USE AND PERCEPTIONS OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG NORTHERN THAI ADOLESCENTS

Arunrat Tangmunkongvorakul[1], Cathy Banwell[2], Gordon Carmichael[2], Iwu Dwisetyani Utomo[3], Sam-ang Seubsman[4], Matthew Kelly[2] and Adrian Sleigh[2]

[1]Research Institute for Health Sciences, Chiang Mai University, Chiang Mai, Thailand; [2]National Centre for Epidemiology and Population Health, Australian National University; [3]Australian Demographic and Social Research Institute, Australian National University, Canberra, Australia; [4]School of Human Ecology and Thai Health Promotion Centre, Sukhothai Thammathirat Open University, Nonthaburi, Thailand

Abstract. This study sheds light on obstacles to safe sexual health for young Thais and their need for appropriate sexual and reproductive health services. The study population was 1,745 unmarried adolescents aged 17-20 who resided or worked in Chiang Mai, the major city in northern Thailand. The study used quantitative and qualitative methods to explore the vulnerability of sexually active adolescents as well as the lack of support and care for them from parents and health providers. We found that young Thais still prefer pharmacies for self-medication and use government health care facilities as a last resort. Current health services are not suitable for adolescents in northern Thailand because they lack privacy and impose judgemental attitudes, especially towards sexually active adolescent females. Current programs for adolescent sexual and reproductive health focus on education and counselling and do not provide appropriate privacy or clinical care. There is a pressing need for advocacy, and policy support for the development of youth-friendly sexual and reproductive health services in Thailand.

Keywords: sexual behavior, sexual and reproductive health services, health policy, adolescent, Chiang Mai, Thailand

INTRODUCTION

The high coverage and good quality of family planning services, and maternal and child health care in Thailand has been reported in Thailand's health profile (Wibulpolprasert, 2002; WHO SEARO, 2003; MoPH, 2005). However, existing evidence suggests that family planning services do not meet the needs of unmarried adolescents. Indeed, apart from HIV reduction campaigns for sex workers, the sexual and reproductive health of young Thai people has never been treated as a priority.

In Thailand, contraceptives and advice about their use are available to most married couples through mother and child care centers, clinics, hospitals, and for-profit and non-profit private organizations. However, this is not the case for

Correspondence: Dr Arunrat Tangmunkongvorakul, Research Institute for Health Sciences, Chiang Mai University, PO Box 80 CMU, Chiang Mai 50202, Thailand,
Tel: +66 (0) 53 945055; Fax: +66 (0) 53 221849,
E-mail: arunrat@rihes-cmu.org

unmarried adolescents, as they are not expected to be sexually active. The embarrassment of teenagers over using sexual and reproductive health services in Thailand is a major problem. The Ministry of Public Health (MoPH) started a program in 1985 to meet adolescent reproductive health needs, and successive evaluations found that there had been many obstacles to its implementation nationwide (Warakamin and Takrudtong, 1998; Poonkhum, 2003). Services needed include relationship counseling; sex education; contraception (both conventional and emergency methods); prevention, diagnosis and treatment of sexually transmitted infections; menstrual regulation; and counseling regarding unwanted pregnancy and safe therapeutic abortion.

During 1991-1993, northern Thailand was the region where HIV infection rates were highest in Thailand (Nelson *et al*, 1994; Celentano *et al*, 1995). Infection was not reported in the region until 1988, but within a few years more than half the brothel-based female sex workers and one-in-six 21-year-old male Royal Thai Army conscripts from the upper northern provinces were HIV-infected (Celentano *et al,* 1995). Following a persistent prevention campaign, infection rates among young men in the north decreased. However, in response to fears about commercial sex and HIV infection, young men in northern Thailand have turned to other ways of satisfying their sexual needs (Jenkins and Kim, 2004; Taywaditep *et al,* 2004). Some, especially those in urban middle-class settings, have taken to paying for sex with sex workers who are not in sex establishments. Others visit nightlife locations in cities for casual sex with pick-up partners. Then, there are an increasing number of those who have sex with girlfriends in committed romantic relationships.

In 2002, Tangmunkongvorakul *et al* (2006) explored the perspectives of providers in northern Thailand concerning difficulties with sexual and reproductive health services for unmarried youth. Providers were aware that unmarried youth were increasingly exposed to risky sexual behavior, yet faced an array of obstacles in acquiring appropriate information and services in user-friendly ways. Facility-level obstacles included a lack of privacy in clinic settings, excessive waiting times, and inconvenient clinic hours. Ambivalence about providing services to unmarried youth who were sexually active was evident. Not only did some providers express negative attitudes, but there was a lack of understanding of the difficulties adolescents may encounter in expressing their needs and admitting their sexual activity status. There was also a lack of appreciation of the range of fears they may have over possible violations of confidentiality and inability to pay for needed services. Providers also expressed some unwillingness to accommodate the additional time requirements of adolescents who sought counselling or other services, and some frustration about adolescent's unwillingness to reveal their sexual histories and to follow up on prescribed treatment.

The study was set in Chiang Mai City, which is the cultural, economic, communications and tourism center of northern Thailand and a very important area nationally. As a result of national planning programs to move industry and other technologies from Bangkok to other regions, Chiang Mai City has become a major destination for rural-urban migrants, as well as a site to which adolescents from country areas and surrounding provinces move for education and work

(Vaddhanaphuti, 1999; Vuttanont *et al*, 2006). For young rural migrants, Chiang Mai City is a new social space removed from the social and community surveillance as well as the support of families and relatives. They live in rented rooms among strangers who pay little attention to them. As they gain new friends and social networks, they adopt new social behaviors and values, and eventually acquire sexual partners (Timpan, 2005; Tangmunkongvorakul, 2009). Given its HIV history and ongoing socio-economic significance, northern Thailand is an informative and appropriate region to investigate the 'use and perceptions of sexual and reproductive health services' among adolescents.

This paper aims to describe the experiences and perspectives of adolescents with regard to obstacles to their safe sexual health outcomes and desirable health services. The analysis draws on both the quantitative survey data and qualitative information obtained from adolescents in the Chiang Mai urban area. Findings are intended to guide the development of sexual health services for adolescents.

