



**Development of Islamic-Based Nursing Model for Intention of Sexual
Abstinence Behavior among Muslim Female Adolescents:
Participatory Action Research**

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**A Thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy in Nursing (International Program)**

Prince of Songkla University

2018

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Thesis Title Development of Islamic-Based Nursing Model for Intention of Sexual Abstinence Behavior among Muslim Female Adolescents: Participatory Action Research

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ชื่อวิทยานิพนธ์	การพัฒนารูปแบบการพยาบาลตามหลักอิสลามต่อความตั้งใจละเว้นพฤติกรรมการมีเพศสัมพันธ์ของวัยรุ่นหญิงมุสลิม: การวิจัยเชิงปฏิบัติการแบบมีส่วนร่วม
ผู้เขียน	นางจิตจรลดา พิริยศาสน์
สาขาวิชา	การพยาบาล (นานาชาติ)
ปีการศึกษา	2560

บทคัดย่อ

การศึกษานี้เป็นการวิจัยเชิงปฏิบัติการแบบมีส่วนร่วมเพื่อพัฒนาแบบการพยาบาลตามหลักอิสลามต่อความตั้งใจละเว้นพฤติกรรมการมีเพศสัมพันธ์ของวัยรุ่นหญิงมุสลิม โดยมีขั้นตอนปฏิบัติการ 2 ระยะในโรงเรียนเอกชนสอนศาสนาอิสลามแห่งหนึ่งในภาคใต้ของประเทศไทย ภายหลังจากศึกษาเชิงคุณภาพเพื่อเข้าใจการรับรู้ของผู้ให้ข้อมูลหลัก คือวัยรุ่นหญิงมุสลิมจำนวน 12 คน อายุระหว่าง 12-14 ปี กำลังศึกษาอยู่ในชั้นมัธยมศึกษาปีที่ 2 และครู 3 คน ผู้ปกครอง 5 คน และพยาบาล 2 คน เป็นผู้ให้ข้อมูลร่วม เก็บข้อมูลโดยการสังเกต การสนทนากลุ่ม การสัมภาษณ์เชิงลึก รวมทั้งเก็บข้อมูลเชิงปริมาณ โดยใช้แบบสอบถามเกี่ยวกับความตั้งใจละเว้นพฤติกรรมการมีเพศสัมพันธ์ของวัยรุ่นหญิง การวิเคราะห์ข้อมูลเชิงคุณภาพใช้วิธีวิเคราะห์เชิงเนื้อหา และวิเคราะห์ข้อมูลเชิงปริมาณใช้สถิติเชิงบรรยาย และการทดสอบค่าที เพื่อเปรียบเทียบคะแนนความตั้งใจก่อนและหลังพัฒนาแบบการพยาบาล

ผลจากการศึกษานี้ พบว่าองค์ประกอบหลักในการพัฒนาแบบการพยาบาลตามหลักอิสลาม คือ การสื่อสารทางบวกเพื่อก้าวข้ามความยากลำบากในการสื่อสารเนื้อหาเรื่องเพศตามวิถีอิสลาม ซึ่งการศึกษานี้ได้บูรณาการคำสอนในอิสลามเกี่ยวกับสุขภาพทางเพศผ่านกระบวนการเรียนรู้เชิงประสบการณ์จึงทำให้โมเดลนี้มีรูปแบบเฉพาะ ประกอบด้วย 2 ระยะ ดังนี้

ระยะที่ 1 การเพิ่มความตระหนักรู้ในตนเองของวัยรุ่นหญิงมุสลิม โดยใช้การคิดวิเคราะห์แนวคิดศีลธรรมทางเพศตามหลักอิสลาม ประกอบด้วย 3 กลยุทธ์ที่ทำให้เกิดความสำเร็จได้แก่ 1) การสนับสนุนการสื่อสารทางบวกกับวัยรุ่นหญิงมุสลิมภายใต้สภาพแวดล้อมที่อบอุ่นเป็นมิตร 2) สร้างสรรค์การเรียนการสอนที่เน้นการมีปฏิสัมพันธ์ผ่านการเรียนรู้เชิงประสบการณ์ และ 3) การเอื้ออำนวยให้เกิดกระบวนการเรียนรู้บนแนวคิดศีลธรรมทางเพศตาม

หลักอิสลาม เพื่อเพิ่มความตระหนักรู้ในตนเองผ่านการสะท้อนคิด การปฏิบัติการระยะนี้เน้นการสื่อสารทางบวกผสานแนวคิดตามหลักอิสลาม มีองค์ประกอบในการขับเคลื่อน 3 ด้าน คือ 1) ความเชื่อเกี่ยวกับพฤติกรรมเชิงบวกในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ 2) การได้รับการสนับสนุนจากครอบครัวและโรงเรียน และ 3) ความสม่ำเสมอในการร่วมกิจกรรมการเรียนรู้เชิงประสบการณ์โดยบูรณาการแนวคิดศีลธรรมทางเพศตามหลักอิสลาม

ระยะที่ 2 การเพิ่มทักษะที่สำคัญในการดำรงความตั้งใจละเว้นพฤติกรรมการมีเพศสัมพันธ์ตามหลักอิสลาม กลยุทธ์ที่นำไปสู่ความสำเร็จมี 3 ประการ ได้แก่ 1) การเอื้ออำนวยให้ตั้งเป้าหมายและการตัดสินใจร่วมกันเพื่อคงไว้ในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ของวัยรุ่นหญิงมุสลิม 2) สนับสนุนทักษะที่สำคัญผ่านการเรียนรู้เชิงประสบการณ์ตามหลักอิสลาม และร่วมแลกเปลี่ยนเรียนรู้ และ 3) เน้นการสื่อข้อความทางบวกเพื่อคงไว้ในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ตามหลักอิสลาม โดยให้ผู้ปกครองเข้ามามีส่วนร่วมอย่างจริงจังใน 4 กิจกรรม ดังนี้ 1) เสริมพลังอำนาจแก่วัยรุ่นหญิงมุสลิมในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ 2) เอื้ออำนวยให้เกิดการตั้งเป้าหมายและการตัดสินใจร่วมกัน 3) สร้างความสม่ำเสมอในการทำกิจกรรมผ่านการเรียนรู้เชิงประสบการณ์ตามหลักอิสลาม และ 4) เน้นการสื่อข้อความทางบวกเพื่อโน้มน้าวให้คงไว้ในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ของวัยรุ่นหญิงมุสลิม

