Research Article

Helping Teachers Conduct Sex Education in Secondary Schools in Thailand: Overcoming Culturally Sensitive Barriers to Sex Education

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SUMMARY

Purpose: The purpose of this quasi experimental study was to evaluate the effects of Culturally Sensitive Sex Education Skill Development, a teacher-led sex education program in secondary schools in Thailand.

Methods: Two public secondary schools in the suburban areas of Bangkok were randomly selected. One was designated as the experimental school and the other as the comparison school. Ninety grade seven and eight teachers, 45 from each school, were selected to participate in the study. Self efficacy theory and culturally appropriate basis were applied to develop the program which included 4 weeks of intervention and 2 weeks of follow up. Primary outcomes were attitudes toward sex education, perceived self efficacy, and sex education skills. Statistical analysis included independent and paired t test, and repeated one-way analysis of variance.

Results: At the end of the intervention and during the follow-up period, the intervention group had significantly higher mean scores of attitudes toward sex education, perceived self efficacy, and sex education skills than their scores before (p < .001), and than those of the comparison group (p < .001).

Conclusion: The results showed that Culturally Sensitive Sex Education Skill Development could enhance attitudes and sex education self efficacy to promote the implementation of sex education among teachers.

Introduction

In Thailand, young people are at risk of risky sexual behavior. Teenage pregnancy rate in this country is the highest in South-East Asia; sexually transmitted infection rates are rising, while the age of first sexual intercourse has declined (Panyayong, 2010). Younger teenagers are less likely to use contraception than older ones do, and more than two thirds of them experience an unintended pregnancy (Thai Health Promotion Foundation, 2009). In 2010, the incidence of unintended pregnancy in Thailand rose to 13.7% compared to 13.0% and 12.0% in 2006 and 2008, respectively (The National Statistical Office, 2009) which was higher than the number reported by the WHO. The number of teenagers giving births in 2010 was 120,000, nearly half of which occurred among those aged 16–17 years (Panyayong; The National Statistical Office).

Many studies have sought to identify the factors accounting for unintended pregnancy in Thailand (Atwood et al., 2012; Thaithae & Thato, 2011). Common factors found from these studies were levels of sexual drive, curiosity, and peer pressure. Sexual health services help assist young people through personal skill development. Ministry of Public Health has embarked on preventive programs to increase awareness of the negative consequences of abortion, enhance negotiation skills for safe sex. Sex and relationships education is neither compulsory nor subject to assessment, but it is clearly linked to pastoral care and school health services under the education policy of the Ministry of Education (Thai Health Promotion Foundation, 2009). Sex education is delivered in a sporadic and somewhat discretionary manner. Schools may choose to employ external providers to deliver an annual lesson to secondary school students, but many students are left to garner a sex education from the internet, magazine, and their peers (Sridawruang, Pfeil, & Crozier, 2010).

Several reviews have concluded that sex education delivered by teachers can have beneficial effects on young people’s sexual behavior (Goldman, 2011; Im & Park, 2014; Kirby & Laris, 2009).
Thus, teachers might be in a unique position to promote healthy sexual behaviors among adolescents. They can start talking about sexual behaviors and decision making early and repeatedly; they generally have a distinct emotional bond with and influence over their students; they can tailor conversations to suit students’ cognitive, social, emotional, and physical development and needs.

Teacher-delivered sex education has been recognized as a promising approach (Shepherd et al., 2010; Tummy, 2008). The claimed advantage of teacher-led programs over nonteacher-led interventions is that teachers can convey information to the target group in a more credible and appealing way (Shepherd et al.). Relatively few primary or secondary school teachers are confident in delivering messages containing even simple, explicit, and relevant information on sexual issues. Many teachers have not talked to students, particularly adolescents, about sexual topics because they lack sex education skills (Thaingtham, Powwattana, & Chandanasotthi, 2005). Teachers reported feeling embarrassed, inadequately informed, and unsure of what to say or how to begin (Phiphitphatphaisit & Saengjun, 2007). In Thailand, efforts to train teachers to better communicate information about sexual health include incorporating teacher activities in youth programs (such as joint teacher–student activity), teaching adolescents and teachers together and working with teachers alone. A serious challenge for these programs is teachers’ education pattern (Boonsang, 2005; Munkong, 2006) and insufficient teaching materials (Siriwong, 2004). Because of these limitations, formal training programs for teachers in providing sex education knowledge, attitude toward sex education and sex education skills have not been implemented. Consequently, teachers have negative impressions about and are not confident in providing sex education.

