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Abstract

The number of street children is increasing in many countries. Much of the literature in many countries has shown that too many street adolescents experience predictable negative health outcomes in every aspect, particularly sexual and reproductive health problems. This descriptive study aimed to explore the sexual and reproductive health (SRH) status as well as service needs of street adolescents in Thailand and the perceived barriers to such SRH services. A total of 400 street adolescents were recruited. Out of these, 120 were selected via snowball sampling as participants in the focus group sessions. Research instruments were composed of an SRH status questionnaire plus a service needs questionnaire, as well as an interview guideline for assessing the SRH service needs and perceived barriers to SRH services. Based on the validation done by five experts, the content validity index was 0.89 and 0.94. Cronbach's alpha coefficient reliability was 0.84 and 0.92, respectively. Data were analyzed by using descriptive statistics and content analysis.

Results show that the average age of the 400 respondents was 15.67 years (SD 1. 79), of which 70 percent were male. More than 70 percent graduated from primary school. More than 55 percent of the sexually active adolescents indicated that they had unprotected sexual intercourse in the preceding year. Thirty-nine percent of the males and 22 percent of the females had caused or had been pregnant. Sixty-six percent of the males and 53 percent of the females believed that they could become human immunodeficiency virus (HIV) infected. More than half of the respondents (51.8%) answered that they had encountered sexual related problems—i.e., unprotected sex under the influence of alcohol or drug use, unwanted pregnancy, rape attempts, sexually transmitted diseases, and abortion. These street adolescents, however, were not satisfied with the SRH services delivered to them. More than half (62%) mentioned unaffordable cost, unfriendly staff, and long waiting time as the main barriers to access to SRH services. They were concerned mostly with the SRH service staffs' characteristics, process of the service, and the service contents.

This study suggests that health organizations at the policy level and healthcare providers should be more concerned with the street adolescents' SRH health service needs and must remove the barriers to access to services.

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The problem of homelessness has grown to distressing proportions in many countries, including Thailand. Homeless or street people are no longer mainly composed of the middle-aged group; rather, they are more likely to be children and adolescents (Bryant 2005). The number of street children is estimated at 20 million to over 100 million worldwide (Consortium of Street Children 2010).

Socioeconomic, political and cultural changes can, in some cases, lead to economic hardship, poverty, family dysfunction, school problems, and drug/alcohol use. These can push children into the streets (Nasir and Siddiqui 2010). However, the number of street children all over the world has never been known. Likewise, the characteristics of this group are diverse across regions and settings (Consortium for Street Children 2010).

Adolescence is the transition period from childhood to adulthood. It is characterized by significant physical, sexual development, psychological, and emotional change. Much of the literature in many countries have shown that too many street adolescents experience predictable negative health outcomes in every aspect associated with their living environments, where risk factors outweigh protective factors. They are more likely to drop out of school and have limited opportunities for higher education, become parents at an early age, be incarcerated in youth detention facilities, or die as a result of unintended injury or severe illness. In addition, there is the increase in health risks such as adolescent pregnancy, sexually transmitted infections (STIs), human immunodeficiency virus (HIV) infection and acquired immune deficiency syndrome (AIDS), chronic or other infectious diseases, substance abuse, emotional problems, mental health disorders, and violence (Walters 1999; Rooyen and Hartell, 2002; Feldman and Middleman, 2003; Boivin et al. 2005; Nasir and Siddiqui 2010).

To date, there has been little research evidence on the sexual and reproductive health (SRH) status of street adolescents in all regions of Thailand. Most studies focus on specific social problems rather than on health (Jitradup 2007). Therefore, this study will zero in more on the sexual and reproductive health status of Thai street adolescents as well as their access to SRH information and services. This study documents and illustrates these SRH service needs in Thailand as well as the youth's perceived barriers to access to such services.

