristics by history of sexual intercourse.

Characteristics	Total (N=359)	Those who have had sexual intercourse (N=105)	Those who have not had sexual intercourse (N=254)	Chi-square (<i>p</i> -value)
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	
Age (years) (mean = 17.29)				
16-17	269 (74.9)	74 (27.5)	195 (72.4)	0.454
18	75 (20.9)	26 (34.7)	49 (65.3)	
19-20	15 (4.2)	5 (33.3)	10 (66.7)	
Gender				
Male	128 (35.6)	46 (35.9)	82 (64.1)	0.038
Female	231 (64.4)	59 (25.5)	172 (74.5)	
Religion				
Buddhist	326 (90.8)	102 (31.3)	224 (68.7)	0.008
Christian or Muslim	33 (9.2)	3 (9.1)	30 (90.9)	
Ethnicity				
Northern Thai	271 (75.5)	82 (30.3)	189 (69.7)	0.037
Minority (hill tribes)	62 (17.3)	8 (12.9)	54 (87.1)	
Thai from other region	26 (7.2)	15 (57.7)	11 (42.3)	
Living situation				
Live with parents	286 (79.7)	84 (29.4)	202 (70.6)	0.206
Live with friends	17 (4.7)	2 (11.8)	15 (88.2)	
Other living arrangements	56 (15.6)	19 (33.9)	37 (66.1)	
Household income/month (Baht)				
≤5,000	118 (32.9)	27 (22.9)	91 (77.1)	0.015
5,001-10,000	114 (31.8)	29 (25.4)	85 (74.6)	
>10,000	127 (35.4)	49 (38.6)	78 (61.4)	

had sexual intercourse had dated previously. Dating was defined by the study as two people participating in activities together. Having dated did not mean having a regular boyfriend or girlfriend. While males had dated slightly more than females, this difference was not statistically significant. Table 4 summarizes the sexual experiences of the participants who had dated previously. These experiences ranged from hand holding (nearly 90%) to stimulation of the breasts by hand or mouth (5.5%). The differences by gender were not significant.

Relationship status

Forty-five percent of the participants report currently having a boyfriend or girlfriend. Eleven percent of females reported being in a same-sex relationship; no males reported having a same-sex partner. While half of those in a relationship had introduced their partner to their parents, only 16% wanted to marry or have a long-term relationship with their current partner. The remainder were equally divided between not wanting a long-term relationship or being unsure of the relationship's future. Half openly

Table 2
Reasons given for not having sex among respondents.

Reasons	Total <i>n</i> ^a (%)	Male <i>n</i> ^a (%)	Female <i>n</i> ^a (%)	<i>p</i> -value ^b
Concern for parents' feelings	237 (96.0)	68 (87.2)	169 (100)	<0.001
Fear of AIDS/STIs	224 (91.8)	64 (83.1)	160 (95.8)	0.001
Fear of pregnancy	216 (88.2)	53 (68.8)	163 (97.0)	<0.001
Fear of blame/gossip at school	207 (84.5)	54 (70.1)	153 (91.1)	<0.001
Think that having sex before marriage was not right	207 (84.2)	54 (70.1)	153 (90.5)	<0.001
Not ready	202 (82.1)	45 (57.7)	157 (93.4)	<0.001
No opportunity	24 (9.8)	20 (25.6)	4 (2.4)	<0.001

^aContains missing values, not all participants responded.

^bAssessed by chi-square test, except for fear of AIDS/STI and concern for parents' feeling which were calculated by Fisher's exact test due to low expected value.

Table 3
Plans among respondents to have sexual intercourse in the future.

	Total <i>n</i> ^a (%)	Male <i>n</i> ^a (%)	Female <i>n</i> ^a (%)	<i>p</i> -value ^b
I plan to wait until marriage.	166 (65.4)	36 (43.9)	130 (75.6)	
I plan to wait until I am engaged to be married.	14 (5.5)	4 (4.9)	10 (5.8)	
I plan to wait until I find someone I love.	17 (6.7)	14 (17.1)	3 (1.7)	
I plan to have sex whenever an opportunity comes along.	9 (3.5)	9 (11.0)	0 (0)	<0.001
I plan not to have sex.	2 (0.8)	1 (1.2)	1 (0.6)	
I am not sure about whether or when I will have sex in the future.	37 (14.6)	12 (14.6)	25 (14.5)	
Total	245 (100)	76 (100)	169 (100)	

^aContains missing values, not all participants responded.

