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Abstract

The sexual risk behavior among Thai adolescents plays a major role in the spread of STDs/HIV/AIDS. Within a Bandura's self-efficacy model for safer sexual behavior, the present study aimed to examine the differences in attitudes toward condom use between male and female Thai adolescents. A cross-sectional descriptive design was used with a clusterbased sample of 270 students aged 18 to 21 years from three randomly selected vocational schools in a selected province located in the northeastern part, Thailand. The Condom Attitude Scale-Adolescent Version (CAS-A) and a demographic data sheet were used to collect data for this study. Descriptive statistic methods and t-test analysis were utilized to analyze data. The results showed that almost sixty-seven percent (180 adolescents) of the 270 participants reported that they had had sexual intercourse experience. The average age of first sexual intercourse experience occurrence was 16.88 (SD=1.93) year-old among participants who are sexually active. Among sexually active participants, 3% (n=8) initiated the first sexual intercourse at age of 11 which is considered as the youngest age among this group. The average age of initial sexual intercourse occurrence in male adolescents was slightly lower (Mean=16.70, SD=1.94) than their female counterpart encounters (Mean=17.4, SD=1.92), but the difference was not significant (t=-1.51, p=.13). Moreover, each dimension of attitudes toward condom use varied with gender. Female participants reported greater attitudes toward condom use in all of six dimensions, including relationship safety, perceived risk, interpersonal impact, safety, effect on sexual experience, and promiscuity, than the males did. Gender specific approach may be needed when providing STDs/HIV/AIDS prevention programs focusing on attitudes toward condom use to Thai adolescents.

Keywords: attitudes toward condom use, gender differences, Thai adolescents

Introduction

Young people are at increasing risks of the HIV/AIDS pandemic while the threats of HIV/AIDS quickly spread all over the world. Asia, which is estimated to have 2.2 million cases of HIV infected young people, is the region with the second highest prevalence of HIV infection in the world (WHO, 2006). Sexual activity has been identified as the major form in which HIV transmission occurs in most reported AIDS infected cases. Early age of sexual intercourse initiation, multiple sexual partners, inconsistent or no condom use, and substance use during intercourse have been found as influential factors that increase the risk of contracting HIV (Sturdevant et al. 2001; Tapert, Aarons, Sedlar, & Brown, 2001). Thai

young people are at a high risk of being exposed to HIV infection as youths in other countries. In Thailand, 56% of HIV infected persons are 10 to 39 years-old (Ministry of Public Health, Thailand, 2006). An increased prevalence of sexually active young Thai with a decreased onset of age of sexual intercourse was identified (Khumsaen, 2008). It has also been noticed that Thai adolescents engage in high-risk sexual behaviors such as having multiple sexual partners and lack of condom use (Khumsaen & Gary 2009). Increasing rates of HIV/AIDS infections among young Thai people draw attention to the need for emphasizing the reduction of risky sexual behaviors, a major contributor to the spread of HIV/AIDS.

Attitudes toward condom use have been identified as an essential contributor to behavioral changes. It has also been found playing an essential role in the prevention of HIV/AIDS-related risky sexual behavior. A number of studies have shown that attitudes toward condom use were significantly related to safer sexual practices among adolescents (DiIorio, Dudley, Soet, Watkins & Maibach, 2000; Sieving, Resnick, Bearinger, Remafedi., Talyor, et al., 1997). While knowledge and skills regarding the reduction of sexual risk was found to be necessary but inadequate for exercising self-protective behavior and behavior changes, increasing the level of attitudes toward condom use has been considered as a valuable strategy for changing behaviors and increasing personal control over the prevention of sexual risk-taking behaviors (Brown, 2000; Taylor-Seehafer & Rew, 2000).