ปัจจัยสำคัญที่มีผลต่อความตั้งใจในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ตามหลักอิสลามของวัยรุ่นหญิงมุสลิม ได้แก่ 1) การตั้งเป้าหมายร่วมกันระหว่างผู้ปกครอง ครู และวัยรุ่นหญิงมุสลิม 2) การสนับสนุนของผู้ปกครองและโรงเรียน 3) ข้อมูลในการสื่อสารทางบวกที่มีพลัง 4) การนำวิธีการจัดการเรียนรู้เชิงประสบการณ์ตามหลักอิสลามมาใช้ที่เหมาะสม และ 5) ความเชื่อในความสามารถในตัวตนของวัยรุ่นหญิงมุสลิม ดังนั้นความสำเร็จของรูปแบบที่ศึกษานี้มาจากความร่วมมือระหว่างผู้ปกครอง ครู และวัยรุ่นหญิงมุสลิมในการนำรูปแบบการพยาบาลตามหลักอิสลามในโรงเรียน ที่ให้ความสำคัญต่อความตั้งใจละเว้นพฤติกรรมการมีเพศสัมพันธ์ นอกจากนี้ พบว่าวัยรุ่นหญิงมุสลิม 11 คน จาก 12 คน ยังคงไว้ซึ่งความตั้งใจในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ ส่วนคะแนนความตั้งใจในช่วงก่อนและหลังการใช้รูปแบบนี้พบว่าไม่แตกต่างกัน ($t = 0.861, p = 0.408$) ทั้งนี้อาจเป็นเพราะประเมินในช่วงระยะเวลาสั้น แต่พบว่าผู้เข้าร่วมวิจัยทั้งหมดมีความพึงพอใจในกระบวนการพัฒนารูปแบบการพยาบาลตามหลักอิสลาม ผลการศึกษานี้แสดงให้เห็นถึงบทบาทสำคัญของผู้ปกครองและครูในการสนับสนุนให้เกิดความตั้งใจในการละเว้นพฤติกรรมการมีเพศสัมพันธ์ และเสนอแนะว่าพยาบาลควรมีการบูรณาการความรู้ด้านศาสนาในการแนะแนวหรือให้การปรึกษาด้านสุขภาพทางเพศในโรงเรียนให้เกิดความยั่งยืนต่อไป

Thesis Title	Development of Islamic-Based Nursing Model for Intention of Sexual Abstinence Behavior among Muslim Female Adolescents: Participatory Action Research
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Major Program	Nursing (International Program)
Academic Year	2017

ABSTRACT

This participatory action research (PAR) aimed to develop an Islamic-based nursing model for the intention of sexual abstinence behavior for Muslim female adolescents. The two-phase PAR design was implemented in a private religious Muslim school in southern Thailand after exploring the perspectives of adolescents, family members, teachers, and nurses on sexual abstinence. Twelve Muslim female adolescents in grade 8 at secondary school, three teachers and five mothers/female guardians, and two nurses were assessed using observation, focus group discussions and in-depth interviews. Data were also obtained via self-administered questionnaires on the intention of sexual abstinence. Qualitative data were assessed via content analysis, while for descriptive statistics, the t-test was used to compare pre and post intention score.

Results showed that the main component for all participant groups was positive communication to overcome the difficulty in sharing sexual content within the Islamic way of thinking. The uniqueness of this model was rooted at integrating Islamic teaching in sexual health education via experiential learning in which this

study was conducted. The Islamic-based nursing model for improving the intention of sexual abstinence behavior among Muslim female adolescents included two stages.

In the first stage, the Muslim female students' self-awareness was raised through critical thinking. The three strategies were carried out encompassing: 1) enhancing support to communicate in positive ways for creating a comfortable environment for Muslim female adolescents; 2) creating Islamic based content in performing interactive education through experiential teaching; 3) facilitating the learning process on Islamic sexual morality to raise female adolescents' awareness through self-reflective practice. The implementation for this stage was focused on encouraging positive communication within Muslim perspectives. There were three components to fulfill consisting of: 1) positive behavioral beliefs related to sexual abstinence; 2) school and guardian support; and 3) constantly participating in experiential learning activities by integrating Islamic sexual morality.

In the second stage, the overall goal was to gain important skills to maintain intention of sexual abstinence based on Islamic concepts. The three strategies used were: 1) facilitating mutual goal-setting and decision making to remain abstinent with Muslim female adolescents; 2) encouraging important skills by using experiential learning within Islamic concepts and sharing lessons learned; and 3) emphasizing positive messages in convincing female adolescents to remain abstinent within Islamic concepts. The four activities with the active participation of parents were carried out encompassing: 1) empowering girls for sexual abstinence; 2) facilitating mutual goal-setting and decision making for Muslim female adolescents; 3) constantly conducting activities using participatory learning, integrated with

Islamic sexual morality; and 4) emphasizing positive messages to convince Muslim female adolescents to remain abstinent.

The major influencing factors for the intention of sexual abstinence behavior among Muslim female adolescents within Islamic-based cultural care were: 1) mutual goals of parent-teacher and Muslim female adolescents; 2) school and guardian support; 3) information related to the power of positive communication; 4) appropriate use of experiential learning integrated with Islamic sexual morality; and 5) belief of self-efficacy in Muslim female adolescents.

The key success of the model was derived from the active participation of parents, teachers, and female adolescents in applying an Islamic-based nursing model in the school programs that address the intention of sexual abstinence behavior. In addition, eleven of the twelve female adolescents were able to maintain or increase their intention of sexual abstinence. The t-test showed no significant differences in the intention of sexual abstinence behavior ($t = 0.861, p = 0.408$), partly due to the short period of evaluation. However, the participants were satisfied with the process of the sexual abstinence intention program. This study showed that parents and teachers play an important role in their adolescents' sexual abstinence. It is suggested that nurses incorporate religious knowledge in the sexual health school program to enhance the sustainability of the model.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my advisor Assoc. Prof. Dr. Praneed Songwathana for the continuous support of my Ph.D study and research, for her patience, motivation, enthusiasm, and immense knowledge. Her guidance helped me in all the time of research and writing of this thesis. I could not have imagined having a better advisor and mentor for my Ph.D study.