^bFisher's exact test.

discussed sex with their partner, though only 10% did so regularly. Twenty-nine point eight percent felt very comfortable discussing sex in this study while 59.6% were neither comfortable nor uncomfortable discussing sex. Table 5 shows some characteristics of participants who had not has sex.

DISCUSSION

In Thailand, the proportion of adolescents who have had sexual intercourse has been increasing among all ages and the average age of first sexual intercourse has been declining steadily among both genders (Bureau of Epidemiology, 2011).

Table 4
 Dating experiences among adolescents who had not had sexual intercourse.

	Total <i>n</i> ^a (%)	Male <i>n</i> ^a (%)	Female <i>n</i> ^a (%)	<i>p</i> -value ^b
Ever dated someone? (<i>n</i> =252)				
Yes	94 (37.3)	36 (45.0)	58 (33.7)	0.085
No	158 (62.7)	44 (55.0)	114 (66.3)	
Ever done the following while on a date?	(<i>n</i> =94)	(<i>n</i> =36)	(<i>n</i> =58)	
Held hands (<i>n</i> =92)				
Yes	81 (88.0)	31 (86.1)	50 (89.3)	0.647
No	11 (12.0)	5 (13.9)	6 (10.7)	
Kissed on the cheek (<i>n</i> =92)				
Yes	46 (50.0)	17 (47.2)	29 (51.8)	0.669
No	46 (50.0)	19 (52.8)	27 (48.2)	
Kissed on the lips (<i>n</i> =92)				
Yes	25 (27.2)	11 (30.6)	14 (25.0)	0.559
No	67 (72.8)	25 (69.4)	42 (75.0)	
Engaged in fondling the breasts or genitalia through the clothes (<i>n</i> =91)				
Yes	12 (13.2)	6 (16.7)	6 (10.9)	0.427
No	79 (86.8)	30 (83.3)	49 (89.1)	
Engaged in fondling or oral stimulation of the breasts inside the clothes (<i>n</i> =91)				
Yes	5 (5.5)	3 (8.3)	2 (3.6)	0.381
No	86 (94.5)	33 (91.7)	53 (96.4)	

^aContains missing values, not all participants responded.

^bChi-square test, except for "Engaged in fondling or oral stimulation of the breasts inside the clothes", used Fisher's exact test due to low expected value.

One-third of our participants had sexual intercourse previously and about half of those had done so by age 16. These early initiators were also likely to have had multiple partners. This suggests interventions should begin early in adolescence. Nitirat (2007) found Thai adolescents engaged in a variety of sexual behavior, media and technology had the greatest influence on that sexual behavior. The same study found that while most Thai adults did not condone premarital sex among adolescents, they were willing to accept other sexual behavior.

Given the connection between early initiation of sexual intercourse and higher

rates of HIV infection (O'Donnell *et al*, 2001; Sandfort *et al*, 2008), it is reassuring that the majority of participants (70.8%) reported never having had sexual intercourse. While nearly 66% of participants planned to delay sexual intercourse until after marriage, nearly half of this group reported currently being in a relationship which could increase the risk of initiating sexual intercourse prior to marriage. In our study, 5%-27% of participants were already engaged in other types of sexual activity. Some stated they would have sex when they found someone they loved, felt ready to do so or whenever an opportunity presented itself. This is consistent

Table 5
Relationship experiences among adolescents who had not had sexual intercourse.