MATERIALS AND METHODS

Data sources and collection methods

Data were collected in 2006. The field research team consisted of the first author and five young research assistants, three females and two males, aged 20-23 years, who were trained in sociology and anthropology, and who had additional training specific to this project. The team members were good at interacting with adolescents of diverse sexual orientations.

This study consisted of three components. One was an adolescent lifestyle and relationships questionnaire administered as a computer-assisted self-interview (CASI) via the internet or as a self-administered questionnaire (SAQ) with paper and pen. The second and third components were individual in-depth interviews and focus group discussions, respectively; both supplemented by participant-observations and field notes.

For the lifestyle and relationship questionnaire, CASI was used at field sites (see Study population below) where computers and the internet were readily accessible (*ie*, big schools and Chiang Mai University). At other locations (*ie*, smaller schools and open or public places), the SAQ method was used. The questionnaire was 22 pages long and covered socio-economic background, recreational activities, alcohol, tobacco and drug use, relationships, sexual identity and experience, sexually transmitted diseases, birth control, pregnancy and abortion, mental health, and need for sexual health services. Most questions were close-ended, and the questionnaire was pre-tested in both CASI and SAQ formats.

The in-depth interviews were conducted by team members and lasted for 60-90 minutes. Interviewees were recruited from survey participants after rapport had been established to be able to discuss their sexual activities. While ensuring that they were drawn from the three educational groups, they were purposively selected to represent the range of gender identity diversity. Sixteen males and 14 females were interviewed, of whom 21 (11 males and 10 females) were students who ranged from grade 12 at high or vocational schools to second-year university, and nine (five males and four females) were employed, waiting for jobs or unemployed. About half of them lived with their parent(s).

The focus groups lasted for approximately 60-90 minutes and included

eight male and eight female groups, each with 4-8 participants. Four groups were recruited from the out-of-school sample, six from the vocational school sample, and six from the high school/university sample. The groups were purposively selected to represent the diverse gender identities of participants who were invited to join by the research team after they had completed the survey. Some survey respondents also brought friends who shared their gender identities to the focus groups, but more than three-quarters of the people who participated in the focus group discussions were questionnaire survey respondents. Both the individual and group interviews were used to probe normative aspects of adolescent's daily lives and intimate relationships, and their perceptions of sexual and reproductive health services.

Ethical considerations

Ethical approval for this study was obtained from the Australian National University (Protocol 2005/340, approved 22 November 2005) and Chiang Mai University (Protocol 6/2006, approved 13 March 2006). Participants chose the place and time for interviews and discussions, and every effort was made to facilitate their comfort and security. Anonymity and confidentiality were also maintained at all times. Information and advice regarding the matters discussed in the study were also made available to participants, as well as information on available services.

Study population

We defined our study population as adolescents aged 17-20 years who were literate, unmarried males and females. The sample was categorized according to the following characteristics: gender (male, female) and educational status (out-of-school, vocational school, and high school/university). Thus, all sampled persons fell into six groups: males and females in an out-of-school group, and those studying at vocational schools, or studying at university or high schools.

We recruited our respondents from three sources. The first source was from youth-frequented public spaces, including playing fields, shopping malls, and public gardens [assisted by non-governmental organizations (NGOs) that work with Thai youth]. Those recruited from this source were differentiated by the three educational groups. The second source was from non-formal education centers (all respondents were included in the out-of school education group). The third source was from formal education centers (vocational schools, senior high schools, and university). These six educational groups included both sexes and a range of socio-economic levels across the adolescent Thai population, and much of our quantitative analyses were based on these groups as they vary considerably in their sexual experience and need for reproductive health services.

For each gender-education group, we aimed to generate a sample that was sufficient to produce an error no more than ± 7% at the $p<0.05$ significance level when estimating key indicators such as the percentage of the group with experience of sexual intercourse. Applying our desired sampling error and significance level meant we needed to obtain samples of 192 individuals for each of these six groups, a total of 1,152 individuals. After recruitment we arrived at a total sample of 1,745 (906 males and 839 females). In all education and gender groups, we exceeded the required sample size except for out-of-school females, who proved more difficult to recruit, and of whom we re-

cruited only 169 (12% less than the target of 192). The recruitment methods used for samples of each of the three educational groups were as follows.

Out-of-school sample. These respondents were all recruited from non-formal education centers (47 males and 85 females) and from public spaces in Chiang Mai City (191 males and 84 females). Non-formal education centers provide classes for adolescents who are outside the formal education system. They generally attend for three hours on weekends. The six largest centers were approached on teaching days, and all age-eligible youth were invited to participate.

The NGOs assisting in recruitment were the Harm Reduction Youth Program, the Street Youth Outreach Team, the Adolescent Sex Education Outreach Team, and the Men's Sexual Health Outreach Team. Working with NGO staff, the research team recruited respondents from an array of public gathering places (*ie*, playing fields, shopping malls and public gardens) at various times of the day and night. This sample was non-random, but it did ensure that those respondents in the out-of-school group were quite diverse and not dominated by any single source.

Vocational school sample. These respondents were drawn from public spaces mentioned above (52 males and 40 females) as well as directly from vocational schools in Chiang Mai City (357 males and 172 females). From the two public and 10 private vocational schools in Chiang Mai City, one public technical, one private technical, and one private commercial school were chosen at random. At each of these schools, age-eligible students from three departments were invited to participate. In practice, almost all eligible students responded and the target sample size was exceeded. Selected departments were electronics, mechanics, and computer technologies at the two technical schools, and marketing, hotel management, and finance at the commercial school.

High school/university sample. These respondents were drawn from public spaces mentioned above (63 males and 69 females) as well as directly from senior high schools and universities in Chiang Mai City (199 males and 390 females). From the nine pubic and 11 private high-schools and the two public and two private universities in Chiang Mai City, one large public and one large private high-school were chosen along with Chiang Mai University; thereby, representing all components of this educational group. At the high schools, a sample of respondents was obtained from the pure and applied sciences and language study groups. The university sample was drawn from the health sciences, science and technology, and humanities and social sciences groups. All respondents volunteered after being issued an invitation.