Common to all theories is the idea that behavior is influenced by an individual’s learning ability and the values and beliefs that transfer from a source of information to target groups. The hierarchical nature of the interaction between young people and teachers allow reliable communication about sexual issues in ways they have.

The researchers have developed a sex education program, Culturally Sensitive Sex Education Skill Development (CSSE). The program was a teacher-delivered program based on the Self Efficacy Theory of Bandura (Bandura, 1997) and specific social and cultural relevance. The program aimed to enhance teachers’ skills in communicating with students information on sexual issues especially those never addressed in a formal curriculum (i.e., sexual communication, awareness about sexual health barriers, masturbation, and sexual imagination). It is hypothesized that, after attending the CSSE program, compared to before enrolling into the program and to those who did not participate in the program, the teachers would report a more positive attitude toward sex education, better communication ability, more frequently discussing sexual issues with their students.

Methods

Study design

This study was a quasi-experimental, two groups, pretest and post-test in design.

Setting and sample

Eligible schools were 10 public secondary schools in suburban areas (Secondary Educational Service Area 6) of Bangkok. Schools were randomized after teachers were informed about the trial and agreed to participate in the study. One school was randomly selected as the intervention school, and the other was designated as the comparison. Teachers in each school were eligible if they were teachers of grade seven and/or grade eight, had never received sex education training, and were willing to participate in the study by giving signed consent form. Since small effects were anticipated (Johnson, Scott-Sheldon, Huedo-Medina, & Carey, 2011; Picot et al., 2012), sample sizes were chosen to provide 80% power to detect a 0.20 SD differences in outcomes between the intervention and control groups, and changes from the baseline with 95% confidence interval (Cohen, 1992). To meet such requirements, 41 persons are needed in each group. To compensate for dropout, the number was increased by 10% (4 persons). Therefore, the study included a total of 90 participants, 45 each in the intervention and in the comparison groups.

Ethical consideration

After receiving ethical approval from the Institutional Review Board (MUPH 2010-072 Faculty of Public Health, Mahidol University).

Instruments

The CSSE was a 6-week course that met once a week for 4 weeks. There were four 3-hour activities. In the first week, the teachers were trained to change attitudes toward sex education and to use strategies to overcome cultural barriers for sexual discussion. In the second week, after reviewing emerging barriers, the activities were focused on developing self-efficacy on sex education, aiming to build teachers’ confidence in communicating information on sexual issues with their students. In the third and fourth week, the teachers’ skills and the ground rules for effective communication between teachers and students were reinforced. The contents and skills of sex education that are prerequisite to the learning and role-playing activities in a hypothetical classroom were reviewed.

The instrument for data collection was a self-administered questionnaire developed by the research team. The contents of the questionnaire were reviewed by five experts in adolescent sexual behavior, sexual health education, and adolescent development for content validity index. The content validity index of the questionnaire was acceptable (≥80). The questionnaire was divided into four parts as follows:

Part 1: Personal information included gender, age, education, marital status, working period, sex education experience, knowledge/major subject, and teaching subjects.

Part 2: Attitude toward sex education. This category consisted of 20 items regarding attitudes toward sex education, sexual communication, masturbation, and sexual imagination. The participants were asked to rate on a 4-point rating scale from 1 (strongly disagree) to 4 (strongly agree). Higher scores indicated that the teachers had a positive attitude toward sex education. The reliability of these items measured by Cronbach’s alpha was .77.

Part 3: Self-efficacy of sex education consisted of 20 items regarding perception of their ability to transfer information about sexual communication, challenge and awareness of sexual health barriers, masturbation, and sexual imagination. The participants were asked to rate on a 4-points rating scale from highly confident (4) to no confidence (1). Total scores ranged from 20 to 80. Higher scores indicated that teachers perceived their sex education self-efficacy as high. Cronbach’s alpha was .92.

Part 4: Sex education skills included 10 items on activities regarding communicating information on sexual issues, challenge and awareness of sexual health barriers, masturbation, and sexual imagination. The participants were asked to rate on a
4-point rating scale from 1 (never perform) to 4 (regularly perform). Total scores ranged from 10 to 40. Higher scores indicated that teachers performed better in sex education than those with lower scores did. Cronbach’s alpha was .88.

