Teaching Sex Education in Thailand

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Abstract

The purposes of this study were to examine the current situation pertaining to the teaching of sex education and identify barriers to teaching sex education among Thai health education teachers. A survey questionnaire was administered to 193 health education teachers who participated in this study. The questionnaire was comprised of three parts: (1) demographic questions, (2) the current status of sex education in Thailand, and (3) the barriers to teaching sex education. The third part was comprised of teacher characteristics, curriculum and multimedia, and environmental factors. The findings focused on the main effect interaction analysis between a dependent variable (gender, age, level of education, etc.) and the three factorial scales generated by using the Factor Analysis Procedure from the questionnaire. There were no significant differences found between the dependent variables and the three factors associated with teaching based on Analysis of Variance (ANOVA) at p=0.05. Using descriptive statistics, we found teachers held interesting perspectives on factors surrounding sex education. So, although there were no significant differences in the findings, the study indicates that health education teachers contribute to the quality of teaching and the learning process of sex education. They play a critical role in designing and implementing sex education courses.

Key words: students, health, teachers, curriculum

Educating children, pre-teens, and teenagers about sex is important and assists in developing social skills. Students can use these skills to avoid unwanted pregnancies, sexually transmitted infections (STIs) and HIV/AIDS that could otherwise hinder a fulfilling life. In Thailand, sex education includes classes or presentations that discuss human reproduction, dating relationships, abstinence, STIs, HIV/AIDS, pregnancy prevention, contraception, family planning, and related sexual activities. Providing proper age-appropriate information is initiated from predetermined traditional settings, authority opinions, workshops, seminars, studying past research related to the topic, and exploring the current sex education curriculum being implemented in schools. New knowledge and extended research are needed to improve understanding and further develop sex education in Thailand.

Thai male and female adolescents lack the experience of formal educational information, which leads to unsafe sex activities. Sex education could assist in extinguishing misconceived stereotypes (Vuttanont, Greenhalgh, Griffin, & Boynton, 2006). Their study described how society and the stereotypes society had contributed led to unhealthy life styles that influenced adolescents to engage in protection free sexual activities. Thai male adolescents are encouraged to tell stories of sexual conquest as a way of boosting their status in society (Vuttanont et al., 2006). There is a widespread acceptance that men have a right to engage in premarital or extramarital sexual affairs (Cash, Anansuchatkul, & Busayawong, 1999). Thai females are encouraged to keep their traditional submissiveness, which leads to insufficient negotiating skills (Vuttanont et al., 2006). For example, females often leave the decision of condom use to males because it is "men's business" (Cash et al., 1999). In addition, condom use has a negative connotation in adolescents because of the connection between condoms being used in the commercial sex industry (Jenkins et al., 2002). The aforementioned gender-related stereotypes lead to unprotected sexual encounters through coercion (Vuttanont et al., 2006).

In addition to the stereotypes reinforcing unprotected sex, the sex education taught within the schools narrowly focused on biological content and was inconsistently delivered throughout the school system (Vuttanont et al., 2006). Students lacked applicable knowledge about desirable sex and therefore did not have the adequate skills to participate in sexual encounters safely. Having a sex education program that takes into consideration the needs of adolescents to receive knowledge about peer norms, gender stereotypes, and life skills could help prevent undesirable sexual interaction (Jenkins et al., 2002; Mahattano, Warakamin & Pongkittilar, 2004; Vuttanont et al., 2006).

A reoccurring theme found in the research for sex education in Thailand is that sex education programs fail to focus on proper knowledge to help adolescents make healthy decisions related to sexual preference. Lyttleton (1994; 1996) has explored this issue and found that education programs being controlled by central authorities are run from a top-down perspective. This has led to information that lacks the details that are relevantly vital to individuals learning about sex education. Having a "one size fits all" approach has not been effective for sex education (Lyttleton, 1994; Lyttleton, 1996). Focusing more on a curriculum that takes the students' needs into consideration and focuses on ageappropriate information may serve to be more effective in the long run. How teachers respond to the guidelines given to them will provide more information on how sex education was introduced in schools and how it may need to be altered to help meet the needs of its audience.