Data analysis

The responses to the SAQs were double-entered using Microsoft Access 2003® (Microsoft Corp, Redmond, WA). The CASI data were digitized as they were collected and merged with the SAQ data before analysis. The merged data were analysed using SPSS® version 14 (SPSS, Chicago, IL). The quantitative outcome variables measured were those dealing with 'use or perceptions of sexual and reproductive health service facilities.' The explanatory variables were 'gender,' 'sexual experience,' and 'educational group' (out-of-school, vocational school, or high school and university groups).

Analyses included description of sexual experience for males and females in the three educational groups. This was followed by comparisons of males

and females for 'use and perceptions of sexual health services' further described according to 'sexual experience,' 'education group,' and 'type of service.' Overall results for females on 'sexual experience' and 'use and perceptions of sexual health services' were standardized to show what would have happened if the females educational groups were proportionally identical to males. This allowed us to compare male and female outcomes directly removing the differential influence of education groups. Formal comparisons between groups used the chi-square statistic to indicate if the differences in proportions were statistically significant at the $p<0.05$ level. For comparing means we used *t*-tests.

Qualitative data generated by focus groups and interviews were managed as follows. In-depth interviews and focus group discussions were collected on digital recorders with accompanying field notes. Digital recordings were fully transcribed in Thai into Microsoft Word® documents. The qualitative software package ATLAS.ti® version 5.2 (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany) was used to manage the process of identifying and collecting repeated normative themes, some of which arose spontaneously from the interview interaction and some in response to open-ended questioning concerning the values, attitudes, and practices of adolescents related to sexual issues and their reproductive health-seeking strategies. Passages most relevant to the study were later translated into English.

RESULTS

Questionnaire format effect (CASI *vs* SAQ)

To test whether the two questionnaire formats produced similar results, responses obtained were compared on ten selected items from 358 heterosexual male vocational school students (218 respondents in a big vocational school who used CASI and 140 respondents in smaller vocational schools or public spaces who used SAQ). On only one item ('ever smoked cigarettes during past year') was a statistically significant difference in affirmative response obtained (39.4% CASI; 53.1% SAQ). Crucially, on the key attribute of whether the respondent had 'ever had sexual intercourse,' the difference was minimal (68.8% compared to 69.2%), and differences were also small on such other important items as whether they had 'ever had oral sex with a date' (40.5% *versus* 43.6%), 'vaginal sex with a date' (79.2% *versus* 74.4%), 'casual sex' (39.0% *versus* 39.6%) and 'ever drunk alcohol in the past year' (87.6% *versus* 87.2%). It was concluded that method of interview did not have a major influence on results obtained.

Sexual experience

Males and females from the different educational groups reported having had different sexual experiences (Table 1). 'Sexual intercourse' was defined in the questionnaire to include both vaginal and anal intercourse. Among all males, almost two-thirds, had had sexual intercourse. Around a third reported never having had either 'sexual contact' (genital touching of/by a partner for erotic stimulation) or sexual intercourse, while 1.9% had had sexual contact only. By contrast, a third of the female respondents had had sexual intercourse. Almost two-thirds had never had either sexual contact or sexual intercourse, while 2.3% had had sexual contact only.

Sexual experience showed an interaction of educational group and gender.

Table 1
Sexual experience of adolescents by gender and educational group.

Gender and educational group	Ever had sexual contact or sexual intercourse?						Total	
	Never had either		Had sexual contact only		Had sexual intercourse			
	n	%	*n*	%	*n*	%	*n*	%
Males								
Out-of-school	45	18.9	0	0	193	81.1	238	100
Vocational school	116	28.6	11	2.7	279	68.7	406	100
High school and university	163	62.2	6	2.3	93	35.5	262	100
Total	324	35.8	17	1.9	565	62.4	906	100
Females								
Out-of-school	76	45.0	4	2.4	89	52.7	169	100
Vocational school	73	34.6	6	2.8	132	62.2	211	100
High school and university	382	83.2	9	2.0	68	14.8	459	100
Total	531	63.3	19	2.3	289	34.4	839	100

Thus, out-of-school males were the educational group most likely to report having had intercourse (81.1%). For females, however, the vocational school group reported the highest prevalence of having had sexual intercourse (63.2%). The lower out-of-school female intercourse prevalence (52.7%) reflected the influence of a subsample of 27 who were of Hill Tribe ethnicity and Christian religion. Recruited at non-formal education centers, they occupied boarding houses run by Catholic nuns, and none had had intercourse. By contrast, of 30 out-of-school females who were Buddhist, northern Thai and who did not attend non-formal education, 26 (87%) had had intercourse ($p<0.001$). If the subsample of 27 is discounted, intercourse experience among out-of-school females rises to 62.7%, almost identical to the figure for vocational school females.

Respondents from the high school and university group reported the lowest male level of sexual experience, with only 35.5% having had sexual intercourse. Females from this group likewise reported the lowest female level of sexual experience: 14.8% having had sexual intercourse.

Respondents who had had sexual intercourse

Age at first sex. Sexually experienced respondents reported that they first had sexual intercourse (sexual debut) at a mean age of 16.7 years. The mean age in years at sexual debut for male respondents was a little younger than for females (16.6 *versus* 17.2, $p<0.001$). Out-of-school males had a mean age of sexual debut of 16.0 years, compared to 16.9 and 16.8 years among the vocational school and high school/university groups, respectively ($p<0.001$). Out-of-school females had a mean age at sexual debut of 16.5 years, compared to 17.2 years and 17.4 years for the vocational school and high school/university groups, respectively ($p<0.001$).

Numbers of sexual partners. Among respondents who had had sexual intercourse, the mean numbers of lifetime

Table 2
Use of sexual health services by gender and sexual experience.