Access to care is bound to health consequences. Unfortunately, because of such factors as the lack of financial as well as other appropriate resources, underprivileged adolescents experience health problems at a disproportionate rate and face barriers to healthcare. They do

not feel secure in approaching medical establishments either (Ministry of Social Development and Human Stability 2010; Rooyen and Hartell 2002; Consortium for Street Children 2010).

Despite such alarming reality, street children rarely have a voice in the sexual and reproductive health discourse. Surveys on homeless youth have found that most opt to seek health advice from friends, followed by self-treatment, and lastly, assistance from clinics when self-treatment no longer works. Unfriendly staff and certain health service policies were the major barriers to access to services for street adolescents (Berckmans et al. 2012; Rutchanagul 2012).

1. SIGNIFICANCE AND FRAMEWORK

Adolescent sexual and reproductive health issues in Thailand are not merely personal problems. Rather, these are problems of society that have to be addressed. Efforts to improve awareness about SRH as well as a proven prevention, treatment and care of these adolescents have to be sought. Once the situation is understood, policymakers and health professionals will be better equipped to formulate the right policies, strategies, and health services for this highly vulnerable group.

4.1. Objective of the Study

This study has three objectives:

1) To explore sexual and reproductive health status of street male and female adolescents in Thailand;
2) To assess adolescents' sexual and reproductive health service needs; and
3) To identify the perceived barriers to Thai adolescents' access to sexual and reproductive health services.

4.2. Theoretical Framework

The 1994 Cairo International Conference on Population and Development (ICPD) and the World Health Organization (WHO 2006) defined reproductive health and the right to reproductive health as:

> …a state of complete physical, emotional, mental and social well-being in relation to sexuality and not merely the absence of disease, dysfunction or infirmity in all matters relating to the reproductive system and to its functions and processes. Sexual health requires a positive and respectful approach to sexuality and sexual

> relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled. It is critically influenced by gender norms, roles, expectations and power dynamics.

Reproductive health therefore implies that people are able to have a satisfying and safe sex life, the capability to reproduce, and the freedom to decide if, when, and how often to do so. Implicit in this last condition are the rights of men and women to be informed and to access safe, effective, affordable and acceptable methods of family planning, as well as other fertility regulation methods of their choice that are not against the law. There too is the right of access to healthcare services that will enable women to go through pregnancy and childbirth safely and provide couples with the best chance of having a healthy infant.

Sexual health needs to be understood within specific social, economic and political contexts. For this study, SRH of Thailand's street adolescents are explored within the Thai context and using the framework of adolescent SRH—which covers sexual activities and risk behavior practices, ways to protect their sexual rights, and consequences of risky sexual behaviors. The study on SRH services includes primary, secondary and tertiary prevention services on sexual and reproductive healthcare.

2. METHODOLOGY

This is a community-based cross-sectional study that explored the sexual and reproductive health status of Thai street adolescents, their service needs, and the perceived barriers on their sexual and reproductive health service. Data were collected by using both quantitative and qualitative methods. Questionnaire and interview guidelines were used as instruments.

2.1 Population

Street adolescents aged 10-19 years in this study were divided into two categories. The first set consisted of young people of both sexes who were "of the street"—i.e., both economically and socially engaged in street life, having no homes but the streets.

The other set consisted of "on the street" youths who engaged in economic activities in the streets but lived with their parents or visited their parents regularly. These street adolescents had lived in public areas (parks, railway stations, or night markets where street adolescents tended to congregate to work, look for work, or socialize with friends) for at least six months in five big cities in different regions of Thailand.

Those provinces with high concentration of street children were selected purposively for this research.

2.2 Sample Size

Participants of the study consisted of street adolescents aged 10-19 years who had lived in Bangkok (the capital of Thailand), Chiang Mai province (northern region), Ubon-Ratchathani province (northeastern region), Suratthani province (southern part), and Pattaya (eastern region). Because the true numbers of the street adolescents remained unknown, this study estimated the proportion of street children at 0.5 with precision level of 5 percent and 95 percent confidence interval. Based on Cochran (1977), the 384 subjects had been computed using the formula. The actual number of street adolescents in this study was increased to 400, of which each location had a minimum of 80 participant-adolescents.

