

BEHAVIOR AMONG ADOLESCENT MALES IN THE ROYAL THAI ARMY

Tanannut Singwiset^{*}

Pimpan Silpasuwan^{**}

Pratana Satitvipawee^{***}

Ram Rangsin^{****}

Abstract

Risky sexual behaviors, including having sexual intercourse at young age, having multiple sexual partners, or not using a condom during the intercourse, all increased high risk of sexually transmitted diseases. This study aimed to examine factors associated with risky sexual behaviors and Sexually transmitted diseases among adolescent males in The Royal Thai Army. The conceptual framework was derived from the problem behavior theory highlighting on personal factors, personality factors, environmental perceptions, socialization factors and drug abuse. 235 adolescent males on duty in The Royal Thai Army completed self-administered questionnaires, as well as, gave information about their drug use and sexually transmitted diseases (via Methamphetamine urine test, Blood test and Physical Examination). Data analysis was performed using descriptive statistics, Chi-square test, Fisher's exact test, Mann-Whitney U Test, and Binary logistic regression.

The results showed that the participants with high and low risk of sexual behavior were accounted for 79.6 % and 20.4 %, respectively. The prevalence rate of sexually transmitted diseases based on the blood test result was 1.3 %. The prevalence rate of urine methamphetamine was 29.8 %. The factors that were significantly and positively associated with risky sexual behaviors were marital status, alcohol used, attitude of personality factor, attitude of perceived environment and socialization factor, family, and drug abuse history ($p < 0.05$). Regarding the sexual risk behavior aspect among the participants, no differences were found among those who used or did not use drugs ($p = 0.356$). Moreover, it was found that the marital status, alcohol used, attitude of personality factor and drug abuse history could enhance the ability to predict risky sexual behaviors by 18.0 %.

Alcohol use and drug abuse should be prevented. In addition, there should be a guidance to prevent individuals from sexual behavior and sexually transmitted diseases.

KEY WORDS: RISKY SEXUAL BEHAVIOR; ADOLESCENT MALES; THE ROYAL THAI ARMY, DRUG ABUSE

^{*}Graduate student in master of Nursing Science major in community nurse practitioner Faculty of Graduate studies Mahidol University

^{**}Corresponding Author, Emeritus Professor Department of Public Health Nursing, Faculty of Public Health, Mahidol University, Thailand

^{***}Associate Professor Department of Biostatistics, Faculty of Public Health, Mahidol University, Thailand

^{****}Assistant Professor Department of military and community medicine, Phramongkutklao College of medicine, Bangkok, Thailand

Table 1. Risky sexual behavior among adolescent males in the Royal Thai Army

Sexual Behavior	(n)	(%)
Sexuality		
Yes	224	95.3
No	11	4.7
Had sex in the past year		
Yes	201	89.7
No	23	10.3
Age at first sex		
< 15 years	61	27.2
≥ 15 years or above	163	72.8
Type of sexual Partner		
Wife or Girlfriend	220	98.2
Casual Partner	73	32.6
Women Sex worker	48	21.4
Male	9	4.0
Number of sexual partners (n=224)		
Long lifetime		
1	72	32.1
≥ 2	152	67.9
Past six months		
Non had sex		
1	102	45.5
≥ 2	34	15.2
Past three months		
None		
1	80	35.7
≥ 2	22	9.8
Condom use		
Wife or Girlfriend		
Never	54	24.5
Sometimes	129	58.6
Always	37	16.5

Table 1. Risky sexual behavior among adolescent males in the Royal Thai Army (Cont.)

Sexual Behavior	(n)	(%)
Casual Partner		
Never	1	1.4
Sometimes	25	34.2
Always	47	64.4
Female sex worker		
Never	1	2.1
Sometimes	2	14.6
Always	40	83.3
Male		
Never	2	22.2
Sometimes	3	33.3
Always	4	44.4
Ever drunk alcohol before sex		
Yes	181	80.8
No	43	19.2
Ever use Illicit drug before sex		
Yes	117	52.2
No	107	47.8
Buy condom		
Yes	176	78.6
No	48	21.4

Table 2 Association between demographic data, characteristic, attitude of personality, attitude of environmental perception (family, friend and socialization), drug abuse and risky sexual behavior among adolescent males in the Royal Thai Army