Use category	All	Males			Females			
	Total (N=1,745) %	Sexually inexperienced (n=341) %	Sexually experienced (n=565) %	Total (n=906) %	Sexually inexperienced (n=550) %	Sexually experienced (n=289) %	Total (n=839) %	Total (standardized)[d] %
Ever visited a sexual and reproductive health facility [a,b,c]	11.7	4.5	19.3	13.7	1.9	24.5	9.6	16.0
If yes,	(n=204)	(n=15)	(n=109)	(n=124)	(n=10)	(n=70)	(n=80)	
Reason for last visit [a]								
STD	49.5	53.3	63.6	62.3	40.0	27.9	29.5	29.4
Contraceptives	19.0	20.0	12.1	13.1	30.0	27.9	28.2	28.2
Pregnancy test	7.5	0.0	6.5	5.7	0.0	11.8	10.3	10.4
Pregnancy termination	8.0	0.0	8.4	7.4	0.0	10.3	9.0	9.1
Maternal- child health	6.0	0.0	0.9	0.8	0.0	16.2	14.1	14.2
Other	10.0	26.7	8.4	10.7	30.0	5.9	9.0	8.8
Type of health organization visited last time [a,c]								
Government	43.8	40.0	42.1	41.8	0.0	52.9	46.2	46.5
Private	36.3	46.7	29.9	32.0	90.0	36.8	43.6	43.2
NGO	9.5	0.0	15.0	13.1	0.0	4.4	3.8	3.9
Other	10.4	13.3	13.1	13.1	10.0	5.9	6.4	6.4

[a]The chi-square statistic between male and female groups is significant at the 0.05 level.
[b]The chi-square statistic between different educational groups of males is significant at the 0.05 level.
[c]The chi-square statistic between different educational groups of females is significant at the 0.05 level.
[d]The final column for females is standardized to the distribution by educational group for males. The percentages shown represent the proportions that would have been observed if the females had the same distribution by educational group as the males.

Table 3
Use of sexual health services among respondents who reported having had sexual intercourse by gender and educational group.

Use category	All	Males				Females				
	Total (N=850) %	Out-of-school group (n=193) %	Vocational school group (n=275) %	High and university group (n=93) %	Total (n=561) %	Out-of-school group (n=89) %	Vocational school group (n=132) %	High and university group (n=68) %	Total (n=289) %	Total (standardized for educational group)[d] %
Ever visited sexual/reproductive health facility [a,b,c]	21 (n=178)	29.7 (n=57)	12.1 (n=34)	18.7 (n=17)	19.3 (n=108)	38.2 (n=34)	19.2 (n=25)	16.2 (n=11)	24.5 (n=70)	25.2
If yes, reason for last visit [a]										
STD	49.7	70.2	45.5	76.5	63.6	32.4	30.4	9.1	27.9	27.6
Contraceptives	18.3	8.8	24.2	0.0	12.1	35.3	21.7	18.2	27.9	25.8
Pregnancy test	8.6	7.0	3.0	11.8	6.5	8.8	8.7	27.3	11.8	11.8
Pregnancy termination	9.1	8.8	9.1	5.9	8.4	0.0	17.4	27.3	10.3	13.1
Maternal-child health	6.9	0.0	3.0	0.0	0.9	20.6	13.0	9.1	16.2	15.0
Other	7.4	5.3	15.2	5.9	8.4	2.9	8.7	9.1	5.9	6.8
Type health organization visited last time [a,c]										
Government	46.3	40.4	48.5	35.3	42.1	38.2	69.6	63.6	52.9	57.8
Private	32.6	29.8	39.4	11.8	29.9	50	26.1	18.2	36.8	33.0
NGO	10.9	8.8	9.1	47.1	15.0	2.9	4.3	9.1	4.4	4.6
Other	10.3	21.1	3.0	5.9	13.1	8.8	0.0	9.1	5.9	4.5

[a]The chi-square statistic between male and female groups is significant at the 0.05 level.
[b]The chi-square statistic between different educational groups of males is significant at the 0.05 level.
[c]The chi-square statistic between different educational groups of females is significant at the 0.05 level.
[d]The final column for females is standardized to the distribution by educational group for males. The percentages shown represent the proportions that would have been observed if the females had the same distribution by educational group as the males.

Table 4
Perceptions of sexual health services by gender and sexual experience.

Perceptions	All	Males			Females			
	Total (N=1,745) %	Sexually inexperienced (n=341) %	Sexually experienced (n=565) %	Total (n=906) %	Sexually inexperienced (n=550) %	Sexually experienced (n=289) %	Total (n=839) %	Total (standardized)[d] %
Should there be a sexual health clinic providing services only for young people? [b, c]								
Yes	71.8	64.5	76.0	71.7	67.8	80.1	72.0	75.5
If 'yes', how important for a clinic to have each of the features listed?	(n=1,253)	(n=220)	(n=429)	(n=649)	(n=373)	(n=231)	(n=604)	
Located away from a hospital area [a]								
Very important	57.5	59.3	62.1	61.1	52.6	55.1	53.5	54.3
Offering multiple services or a one-stop service								
Very important	88.4	88.9	86.0	87.0	90.1	89.4	89.9	89.6
Providing separate clinics for females and males [a]								
Very important	67.8	61.1	60.4	60.7	76.2	74.0	75.3	74.7
Opening hours that are convenient for school-going and working adolescents [b]								
Very important	78.9	77.3	78.2	77.9	80.0	79.7	79.9	79.8
Staff with sympathetic attitudes to sexually active young people [a, c]								
Very important	90.8	88.9	88.9	88.9	94.8	89.9	92.9	91.6
Providing free or low-cost services								
Very important	82.5	80.1	84.6	83.1	80.5	83.7	81.8	82.6
Focusing on confidentiality								
Very important	88.6	87.5	87.9	87.8	91.2	86.8	89.5	88.3
Providing abortions [b,c]								
Very important	53.2	41.2	59.5	53.3	46.6	63.0	52.9	57.4

[a] The chi-square statistic between male and female groups is significant at the 0.05 level.
[b] The chi-square statistic between different educational groups of males is significant at the 0.05 level.
[c] The chi-square statistic between different educational groups of females is significant at the 0.05 level.
[d] The final column for females is standardized to the distribution by educational group for males. The percentages shown represent the proportions that would have been observed if the females had the same distribution by educational group as the males.

Table 5
Perceptions of sexual health services among respondents who reported having had sexual intercourse by gender and educational group.