Past research has shown that peer programs that are based on reproductive health have provided knowledge and increased positive attitudes about the subject within the student population (Mahattano et al., 2004.). They suggested that in order for sex education to be effective there needs to include input from students helping develop guidelines, strategies, and curricula that will be relevant to their needs.

Sex education had not been formally incorporated into Thailand's Compulsory Education Curriculum until 2001 (Noppakunthong, 2007). Lack of sex education in the home and the inability to talk about sexuality in public because of its taboo nature had pushed the responsibility of teaching sex education onto the teachers. In addition, the years in school without proper sex education have led to an increase in sexually transmitted infections and unwanted pregnancies (Grunseit, 1997).

In one study, teachers were more aware of sex education topics such as emergency contraceptive pills (ECPs) than guardians were (Sripichyakan & Tangmunkongvorakul, 2006). Teachers also had more positive attitudes towards topics such as ECPs and the moral issues surrounding contraception (Sripichyakan & Tangmunkongvorakul, 2006). Both teachers and guardians need additional instruction on sex education content to increase accurate knowledge that will be passed onto adolescents. Teachers and guardians also agreed that adolescents should learn about ECPs and other sex education topics (Sripichyakan & Tangmunkongvorakul, 2006).

Therefore, a decade ago, Thailand turned to its formal channel, the school system, to educate school-aged children on sexual behavior (Ministry of Education, 2001). Schools have access to a wide variety of individuals, which allows sex education to have a widespread captive audience (Smith, Kippax, & Aggleton, 2000). Thus, sex education was implemented into elementary and secondary schools in order to reach different age groups and be able to provide age-appropriate material (Ministry of Education, 2001).

The sex education curriculum was formed with the cooperation among government agencies, private entities, educators, and health providers. Universities, Ministry of Education, and Ministry of Public Health first introduced a guideline curriculum to integrate sex education from the first grade through the twelfth grade. Strategies for teacher preparation developed as well as integrating sex education into various subject matters (Peerapipat, 2006). Similarly, HIV related education was incorporated into many curriculum subjects, which has allowed for the incorporation of social development and acquisition of life skills along with HIV education (Phoolcharoen, 1998; Smith, Kippax, Aggleton, & Tyrer, 2003).

The very first hurdle schools experienced when incorporating a sex education program was the lack of budget funding for personnel, materials, equipment, teacher in-services, and so on (Peerapipat, 2006). In addition, majors in sex education were not offered as part of a teaching degree in any university. Assigning teachers to have the primary duty of teaching sex education became a new challenge for the whole process of teaching sex education through the school (Peerapipat, 2006).

Challenges such as these and many others inspired this study to focus on examining the status of, and the barriers to, teaching sex education. This study lends itself to investigating from teachers' opinions and attitudes what they have experienced after nearly a decade of sex education curriculum implementation. This study explored teachers' experiences on curriculum implementation, classroom activities, instructional content, teaching strategies, and field support from the school and community. It is a study that identified characteristics of teachers and examined the barriers or problems confronting teachers in classrooms and activities surrounding the teaching environment.

Method

This study illustrates a general perception of teachers who are teaching sex education in middle schools and high schools in Thailand. A questionnaire was given to teachers, as study subjects, who were currently teaching sex education in middle and high school. Included in this study, 193 teachers were randomly selected to be the subjects representing teachers currently teaching sex education. Teachers throughout the regions were asked to answer questions from a questionnaire. The school districts were geographically divided into seven corresponding educational regions. The survey method was employed to randomly selected subjects throughout the country.