**Intervention process**

Instrument for the experiment was the CSSE. The intervention was designed based on a systematic instructional design process, to integrate its content in the social cognitive theory of Bandura (Bandura, 1997) and participatory learning (Goldman, 2011; Kirby & Laris, 2009). The social learning model included the teaching and practice of desirable behaviors through role playing. The model also included specific elements of self-efficacy, an individual’s belief that if certain methods were employed, success (i.e., communicating sexual topics with the students) would be achieved, that benefits can accrue to the individual, and that the individual is capable of using the necessary behavior to attain the goal.

The theory stated that perceived self-efficacy determined decisions on personal ability and the performance of behaviors for achieving the target. There are four strategies to increase perceived self-efficacy (Bandura, 1997): (a) Mastery experience is the direct experience. The people’s achievement would contribute to increased perceived ability to perform that task. (b) Vicarious experience is to learn from the success of others in performing the same tasks or activities, inspiring observers to do the same. (c) Verbal persuasion is to suggest, explain, persuade, or compliment other people’s ability. This persuasion motivates an individual to perform the task. (d) Emotional arousal refers to stimulating both physical and emotional readiness to perform the task. This program included activities to personalize information about sexuality and reproduction and to provide training in assertive communication skills. Practice opportunities were provided for applying these skills in different situations.

The CSSE took a total of 6 weeks: In Week 1 the activities focused on the development of positive attitudes towards sex education. The researchers arranged the activities in order to adjust teachers’ feelings toward sex education, using news about teenagers’ sexual situations and case studies of students’ sexual behaviors. The activity started with reading news of teenagers’ sexual situations and case studies of students’ sexual behaviors. After that, the teachers were divided into small groups (7–8 persons in each group). Group discussions were used to raise culturally sensitive issues related to sex education, and to attain strategies to overcome these barriers. An opportunity was provided to teachers to apply their sex education experiences and group discussions were used to exchange their opinions on how to apply such experiences in sex education. At the end of the activity, each group had to summarize their discussion and present it as concept mapping. The researchers corrected any points that were inadequate. The time taken for discussion, raising cultural barriers, and strategies to overcome the barriers was determined as approximately 3 hours.

In Week 2 activities aimed to increase individual’s perceived self-efficacy in sex education. The activities started from the provision of information about sex, learning from experience using a role model who was successful in sex education. The next activity focused on emotional arousal on sex education through small group discussion about exemplary adolescents, and the roles of teachers in creating exemplary adolescents. The researchers linked how sex education is important for creating exemplary adolescents. This activity took about 45 minutes. At the end of this session, the teachers had sex education skill practice in the hypothetical classroom with 7–8 teachers in each group. The topic started with simple and familiar issues (i.e., sexual health, hygiene, and physical changes). The researchers provided reflection, complimentary reinforcement and encouragement to teachers who attentively performed the activities.

In Week 3, each teacher came upon their appointed time. They practiced providing sex education on selected topics (i.e., awareness of sexual health barriers, masturbation and sexual imagination) to students in the hypothetical classroom. The researchers provided feedback and discussed the teachers’ concerns. The teachers practiced repeatedly until they were confident in providing sex education to students. The time taken for each teacher was determined as approximately 30 minutes.

In Week 4, using group discussions, the teachers were asked to review the contents and skills in sex education that were prerequisite to learning; they also explored their successful and unsuccessful experiences with their students. The teachers set their goals and committed themselves to sex education. The researchers collected the data after the experiment. Two weeks after (Week 6) the program were left for measuring the sustainability of perceived self-efficacy, attitude, and sex education skills. Teachers in the comparison group received teacher training and the provision of the material at the end of the study.

**Data collection**

After receiving ethical approval from the Institutional Review Board (MUPH 2010-072 Faculty of Public Health, Mahidol University), a baseline survey was done among teachers in the CSSE group at the beginning of the program. They answered questions on perceived sex education self-efficacy at the beginning, immediately after the program (Week 4), and at the end of Week 6. At the beginning and at the end of Week 6, teachers answered questions about attitude towards sex education and their sex education skills. Teachers in the comparison group completed the same set of questionnaire as the intervention group did (Figure 1).

**Data analysis**

The data were analyzed by using SPSS program (version 18; IBM Inc., Armonk, NY), and presented by percentage, mean, standard deviation, independent t test, paired t test, and repeated measures analyses of variance with post-hoc Bonferroni. The level of significance was less than or equal to .05.