Perceptions	All	Males				Females				
	Total (N=850) %	Out-of-school group (n=193) %	Vocational school group (n=275) %	High and university group (n=93) %	Total (n=561) %	Out-of-school group (n=89) %	Vocational school group (n=132) %	High and university group (n=68) %	Total (n=289) %	Total (standardized for educational group)[d] %
Should there be a sexual health clinic providing services only for young people? [b,c]										
Yes	77.4 (n=658)	79.7 (n=154)	71.2 (n=196)	82.4 (n=77)	76 (n=427)	84.3 (n=75)	77.4 (n=102)	79.4 (n=54)	80.1 (n=231)	80.1
If 'yes', how important for a clinic to have each of the features listed?										
Located away from a hospital area [a]										
Very important	59.6	60.1	64.4	60	62.1	57.3	57.1	48.1	55.1	55.7
Offering multiple services or a one-stop service										
Very important	87.2	85.6	85.6	88	86	92	92.9	79.6	89.4	90.4
Providing separate clinics for females and males [a]										
Very important	65.2	51.6	67.0	61.3	60.4	74.7	75.5	70.4	74	74.4
Opening hours that are convenient for school-going and working adolescents [b]										
Very important	78.7	78.4	77.8	78.7	78.2	78.7	84.7	72.2	79.7	80.6
Staff with sympathetic attitudes to sexually active young people [a,c]										
Very important	89.2	91.5	87.1	88	88.9	90.7	93.9	81.5	89.9	90.7
Providing free or low-cost services										
Very important	84.3	86.3	85.1	80.0	84.6	81.3	84.7	85.2	83.7	83.6
Focusing on confidentiality										
Very important	87.5	88.2	86.1	92	87.9	84	91.8	81.5	86.8	87.4
Providing abortions [b,c]										
Very important	60.7	67.3	57.7	48.0	59.5	58.7	73.5	50.0	63.0	64.5

[a] The chi-square statistic between male and female groups is significant at the 0.05 level.
[b] The chi-square statistic between different educational groups of males is significant at the 0.05 level.
[c] The chi-square statistic between different educational groups of females is significant at the 0.05 level.
[d] The final column for females is standardized to the distribution by educational group for males. The percentages shown represent the proportions that would have been observed if the females had the same distribution by educational group as the males.

sexual partners were 6.6 among males and 3.5 among females ($p<0.001$). Among males, the mean number of sexual partners for the out-of-school group was 8.4, while it was 6.2 for the vocational school group, and 4.2 for the high school and university group ($p<0.05$). Among females, the mean age for the out-of-school group was 5.1, while it was 3.2 for the vocational school group, and 2.0 for the high school and university group ($p<0.05$). More results on sexual practices and sexual and reproductive health consequences are not presented here, but are available in Tangmunkongvorakul (2009) and Tangmunkongvorakul *et al* (2011).

Sexual and reproductive health services

Experience of using services. Approximately one-in-nine respondents had ever visited a health facility to receive services on contraception, pregnancy, abortion, or sexually transmitted diseases. Sexually experienced females were most likely to have done so, with a quarter having visited a facility. One-fifth of sexually experienced males had visited a facility, while very few sexually inexperienced respondents of either gender had done so (Table 2).

Among those who had ever visited a health facility for sexual or reproductive purposes, females reported seeking these services slightly more often than males (3.20 *vs* 2.81). Half of all respondents who had sought services reported that the reason for the visit on the last occasion related to sexually transmitted diseases, with males more than females (62.3% *vs* 29.5%, $p<0.001$). Females more often sought services or information on contraceptives, pregnancy tests, and maternal and child health.

The most recent visit for a sexual health service was usually to a government or private facility, while only a few adolescents had used services operated by NGOs or by others, such as health personnel in schools or workplaces. Females received their services overwhelmingly from private and government health facilities, while larger minorities of males had received their services from NGOs or other sources.

For both males and females, the out-of-school group visited a sexual and reproductive health facility at least twice as often as the other two groups (Table 3). Among those that did visit such facilities, there was no consistent pattern linking use to school group, although there were differences in the reported rates for different services and different types of facilities.

Use and perceptions of services in different settings. Different characteristics were observed among government, private and non-government organizations. These included types of service, operating strategies, and providers' attitudes toward adolescent sexual and reproductive issues. From field observations, programs relating explicitly to adolescent sexual and reproductive health were operated mostly by NGOs, and some informants reported being themselves members of NGO outreach programs. The government and private sectors generally provided services to clients of all ages, and adolescents had to use services in the same clinics as older adults if in need. There was no special clinic to provide sexual and reproductive health services exclusively for them.

Government health services: stigmatization, inadequate confidentiality and gender bias. Field observations and informal interviews with health care providers in government sexual and reproductive health settings in Chiang Mai City suggested that unmarried adolescents aged

20 or younger accounted for perhaps one-tenth to one-fifth of their clients, depending on the type of health setting. Collectively, providers reported that adolescents sought a range of services, mainly in clinic settings and only sometimes in outreach programs. Services provided to them included physical examinations and treatment of menstrual problems (cramps, missed periods, vaginal bleeding), family planning information and provision of contraceptives, antenatal care and assistance at delivery, post-abortion care (uterine curettage and treatment), HIV testing, and STD treatment.

For many young informants, government hospitals were seen as the last choice. They mainly used these services only when they had severe sexual health problems that needed advanced health treatments. Several aspects of government organizations presented major hurdles to adolescents that prevented them, especially girls, from using their services. These included issues of stigmatization, inadequate confidentiality, and negative attitudes from health care providers. Nook's experience exemplified how girls were treated when seeking medical services related to their reproductive health.

> I once had (vaginal) spot bleeding. I went to see a doctor at the university hospital. The doctor asked me whether I had had sexual experience. I was so embarrassed, as there were many nurses and patients around the area. When I said 'No,' she just looked at me, raised her voice and asked 'are you sure'? ... I felt so humiliated on that occasion. I would never go to that hospital again, even though it gives service to students free of charge ('Nook,' female, 20 years old, university student).

In addition to the issue of stigmatization, the government service computer records system did not allow sufficient confidentiality. Clients were required to provide their name and address in order to receive services. This top-down government policy was extremely impractical for dealing with adolescent sexual and reproductive health. Besides, inadequate confidentiality can lead to mistrust when seeking services. Providers seemed not to realize that some young women might need time to establish trust in them.

> I once went to a government STD clinic when I felt pain when urinating ... The price of the service was quite low and it was situated in town, easy to get to. However, to register for the service I needed to give the health providers my ID card, and the staff there called my name very loudly. I thought at that time that it was lucky I was a man…well, the girls would be in trouble if they were treated (by the health staff) like that ('Jon,' male, 19 years old, unemployed).