Besides my advisor, I would like to thank the rest of my co-advisor and thesis committee: Asst. Prof. Dr. Wantanee Wiroonpanich, Assoc. Prof. Dr. Urai Hatthakit, Assoc. Prof. Dr. Kittikorn Nilmanat, and Asst. Prof. Dr. Penpaktr Uthis for their encouragement, and insightful comments. My sincere thanks also goes to Assoc. Prof. Dr. Susan Kools, my mentor at University of Virginia School of Nursing, guiding me working on research manuscripts for publication.

I would be greatly remiss if I did not recognize, with deep gratitude, the participants who volunteered their time to take part in this study. Importantly, I would like to thank my family: my parents, my brother, my husband and my special two daughters for supporting me spiritually throughout writing this thesis and my life in general.

My final appreciation goes to Office of the Higher Education Commission (OHEC) for funding which provided a scholarship for me to study in Doctoral program.

Jitlada Piriyasart

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Chapter 1

Introduction

Background and Significance of the Problem

Early sexual initiation at the age of 15 or younger is an indicator for alarm in any lifestyles and life situations (Makenzius & Larsson, 2013). The number of female adolescents engaging in sexual activity before marriage is higher than males (Shtarkshall, Carmel, Jaffe-Hirschfield, & Woloski-Wruble, 2009). For young adolescents who get pregnant within two years after beginning menstruation, the period of potential risk-taking behavior is prolonged (Dunbar, Sheeder, Lezotte, Dabelea, & Stevens-Simon, 2008; Kirkeby, Biering, Olsen, Juhl, & Nohr, 2013; Osorio, Lopez-del Burgo, Carlos, & de Irala, 2017). Female adolescents and young women are more at risk for sexually transmitted diseases (STDs) compared to males. Furthermore, females are less likely to exhibit symptoms as well as suffer more severe health consequences than males. Sexually transmitted organisms easily pass into the internal reproductive organs of young girls and young women because these organisms can spread out to the vaginal surface of the cervix (CDC, 2012; Gavin et al., 2009). Hence, sexual risk prevention in female adolescents is important.

Adolescents in Thailand as elsewhere, are engaging in sexual activity at much younger ages, as a recent report states that the age of first having intercourse is 13 years and the risk associated with this can result in teen pregnancy and STDs. Compared to other countries in Asia, Thailand is ranked as the second in the birth rate of girls aged 10-19 years old per 1,000 women (15 percent of the total delivery), and

this also relates to higher rates of sexually transmitted diseases. The trend of Thai adolescents who delivered a child under 15 years of age increased significantly from 2010 to 2012 (The Bureau of Reproductive Health, Department of Health of Thailand, 2016). In addition, the trend of female adolescents aged 10-14 who delivered a child in southern Thailand (where Muslims are the majority) increased significantly from 2014 to 2015 (from 0.3 to 0.4 births per 1,000 women ages 10-14) (The Bureau of Reproductive Health, Department of Health of Thailand, 2017).

Sexual health education for female Muslim adolescents is crucial since they are faced with socio-cultural challenges to taboos surrounding sexuality. Roudsari, Javadnoori, Hasanpour, Hazavehei, and Taghipour, (2013) pointed out that several issues are related to sexual health and HIV prevention for adolescents. In Islamic schools, sex education seems like a contradiction. Many young Muslims are open to the idea of sex education in school, however, some sexual topics such as sexual orientation or using condoms for pregnancy prevention can lead to conflict in regards to religious thought. In addition, many Muslim adolescents, both boys and girls, cannot handle the intrinsic pressure involving sexual issues at a school age (Tenkorang, & Maticka-Tyndale, 2008).

In previous studies, personal factors play an important role for predicting health behavior, intention, and goal-setting especially for young females (Doswell, Braxter, Cha, & Kim, 2011; Dancy, Crittenden, & Freels, 2006; Skinner, Smith, Fenwick, Fyfe & Hendriks, 2008; Wang, & Hsu, 2006). With regard to the intention to abstain from sexual intercourse, this is presented in predicting sexual health behavior (Leerlooijer, Ruiter, Damayanti, Rijdsdijk, Eiling, Bos, & Kok, 2014).

Therefore, personal intention influences intentions to carry out a behavior (Villarruel, Bishop, Simpson, Jemmott, & Fawcett, 2001).

A number of studies have been conducted on sexual knowledge, attitudes and behaviors and sexual health situations (Farahani, Cleland, & Mehryar, 2011; Causarano, Pole, & Flicker, 2010; Wong, 2012; Zain Al-Dien, 2010; AlQuaiz, Kazi, & Al Muneef, 2013; Reis, Kilic, Engin, & Karabulutlu, 2011). Some of these studies have focused on factors related to sexual abstinence. One study assessed the correlates of sexual abstinence of any sexual practice based on the theory of Planned Behavior (TPB) among male Iranian adolescents (Mohtasham et al. 2009). Most of the studies considered sex education interventions and mainly focused on the timing of first having sex of adolescents (Kirby, Coyle, Alton, Rolleri, & Robin, 2011). In addition, interventions that focus on abstinence programs have been shown to be less effective (Jemmott & Fry, 2002; Santelli et al., 2006; Underhill, Montgomery, & Operario, 2007; Underhill, Montgomery, & Operario, 2008, Wilson, Goodson, Pruitt, Buhi, & Davis-Gunnels, 2005). These previous findings were insufficient for exploring and developing the intention of a sexual abstinence behavior model for Muslim female adolescents.