2.3 Sampling Procedures

Samples by sex and by type of living were recruited by purposive sampling from public areas with the assistance of local street teachers from the foundation of Better Life of Children and nongovernmental organizations in each province. Snowball sampling was used to recruit the subjects, of which 120 participated in focus group sessions.

Each area was selected using probability sampling. Location and time for the interviews were set by the local street teachers. In each area, two female groups and two male groups (10-15 years old and 16-19 years old) attended the focus group discussions.

2.4 Research Instruments

This study used socio-demographic data and four instruments: an assessment form on respondents' sexual and reproductive health status, an SRH service needs questionnaire, an interview guide on the services used, and a questionnaire on the perceived barriers on SRH services. All instruments were validated by five experts.

The demographic data form was used to obtain information on each participant. Data included gender, age, education, occupation, income, substance use, the place where the adolescents live, the leading causes of becoming a street adolescent, length of time living on the streets.

Sexual and reproductive health status was assessed using a questionnaire adopted from the comprehensive SRH Survey for Adolescents in Emergency Situations (UNFPA 2009). The questionnaire surveys respondents' sexual activities and risk behavior practices, ways to protect their sexual rights, consequences of risky sexual behaviors, and SRH problems in the past six months.

An SRH service needs instrument consisted of unstructured questions to serve as a guideline for individual interviews. Responses were based on a five-point Likert scale (mostly need = 5, most likely need = 4, moderately need = 3, a little need = 2, not at all =1)

An interview guideline about the SRH services used and a questionnaire on the perceived barriers to SRH services were developed based on a review of the relevant literature. Their open-ended questions asked: "Who are the persons or institutions you want to deal with when SRH problems occur and how?"; "What else do you need in order to improve your SRH and to help you stay healthy in sexuality?"; "Why do you need the service?"; "What are the barriers to your access to healthcare?"

All instruments were pilot tested on 30 adolescents from both "of the street" and "on the street" groups. The reliability of the service needs instrument's test items was calculated using Cronbach's alpha reliability and validated by five experts. The two groups' content validity index were 0.89 and 0.94, respectively. Cronbach's alpha coefficient reliability were 0.84 and 0.92, respectively.

3. DATA COLLECTION PROCEDURES

Prior to the data collection stage, the study was approved by the Ethics Committees of the Thammasat University. After approval was granted, the adolescents were approached individually for their consent to participate. The project was explained, and respondents were asked if they would like to participate without incentive, money, or coercion. Adolescents were given time to think about their decisions. Confidentiality of information was maintained by excluding names from the questionnaire and keeping the respondents' identity private by interviewing them individually. Participants were also informed that they could withdraw any time if they were uncomfortable with the study's process. In this study, no one refused.

The adolescents who were living "on" and "of" the street were not sufficiently literate, and the questions were therefore asked verbally by a research personnel. Data collectors consisted of four masters in nursing students working as a nurse in different locations. Meanwhile, the gatekeepers consisted of five local street teachers or nongovernmental organizations' staff in each setting. Training was given for two days on the objectives, confidentiality of information, respondents' rights and techniques of interview and focus group

discussion prior to data collection. During data collection, the principal investigator (PI) checked to ensure the completeness and consistency of data.

Focus group discussions were conducted in two cities, with participants grouped by gender and age, and selected by local street teachers. Each of the 20 groups consisted of six members.

3.1. Data Management, Analysis, and Interpretation

All statistical analyses were performed using SPSS for Windows, version 15.0. Descriptive statistics, frequency, percentage, mean, and standard deviation were used to analyze the demographic data and to score the SRH status, SRH problems, and service needs. Content analysis was applied to data from the interviews and focus group discussions. All records were transcribed, analyzed manually, and arranged by categories as identified in the discussion guide.