Instrument

Participants

Participants were given a 57-item/question survey that consisted of three parts. Part 1 included 12-items referring to demographic questions. Teacher demographic data consisted of personal information including gender, age, education, teaching experience, grade level taught, family status, and religious denomination beliefs. Part 2 included 13-items focusing on the teachers' perceptions toward teaching sex education according to a predetermined operational definition of sex education, mentioned earlier, as the conceptual framework of the study. Teachers were asked to read each given questionnaire item carefully and respond to the given choice that was mostly true to their personal status. Lastly, Part 3 included 32-items that sought opinions of the barriers teachers felt existed in teaching sex education in Thailand. Using the Item Analysis Procedure, it was found that the reliability level of the instrument was at 0.933.

Data Analysis

The results from the survey were analyzed using the Procedure of Descriptive Statistics, Item Analysis, Factor Analysis, and Analysis of Variance (ANOVA) to classify, explore, and compare the between-groups and within-groups effects. Item analysis determines the outcome of the instrument reliability. Analytical data included teachers' demographic information as dependent variables. The independent variables were predetermined and classified into three scales: teacher characteristics (FACTOR 1: F1), teacher perspective towards sex education and its curriculum (FACTOR 2: F2), and teacher opinions reflecting perceptions on social norm and community (FACTOR 3: F3).

Results

The findings of the study were summarized through information provided by 193 teachers that were included as subjects in the survey. The study found the breakdown of teacher's gender to be 48 percent male and 50 percent female; four subjects did not report his/her gender. The average age of the subjects was 32 years old and over 50 percent were 40 years or older. All teachers obtained a Bachelor's degree (85 percent) or higher (15 percent). The average teaching experience was 12 years and 45 percent of them taught middle school (grade 7-9), while 55 percent taught high school (grade10-12). Among those grade levels, 89 percent were co-ed schools. In some schools, males and females were assigned to be in separate classrooms, or schools were designated for either girls or boys.

In regards to the teachers' family background, 62 percent were married, 35 percent responded as never married, and three percent did not declare their status. Teacher family size, on average, consisted of two children. Nearly 40 percent, married or single, had no children. Geographically, the gender of teachers was a relatively equal ratio. In aspect of religious denomination, 96 percent of teachers claimed to be Buddhist, otherwise they were Christian or Muslim.

Part 2 questionnaire items focused on the current status of sex education in Thailand. Sixty percent of teachers felt that there had not been any significant changes in the past two years in sex education. In addition, over 68 percent of teachers did not realize any controversial issues in their community regarding sex education. In the classroom, teachers can adopt any additional topics in addition to the given curriculum.

Currently, the teachers, on average, teach sex education from eight to nine hours per academic year and they agreed this is the right amount of time. Approximately 88 percent of the schools teach sex education in a co-ed setting with a 95 percent acceptance of parents. In addition, teachers believed that students agreed sex education is important and they receive school administration support. Over 60 percent of schools are encouraging sex education extracurricular activities for students in depth and 88 percent of the schools involved in the study have a health counselor on-site.

Findings on the main-effect interaction analysis between a dependant variable and the three factorial scales: FACTOR 1 (F1) consisted of 12 question items relating to teachers' credentials and their characteristics that contribute to their ability to teach sex education in schools. FACTOR 2 (F2) consists of 10 question items reflecting curriculum requirement, time allocation, and materials

Table 1. Anova for a Comparison of Teacher Quality Scale (F1)						
	Sum Squares	df	Mean Squares	F- Ratio	Sig.	
By Gender						
Between Groups	0.022	1	0.022	0.08	0.78	
Within Groups	51.508	187	0.275			
Total	51.53	188				
By Age						
Between Groups	1.405	3	0.468	1.74	0.16	
Within Groups	50.97	189	0.27			
Total	52.373	192				
By Education Level						
Between Groups	0.005	1	0.005	0.02	0.9	
Within Groups	52.212	189	0.276			
Total	52.217	190				
By Teaching Experience						
Between Groups	0.952	2	0.476	1.74	0.18	
Within Groups	50.532	184	0.275			
Total	51.485	186				
By Marital Status						
Between Groups	0.05	1	0.05	0.18	0.67	
Within Groups	50.532	184	0.275			
Total	51.485	186				

applied to sex education teaching techniques. Lastly, FACTOR 3 (F3) consists of 10 question items focusing on traditional beliefs, current social influential trends, and activities presented within and outside the classroom. From here, these scales will be referred as: Teacher Quality (F1), Teacher Perception (F2), and Teacher Opinion (F3). The statistical analysis indicated that among these three scales the reliability index, of Cronbach's Alpha, was at 0.933.