The studies in Thailand have also emphasized factors and situations related to sexual behaviors, such as pregnancy prevention, condom use, and safe sex behavior of female adolescents. (Konggumnerd, Sindhu, & Tongkong, 2012; Khumsaen, 2008; Rasamimari, Dancy, Talashek, & Park, 2007; Pongsa, Sritapa, & Chaisayan, 2010; Chaikoolvatana, Arpaporn, Sunee, Jirapongsuwan, & Bennet, 2013). Three studies have addressed sexual abstinence in female adolescents. One of them has been conducted on sexual abstinence behavior among adolescents aged

13-19 years old (Suthinphuak, Chamroonsawasdi, Suprap, & Taechaboonsersmask, 2010). The findings demonstrated the significant factors based on the PRECEDE PROCEED model, and they were related to sexual abstinence behavior. The significant factors identified were perception of friends' norms, experience in receiving sex education, as well as gender and age. The second study examined factors related to sexual abstinence among late adolescent females in Bangkok (Danaidussadeekul, 2004). The results showed that having fewer numbers of close friends who had sexual intercourse, disapproving attitudes toward premarital sex, having good knowledge about sex education, and having good family relationships are related to sexual abstinence behaviors. The third study was a qualitative study using the grounded theory method to address the sexual abstinence experiences as "honoring parental love", and included three components for avoiding heterosexual intercourse: "learning proper rules, planning a life-long sexual path, and ways of preserving virginity" (Supametaporn, Stern, Rodcumdee, & Chaiyawat, 2010). This study showed that respondents with high sexual abstinence self-efficacy were more likely to refrain from engaging in sexual activity. However, those findings are insufficient for exploring, understanding and acting on issues related to sexual abstinence behaviors in the Muslim context of Thailand.

To solve the problem of early sexual initiation and reduce consequences, sex education is stated as the main strategy to decrease the risk of sexual activity with comprehensive sexuality education program. The Program for Appropriate Technology in Health (PATH) has been introduced in some schools since 2009 (four schools in Pattani). The goals of this program are to decrease the risk of STDs, HIV/AIDS, an unintended pregnancy, sexual violence and to promote positive

youth development in every sector. The available time, teaching coach, experience in teaching, instruction aids for teaching and focusing on academic excellence were challenges faced by the people who delivered the program (UNESCO, 2012).

Another factor is that the use of particular words/phrases such as ‘condom use’ or ‘contraceptive method’ have been a barrier in introducing some parts of this project in the lower south of Thailand because of the Muslim culture. More importantly, the goal of PATH is safer sex, from an Islamic perspective, shows that abstinence is the only path before marriage. There is also some objection to teaching about transgender or gender identity as the behavior must conform with Islamic perspective (such as single-sex classes for sex education). This indicates the importance of a program appropriate to Islam. The value of family and raising children is unquestioned among most Muslims; hence, the program of pregnancy prevention does not seem to be relevant to Islamic principles and should not be promoted among unmarried adolescents.

According to the principles of Islam, the human being is holistic; encompassing and engaging among spiritually, morally, intellectually, physically, emotionally and social domains. These are also integrative to enhance the power of the learning experience so this will attract and inspire adolescents to adopt Islam and it is common activity that promotes intention (Alimohammadi, Taleghani, Mohammadi, & Akbarian, 2014). The life goal in the future is sincere intention that approaches a peace with God. Therefore, Islam does not just look at the deed irrespective of its motives. God evaluates peoples’ deeds according to the intentions behind them. Therefore, the knowledge of sexual health and mindset are interconnected with the religious-cultural norms and values (Wong, 2012). Muslim

Adolescents will behave based on Islamic principles, and these behaviors depend on Islamic societal norms, the level of understanding of Islamic principles, the level of upbringing under Islamic principles, participation in religious activities, and participation in special Islamic study classes (Laeheem, 2013).

The abstinence intervention in schools that encouraged abstinence-only seems to have been successful but the outcome is still less effective to biological and behavioural outcomes (Santelli et al., 2006; Underhill et al., 2007; Underhill et al., 2008). However, the most suitable method in Thailand is sexual abstinence because traditional values do not agree with premarital sex (Sridawruang, Crozier, & Pfeil, 2010). Additionally, all aspects of Muslim cultural identity are affected by religious belief (Yusuf, 1999) which differs in the general Thai female population. As a result, a sexual abstinence behavior model has to be concerned with living patterns, especially in regards to religious beliefs. Interventions related to delay a first sex encounter should create and educate about healthy relationships for youth (Childs, White, Hataway, Moneyham, & Gaioso, 2012). The capacity of teenagers will develop positively by improving skills and values that strengthen self-efficacy (Parkes, Henderson, Wright, & Nixon, 2011). For the reasons outlined above, several existing programs that have been developed for the general Thai female population may not be suitable for Muslim adolescents.

A pregnancy and sexually transmitted disease prevention program has been conducted on adolescents which promoted avoiding sexual activity by focusing on intentions to abstain from sex. This was carried out by promoting positive communication (Kirby, Faris, & Rolleri, 2006). Across a diversity of health studies, there is much evidence supporting the fact that intentions influence behavior such as

the theory of planned behavior (TPB) (Armitage, & Conner, 2001; Backman, Haddad, Lee, Johnston, & Hodgkin, 2002). For the theory of planned behavior, knowledge, perceptions of risk, attitudes, norms and self-efficacy were factors that linked to intentions. Although some activities seem to encourage youth to clarify and intend to abstain from sexual intercourse intentions, youth may not be clear on these or have well formulated intentions. Sometimes they may not have the intention to do something or to make a commitment or think about the obstacle to apply the intentions and strategies they could handle to overcome the barriers (Buhi, & Goodson, 2007; Ali-Faisal, 2014). In measuring intentions, beliefs, norms, and self-efficacy that are related to the intention of sexual abstinence need to be identified (Buhi, Goodson, Neilands, & Blunt, 2011). Interestingly, the important issue that contributes to potential conflicts in health promotion is a lack of understanding of Muslim religious tradition (Ahmad, & Harrison, 2007). Thus, the use of Islamic values and elements has been used for developing the intention of sexual abstinence behavior for promoting health behavioral change in Muslim adolescents.

Considering the above issues, the appropriate model for Muslim adolescents should integrate Islamic philosophy into the sexual education program. In addition, the participation from teachers, parents and female adolescents should be enhanced at school and be promoted by nurses. New patterns and insights into the model (either the content or process after forming a culture of practice) is necessary. The methodology of emancipatory action research allows the researcher and participants reciprocally to evaluate, recognize an action, observe, and reform for a satisfactory outcome. The PAR was also conducted step by step through collaboration in this process. Data collection was performed, both quantitative and qualitative, to

gain more data to provide a body of knowledge before the consensus for the final nursing program.