4. FINDINGS

4.1. Respondents' Characteristics

Results show that the 400 participants, two-thirds of whom were boys, had an average age of 15.67 years (SD 1.79). About 55 percent was composed of the "in the street" group. More than 70 percent graduated from the primary school level but all had dropped out of school at the time of the conduct of this study. They had been on the streets for an average of 4.42 years (SD 1.26), with about 60 percent coming from the "of the street" group.

Almost all (89.25%) had some type of job on the streets (Table 1).. As such, they had been forced to work under dangerous conditions and laid open to exploitation. More than 80 percent were engaged in unskilled labor during the day and driven to beg. On average, they earned THB 96 (SD 90.69, ranging from THB 20 to THB 400 per day), which was typically spent within one day, especially by male adolescents, on playing vendor games and buying solvent glue for sniffing.

TABLE 1. Profile of Respondents/study Participants (N=400).

Demographic data	No. (%)	On The Street Group		Of The Street Group	
		No	%	No	%
Sex					

Female	120 (30%)	82	20.50	38	9.50
Male	280 (70%)	100	25.00	180	45.00
Age	X = 15.67 (SD 1.79) 11-19 years old	X= 13.25 (SD 1.36) 12-18 years old		X= 16.47 (SD 0.89) 13-19 years old	
Education Level					
Grade 4-6	70 (17.50%)	59	10.32	11	15.71
Grade 7-9	287 (71.75%)	95	33.10	192	66.90
Grade 10-12	28 (7.00%)	25	6.25	3	0.75
Never studied	15 (3.75%)	3	0.75	12	3.00
Time for wander	X = 4.42 (SD 1.26) 19 years	X= 2.54 (SD 1.36) 6 month-5.5 years		X= 6.47 (SD 0.89) 9 month-12 years	
Occupation					
Unskilled labor	325 (81.25%)	95		230	
Beggar	30 (7.50%)	5		25	
Sexual service provider	20 (5.00%)	7		13	
Unemployed	25 (6.25%)	19		6	

*Note: SD = standard deviation.
Source: Author's calculation.

4.2. **Sexual and Reproductive Health Status**

Almost 80 percent of the adolescents were sexually active. On average, they started to have sexual intercourse at 14 years old. This was true for both genders and groups. The sexually active adolescents had more than one partner in the past three months (Table 2). Also, more than 55 percent indicated that they had not had unprotected sex in the preceding year. Thirty-nine percent of the males and 22 percent of the females had caused or had been pregnant, and more than 70 percent of adolescents with unwanted pregnancy had self-induced abortion. Sixty-six percent of the males and 53 percent of the females believed that they could become HIV infected. More than half of the respondents (51.8%) answered that they had encountered sexuality related problems such as unprotected sex under the influence of alcohol or drug use, unwanted pregnancy, rape attempts, STIs, and abortion. About 30 percent had STIs. One fourth of the sexually active youth reported that they had been sexually abused.

TABLE 2. Sexual and Reproductive Health (SRH) Status (N=400).

SRH Status	No. (%)	On the Street Group (n=182)		Of the Street Group (n=218)	
		No	%	No	%
Having sex					
Active	316 (79.00%)	68	21.52	248	78.48
Female	72	44		28	
Male	244	84		160	
Never	84 (21.00%)	58	48.72	26	51.28
Female	48	38		10	
Male	36	26		20	
Age at first intercourse					
Female	X = 14.84 (SD 1.22) Range 12-19 yrs	X= 15.28 (SD 1.36) Range 12-18 yrs		X= 14.47 (SD 1.89) Range 13-19 yrs	
Male	X = 14.98 (SD 1.47) Range 13-18	X = 14.27 (SD 0.98) Range 14-19		X = 14.36 (SD 0.78) Range 13-18	
No. of partners					
Female	X = 2.30 (SD 1.22) Range 1-3	X=1.30 (SD 0.25) Range 1-3		X= 3.77(SD 1.89) Range 1-6	
Male	X = 4.20 (SD 1.24) Range 1-7	X = 14.27 (SD 0.98) Range 1-3		X = 14.36 (SD 0.78) Range 1-7	

Source: Authors' calculation.