Adolescents are at a time in life when multiple critical tasks merge together. Developmental changes, including social changes, cognitive changes, and physical changes, have an impact on adolescents' perceptions of their own capacities and beliefs (Schunk & Meece, 2006). Conflicts from managing interpersonal relationships and social environments might depress adolescents' attitudes toward condom use to managing their sexualities which involve management of interpersonal relationships (Bandura, 2006). Enhancing attitudes toward condom use may be especially important for adolescents.

Attitudes toward condom use might be different across gender (Kasen, Vaughan & Walter, 1992; Rosenthal, Moore & Flynn, 2002). In 1995, Santelli and associates explored combined use of condoms with other contraceptive methods in 717 women, aged 17-35 years in two inner-city Baltimore communities. Logistic regression analyses showed that positive attitudes toward safer sex, ever having refused sex without a condom and believing in condom efficacy all significantly predicted use of the condom with another method (Santelli, Davis, Celentano, Crump, & Burwell, 1995). Additionally, several researchers also have

documented the findings that adolescent attitudes toward condom use are associated with their use. Also, there were differences in attitudes toward condom use between girls and boys (DiClemente et al., 1992; Pendergrast, Durant, & Gaillard, 1992; Reitman et al., 1996). Although the findings of many studies have indicated that the factor structure and the function of attitudes toward condom use are comparable across different cultures, the ways in which attitudes toward condom use was implemented, how attitude is developed and structured, and the purposes of attitude were situated cross-culturally (Bandura, 2006).

In the review of existing literature, information regarding attitudes toward condom use among Thai adolescents during the sexual activity is extremely limited. Moreover, interventions for enhancing individual's attitudes toward condom use has been missed and not a part of the HIV/AIDS prevention programs in Thailand.

The purpose of this study was to examine whether attitudes toward condom use varies with gender among Thai adolescents. The research questions in this study were: (a) What are the degrees of attitudes toward condom use among Thai adolescents?; and (b) Is there a significant difference in degree of attitudes toward condom use between male and female Thai adolescents?

Methodology

The current study employed a cross-sectional, descriptive design aimed to investigate gender differences in Thai adolescents' attitudes toward condom use. Approvals for the study were obtained from Institutional Review Broad and from the City Bureau of Education in Thailand before approaching the potential subjects. The vocational school students were assured confidentiality, anonymity, and voluntary participation both orally and in writing. Signed assent form from adolescents was received before anonymous, self-administrative questionnaires were distributed to the participants. Adolescents were encouraged to complete the questionnaires and were informed of their anonymity. However, they were also told to skip any question which made them feel uncomfortable.

Setting and Sample

This study recruited 18-21 year-old male and female adolescents who were studying in vocational schools in Thailand and able to respond independently to the questionnaires. Adolescents who were studying in special classes that only provided for individuals with mental or cognitive disorders were excluded. Using a multistage cluster sampling procedure, a total of 9 classes distributed among 3 schools in the second biggest province of

northeastern, Thailand were randomly selected. Principals and teachers of the selected schools and classes were contacted for scheduling the best time for data collection. All data was collected in the classrooms of participants' schools in Thailand. Totally, 270 Thai adolescents participated in this study.

Instruments

The Condom Attitude Scale–Adolescent Version (CAS-A) had 23 items that measured adolescent attitudes toward condom. A total of 23 items, developed by St. Lawrence et al. (1994), explored relationship safety, perceived risk, interpersonal impact, safety, effect on sexual experience, and promiscuity among adolescents. The instrument was translated into Thai by the author of this study and the original and back-translated versions were systematically compared. The 7-point Likert scale was used with responses ranging from 0 (strongly disagree) to 6 (strongly agree), with a Cronbach's alpha of .74. The higher score indicated the positive attitudes about condoms.

Demographic data

The demographic characteristic questionnaire was developed to gather the demographic background of the subjects, including age in years, and gender. Participants were also asked about substance use history (including smoking, alcohol drinking, and illicit drug user) and sexual intercourse experience (including having girl/boyfriends, premarital sexual experience, age at first intercourse, use of hormonal contraception, abortion experience, and duration of the current intimate relationship).