**Results**

The majority (75.5%) of the intervention and the comparison groups were female. The teachers in both groups were in their middle age. The age of the intervention group ranged from 31 to 40 years with an average age of 38.5 years. The comparison group was slightly older than the intervention group, with an average age of 43.3 years. The majority of both groups had graduated with a bachelor degree (60.0% and 77.8%, respectively). About half of the participants in both groups were married, 44.4% in the intervention and 51.1% in the comparison groups. Members of neither group had experience in providing sex education. They had basic knowledge, having majored and taught in general education class. No significant differences in demographic characteristics between the intervention and comparison groups were observed at baseline; attrition rate was not different between the two groups (Table 1).

**Mean scores of studied variables in intervention and comparison groups**

No baseline difference was found between the two groups in attitude toward sex education, self-efficacy in sex education, and
- One school assigned to experimental group
- 45 participants assigned to experimental group and all of them completed the study

- Pretest: Attitudes toward sex education, self efficacy of sex education, and sex education skills

- Immediately after: Attitudes toward sex education, and self efficacy of sex education (Week 4)

- Follow up: Attitudes toward sex education, and self efficacy of sex education (Week 6)

- One school assigned to control group
- 45 participants assigned to control group
- 45 participants completed the study

- Intervention
  - Developed positive attitudes toward sex education through culturally sensitive issues discussion and case studies (Week 1)
  - Increased perceived self efficacy on sex education through sharing experiences, lived model, mastery in hypothetical classroom (Week 2)
  - Increased sex education skills in topics: sexual health barriers, masturbation, sexual fantasy in hypothetical classroom (Week 3)
  - Raising awareness of sex education through group discussion led to newly acquired activities included in this program improved positive feelings from existing experiences and group discussion (Week 4)

- No intervention

Table 1: Comparison of Demographics and Teacher Characteristics in Experimental and Comparison Groups (N = 90)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number</th>
<th>Total</th>
<th>Intervention group (n = 45)</th>
<th>Comparison group (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>68 (75.5)</td>
<td>33 (73.3)</td>
<td>35 (77.8)</td>
<td>0.24</td>
</tr>
<tr>
<td>Male</td>
<td>22 (25.5)</td>
<td>12 (26.7)</td>
<td>10 (22.2)</td>
<td>.624</td>
</tr>
<tr>
<td>Age (yr)</td>
<td>56,566</td>
<td>46–60</td>
<td>46–60</td>
<td>8.4, 11.1, respectively, 0.001</td>
</tr>
<tr>
<td>≤ 30</td>
<td>22 (24.4)</td>
<td>11 (24.4)</td>
<td>11 (24.4)</td>
<td>4.87</td>
</tr>
<tr>
<td>31–45</td>
<td>29 (32.2)</td>
<td>19 (42.2)</td>
<td>10 (22.2)</td>
<td>.880</td>
</tr>
<tr>
<td>Education level</td>
<td>55,920</td>
<td>Bachelor</td>
<td>62 (68.9)</td>
<td>27 (60.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Master</td>
<td>28 (31.1)</td>
<td>18 (40.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marital status</td>
<td>43 (47.8)</td>
<td>20 (44.4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single/divorce</td>
<td>47 (52.2)</td>
<td>25 (55.6)</td>
</tr>
<tr>
<td>Experience in providing sex education</td>
<td>56,568</td>
<td>Not have experience</td>
<td>83 (92.2)</td>
<td>42 (93.4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Have experience</td>
<td>7 (7.8)</td>
<td>3 (6.6)</td>
</tr>
<tr>
<td>Responsible subjects</td>
<td>56,577</td>
<td>23 (25.5)</td>
<td>10 (22.2)</td>
<td>13 (29.1)</td>
</tr>
<tr>
<td>General education</td>
<td></td>
<td>Science</td>
<td>15 (16.7)</td>
<td>9 (20.0)</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td>Social studies</td>
<td>15 (16.7)</td>
<td>8 (18.0)</td>
</tr>
<tr>
<td>Social studies</td>
<td></td>
<td>English</td>
<td>13 (14.4)</td>
<td>6 (13.3)</td>
</tr>
<tr>
<td>English</td>
<td></td>
<td>Thai</td>
<td>12 (13.3)</td>
<td>6 (13.3)</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td>Mathematics</td>
<td>11 (12.2)</td>
<td>5 (11.2)</td>
</tr>
</tbody>
</table>

Mean scores of attitude toward sex education and sex education skill of teachers within the intervention group

During the follow-up period, the intervention group was significantly more likely to have adopted a positive attitude toward sex education, to have achieved greater perceived self efficacy on sex education, and to have practiced sex education more than the comparison group did with statistical significance (t = 14.9, 13.6, 16.6, respectively, p < .001) (Table 2).