Using Analysis of Variance (ANOVA) found that among those three scales there were no significant differences in their variances of each scale under the selection of each dependent variable at 0.05 percent level of significance as shown in Table 1, Table 2, and Table 3 below.

As shown by the analysis, the characteristic of teachers indicated that two groups "age" and "teaching experience" had a tendency to make a difference in quality of teaching performance. More confidence was related to the amount of time served in school and personal maturity. Between "gender" and "marital status," both F-Ratio at 1.74 indicated that there were some variations of mean squares over between-groups and within-groups. Teacher performance might be influenced by the attribution of gender and family background.

Table 2. Anova for a Comparison of Teacher Perception Scale (F2)						
	Sum Squares	df	Mean Squares	F- Ratio	Sig.	
By Gender						
Between Groups	0.079	1	0.279	0.91	0.34	
Within Groups	57.081	187	0.305			
Total	57.360	188				
By Age						
Between Groups	0.815	3	0.272	0.9	0.44	
Within Groups	56.837	189	0.301			
Total	57.689	192				
By Education Level						
Between Groups	0.168	1	0.168	0.56	0.90	
Within Groups	56.610	189	0.300			
Total	56.778	190				
By Teaching Experience						
Between Groups	0.228	2	0.114	0.38	0.69	
Within Groups	55.724	184	0.303			
Total	55.952	186				
By Marital Status						
Between Groups	0.018	1	0.018	0.06	0.81	
Within Groups	57.135	189	0.302			
Total	57.153	190				

The comparison on Table 2, teacher perspectives towards sex education and its curriculum, showed that the variances betweengroups are proportionally smaller than within groups as reflected from the F-Ratio values. It indicates that the majority of teachers share closely related perceptions on strategy and implementing curriculum. Further investigation could help to identify relationships on this phenomenon in detail, especially in "marital status" where the variation of between-groups is very small.

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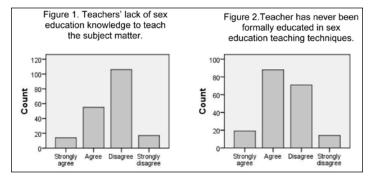
Scale (F3)			-		
			Mean	F-	
	Sum Squares	df	Squares	Ratio	Sig.
By Gender					
Between Groups	0.056	1	0.056	0.23	0.63
Within Groups	44.830	187	0.240		
Total	44.886	188			
By Age					
Between Groups	1.351	3	0.450	1.94	0.12
Within Groups	43.813	189	0.323		
Total	45.163	192			
By Education Level					
Between Groups	0.278	1	0.278	1.19	0.28
Within Groups	44.293	189	0.234		
Total	44.572	190			
By Teaching Experience					
Between Groups	0.647	2	0.323	1.41	0.25
Within Groups	42.265	184	0.230		
Total	42.912	186			
By Marital Status					
Between Groups	0.348	1	0.348	1.49	0.22
Within Groups	44.048	189	0.233		
Total	44.395	190			

Table 3. Anova for a Comparison of Teacher OpinionScale (F3)

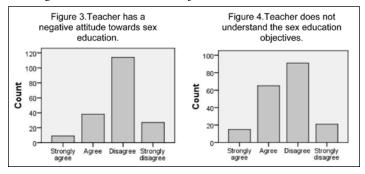
On Table 3, teachers' opinions reflecting perceptions on social norms and community in age group, the F-Ratio was the highest at 1.94 but there was not a significant difference at level of 0.05. "Teaching experience" and "marital status" rather indicated the tendency of mean squares to have proportional differences. Those three factors suggested that there might be value differences due to the generation gap or family orientation.