Objective of the study

The objective of the study was to develop an Islamic-based nursing model for the intention of sexual abstinence behavior for Thai Muslim female adolescents.

Research questions

1. What is the perception of sexual abstinence behavior among Thai Muslim female adolescents?
2. What are the factors influencing intention of sexual abstinence behavior for Thai Muslim female adolescents?
3. What are the appropriate components of the Islamic-based nursing model for intention of sexual abstinence behavior for Thai Muslim female adolescents?

The Theoretical and Methodological Framework of the study

The present study aimed to develop an Islamic based intention of sexual abstinence behavior model for Muslim female adolescents. In this section, Islamic sexual morality from Islamic philosophy and strategies of experiential

learning in sexual education programs were used as a theoretical framework and the principle of action research was applied to guide the methodology framework (Figure 1.1).

The Theoretical Framework of the Study

The concept of sexuality (*nikah* and *zina*), and the concept of modesty based on Islamic sexual morality (Athar, n.d.) were employed as the theoretical framework of the study (Figure 1.1). The researcher was guided according to Islamic sexual jurisprudence (the Islamic laws of sexuality in Islam) in the development of an Islamic-based nursing model for the intention of sexual abstinence for Muslim female adolescents. These concepts could increase the understanding of the cultural context based on Islamic philosophy and the teachings of the Quran, and the sayings of Muhammad (*hadith*). The objective of performing religious duties is for people to become closer to God, which leads to doing good for others, and refraining from wrong-doing in their daily lives (Abdulsalam, 2009, Oct 4).

1) The concept of sexuality (*nikah* and *zina*)

Aspects of human sexuality are obviously found in Islamic teaching based on the numerous *Hadith* (report of the words and deeds of Muhammad). The matters related to sex are very much essential to discuss openly. The knowledge related to anatomy and the development in puberty period is essential for enabling young people to grow up with a healthy self-image. Sexuality in scientific and moral terms can be taught and inform young people. The statements in the Quran and Hadith related to prohibitions and permissions such as extramarital

sex, homosexuality, abortion, permissible sexual relationships, love and closeness in relationship, sexual activity are permitted for them to know.

2) The concept of modesty

The viewpoint of modesty in women is a vital part of the foundations of Islamic law under the sayings in Quran and the Hadith. Modesty is the foundation of Islamic values and is one of the fundamental underpinnings in Islam family. Many statements in Quran and the customs of the Prophet present the equal rights of men and women. The Islamic guidelines propose the modesty for supporting women to maintain sexual morality, as stated: “early marriage, lowering of the gaze and to safeguard their chastity, proper dressing especially after a girl attains the menstrual age (i.e., puberty) nothing should be seen of her except her face and hands”.

With regard to teaching children before they reach the age of puberty, the custom in Islam concerns with *'awrah*, the private parts to be covered in public including getting permission before going in the private zone. The Islamic manner related to the difference between male and female should be provided to the young who reach puberty. The young should be educated the Islamic law on *wudoo* and *ghusl*. Adults need to give more consideration to the words used in instructing and provide information on adolescents' demand (Salman, 2008).

To promote the understanding of sexual behavior and scientific knowledge, the principle of Islamic teachings should be modified with clearly demonstrated Islamic statements into a program or references in order to make it persuasive to Muslim adolescents. The use of the Quran and Hadith quotations, the roles of Islamic opinion leaders, such as the mosque, school and community centers are also important in communication strategies for promoting health among Muslims.

Particularly, religious congruency and the participation of family and religious leaders in committing towards sexual abstinence before marriage among early adolescents should be an issue of concern (Landor, Simons, Simons, Brody, & Gibbons, 2011; Abu-Moghli, Nabolsi, Khalaf, & Suliman, 2010) as well as being focused on the future and academic success of the adolescents (Kogan et al., 2013; Yu, 2012).

Methodological Framework of the study

Participatory action research (PAR) is a traditional social science that seeks collaboration from the stakeholders (MacDonald, 2012). The use of PAR aims to find out and understand and develop awareness of how PAR is improved and shaped by circumstances. Action research is combined with humanistic and naturalistic scientific methods. The enhancement approach was employed in this study. Based on the critical social theory, research has the focus of collaboration as mutual emancipation. There are two goals in this approach. The first goal is to increase the closeness between the real problems encountered by practitioners in a specific setting and how to explain and resolve the problems. The second goal is to identify and make clear the fundamental problems by first raising the collective consciousness of the practitioners. The research process is characterized by continually redefining problems and cooperative interaction. Hence, this action and change process leads to the facilitation of community empowerment and the enhancement of community competence. It results in practical knowledge that can help people better understand and change social aspects of the world.

Kemmis and McTaggart (1988) proposed that action research is a series of cycles, such as a spiral model. It consists of planning, acting, observing and reflecting. Action research features which are followed by researchers work with and for the people (participatory), researchers and non-researchers provide the chance for feedback from participants for validation and motivation in order to find solutions to practical problems, participate in the research process and allow people to adapt the improvements; the solutions and data are shared with stakeholders (Kemmis & McTaggart, 1988).

Concerning the nature of actions with the philosophical orientation, Holter, and Schwartz-Barcott (1993) addressed the four major characteristics of action research, the participation between the researcher and practitioner, finding solutions to solve the problems, change for better, and the development of new knowledge or the enhancement of already existing scientific theories. To develop an appropriate Islamic model for female adolescents, the emancipatory collaborative approach is a vehicle for critiquing the current perspectives and approaches to learn about reform.