Mean scores of perceived self efficacy on sex education within the intervention group

The comparison mean score of perceived self efficacy on sex education among before, after, and during the follow-up period were significantly different (F = 47.7, df = 1.7, 77.0, p < .001). The intervention group was significantly more likely to perceive their ability in sex education immediately after and during the follow-up period than before the program (p < .001). Their perceived ability also increased from immediately after the experiment to the follow-up period (p < .001) (Table 3; Figure 4).

Discussion

By comparison with more traditional school sex education, this program especially developed to incorporate current theory and cultural appropriateness had beneficial effects on attitude, perceived self efficacy and sex education skills. Teachers in the intervention group were more positive in attitude toward sex education, more confident in performing sex education, and practiced sex education more often.

Some variation arose in the implementation of teacher-delivered sex education, but the teachers reported that they changed their attitude toward sex education to a positive one. The activities included in this program improved positive feelings from existing experiences and group discussion led to newly acquired concepts and applied attitude. The teachers in the intervention

Table 2: Comparison of Mean Scores of Studied Variables in Experimental and Comparison Groups (N = 90)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Intervention group (n = 45)</th>
<th>Comparison group (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward sex education</td>
<td>61.7 ± 5.8</td>
<td>59.3 ± 6.8</td>
</tr>
<tr>
<td>Follow-up</td>
<td>71.6 ± 5.8</td>
<td>54.9 ± 4.8</td>
</tr>
<tr>
<td>Self efficacy on sex education</td>
<td>53.1 ± 8.5</td>
<td>49.7 ± 10.6</td>
</tr>
<tr>
<td>Immediately after experiment</td>
<td>62.3 ± 6.9</td>
<td>52.8 ± 3.1</td>
</tr>
<tr>
<td>Follow-up</td>
<td>68.4 ± 8.8</td>
<td>43.5 ± 8.6</td>
</tr>
<tr>
<td>Sex education skill</td>
<td>19.1 ± 4.9</td>
<td>16.5 ± 4.4</td>
</tr>
<tr>
<td>Follow-up</td>
<td>31.2 ± 5.4</td>
<td>15.9 ± 3.0</td>
</tr>
</tbody>
</table>

* Two-tailed test.
group become informed of critical sexual situations at present from their friends’ experiences and current news. This process raised the awareness and understanding of the importance of sex education. Following the adoption of positive attitudes, the re-examination of previously learned material and the provision of new information under a supportive environment enabled them to exchange opinions about success and failure factors of sex education as well as attitudes toward sex education in school (Jackson, 2011). After each session, the researcher summarized key messages from the group discussion; this strategy strengthened their positive attitudes toward sex education.

The strengths of this program include a theoretical foundation that is culturally relevant and the systematic approach to intervention development (Goldman, 2011). This study provides evidence in support of teacher-delivered sex education to improve perceived self-efficacy on sex education. This improvement could be attributed to the effectiveness of the program which was developed based on the self-efficacy theory of Bandura (Bandura, 1997).

The activities included in this sex education program were designed in accordance with the four strategies mentioned earlier. Sex education practice enabled the teachers to provide sex education on a routine basis, to learn techniques and experiences from successful role model in providing sex education, to provide information about sex, to distribute sex education manuals, to engage in group activity for motivating positive feelings toward sex education along with complimentary encouragement from the researcher and their friends. In addition, the researcher arranged activities contributing to teachers’ self-efficacy by allowing teachers to practice sex education repeatedly in a hypothetical classroom as well as in an actual classroom along with recordings for later study and reflection. A repeated sex education practice encouraged teachers to become skillful and have more confidence in providing it (Kirby & Laris, 2009) than the comparison group who did not receive the sex education skill development program.