Data Analysis

The overall attitudes toward condom use was calculated by summing up scores from all 23 items on the Condom Attitude Scale—Adolescent Version (CAS-A). Descriptive statistics were employed to describe the distribution of attitudes toward condom use and the characteristics of the participants. Independent t-test was performed to analyze the differences in attitudes toward condom use between male and female Thai vocational student participants.

Results

Characteristics of the Sample

Among 270 participants, 174 are males (64.4%) and 96 are females (35.6%). The overall age of participants was 19.18 (SD= 0.83) years old and an age range of 18 to 21 years. Fifty-two participants (19.3%) were 18 years of age. One-hundred and thirty-seven participants (50.7%) were 19 years of age, while fifty-nine participants (21.9%) were 20 years of age, and twentytwo participants (8.1%) were 21 years of age. Over sixty percent (61.5%) lived in dormitory/apartment. The average age of female participants (Mean=18.9, SD=0.67) was significantly older than the average age of male participants (Mean=19.2, SD=0.86) in this study (t= 3.12, p<.05). About 31.10% of the participants reported that they consumed alcohol or abused drugs once in a while before engaging in a sexual intercourse, 8.90% reported drinking alcohol or using drugs half of the time before engaging in a sexual intercourse, and only 0.70% reported drinking alcohol or using drugs all of the time before engaging in a sexual intercourse. Almost sixty-seven percent (180 adolescents) of the 270 participants reported that they had had sexual intercourse experience. The average age of first sexual intercourse experience was 16.88 (SD=1.93) year-old among participants who are sexually active. Among sexually active participants, 3% (n=8) initiated the first sexual intercourse at age of 11 which is considered as the youngest age among this group. The average age of initial sexual intercourse occurrence in male adolescents was slightly lower (Mean=16.7, SD=1.94) than their female counterpart encounters (Mean=17.4, SD=1.92), but the difference was not significant (t=-1.51, p=.13).

Attitudes toward condom use among all participants

Overall, the participants reported positive attitudes toward condom use; the average sum of the attitudes toward condom use is 90.35 and a standard deviation of 15.71 on a scale with a possible range of 0 to 138. On a relationship safety subscale, scores ranged from 0 to 30, with a mean of 17.65 and a standard deviation of 7.34. On a perceived risk subscale, scores ranged from 0 to 30, with a mean of 22.45 and a standard deviation of 5.20. On an interpersonal impact subscale, scores ranged from 0 to 24, with a mean of 18.93 and a standard deviation of 4.95. On a safety subscale, scores ranged from 0 to 18, with a mean of 13.70 and a standard deviation of 3.48. On an effect on sexual experience subscale, scores ranged from 0 to 18, with a mean of 9.80 and a standard deviation of 3.92. On a promiscuity subscale, scores ranged from 0 to 18, with a mean of 7.81 and a standard deviation of 4.18 (as shown in Table 1).

Table 1 The means and standard deviations of attitudes toward condom use among Thai adolescents (n=270)

Attitudes toward condom use	Mean	SD	Possible range score	
Overall	90.35	15.71	0-138	
- Relationship safety	17.65	7.34	0-30	
- Perceived risk	22.45	5.20	0-30	
- Interpersonal impact	18.93	4.95	0-24	
- Safety	13.70	3.48	0-18	
- Effect on sexual experience	9.80	3.92	0-18	
- Promiscuity	7.81	4.18	0-18	

Gender differences on attitudes toward condom use

The results revealed that the overall attitudes toward condom use significantly varied with gender. Moreover, female participants reported greater attitudes toward condom use in all of six dimensions, including relationship safety, perceived risk, interpersonal impact, safety, effect on sexual experience, and promiscuity, than the males did (as shown in Table 2).