> When girls have sexual health problems, I think it is shameful already. Yet, when we go to the (government) hospital, the staff members seem not care to give us enough confidentiality. We have to follow the same hospital rules as if we had other health problems. I used to go to that place (the government hospital) once, but I will never visit it again. Lately, I see a doctor in a (private) clinic … It's expensive, but at least I didn't get mad about the service ('Noi,' female, 20 years old, pub employee).

There was also a discrepancy in the attitudes of staff toward male and female adolescents' sexual activities. Informants suggested that although providers displayed disapproving attitudes to unmarried adolescents in general, females were much more likely than males to face

judgemental provider attitudes. It was more acceptable for young men to have sexual experiences, and negative consequences were more likely to be tolerated or forgiven.

> I felt embarrassed to see doctors when I had sexual health problems. Anyhow, since I haven't much money, I had no choice but to see a doctor at the government STD clinic. The staff might not have talked to me nicely at first, but in the end most of them seemed good. ('Tum,' male, 19 years old, unemployed).

Young sexually active females, in contrast, faced provider attitudes that labelled them 'promiscuous' or 'bad girls' and appeared unwilling to provide sensitive counselling and care to them. This attitude had a significant impact on how providers, especially female nurses, dealt with young female clients who came with reproductive health problems.

> I really didn't understand why the nurse yelled at me when I told her that it hurt when she gave me a vaginal examination. I felt like she didn't want to provide services to an indecent girl like me (said with tears in her eyes)… She (the nurse) said I should behave well, so I wouldn't get into trouble next time. I knew that … but what I wanted was to have someone to talk with and listen to me. The nurse I met didn't seem to understand that point at all ('Duan,' female, 18 years old, high school student).

Private health sector: the high cost of anonymity. Given the evidence of inadequate confidentiality and poor services provided by some government health personnel, many adolescents, especially girls, preferred to use other kinds of services, such as small private clinics and hospitals, where their identities could be concealed and attitudes were perceived to be less judgmental. Private health care providers gave services to adolescents in a variety of settings, including small general practices and specialist STD, gynecological and obstetric clinics, as well as these kinds of clinics in hospitals.

Informants who had no financial difficulties reported more use of services in private settings, especially small clinics, which were situated around Chiang Mai City. The cost of services and treatment was quite high (double or more) compared to that at government facilities, but many claimed that they had no choice if they wanted good services with guaranteed confidentiality. Unfortunately, these private services were not available to adolescents who could not afford them.

> I went to a private clinic once when I had abnormal discharge. The doctor said I had got chlamydia. He gave me some drugs and asked me to pass another set of drugs to my girlfriend as well. She didn't go to see the doctor with me … The service was okay, but the price was quite high though ('Toey,' male, 19 years old, technical school student).

> A week after having the second abortion (self-induced) I had some fever and severe cramps. I went to a private hospital and had uterine curettage and got antibiotics. I didn't stay overnight in the hospital, just spent a few hours in an observation room. But, you know, I spent lots of money - three thousand Baht, just as I did paying for the (induced) abortion (illegally in a hospital) the first time ('Noi,' female, 20 years old, pub employee).

Non-government organizations: support but no clinical treatment. Some programs and services that were operated by NGOs provided counselling and special youth projects. The NGOs in Chiang Mai City included, for example, the Harm Reduc-

tion Youth Program, the Street Youth Program, the Adolescent Sex Education Team, and the Men's Sexual Health Team. The programs organized by NGOs mainly provided sex education and life skills education for managing love and relationships to adolescents through outreach programs in schools, workplaces, and other community settings.

Generally speaking, providers at NGO facilities were more likely to offer acceptable services for young people. In addition, peer counsellors and young staff members were often employed. Staff described innovative programs that were adolescent-friendly and allowed confidentiality and even anonymity. Examples included telephone and in-house counselling, and a peer outreach program that aimed to attract young people. However, most of these youth programs did not provide any treatment. Only the Men's Sexual Health Team provided some basic sexual health treatment (physical examinations, blood tests and basic medical treatment) in the clinic, and then only to males.

> I joined a program on sex education in school which was provided by an NGO group. It was fun. The staff knew how to talk to young people like us. We students played games, participated in brain storming, and presented our work. We laughed a lot during the sessions, but we still received thoughtful knowledge on reproductive health and sexuality ('Por,' male, 18 years old, high school student).

> The NGO staff came to give sex education in our school last month. It was so good. We laughed all the time, since the staff leader told a lot of dirty jokes … Well, they were not too dirty, but we got some ideas about love and safe sex. I think it's better than a boring sex education lesson learnt in the classroom (from a school teacher) ('Fresh,' female, 19 years old, commercial school student).

Friends and hotline counselling services organized by NGOs were popular resources when sexually active young people encountered serious issues. Common concerns for which adolescents sought counselling included family problems, school problems, and problems to do with love, sexual relationships, contraception, safe sex, and STDs. Female adolescents also sought counselling in relation to pregnancy and abortion. In the realm of health care services and programs offered in government settings, providers were aware that they had more power than young people, and exercised it. However, some NGO staff members tried to overcome this inequity.

> When compared to the hotline staff in the (government) hospital, I think the NGO staff members are friendlier and more relaxed. I can just talk, talk and talk to them. They listen to me … I like hotline counselling, as I don't talk about my (same sex) love life with my parents. They won't accept me, for sure ('Keng,' male, 20 years old, university student).

Pharmacies: available, accessible, but not always beneficial. In obtaining medical treatment for sexual and reproductive health problems, those who could not afford to use the services of private health facilities, or who were concerned about lack of confidentiality and poor services offered by government organizations, sought care in other ways. It is no surprise, then, that sexually active adolescents, especially females, were attracted to self-treatment or the advice of friends who were less judgmental.

Many young people followed suggestions from peers and bought various products from pharmacies. This was because

those strategies involved less risk of being judged and criticized. In Thailand some drugs, including antibiotics, are available from pharmacies without a doctor's prescription. Obtaining treatments from pharmacies is therefore easier for young people because of the less hierarchical power relations between providers and clients. However, this source of service and treatment was also often less effective.