This study’s implications go beyond the substantive areas of sex education in the formal curriculum. They point to the potential to expand the scope of sex education in school. We found that the teachers showed enthusiasm for programs that help prevent risky sexual behavior among adolescents. In Thailand, the needs of

### Table 3 Comparison of Mean Scores of Self-Efficacy on Sex Education in Intervention Group (n = 45)

<table>
<thead>
<tr>
<th>Self-efficacy on sex education</th>
<th>M ± SD</th>
<th>Mean difference</th>
<th>p (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>53.1 ± 8.5</td>
<td>9.2</td>
<td>.001</td>
</tr>
<tr>
<td>Immediately after experiment</td>
<td>62.3 ± 6.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before</td>
<td>53.1 ± 8.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-up</td>
<td>68.4 ± 8.8</td>
<td>15.3</td>
<td>.001</td>
</tr>
<tr>
<td>Immediately after experiment</td>
<td>62.3 ± 6.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-up</td>
<td>68.4 ± 8.8</td>
<td>6.1</td>
<td>.001</td>
</tr>
</tbody>
</table>

*F = 47.7, df = 1.7, 77.0, p < .001.*

School nurses might want to consider sex education programs as a means to address risky sexual behavior prevention among young people. There are four major concerns when applying this program. Firstly, during group activities, teachers should be stimulated to focus on group discussion. This could be managed by having an interval break for about 5–10 minutes, allowing the teachers to relax, to do more activities, and foster informed decision making (Jackson, 2011). Secondly, sex education manuals should include exercises to increase knowledge and to assure accuracy about sex education. Thirdly, both formal and informal methods should be employed when delivering sex education by forming partnerships and sharing resources (Jackson). Lastly, the teaching issues should be more specific and consistent within the adolescent context, such as awareness of sexual health barriers and sexual abuse. Repeated sex education practice encourages teachers to become skillful and reinforces their confidence in providing sex education (Tortolero et al., 2010).

In addition to the teachers themselves, school principals should also be aware of the importance of sex education (Kirby & Laris, 2009). The researchers suggest launching the policy to promote sex education in school and integrate the program into other subjects, providing opportunity for teachers and students to have sexual communication during homeroom, initiating the plan for developing teachers’ competency to become sex educators, and honing their competency periodically. Contents should be revised in accordance with students’ developmental stages and needs.

The effects of teacher-led sex education skill development program should be followed up over the years to maintain
sustainability for adjusting attitudes toward sex education, self-efficacy in sex education, and practice of sex education (Wight et al., 2002). Other strategies should be considered such as computer-assisted instruction which overcomes the limitation of time and involvement (Goldman, 2011; Guse et al., 2012), or knowledge sharing which increases problem solving and learning experiences. In order to ensure sustainability of attitude toward sex education, self-efficacy on sex education, and sex education skill activities should be routinely conducted by utilizing existing resources along with new contents such as the promotion of condom use and pregnancy prevention programs focusing on practicing sex education skills in various situations (Kirby & Laris, 2009). Further study should measure the outcomes of teacher-led sex education program such as the sexual behavior profiles of students as well as explore the rate of subsequent problems such as unintended pregnancy and abortion (Shepherd et al., 2010). Effective programs should involve parents because, to date, the most promising programs have greater scope and aim to modify the social context for young people (Kirby & Laris; Mathews et al., 2012).

Methodological strengths of the study include private self-administered questionnaires for higher self-report validity, and our high level of retention among teachers.

Moreover, no other intervention trials have assessed the impact of the intervention on specific types of sex education skill. Most studies examine the impact of psychosocial factors, which may be interpreted in many ways by the respondents. The findings reported here face a number of limitations. Because CSSE was a teacher-led intervention, the potential for whole class sex education delivered by teachers might need to be done rather than in hypothetical classroom in order to have a stronger impact on the sexual health outcomes for young people.

Conclusion

Overall, the findings suggest that a sex education program that increases positive attitudes toward sex education and perceived ability to perform sex education, can overcome sexual communication limitations and increase the practice of sex education among teachers. The activities conducted in this study, enabled teachers to learn from experiences in sex education provided for students, to realize its importance, and to have more confidence in providing it. In addition, sharing experiences about success and failure factors of sex education, and learning from a manual enabled teachers to provide the education more comfortably and confidently. In this study, the program considered all three criteria (Bandura, 1997) that support learning activities: level or magnitude—to start from uncomplicated skills and move forward to more complicated skills to being able to perform and apply these skills in different situation: generality—success in particular situations could be applied to similar situations (e.g., experience sharing within the group could be applied to use with their situation in different circumstances); strength—confidence in their ability (e.g., repeated skills practices in a hypothetical classroom leading to more perceived self efficacy and skill practice when performing sex education in actual classroom settings). Therefore, the impact of the intervention on this basis may over time lead teachers to develop more sex education skills. The protective influence of sex education is not limited to if or when students engage in sexual intercourse, but extend to issues of healthier sexual behaviors and health outcomes.

Conflict of Interest

The authors declare no conflict of interest.

References