Definition of terms

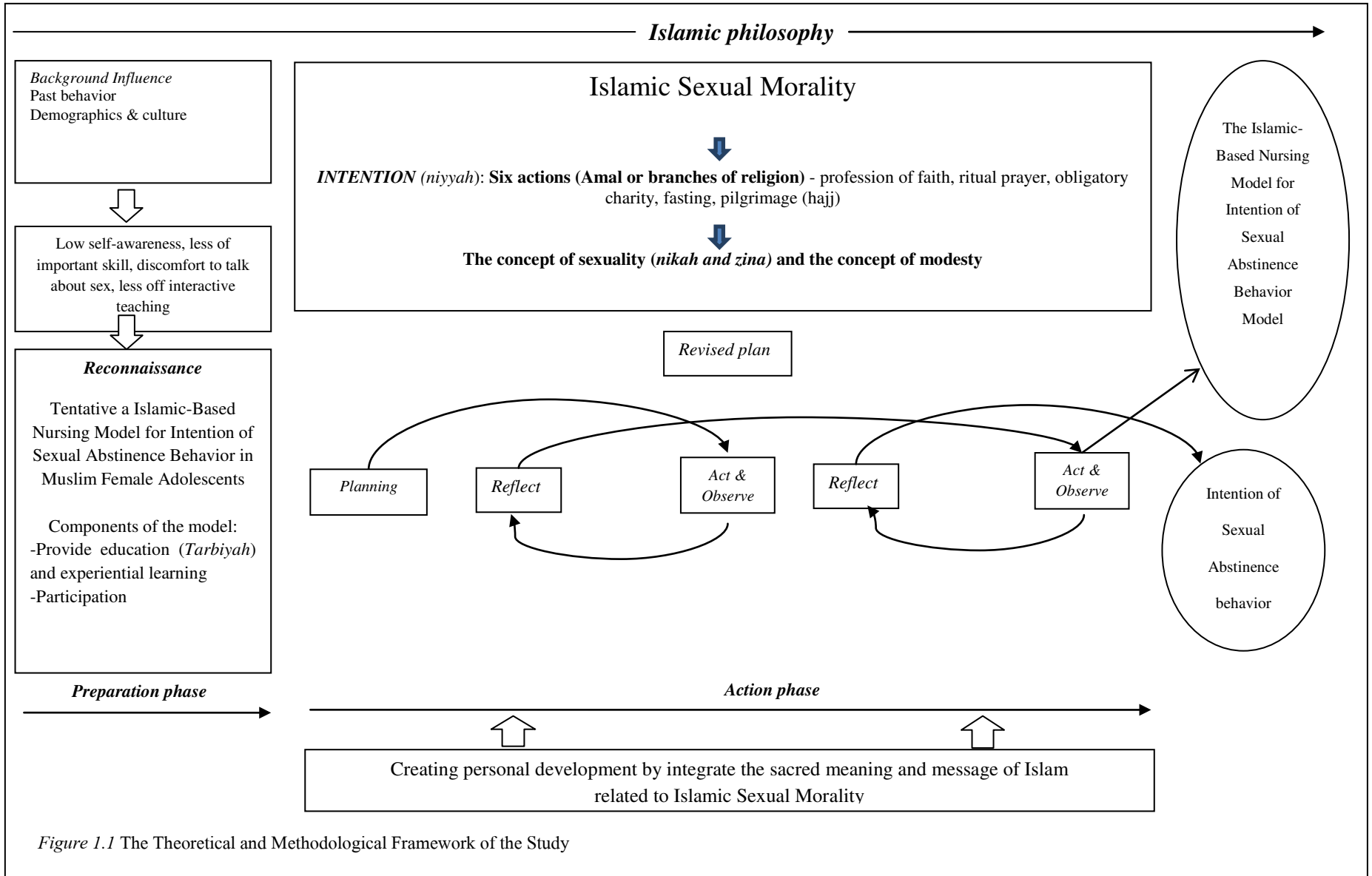
Islamic-based nursing model for intention of sexual abstinence behavior means a set of interventions which consist of the contents and the activities for enhancing the intention of sexual abstinence among Muslim female adolescents based on Islamic teaching. The model is consistent with Islamic teaching related to sexual health and appropriate to the cultural context and living patterns of Thai

Muslim female adolescents. The development also involved the participation of the researcher, teachers, guardians, and nurses.

Intention of sexual abstinence behavior means individual plans or targets that the Thai Muslim female adolescent have opted for sexual abstinence (or a commitment to performing a behavior) based on Islamic philosophy in the future. In this study, the expected outcome was evaluated from the adolescent participants. The questionnaire (intention of sexual abstinence behavior) developed by the researcher, based on the literature review (Chareonsuk, Phuphaibul, Sinsuksai, Viwatwongkasem, & Villarruel, 2013), was used to assess the outcomes as well as through the participants' reflections and responses by in-depth interviews. These were evaluated through understanding the adolescents' perceptions, beliefs, and perceived power related to the intention of sexual abstinence behavior.

Significance of the study

This model is helpful for preventing risk and reducing negative outcomes from early sexual initiation. In addition, the model is practical to extend for the promotion and prevention which is suitable and acceptable for Muslim female adolescents. Furthermore, it could be a guideline for developing a new nursing practice underpinning Islamic philosophy which explores existing knowledge for sexual abstinence intentions for Muslim adolescents.



Chapter 2

Literature review

This chapter presents the literature review which is relevant to the factors predicting the intention of sexual abstinence behavior among female adolescents. This consists of seven sections, as outlined in the following.

1. Adolescent development and sexual behaviors
2. Situations and consequences of early sexual initiation among adolescents in Thailand
3. Factors related to intention of sexual abstinence behavior
4. Intention of sexual abstinence behavior in Islamic philosophy
5. Religious beliefs of sexual health education
6. Existing Programs related to abstinence and intention
7. Critical Social Theory and Action Research

Adolescent Development and sexual behaviors

Adolescence is a state of transition and maturation in the physical, emotional, and social domains that can bring up in increased independence, autonomy, and a self-identity. Early adolescence is stated as the time between the ages of 12-14 years or the age of 10 to 19, after childhood and before adulthood (World Health Organization, 2014), and is an important period of physical, psychological, social development (Santrock, 2007) and, especially, sexual

development (Kar, Choudhury, & Singh, 2015; Greydanus, & Pratt, 2016). Female growth leading to the ability to reproduce typically begins at age 10 and reproductive capability is typically reached by ages 13 to 14, this is prior to males (Sawyer et al., 2012). The experiences of rapid physiological and psychological development changes by early adolescents bring multiple stress and discomfort. Especially for female adolescents, the pubertal period with early maturation leads to frustration on self-image and self-esteem (Sawyer et al., 2012) as it relates to initiating sex at young ages, drug use, and they are more likely to have more sexual partners (Bearinger, Sieving, Ferguson, & Sharma, 2007; Pedlow & Carey, 2004).