Exploring the details of the characteristics for each factorial scale will provide more information due to the finding that there were no statistically significant differences over the given scales. It was suggested that teachers most commonly agreed that sex education is similarly performed throughout the country. Data from individual items showed that there were relatively equal amounts between agreed and disagreed. The following information will illustrate several interactive situations through a descriptive statistics context.

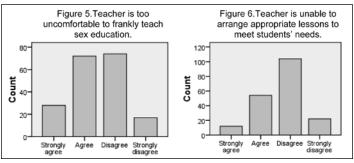
First, looking into F1 in detail, the factors in this area were designed to reflect the teachers' credentials and characteristics to whether they had the ability to teach sex education effectively. Item number 27 asked whether the teacher lacks the sex education knowledge to teach the subject matter. Over half of the teachers responded that they disagreed and strongly disagreed with this statement (see Figure 1). Sex education is a very new subject that has been introduced into the curriculum. Teachers tend to oppose the idea that only certified health teachers are qualified to teach. In addition, teachers responded to never being trained with sex education techniques at 56 percent agreed and strongly agreed as shown in Figure 2.



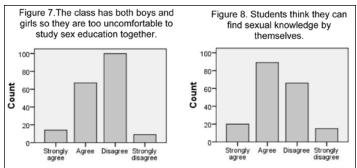
Although teachers in Thailand have not been formally educated in sex education they still feel comfortable that they know the information vital to teaching the subject matter. As Figure 3 shows, over 70 percent of teachers disagreed and strongly disagreed to having a negative attitude towards sex education. However, there is still some confusion understanding sex education objectives, as 58 percent of teachers in Figure 4 disagreed and strongly disagreed to being able to understand the objectives.



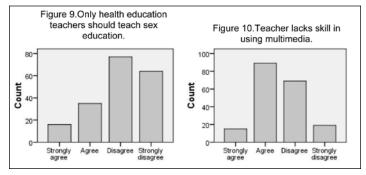
Item 31 on the questionnaire discussed the teachers' comfort level using straightforward vocabulary in sex education. Fifty-two percent of teachers agreed and strongly agreed it is difficult to use straightforward sex education terms (see Figure 5). Linguistically, Thai language lacks technical vocabulary. New terms need to be invented for better mutual understanding. Over 65 percent of the teachers disagreed and strongly disagreed that the content being presented is not relevant to the students as seen in Figure 6. The content is still keeping students' attention and is relevant to their interests.



Teachers were asked to rate whether co-ed classes could cause male and female participants to feel uncomfortable to share the classroom together. Over 56 percent of teachers disagreed with this statement. Although some teachers suggested a disadvantage to having them be in the same classroom as shown in Figure 7. Teachers were also asked whether they believed students could find information on sex independently. Figure 8 shows over 56 percent of teachers agreed and strongly agreed with this statement. It could be interpreted that topics and content provided in class were not adequately covered and was not readily available outside of the classroom.



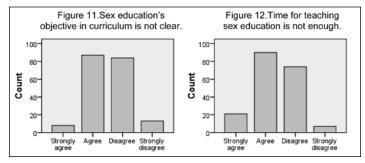
Teachers were asked to rate whether they believed only health education teachers should teach sex education, and an overwhelming 73 percent of teachers disagreed and strongly disagreed with this statement as seen in Figure 9. This reflected the lack of institutional tracking for teacher preparation, unlike science or mathematic programs that specifically prepare teachers for the aforementioned subjects. An item asked whether teachers lacked skill in using multimedia, and over 54 percent of teachers agreed and strongly agreed with this statement, as seen in Figure 10.