	Total <i>n</i> ^a (%)	Male <i>n</i> ^a (%)	Female <i>n</i> ^a (%)	<i>p</i> -value ^b
Currently have a boyfriend/girlfriend?	(<i>n</i> =252)	(<i>n</i> =80)	(<i>n</i> =172)	
Yes	113 (44.8)	34 (42.5)	79 (45.9)	0.610
No	139 (55.2)	46 (57.5)	93 (54.1)	
Gender of partner	(<i>n</i> =113)	(<i>n</i> =34)	(<i>n</i> =79)	
Male	70 (62.0)	0 (0.0)	70 (88.6)	<0.001
Female	43 (38.0)	34 (100.0)	9 (11.4)	
Introduced boyfriend/girlfriend to parents				
Yes	61 (54.0)	20 (58.8)	41 (51.9)	0.498
No	52 (46.0)	14 (41.2)	38 (48.1)	
Plans to get married/have a long-term relationship with current partner				
Yes	18 (15.9)	9 (26.5)	9 (11.4)	0.016
No	48 (42.5)	8 (23.5)	40 (50.6)	
Not sure	47 (41.6)	17 (50.0)	30 (38.0)	
Discussed sexual issues with boyfriend/girlfriend (<i>n</i> =106)				
Yes, quite often	11 (10.4)	4 (12.9)	7 (9.3)	0.470
Yes, occasionally	37 (34.9)	8 (25.8)	29 (38.7)	
Never	58 (54.7)	19 (61.3)	39 (52.0)	
Comfort-level when discussing sex with a boyfriend/girlfriend (<i>n</i> =47)				
Very comfortable	14 (29.8)	4 (36.4)	10 (27.8)	0.413
Neither comfortable nor uncomfortable	28 (59.6)	5 (45.4)	23 (63.9)	
Somewhat uncomfortable	5 (10.6)	2 (18.2)	3 (8.3)	

^aContains missing values, not all participants responded.

^bChi-square test, except for "Gender of currently boyfriend/girlfriend," "Talk about sexual issues with boyfriend/girlfriend" and "Feel comfortable when talking about sex with a boyfriend/girlfriend", used Fisher's exact test due to low expected value.

with the findings of other studies that a large percentage of adolescent males and a growing percentage of adolescent females are having premarital sex (Podhisita and Pattaravanich, 1995; Baker, 2000; Allen *et al.*, 2003).

More than 88% of the participants in our study who delayed sexual intercourse were aware of the risk of pregnancy and contracting sexually transmitted diseases, such as HIV/AIDS. More than 82% attributed delaying sexual intercourse to social factors, such as gossip, parental reaction and the social taboo of premarital sex.

These findings are consistent with a study by Lyness (n.d.) that found three factors were associated with a delay in sexual intercourse: fear-based postponement, emotionality and confusion, and conservative values. These factors have also been found in studies from other countries (Leigh, 1989; Pike, 1999). Interventions that are designed to assist young people in delaying the initiation of sex should provide correct information about the risks of sexually transmitted diseases. The interventions should elicit opinions about the implications for reputations that go

with having sex. They should reinforce the concept that readiness to engage in sexual intercourse includes resolving conflicts in their own minds about engaging in it. They should also reinforce the values that adolescents have expressed about the importance of delaying sexual initiation until engagement or marriage.

The reasons for not having sex are likely to change as people grow older or leave the rural area where they currently reside. Leaving school would remove the concern about becoming the object of gossip among classmates. Moving somewhere far from their parents could make it easier to have sex without their parents knowing. It is interesting to note the large difference between males (68.8%) and females (97.0%) regarding delaying initiation of sexual intercourse because of fear of pregnancy. This barrier could be removed if the woman has confidential access to birth control. The fear of sexually transmitted infections might decrease among those who believe condoms are protective.

Two studies conducted in urban Thailand found adolescents screened potential sexual partners by judging if they were 'good girls/boys' as being STI/HIV-free partners (Thianthai, 2004; Powwattana and Ramasoota, 2008). A poor knowledge about HIV prevention may be even worse in rural areas. Access to sexual health knowledge is limited among these adolescents since rural communities tend to provide less education about sexual health issues (Sridawruang *et al*, 2010). Most rural adolescents will eventually move to bigger cities for better job and education opportunities (Isarabhakdi, 2000). As a result, they are vulnerable to sexual risks as they adapt to sexual opportunities and pressures to have sex that are more prevalent in cities (Kunstadter,

2013). Northern Thailand is also home to diverse ethnic minorities, including several hill tribes. Studies have found these populations have lower levels of knowledge about HIV/AIDS, sexual risks and reproductive health issues than other Thais (Kunstadter, 2013; Keereekamsuk *et al*, 2007).