4.3. SRH Services Needs

Street children were unsatisfied with the SRH services delivered to them. More than half of the respondents (62%) mentioned unaffordable costs, unfriendly SRH service staff, and the long waiting time as the main barriers to access to SRH services. Most were concerned with the staff's characteristics, the service process, and the service contents. Those classified under the "of the street" group had higher needs than those in the "on the street" group. When analyzed by age and gender, it was found that those of older ages (15-19 years) had higher SRH service needs than the younger set (10-14 years). The young group needed contents in sex education more than other groups (Table 3).

TABLE 3. Mean Score, Standard Deviation, and Level of SRH Service Needs of Adolescents In the Street and On the Street Groups (N=400).

SRH service needs	On The Street Group			Of The Street Group		
	X	SD	level	X	SD	Level
Overall score of needs	4.47	0.54	High	4.52	0.43	Highest
Female						

SRH service needs	On The Street Group			Of The Street Group		
	X	SD	level	X	SD	Level
-Young group (10-14)	4.28	0.23	High	4.34	0.46	High
-Older group (15-19)	4.41	0.15	High	4.52	0.18	Highest
Male						
-Young group (10-14)	4.52	0.64	Highest	4.49	0.45	High
-Older group (15-19)	4.67	0.36	Highest	4.74	0.36	Highest
Process needs	4.49	0.46	High	4.58	0.38	Highest
Female						
-Young group (10-14)	4.78	0.23	Highest	4.84	0.23	Highest
-Older group (15-19)	4.23	0.15	High	4.33	0.45	High
Male						
-Young group (10-14)	4.67	0.64	Highest	4.74	0.34	Highest
-Older group (15-19)	4.31	0.36	High	4.42	0.36	High
Content needs	4.47	0.22	High	4.39	0.44	High
Female						
-Young group (10-14)	4.64	0.23	Highest	4.44	0.52	High
-Older group (15-19)	4.58	0.42	Highest	4.38	0.36	High
Male						
-Young group (10-14)	4.23	0.15	High	4.27	0.24	High
-Older group (15-19)	4.44	0.16	High	4.48	0.18	High

TABLE 3. Mean Score, Standard Deviation, and Level of SRH Service Needs of Adolescents In the Street and On the Street Groups (N=400) (cont.).

SRH Service Needs	In the Street Group			On the Street Group		
	X	SD	level	X	SD	Level
Staff needs	4.59	0.62	Highest	4.68	0.67	Highest
Female						
-Young group (10-14)	4.43	0.54	High	4.59	0.62	Highest
-Older group (15-19)	4.78	0.63	Highest	4.84	0.53	Highest
Male						
-Young group (10-14)	4.42	0.76	High	4.56	0.44	Highest
-Older group (15-19)	4.74	0.55	Highest	4.74	0.37	Highest

Source: Authors' calculations.

4.4. Results from Focus Group Discussions

Focus group discussions were conducted among 20 groups (four groups in each region) categorized by gender and age. The younger group had members aged 10-14 years old whereas the older group featured those from 15-19 years old.

Data from interviews showed that sexual health was not one of the main concerns of street adolescents. While the males voiced their needs more than the female group, the female

group had higher needs for SRH services. The longer they were on the streets, the higher their concern over their SRH health and, ironically, their tendency to turn away from the health service system.

When street adolescents were asked about SRH problems—e.g., where and whom they asked for help, and the related SRH issues such as sexual abuse, pregnancy, STIs—every grouping of adolescents reported that they did not seek healthcare services for their own problems. Most chose to self-medicate and did not seek help from local teachers until the illnesses got worse or until they could not bear the symptoms. Health professionals and their service were the last choice of adolescents.