Variable	Risky sexual behavior		χ^2	p-value
	High risk n(%)	Moderate to Low risk n(%)		
Age				
≤ 21 years	111 (79.3)	29 (20.7)	0.018	0.894
≥ 22 years and over	76 (80.8)	19 (20.0)		
Previous level of education				
Primary school (Grade 1-6)	47 (73.4)	17 (26.2)	2.342	0.310
Secondary school (Grade 7-12)	116 (81.1)	27 (18.9)		
Certificate/ Bachelor's degree and over	24 (85.7)	4 (14.3)		
Marital Status				
Single	124 (75.6)	40 (24.4)	5.250	0.022
Married/ Separate/ Widowed	63 (88.7)	8 (11.3)		
Occupation				
None	118 (80.3)	29 (19.7)	1.852	0.396
Non formal occupation	40 (78.4)	11 (21.6)		
Formal occupation	29 (78.4)	8 (21.6)		
Income				
None	42 (80.8)	10 (19.2)	5.778	0.056
≤10,000 bath	64 (71.9)	25 (28.1)		
≥ 10,001 bath above	81 (86.2)	13 (24.5)		
Part of residence				
Central region	64 (84.8)	12 (15.2)	2.331	0.127
Eastern region	99 (76.7)	30 (23.3)		
Northeastern region	21 (77.8)	6 (12.5)		
Ordination				
Yes	37 (82.2)	8 (17.8)	0.240	0.624
No	150 (78.9)	40 (21.1)		

Table 2 Association between demographic data, characteristic, attitude of personality, attitude of environmental perception (family, friend and socialization), drug abuse and risky sexual behavior among adolescent males in the Royal Thai Army (Cont.)

Variable	Risky sexual behavior		χ^2	p-value
	High risk n(%)	Moderate to Low risk n(%)		
Live with				
Parent/ wife/ Cousin	145 (77.5)	42 (22.5)	2.331	0.127
Girlfriend/ Friend/Other (alone)	42 (87.5)	6 (12.5)		
Smoking				
Yes	165 (80.9)	39 (19.1)	1.628	0.202
No	22 (71.0)	9 (29.0)		
Alcohol				
Yes	180 (81.8)	40 (18.2)	10.675	0.004 [†]
No	7 (46.7)	8 (53.3)		
History of illness				
Yes	67 (82.7)	14 (17.3)	0.751	0.386
No	120 (77.9)	34 (22.1)		
Attitude level of personality				
Low to Moderate	113 (85.6)	19 (14.4)	6.741	0.009
High	74 (71.8)	29 (28.2)		
Attitude level of environmental perception				
Family				
Low to Moderate	139 (83.2)	28 (16.8)	4.754	0.029
High	48 (70.6)	20 (29.4)		
Friend				
Low to Moderate	42 (79.2)	28 (16.8)	0.005	0.946
High	145 (79.7)	37 (20.3)		
Socialization				
Low to Moderate	77 (81.9)	17 (18.1)	0.528	0.467
High	110 (78.0)	31 (22.0)		

Table 2 Association between demographic data, characteristic, attitude of personality, attitude of environmental perception (family, friend and socialization), drug abuse and risky sexual behavior among adolescent males in the Royal Thai Army (Cont.)

Variable	Risky sexual behavior		χ^2	p-value
	High risk n(%)	Moderate to Low risk n(%)		
History of drug abuse				
Yes	143 (84.1)	27 (15.9)	7.805	0.005
No	44 (67.7)	21 (32.3)		
Urine Methamphetamine				
Positive	56 (80.0)	14 (20.0)	0.011	0.916
Negative	131 (68.0)	34 (20.6)		

χ^2 = ค่าสถิติทดสอบไคสแควร์[†] Fisher's exact test

Table 3 Distribution of risky sexual behavior between using drug abuse by urine methamphetamine test

Using Drug Abuse	(n)	Mean Rank	p-value
Urine Methamphetamine Test			
Positive	70	124.21	0.356
Negative	165	115.37	

Table 4 Factor for predicting risky sexual behavior (binary logistic regression)

Factors	OR _{adj}	P-value	95% CI for	
			Lower	Upper
Status				
Single	1.00			
Married/ Separated/ Widowed	2.36	0.048	1.006	5.533
Alcohol				
No	1.00			
Yes	1.72	0.005	1.702	18.376
Attitude of personality				
High	1.00			
Low to Moderate	2.20	0.036	1.053	4.628
Attitude of environmental perception :Family				
High	1.00			
Low to Moderate	1.69	0.171	0.797	3.585
History of Drug abuse				
No	1.00			
Yes	2.26	0.025	1.108	4.610
Nagelkerke R Square 0.018				

Reference

1. Srisangnam U. Sexual Education. Bangkok: Style; 1995. (In Thai)
2. Center for Disease Control and Prevention. Fact Sheet; Reported STD in the United States. Sexually Transmitted Disease Surveillance [Internet].2013 [cited 2017 April 8]. Available from: <http://CDC.gov/std/stats13>
3. World Health Organization. Sexually Transmitted Infections in Adolescence. Document for WHO Publication.2004.
4. Brindis CD, Driscoll AK, Bigg MA, Valderrama LT. Fact sheet on Latino Youth : sexual behavior; San Francisco, CA; University of California; 2002.