> I used to have burning sensations when urinating. I went to pharmacies to buy drugs and felt relieved for a while. And then the symptoms occurred again. It was like this a few times, so I decided to go to a (government) STD clinic. The doctor yelled at me that I should not have got so many antibiotics from pharmacies because they might destroy my kidneys. … I didn't want to go to the STD clinic at first. It's kind of scary ('Ton,' male, 19 years old, hardware shop employee).

Perceptions regarding a special adolescent sexual health clinic

Table 4 describes the perceptions regarding sexual health services categorized by gender and sexual experience. It shows that over 70% of respondents believed there should be a sexual health clinic which provided services only for young people, with sexually experienced groups being more strongly of this opinion than sexually inexperienced groups. Among those wanting this kind of clinic, the vast majority agreed that having staff with sympathetic attitudes to sexually active young people would be an important feature of such a clinic. Many also stated the importance of providing confidentiality, offering multiple services or a one-stop service, providing free or low-cost services, and having opening hours that were convenient for school-going and working adolescents. More than half the respondents also stated that providing separate clinics for females and males and locating them away from a hospital were very important. As regards providing abortions in an all-youth clinic, over half the respondents stated that it would be very important to provide such a service.

When comparing by gender and sexual experience, male respondents tended to state more often than females that locating a youth-only clinic away from a hospital area was very important, while females placed more importance on providing separate clinics for females and males, and on having staff with sympathetic attitudes to sexually active young people. Among males, those who were sexually experienced were more likely to place importance on opening hours that were convenient for school-going and working adolescents, and on providing legal abortions to young people. Sexually inexperienced females were a little more strongly of the view than those who were sexually experienced that it was important to have staff with sympathetic attitudes to sexually active young people. The latter, on the other hand, were decidedly stronger in their belief that the ideal sexual health clinic should provide abortions, which would require a change to current laws.

Further analysis of the data regarding perceptions was conducted to determine whether school group was an important source of variation. Generally, perceptions regarding ideal sexual health services were quite similar for different educational groups and no consistent pattern was found when perceptions were cross tabulated by educational groups and by gender (Table 5).

Views of young people on an ideal sexual health clinic

Qualitative data provided a similar

but more detailed picture to that described by the questionnaire survey. Generally, informants supported the need for a special sexual health clinic for young people. There was also agreement on the design and content of services that should be offered. Moreover, in emphasising these requirements, the case was also made for sex education that would focus on modern-day models of young people's lifestyles, implying that it should not focus solely on promoting virginity and abstinence.

> The sex education we have learnt from school lessons or even in the university talks a lot about avoiding sex as the way to avoid AIDS and other negative outcomes. We have been taught that preserving virginity is the best way for oneself and one's parents … It's alright. We have all known that already. But if we can't avoid having sex, we haven't been taught much on what we should do to stay away from the bad outcomes, or to not feel shameful ('Pim,' female, 19 years old, university student).

Most informants, whether sexually experienced or not, also advocated that clinics and other facilities should be more youth-friendly. Several features of an ideal clinic were emphasized. The clinic should be set up in an easily accessible urban area. Many preferred it to be physically separate from any existing health service institution. Moreover, the clinic should provide a friendly, accessible, and relaxing atmosphere; should be open at times that are convenient for school-going and working adolescents alike; and should have 'walk in' facilities requiring no prior appointment (even though this may entail queuing for services). Some suggested that multiple services needed to be provided, including physical check-ups, pap smears, pregnancy and HIV testing, STD screening, sex and reproductive health education, and counselling services. In other words, it needed to be a 'one-stop' service. The clinic should have fixed clinic facilities complemented by outreach programs. Some noted the need for non-profit government or non-government services to be provided, operating over extended hours and over weekends.

> I'd like a clinic that will be located away from a hospital. There are too many people in the hospital area. I am afraid that someone I know might see me when I use the (sexual health) service ('Moo,' male, 18 years old, high school student).

> Can we have, like, a separate clinic for boys and girls? If there is one (for both males and females) under the same roof, I think I may be afraid to visit that clinic.'… One more thing, the clinic should not be like a conventional clinic. It should provide a feeling of being at home. The health staffs don't have to wear a uniform or things like that ('Maew,' female, 19 years old, university student).

Some informants suggested that there should be private waiting rooms providing information in an entertaining but rigorous way. Access to telephone counselling should be available. Providers must be carefully selected to include a range of skills, so that medical doctors, nurses, and counsellors had a genuine understanding of and positive attitudes towards sexually active young people. In addition, the involvement of young people in the design and management of services was necessary. Some recommended that same-sex providers would be preferable for adolescent clients.

> If there is one, I will not go to that clinic if I hear that the health workers are like those in a (government) hospital. There should be health personnel who

really understand the way of life of young people these days. This is the important point I think ('Jan,' female, 18 years old, high school student).

Client confidentiality was stressed by informants. Suggestions were made about ensuring privacy of records, assuring clients that their problems would remain confidential and not requiring adolescents to reveal their names and addresses if reluctant to do so. Quality of care and the issue of good interaction with young clients were also mentioned. Measures must be taken to build rapport with the community, and particularly with parents.

If the kids trust the providers, they will finally give them a contact number if in need…Other than enough confidentiality, I think if the clinic provides good care and builds up joint understanding between staff and clients, many young people will absolutely visit that clinic ('King,' male, 19 years old, commercial school student).

Can we have this kind of clinic without having any conflict with the community? Well, I can't imagine what our parents will think if we have this ideal clinic… So if we have some ways to build up good co-operation with older people, this will be great ('Pim,' female, 19 years old, university student).

Informants suggested that the media should be employed to raise awareness of the need for services for young people. Social marketing of condoms and other contraceptives was suggested as a measure that would address concerns for anonymity. Many ranked unwanted pregnancy as a leading problem facing young people. Some recommended modifying laws concerning induced abortion to facilitate the establishment of termination of pregnancy clinics run by professional medical staff.

Good management in distributing condoms is important. Many of us may need them, but we are too frightened to buy them in the shops. If there is an ideal clinic I guess we need to think about the ways of giving or selling condoms or other contraception (to young people) very carefully ('Tong,' male, 20 years old, restaurant employee).