> *"....Children like us can stand every situation. We have to be strong because we are not the same as other adolescents. Whenever I think I have an illness or something abnormal with my reproductive organ, I ask my friends and buy some medicines to treat myself. The most important thing is that it is cheap but effective and better than seeing the doctor. I feel uneasy with having to [seek professional help]. People like us are not welcomed..."*
>
> 16-year-old boy, street-based group

> *"Our illness is not severe so this medication is our first resort. It can really make us better....If we still feel sick, we will consult a teacher. When they come to visit us, we will seek their advice on our health problems. We dare not visit a doctor by ourselves; we have no money. Sometimes, teachers come when our conditions turn worse, but we have to wait for them...."*
>
> 8 –year-old girl, street-based group

When asked about the persons or place they want to turn to when SRH problems occur (and how as well as why), the adolescent identified the local street teacher as their most significant caregiver. Older friends had also been their counselors.

> *"...SRH problems are not the normal topic to discuss. I had such problems once. First, I was not even sure what it was. I had itching in my vagina and had some foul-smelling discharge. I thought a lot about whom I should talk to and made sure that they could help me and keep this a secret. My close friend is the first person to turn to, and then my teachers...."*
>
> 15-year old girl, street-based group

".....As you know, it is not easy for us to go to the hospital. There are many reasons we want to run away from the hospital. Foremost among these is that we do not feel welcomed. Therefore, my street teachers were the best option…"

14-year old boy, street-based group.

According to this study, street adolescents wanted a healthcare system that provided SRH services, both formal and informal. They needed a service where there were friendly faces. It should be as system that not only provides them access but also refers and gives them information about institutions they can ask for help, professionals they can contact, and SRH tips that prevent them being susceptible to certain illnesses.

"....When we have risk behaviors and doubts about our sexual and reproductive health conditions, we need a place whose friendly staff also understand our context, our life styles. Although the first person we ask for help is our teachers, we know that our teachers are not health workers; they just can help for certain situations. We need—do really, really need—a health service as well as a health personnel who understands us…"

17-year-old boy, street-based group

"....Sex education information, free condom and contraceptive pills, a help hotline, a healthcare unit for street adolescents or vulnerable groups like us, and a system that we can access when sexual problems occur….I mean, somewhere we can just walk in, if we find ourselves in a crisis situation…."

18-year-old girl, street-based group

The adolescents had certain difficulties accessing SRH services. They were unable to pay for the service. They felt uneasy because of their feelings of inferiority and stigma, combined with the health workers' negative attitude toward street adolescents. They also never knew the way to access sexual and reproductive health services in particular.

".....Even with common illnesses, people like us find it difficult to go to a hospital or healthcare center. We think we cannot afford the services and don't know how to access the right services. It is the teachers who usually bring us to the doctor. We are simply too scared to go by ourselves…"

14-year-old girl, street-based group

"…The way health personnel look at us makes us feel inferior and stigmatized. We are not the same as other adolescents; we are simpler a stranger to these health personnel…

16-year-old boy, street-based group

"…If only we have information about health services, it would be easy for us to avail of it. If there are services outside the hospital, it will be easier for us to seek medical help. Big hospitals have too many processes such that we don't know what to do at times…

15-year-old boy, street-based group

To improve street adolescents' SRH, the service should be accessible. These youths prefer one that provides an outreach program and one-stop service. It should not be complicated. Most of all, SRH services should be provided by positive, friendly and knowledgeable staff.

5. CONCLUSION

In this study's context, the gaps between SRH risks and health problems on one end, and the services provided on the other end, need to be addressed. Staffs of service providers, including local street teachers, need to undergo capacity building training on how to deal with the sexual problems of street adolescents.

Policymakers must reconsider social protection schemes for this marginalized group. In addition, the solution to adolescents' SRH problems is something that cannot be addressed by health professionals alone; rather, an interdisciplinary team is required. Risks faced by these adolescents, often unrecognized, should be included in assessments. A study on the protective and risk factors can help understand the causes of their problems. Participatory action research is suggested if one were to understand the street adolescents' needs and the best way to manage their life as well as to develop the model for reducing the SRH problems and encouraging these youth to make the right life decisions.

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