5. Woods-Jaeger BA, Jaeger JA., Donenberg GR, Wilson HW. The relationship between substance use and sexual health among African-American female adolescents with a history of seeking mental health services. *Womens Health Issues*,2013; 23(6) : e365-371.
6. Julawong O. Exploring Risky Behaviors Related to HIV Infection in Thai Army Conscripts (abstract). *Journal of The Royal Thai Army Nurses*. 2013;14(3):142-150.
7. Jessor R, Jessor S L. Problem behavior and Psychosocial development : A longitudinal study of youth. New York ;1977.
8. Daniel WW. Biostatistic : A foundation for analysis is the health sciences. 8th ed . USA : John Wiley & Sons; 2005.
9. Suktassanee P. NaCrotic Substance and some factor relating to the use of Nacrotics substance in Slum Klong Toey area . Master Thesis in Sociology and Anthropology. Bangkok: Thammasat University; 1993.
10. Tipwareerom W. Risky Sexual Behavior Prevention Program Among Adolescent Boys . The Degree of Doctor of Public Health. Bangkok: Mahidol University;2010.
11. Lott RE. The unique influence of mothers' and fathers's negative parental practices on adolescent antisocial behavior: Mediating effects of adolescent psychological resources and deviant peer relationships. Iowa State University; 2009.
12. Yuprasert P. Factors Affecting Drug Abuse of Teen Students in The Metropolis of Bangkok. Master Thesis in Public Health (Public Health Nursing).Bangkok: Mahidol University; 1997.
13. Nacrotics Control Technology Center.National Nacrotics treatment and Rehabilitation Data system: Office of the Nacrotics Control Board [Internet]. [cited 2017 April 10]. Available from:<http://nadc.oncb.go.th>
14. National Youth Risk Behavior Survey.2015.
15. Kwong-Lai PM, Pui-hing WJ, Sutdhibhasilp N, Trung-thu HP. Wong B. Drug Use and STI/HIV Risk among East and Southeast Asian Men Who Have Sex with Men in

- Toronto. The Canadian Journal of Human Sexuality. 2012.
16. Berman AH., Bergman H, Palmstierna T, Schlyter F. Drug Use Disorder Identification Test. Karollinska Institutet, Stockholm; Sweden; 2002.
 17. Gálvez-Buccollini JA, DeLea S, Herrera PM, Gilman RH, Paz-Soldan V. Sexual behavior and drug consumption among young adults in a shantytown in Lima, Peru. BMC Public Health. 2009; (9) : 23.
 18. Bachanas PJ, Morris-Gess J, SarettCuasay E, Sirl K, Ries J, Sawyer M. Predictors of risky sexual behavior in African American adolescent girls: Implications for prevention interventions. Journal of Pediatric Psychology. 2002.
 19. Patiyoot K. Value Associated With Sexual Behavior and Health Locus of Control in STD-Risk Behaviors Among Adolescent in Nakornsrithammarat Province. Master Thesis in Medical and Health Social Science. Bangkok: Mahidol University; 1998.
 20. Pothong S. Sexually Transmitted Disease And Condom Usage: Comparison Between Technical Students Level And High School Student. Master Thesis of Science Human Reproduction and Population Planning. Bangkok: Mahidol University; 1985.
 21. Kaewmarin N, Jitsabuy B, Pimpa Y, Plipat T. Result of Behavioral Surveillance System Among Male Conscripts, Thailand 1995-2004. Thai AIDS journal. 2007; 19(3) : 155-164.
 22. Ghandour LA, Mouhanna F, Yasmine R, El Kak F. Factors associated with alcohol and/or drug use at sexual debut among sexually active university students: cross-sectional findings from Lebanon. BMC Public Health. 2014; (14): 671.
 23. Sudjaritruk T. Sexually transmitted disease. PIDST Gazette [Internet]. 2016[cited 2017 March 23]. Available from: <http://pidst.net/gaz/201610>>CM.
 24. Sangdittha B. Epidemiology of Viral infection from Blood Donation. Journal of Hematol Transfus Med [Internet]. 2013[cited 2017 April 8]. Available from [www. tsh.or.th](http://www.tsh.or.th) (In Thai)
 25. Danthomrongku V. Substance use among adolescents in probation

- and treatment systems. *Journal of Health Research*.2007; 21(2): 155-162.
26. Department of Mental Health. Drug abuse [Internet].2016[cited 2017 April 8] Available from: <http://region1.prd.go.th> (In Thai)
27. Verachai V. Textbook of addiction medicine.: Thanyarak institute on drug abuse. 1st ed, Bangkok; 2005.
28. Muangsom N. Sexual Culture, Risk Perception and Sexual Behavior Related to Sexually Transmitted Disease Transmission: A Case study of Urban Femal Adolescent Living in Northeast Thailand). Doctor Thesis in Medical and Health Social. Bangkok: Mahidol University; 2000.
29. Chaysree L. Factor Influencing sexual risk-taking behavior among high school student, Prachuapkhirikhan Province. Master Thesis in Public Health. Bangkok: Mahidol University; 2010.
30. Kantathanawat T. Psychosocial Factors related to Protected Sexual Risk and Illicit Drug use of Student in Secondary school in Saraburee province. Master thesis of Educational research and statistic. Srinakarinwirot University; 2003.