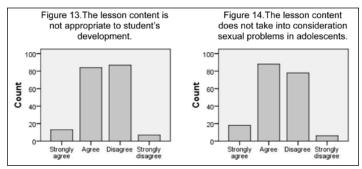
There are some opinions in the many items involved in F1 that are close to being equally weighted between agreed/strongly agreed and disagreed/strongly disagreed. This close distribution is a determination factor resulting in an insignificant difference among the scales.

The factors in F2 examine curriculum requirements, time allocation, and materials applied to sex education teaching techniques. Teachers were asked whether they believed the sex education objectives found in the curriculum were not clear. Teachers responded equally between agreed and disagreed as shown in Figure 11. More in depth questions are needed for further investigation as to why the objective was equally distributed. The next question asked whether the time allocated for teaching sex education was not enough time to complete the curriculum. Fifty-seven percent of teachers agreed and strongly agreed that there is not enough time to teach everything dictated by the curriculum (see Figure 12).

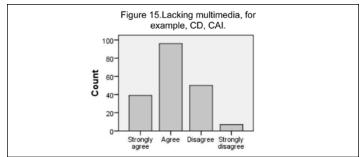
Teachers were asked whether they believed the lesson content was out of date and not appropriate to students' sexual knowledge development. Again the teachers equally agreed and disagreed as shown in Figure 13. The next item asked whether teachers believed the content does not take into account the sexual problems



in adolescents. Over 56 percent agreed and strongly agreed that the content did not address enough social skills to manage the teenager's life around undesired circumstances as seen in Figure 14.



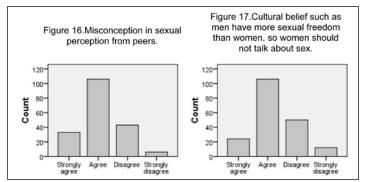
The last item in F2 asked whether the teachers were lacking the multimedia materials to make students pay enough attention to the presentation, and 67 percent of the teachers agreed and strongly agreed that the available multimedia material cannot hold the students' attention as seen in Figure 15. In addition, teachers agreed that the teaching manuals and instructions do not give adequate directions consistently guiding teachers to deliver knowledge to students.



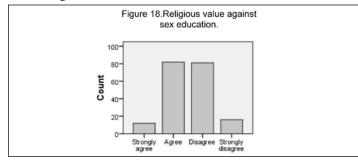
The items in F2 have shown why there were no significant differences between the factors in F2. Teachers are not in unison on whether the materials, curriculum requirements, and time allotment are adequate to teach sex education.

Looking into the last factor F3 will provide additional information about the results of the factorial analysis. Descriptive analysis of F3 focused on traditional beliefs, current social influential trends, and activities presenting within and outside the classroom. The first item sought the teachers' opinion whether student peers or peers in the community were influentially forming a misconception in the teenager's sexual preferences. Over 72 percent of teachers agreed and strongly agreed that what students learn "on the street" influence them to conceive wrong perceptions about sexual attitudes as seen in Figure 16. Another social aspect

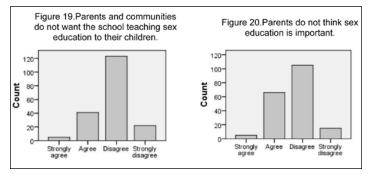
asked teachers whether they believed that traditional beliefs such as "men have more sexual freedom" and "women should not talk about sex" have an impact on sex education. Sixty-seven percent of teachers agreed and strongly agreed that stereotypes play a role in the sexual perception of society as sown in Figure 17.



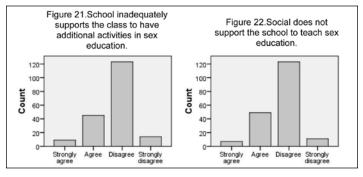
In the context of religion, the teachers were asked to rate whether there is a religious moral implication against sex education. The observation was divided equally between agreed and disagreed as seen in Figure 18.