What I need is a cheap and reliable clinic for having a legal abortion. I did it twice, and they were painful experiences. I think many girls have suffered enough from abandonment by their boyfriends when they got pregnant. Most of them can't tell their parents or any older people. We need to solve the problem alone'… If we have a good clinic which truly cares to help us, I think we young people won't have to suffer from the same problems again and again ('Noi,' female, 20 years old, pub employee).

DISCUSSION

There is still much to be done in changing the cultural context and policy climate towards more progressive adolescent sexual and reproductive health education and services in Thailand. No one 'magic' strategy can achieve optimal sexual and reproductive health for young people. Many sectors of Thai society embrace the notion that male and female virginity should be preserved through abstinence until marriage. This indicates a desire to find a single intervention that supports a particular ideological position, despite clear evidence that a combination of preventive policies, which include friendly sexual and reproductive health services for the young, will achieve broadly favorable sexual health outcomes.

This paper has described the experiences and explored the perspectives of

a range of young people regarding the issue of sexual health services. The findings highlight the vulnerability of sexually active young people, in that many of them experience health problems arising from sexual activity. These include having negative self-images, catching sexually transmitted infections, and experiencing or causing unwanted pregnancy and induced abortion. Several problems also emerged with regard to dealing with adverse sexual health consequences. It is clear from the results of this study that the majority of sexually active young people in northern Thailand face huge obstacles in addressing their sexual health problems and acquiring proper information and services.

The major route taken by adolescents when they encounter sexual or reproductive health problems is to consult friends. Pharmacies are also among the places they often visit to get pregnancy test kits or medications for self-treatment. Government health care facilities were cited as the last choice among facilities to visit, and were usually utilized only when health problems had become more critical. Factors preventing adolescents from utilizing sexual and reproductive health services, especially those operated by the government sector, included embarrassment, fear of disclosure of their sexual activity status, fear of violation of confidentiality, inconvenient service hours, the generation gap between providers and clients, unfriendly atmospheres, and condemnatory attitudes of providers toward premarital sexual behavior.

Findings here also suggest that although providers are aware that unmarried young people are exposed to risky sexual behavior, most of these young people, especially girls, still face a range of obstacles to acquiring appropriate information and services. Notably, the nature of female provider and female client interaction as described in this paper points to the impact of gender-related issues arising from Thai traditions being marked. Female providers' negative attitudes to young female clients are displayed in their body language and the way that they talk to them. The findings confirm that there is a persistence of Thai sexual norms and a gender double standard that continue to stigmatise sexual activity for young people, especially women. A power imbalance between the old and the young also inhibits the exercise of safe choices by young people. The evidence shows that these factors place sexually active adolescents in a particularly vulnerable position, unable to seek help from their parents, health providers or other adults. These issues complicate the implementation and hinder the success of existing services and programs for young people.

The programs (briefly described in the Introduction to this paper) established by the Ministry of Public Health and NGOs for adolescent sexual and reproductive health promotion mostly focus on education and counselling. Many are limited to discussion of social matters and serve as advisory resources, but do not provide medical services. Adolescents still have to seek health care services on their own, and as shown by our data, there is a clear imperative to respond to their needs with an exploration of special clinic services.

There is considerable support in the literature for multifaceted interventions for adolescent sexual and reproductive health services (Aggleton and Campbell, 2000; Jejeebhoy *et al*, 2002; Fathalla *et al*, 2006). They point to the efficacy of programs and services that offer progressive sex and life skills education to adolescents, tailored to the local context.

Programs are needed that enable young women to make sexual and reproductive decisions and exercise informed choices in their sexual relationships. They also need to be equipped to make informed choices as to whether their relationships become sexual in the first place. Likewise, programs are needed that sensitise young men to take responsibility in ensuring safe sex in their partnerships and in supporting partners if they experience unfavorable outcomes of risky sexual practice.

At the health service level, there is a suggestion for appropriate training and sensitization of providers who serve unmarried adolescents, especially young females. This requires more rigorous recruitment practices that ensure that those providing services to unmarried young people have the necessary attitudes and skills to build mutual understanding with young clients. Also, facilities offering services to youth need to be reoriented so that they are more welcoming and accepting. While convenient opening hours, privacy in waiting areas and consulting rooms, and less bureaucratic admission procedures are some ways of achieving this, it is crucial that young people themselves are involved in designing and evaluating the youth friendliness of clinics.

At the policy and program level, the best approach to scaling-up health service interventions is to ensure that issues concerning adolescent sexual and reproductive health are on the policy agenda. In the formation of sexual and reproductive health policy, it is crucial that government health providers are given proper guidelines on how to provide services to unmarried adolescents, and that reporting requirements are rationalized to meet young people's needs for privacy and confidentiality. Last but not least, policy must always be implemented with a sound understanding of the local context and gender issues. Parent education approaches should be different for the various educational groups among young people and different strategies are needed for young people from different socio-economic backgrounds. For example, special initiatives are needed to meet the needs of more vulnerable groups such as out-of-school and vocational school young people. These groups are more sexually active and interventions need to be designed accordingly.

This study suggests a need for policy support and advocacy regarding youth-friendly sexual and reproductive health services. Policy change alone is not sufficient to achieve the necessary aims; policy must in addition be successfully implemented. Promotion of adolescent sexual and reproductive health issues in Thailand has been difficult, and perhaps less effective than it should have been. Although the magnitude of young people's suffering due to sexual and reproductive ill health is well established, such issues have received superficial consideration rather than firm commitment. Advocacy efforts need to go further, and are most needed at a national level. Further delays will carry a heavy cost in terms of avoidable human suffering and lost opportunities for human development. Action is a responsibility of all actors, and action is in urgent need (Fathalla *et al,* 2006). With a genuine sustained effort, it can help bring about a brighter future for all young Thai people.

There were several issues encountered when conducting our research. The first and largest was the topic being addressed, which is personal and intrinsically sensitive. To address this we used trained investigators who were

also young and could relate well to the study population. The representativeness of our sample was also a problem as we were studying hard to reach population of young adolescents, particularly those who are out-of-school. We chose to pre-stratify by those attributes which were likely to influence the outcomes of interest – especially sexual experience. We also chose a large and diverse sample which although not random could capture the extant variation credibly and gave us a balanced sample of the three educational categories for males and females. We have remained aware of the fact that our samples are not random when interpreting our quantitative data and that this is a limitation of our study. A random sample, however, would have been impracticable.

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