Moreover, the psychological development including the cognitive and emotional domains in adolescents is along with the development of interpersonal skills. Although the ability of making decisions in adolescents increases, it may fail to handle under circumstances of stress (Petersen, & Leffert, 1995). In addition, moral development including attitudes, beliefs, and values persist with their life, own personal values have increased with age; however, adolescents usually holds parental values (Kim-Spoon, Longo, & McCullough, 2012). In early or young adolescence in particular, adolescents may be limited in generating alternatives or identifying possibilities and making decision without thinking about the result of action (Sawyer et al., 2012). Adolescents also are likely to be idealistic and keep a strong sense of justice (Kellough & Kellough, 2008). The alteration from a self-centered viewpoint to understanding the opinions and feelings of others has developed. According to moral dilemmas and issues, gender affects adolescents' views and approach, a justice lens for males' view and an interpersonal care lens in females (Muuss, 1988).

In addition, the development of emotions encompasses shaping and sustaining identities by learning to manage their emotions while they form relationships (Sawyer et al., 2012; Petersen & Leffert, 1995). Identity includes self-concept and self-esteem. For romantic relationships, young female adolescents may engaged in sexual activity initiation that is related to the perception of intimacy, caring, and emotional engagement (Bearinger et al., 2007). Thus, the need in providing sexual communication skills, negotiation skills and refusal skills are important for preparing female adolescents to face the risk situations (Pedlow & Carey, 2004; Bearinger et al., 2007).

Furthermore, social relations will begin to form many different types of relationships, for example, different in sex, ethnicity, and older persons. The abilities of social relations develop gradually by arising in their parents and peers relationships. Even though the tension of parent and child relationships is characterized as normative, the closeness to parents is encouraged to form effective relationships (Petersen & Leffert, 1995; Sawyer et al., 2012). Moreover, peer influences can also affect female adolescents' attitudes, values, and sexual risk behavior, peers who involve in risk behavior are more likely to initiate sexual intercourse (Pedlow & Carey, 2004; Bearinger et al., 2007).

The impact of biological, psychological and social development plays important roles during adolescence. Greater attention to adolescence in providing sexuality knowledge at a proper age that matches their level of critical-thinking skills and openness with honest dialogue is needed for healthy development. Therefore, the

effectiveness of public health among adolescents is meaningful for promoting abstinence behaviors.

Situations and consequences of early sexual initiation among adolescents in Thailand

Among Thai adolescents, the age of their first sexual experience was 11-12 years which is the same as America. Early sexual initiation at the age of 15 or younger is an alarming indicator in lifestyle and life situation (Makenzius, & Larsson, 2013). The percentage of girls taking part in sexual activity before marriage was higher than boys (Shtarkshall et al., 2009; Liu et al., 2006). Thai adolescents who are engaged in early sexual activity are facing serious problems in reproductive health.

During the teen years there are some adolescents who have sex prior to the age of 13. The trend of female adolescents delivery under aged 15 rose significantly during 2010 to 2012 (Ministry of Social Development and Human Security, 2013). Jeharsae, Chongsuwiwatwong, Chailungka, Waeteh, and Nibersa (2013) reported that the separation rate from their partner among adolescents in the five southernmost provinces increased from 5.0% in 2000 to 8.0% in 2010. The separation rate sharply increased in Pattani. The ratio of girls to boys marrying in the five southernmost provinces increased from 2.6:1 in 2000 to 3:1 in 2010. The rate of termination among pregnant adolescents in Pattani provinces was 13% which is the same rate as in Thailand. Although the data of the complications in teenage

pregnancies is limited, intra and post-partum hemorrhage was the major cause of maternal deaths in the five southernmost provinces (Jeharsae et al., 2013).

Modernism and westernization has had a wide impact on Islamic society traditions in Thailand. The same-and cross-gender friendships and sex before marriage among the new generation is one of the most observable alterations. The accessibilities to global media are critically important to cultural changes. Sex outside marriage in the young Muslim society has been growing, despite the taboo in religious teaching (Laeheem & Baka, 2010; Chukamnerd, Churngchow, & Sinprajukpol, 2012). In comparing the way of life in the rural areas with the urban areas, it was found that Muslim youth in urban areas seemed to misbehave more than youth in the rural areas (Laeheem & Baka, 2010). Muslim youth in urban areas did not know how to use their spare time wisely; they dressed in fashionable styles, and imitated the manners of western superstars. The relationship with their family and neighbors often were not on good terms. The Muslim youths who got involved in intimate relationships with the opposite sex such as touching, kissing, and having sex before marriage do not follow with the social norms and Islamic principles (Laeheem, & Baka, 2010; Chukamnerd et al., 2012).

In addition, the value of sex among Muslim female teen students aged 12 to 16 in urban areas of Pattani (Chukamnerd et al., 2012) was stated that a sexual relationship was a common preference, having fun but without further obligation and homosexuality as a personal sex preference. The concept of virginity is old-fashioned. Media and technology serve as a means to form a relationship. Muslim adolescents are influenced by an openness to the global society and cultural norms and have

become less conservative and do not strictly follow the Islamic values (Laeheem, & Baka, 2010; Chukamnerd et al., 2012), therefore, they are more vulnerable to sex outside marriage. These findings reflect that adolescents are less concerned about cultural norms or religious issues.

The consequences of sexual initiation are well documented, in terms of negative effects on self-esteem, sociocultural, developmental, and spiritual aspects (Roojanavech, 2012). These problems include the great number of partners and high risk of teen pregnancy and STDs, including the social and emotional harm among Muslim and non-Muslim adolescents (Hallfors, Waller, Bauer, Ford, & Halpern, 2005; Manaf et al., 2014). In the Muslim community, premarital sex and pregnancy outside wedlock are largely socially unacceptable, and can carry with it negative judgements from oneself and others. Such acts can cause guilt and regret in individuals regarding their sexual behavior (Muuss, 1988). In addition, in regards to Islamic principles, those who take part in premarital sex are committing a great sin. (Manaf et al., 2014). For example, problems are related to negative educational and economic consequences because the opportunities to complete school also decrease when a baby is born. Therefore, the future of teenage mothers is limited and socioeconomic problems in later life also increased. As a result of this serious problem, it has a huge effect on an adolescent life.