Table 2 The comparison of each six dimensions of attitudes toward condom use between female and male Thai adolescents (n=270)

Dimensions of attitudes		Female		Ma	Male		
toward condom use	df	Mean	SD	Mean	SD	t-value	p-value
Overall attitudes toward condom use	214	97.51	13.75	86.40	15.36	6.09	0.04*
- Relationship safety	203	21.13	6.69	15.74	6.99	6.24	0.03*
- Perceived risk	264	23.37	3.62	21.94	5.85	2.48	0.04*
- Interpersonal impact	244	20.06	3.97	18.31	5.33	3.06	0.02*
- Safety	259	14.06	2.56	13.50	3.89	1.42	0.03*
- Effect on sexual experience	205	11.38	3.61	8.91	3.82	5.26	0.02*
- Promiscuity	203	7.98	4.06	7.48	4.24	95	0.03*

^{*}p < 0.05

Discussion

In this study, the average overall score of 90.35 (SD=15.71) indicated a medium degree of attitudes toward condom use among Thai vocational students. The findings also showed that there is a significant difference in degree of attitudes toward condom use between male and female Thai adolescents. The findings of this study were consistent with those recently obtained by Myers and Clement (1994). They conducted a study to assess condom use and attitudes among heterosexual college students (n=707) at 4 college campuses in Toronto, Canada. The findings showed that females reported positive and higher score on attitudes toward condom use than did their male counterparts. Males rated sexual enjoyment to be more important. A greater proportion of males than females gave reasons for not using condoms. The researchers concluded that differences between male and female attitudes and behavior are important to address in AIDS prevention programs. The findings of this present study corroborate the results from previous research. Gender differences in attitudes toward condom use between boys and girls are well supported in the literature (Basen-Engquist & Parcel, 1992; Strader & Beaman, 1991).

Until now, the frequency of using condoms as the principal means of contraception has been linked with gender. Men have traditionally been leaders in using condoms. In previous international studies, women have had more positive attitudes toward using condoms than men have (Abraham, Sheeran, Spears, & Abrams, 1992; Grimley, Prochaska, Velicer, & Prochaska, 1995). The explanation for this would be that boys reasoned for not using condom that 'using condom made sexual relationship not natural', while girls stated that 'using condom could prevent unintended pregnancy and HIV infection' (Sacco, Rickman, Thompson, Levine et al., 1993). Moreover, another reason would be the intimacy and length of the girls' sexual relationship; the longer they have had a satisfying and secure sexual relationship the more positive their attitudes towards sexuality can be, including using condoms (Koniak-Griffin, Nyamathi, Vasquez, & Russo, 1994). In a stable relationship it can be easier to discuss with one's partner and solve the technical and psychological problems which using condoms might have caused previously.

Several limitations of the study should be noted. The first limitation of this study is related to the data collection process. Although anonymous self-administrative questionnaires were used to gather data, self-report of data might have influences on the results. Nevertheless, this threat to the reliability of study was minimized since enormous care and procedures were taken to assure the confidentiality of participants during the data collection procedure. Second, characters of

participants with potential interference on female and male participants' attitudes toward condom use were not controlled while the differences of attitudes toward condom use were examined across gender. However, this potential bias might have been diminished because the main purposes of this study were to describe the differences in attitudes toward condom use between female and male adolescents, not to examine the influential effects of gender on attitudes toward condom use.

Conclusion

Few studies have described attitudes toward condom use among Thai adolescents. Positive relationships of attitudes toward condom use on behavioral changes of reducing HIV/AIDS related risk behaviors (Bandura, 1994) highlight the value of enhancing attitude towards condom use. Intervention programs should focus on increasing condom use by promoting positive attitude towards condom use. Understanding the differences in attitudes toward condom use between male and female Thai adolescents may assist healthcare providers' capabilities to design gender-specific and culturally competent interventions for this population. Findings from this study show that a gender specific approach is necessary when developing HIV/AIDS prevention programs for Thai adolescents. Nurses can utilize information from this study to develop HIV/AIDS preventive interventions for adolescents in Thailand

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