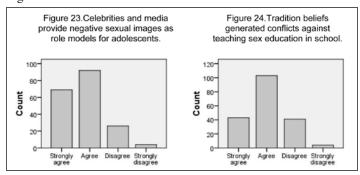
The teachers were then asked to rate whether parents and communities do not want schools to teach sex education to their children. Over 75 percent of teachers believed there was no resistance from the community or the parents against teaching sex education in the school system as seen in Figure 19. Teachers were asked whether parents do not think sex education is important. Over 62 percent of teachers disagreed and strongly disagreed with this statement as seen in Figure 20. Further, teachers believe that parents valued sex education being taught in schools.



Probing into the school system, teachers were asked whether the school did not support classes having additional activities in sex education. The teachers responded with an overwhelming 91 percent disagreeing and strongly disagreeing with this statement as shown in Figure 21. Taking a broader look, teachers were asked whether society does not support sex education. Over 73 percent of teachers believe society prefers to have formal sex education being taught in the school system as shown in Figure 22.



Teachers were asked whether celebrities and media, as role models for adolescents, created a negative image towards sexual awareness. Over 83 percent of teachers agreed and strongly agreed that show business created negative impacts on young people who lack experience in life as shown in Figure 23. In addition, teachers were asked whether traditional beliefs seemed to be in conflict with sex education being taught in schools. Seventy-six percent of teachers agreed and strongly agreed that old tradition still had doubts that sex education should be taught in schools as shown in Figure 24.



As the specific items in F3 have shown, there were a number of items where the teachers were equally divided between agreeing and disagreeing. These items contributed to their being no significant differences between the factors. However, examining each item indicates much more information is needed to better understand the teaching of sex education in Thailand.

Discussion

Statistical analysis on "Teaching Sex Education in Thailand" found that there are no significant differences at 0.05 levels in areas of teacher qualification, curriculum and materials used, and social norms and the environment among teachers who are currently teaching in middle and/or high school. Students in general, pay close attention to the class and pursue extracurricular activities that are offered to them. The topics of interest among students were equally weighted in relation to the degree of how important each topic was to them. The parents were perceived that they accepted and did not raise concerns regarding the school curriculum and its implementation. School administrators fully support and cooperate with teachers in order to serve Ministry of Education policy of providing sex education and health counseling throughout the school system.

Social norms and traditional beliefs, including religious

institutions, are not generating influential pressure against teaching sex education as has happened in some countries, especially in Western societies. However, teachers viewed the entertainment media and celebrities as bringing about damaging sexual perceptions and creating undesirable role models for adolescents.

The limitations to this study are as follows. This study did not cover the opinion from students, parents, and community perspectives. The findings are totally limited through the observation of the teachers' perceptions as key elements for the study analysis. Future studies need to include more stakeholders such as school administrations, policy makers, parents, and communities. Methods of research should include using techniques of record and document analysis and other methods as necessary. Such efforts would gradually improve and guarantee future benefits and effectiveness of teaching sex education in Thailand.

After summarizing the findings of this study, it would be appropriate to mention that teachers had performed their best contributing and delivering educational values through school systems consistently. Even though the barriers may not be contributed by the quality of teachers and their experiences nor the social norms or traditional beliefs, but the awareness of common people toward sexual issues was not raised to the point of being controversial. However, the progression in context of sexual knowledge has not met the demand and problems facing Thai society today. The burden remains hidden under the social stereotypes, the secrecy of social values, and other conflicts of interest.

Looking at another factor, rather than teachers as mentioned above, the school system, policy makers, curriculum developers, and learning materials also need to be evaluated and progressively improved. Good curriculum guidelines, teaching manuals, and teacher in-services need to be developed by highly qualified professionals. The basic resources from university research and development have become increasingly necessary. Research and development are important and essential. They are the only tools to make sex education programs fulfill the ongoing objectives.

Without outstanding resources being supplied to the school system, sex education would lose a clear direction and cycle around with no fulfillment in sight. As the findings have shown, sex education has an allocated time between 5 to 8 hours throughout one academic year, which more than half of teacher believed was "the right amount of time." This reflects that teaching materials and knowledge are limited. One may argue that sex education is an interdisciplinary subject and it is integrated into other subject areas but no one can guarantee a consistent delivery of the information.