In addition to pregnancy, other gender differences were seen in our study. More female participants were concerned about loss of reputation and were more likely to state they were not ready to engage in sexual intercourse. They were also more likely than males to state they delayed sexual intercourse due to concerns about their parents' feelings. These findings may be explained by the study by Rhucharoenpornpanich *et al* (2012) that parental discussions about sex occurred more frequently with female adolescents than males. It is possible parents are more likely to discourage their daughters from having sex given the social ramifications and were more lenient with their sons. This suggests different messages need to be directed toward males and females, and interventions should approach males and females separately.

There is evidence of a double standard regarding premarital sex in Thailand. Thai females are expected to adhere closely to traditional attitudes about avoiding sexual intercourse prior to marriage, which is not considered important for males (Isarabhakdi, 2000; Sridawruang *et al*, 2010). This double standard may explain why participants in our study who indicated plans to have sexual intercourse at the next available opportunity were only male. While some females may feel the same way, they may have felt that it socially inappropriate to admit to such a desire, even on a confidential questionnaire.

Nearly all the participants who had not had sexual intercourse cited their parents' feelings as a reason for delaying sex. This suggests the importance of parents as allies in delaying the onset of sexual intercourse. However, parents in Thailand are not likely to speak openly about sexual intercourse with their adolescents (Nitirat, 2007). Sridawruang *et al* (2010) found a greater need for support among adolescents by their parents. The promotion of open, honest communication between parents and adolescents is important to overcome difficulties of social judgment and align thinking between old and new social values. Studies in other countries have found that adolescents who perceive they have a better level of communication with their parents were less likely to engage in sexual intercourse (Karofsky *et al*, 2000). This is likely to apply to the northern Thai context. Interventions are needed that develop parenting skills on how and when to talk to their adolescents about sex. Rhucharoenpornpanich *et al* (2012) found Thai parents were more likely to talk with their teenage sons and daughters about bodily changes during puberty and dating but less likely to discuss sex-related issues such as birth control and HIV/AIDS. The finding that participants who had sexual intercourse were more likely to come from households with a greater monthly income is worth further investigation because this may be the parental group most in need of learning how to talk about sex with their children.

Finally, religion can play a strong role in encouraging adolescents to delay sexual intercourse. Christian/ Muslim participants in our study had much lower rates of having engaged in sexual intercourse than Buddhists, suggesting Christian/ Muslim values may play a stronger role

in the decision to delay sexual intercourse. Consultation with Buddhist leaders may be valuable in addressing this problem among Buddhist youth. Ways should also be sought on how to bring traditional Buddhist values into education programs.

The traditional idea of not engaging in sexual intercourse before marriage is rapidly disappearing among youth in northern Thailand. Interventions aimed to delaying sexual intercourse in this population should engage them in early adolescence, since many adolescents have already had sexual intercourse by age 16 and others are already engaged in other sexual activities. Interventions should emphasize cultural and social values already expressed by adolescents. Given the gender differences in responses, interventions that separately target males and females may be necessary. Parents and faith communities should be actively included in all efforts. However, it is not enough to focus only on delaying sexual intercourse. Any intervention must also prepare adolescents for how to negotiate safe sex with their partner and must provide them with accurate information on condom use and other safer sex practices.

The validity of the results in our study are subject to the truthfulness of the participants. Some participants might over reported sexual behavior to "show off" while others might have been reluctant to admit having engaged in certain sexual practices, as may be evidenced by no reports of males having sex with other males. The participants may have also answered the questions incorrectly due to lack of sexual knowledge. For example, the high percentage of same sex partners reported by female students suggests that they might mistake friendships for dating. However, study staff went to great lengths to fully explain the study

to the participants and encourage them to answer as honestly as possible. Finally, the participants were recruited from only two government secondary schools and adolescents not in the educational system were not included.

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