Teachers' observations indicated that over 90 percent of students viewed sex education as important to them. Also, most of the schools do provide students with a health advisor or health counselor. So, the school setting is already in place to receive a better health education program. Above the school level, many universities already produce teachers for school health education to supply school needs. However, none of those universities offer a major in sex education. After evaluating the university curriculum in Thailand, offering a course in sex education remains insufficient.

Sex education is lacking specialties because formal teacher preparations are not yet constituted. Peerapipat's (2006) research

cited that the appropriation budget was far short of what was needed in preparing teachers. The current condition could be viewed as a problem that could easily be solved if there was a will to do so immediately. Unlike lack of knowledge and expertise in the area, it complicates a demanding time for maturing the outcome. Policy makers need to seriously investigate solutions to come up with knowledge, materials, resources, personnel, and plans to better the teaching of sex education in the schools in Thailand.

References

(Translated from the Thai language)

- Mahattano, K., Warakamin, S., & Pongkittilar, M. (2004). A study of a peer program on adolescent reproductive health[Abstract]. Presentation at The 26th International Congress of the Medical Women's International Association, Keio Plaza Inter-Continental Japan.
- Ministry of Education. (2001). Standardized learning in health education and physical education in basic education. Author.
- Peerapipat, P. (2006). Sex education development for teachers, Research Abstract.
- Cash, K., Anansuchatkul, B., & Busayawong, W. (1999). Understanding the psychosocial aspects of HIV/AIDS prevention for northern Thai single adolescent migratory women workers. *International Association* of Applied Psychology, 48 (2), 125-137.
- Grunseit, A. (1997). Impact of HIV and sexual health education on the sexual behaviour of young people: A review update, UNAIDS, Retrieved from http://data.unaids.org/Publications/IRC-pub01/JC010-ImpactYoungPeople_en.pdf
- Jenkins, R. A., Manopaiboon, C., Samuel, A. P., Jeeyapant, S., Carey, J. W., Kilmarx, P. H., ...van Griensven, F. (2002). Condom use among vocational school students in Chiang Rai, Thailand. *Aids Education* and Prevention, 14 (3), 228-243.
- Lyttleton, C. (1994). Knowledge and meaning: The aids education campaign in rural northeast Thailand. *Social Science Medicine*, 38 (1), 135-146.
- Lyttleton, C. (1996). Health and development: Knowledge systems and local practice in rural Thailand. *Health Transition Review*, 6, 25-48.
- Noppakunthong, W. (2007, September 4). Talking about sex in the classroom. *Bangkok Post*, Retrieved from http://www.bangkokpost. com/education/site2007/cvse0407.htm
- Phoolcharoen, W. (1998). View point: HIV/AIDS prevention in Thailand: Success and challenges. *Science*, 280 (5371), 1873-1874.
- Smith, G., Kippax, S., & Aggleton, P. (2000, October). HIV and sexual health education in primary and secondary schools: Findings from selected Asia-Pacific Countries, *Monographs of the National Center in HIV Social Research*, ISBN 1-875978-41-0.
- Smith, G., Kippax, S., Aggleton, P., & Tyrer, P. (2003). HIV/AIDS schoolbased education in selected Asia-Pacific countries. *Sex Education*, 3 (1), 3-21.
- Sripichyakan, K. & Tangmunkongvorakul, A. (2006). Comparison of knowledge, attitudes, experience, and opinion between teachers and guardians regarding the emergency contraceptive pill in Chiang Mai, Thailand. *Nursing and Health Sciences*, 8 (1), 27-35.
- Vuttanont, U., Greenhalgh, T., Griffin, M., & Boynton, P. (2006). "Smart boys" and "sweet girls"–sex education needs in Thai teenagers: A mixed-method study. *Lancet*, 368, 2068414 2080.