Factors related to intention of sexual abstinence behavior

Several factors related to the intention of sexual abstinence behavior need to be understood and of concern for encouraging sexual abstinence behavior among adolescents. There are numerous factors affecting adolescents' positive sexual health outcomes. These factors include personal factors, family factors, and extra-family factors. Personal factors include biological, psychological, and behavioral factors. Family factors focus on parental characteristics, family structure and family processes. Extra-family emphasizes peers, and mass media. Therefore, social norms are a vital factor relevant to sexual abstinence behavior. The factors impeding the intention of sexual abstinence behavior focus on peer influence, mass media influence, and inadequate knowledge of sexual and reproductive health. These are important factors in supporting healthy lifestyles and preventing earlier initiation of sexual activity among the younger group.

Personal factors

Personal factors are biological, psychological, and behavioral factors (Jain Muralidhar, & Talwar, 2014; Rhucharoenpornpanich et al., 2012; Roojanavech, 2012; Ekundayo et al., 2007).

1. Biological factors

Biological factors included age of adolescent and pubertal development that is related to personal factors and sexual risk behavior.

1.1 Age

Young girls tend to engage in sexual intercourse and are less likely to practice safe sex (Di Noia & Schinke, 2008). They also have a greater chance to face sexual risk for HIV due to having multiples sex partners and unprotected sexual contacts. Concerning the developmental factors, this issue will result in early adolescent girls with less ability to communicate about sexual experiences, to discuss abstinence and negotiate safer sex practices.

1.2 Pubertal development

Puberty is the developmental stage between childhood and adulthood. During this transition, an individual becomes capable of reproduction. Puberty, which begins as early as nine years old, includes an increase in hormonal levels and leads to a surge of sexual interest. These changes produce primary and secondary sex characteristics. Notable changes include growth spurts, changes in the voice, genital development, and facial and pubic hair (Goddings, Burnett Heyes, Bird, Viner, & Blakemore, 2012).

Sexual maturation and physical growth begin with the hypothalamus directing the body to produce sex hormones. The hypothalamus, which regulates eating, drinking, production of hormones, menstrual cycles, and sexual behavior, is the motivational and emotional control center of the brain. During adolescence, the prefrontal cortex is immature biologically because the myelin sheath is not developed completely. Thus, adolescents are prone to risky behavior, emotional changes, and mood swings. Thus, adolescents are susceptible to engaging in risky sexual behaviors, coital and non-coital. In girls, they tend to consider the costs and benefits of those

they are close to, like their parents or their partner, when weighing the decision to have sex or not (Meier, 2003). These girls are not only at a greater risk of being forced into sex; if and when they do decide to have sex, they are more also likely to let the boys control the use and types of birth control.

2. Psychological factors

Psychological factors are self-efficacy, religiosity, and religious involvement which are variables within the personal factor.

2.1 Self-efficacy

Self-efficacy is particularly related to one's capability and to future behavior (Ajzen, 1991). Self-efficacy is a strong predictor of sexually abstaining (Childs, 2007; Buhi et al., 2011). Self-efficacy and decisional balance based on a transtheoretical model (TTM) (Wang, Cheng, & Chou, 2009) were significant factors including perceived self-efficacy to refuse sex (Dancy et al., 2006; Oladepo & Fayemi, 2011; Wang & Hsu, 2006). Another significant predictor to explain sexual behavior among the girls was their intention (Doswell et al., 2011). Interestingly, a recent article addressed and characterized the motivations for abstinence which include personal readiness (Long-Middleton et al., 2013; Ott, Pfeiffer, & Fortenberry, 2006), fear of the consequences of intercourse (Long-Middleton et al., 2013; Oladepo & Fayemi, 2011; Ankomah, Mamman-Daura, Omoregie, & Anyanti, 2011), partner worthiness, and lack of opportunity (Long-Middleton et al., 2013).

Another significant predictor to explain sexual behavior among the girls was their intention (Doswell et al., 2011). Long-Middleton et al. (2013) studied motivations in abstaining from sexual relationship in 15-19 years old female

adolescents and found that there were basically five broad factors namely; “personal readiness, fear, beliefs and values, partner worthiness, and lack of opportunity”. “Personal readiness” was defined as “one’s sense of preparedness to engage in sex” while being abstinent was related to “one’s perception of feeling developmentally ready to engage in sexual intercourse”. Some adolescents agreed that parental restriction and the absence of a relationship were among the causes for them to have a “lack of opportunity” to get exposed to having sex. However, the lack of opportunity does not related to lack of desire. Therefore, it is ideal that adolescents should be educated with the skills that help them to be able to cope with or to prevent them from having sexual activity. This is to ensure that their decisions to abstain are more rewarding while engaging in sexual activity should be based on a sense of maturity and readiness as well (Brady & Halpern-Felsher, 2008).

2.2 Religiosity and religious involvement

Religiosity can be considered a protective factor against adolescent sexual intercourse (McCree, Wingood, DiClemente, Davies, & Harrington, 2003). Religiosity correlated with intentions toward sexual abstinence in early adolescents (Kopacz, 2000; Adamczyk, 2012; Vazsonyi & Jenkins, 2010) and also predicted accurate sexual knowledge through parent communication (Baxter, 2013). Religiosity does have an impact on sexual attitudes and behaviors. Adolescent’s perspective in “beliefs and values” reflect a moral standard or ethical ideal or themes of religiosity (Long-Middleton et al., 2013). Studies found that religious teenagers tended to delay their first sexual relationship and less likely to have sexual experiences or engage in

any types of sexual behaviors (Meier, 2003; Rostosky, Regnerus, & Comer Wright, 2003; Adamczyk, 2012).

The higher the level of religious involvement, the lower the chance of sexual risk taking would be; whereas the more positive attitudes about condoms, the greater sense of self-efficacy to negotiate with partners about sex, STD's, HIV, pregnancy, as well as the refusal to have unsafe sex would be (McCree et al., 2003). In addition, spirituality is also another protective factor that could help prevent adolescents from early sexual initiation (Roojanavech, 2012). Brassai, Piko, and Steger (2011) stated that the connotation of "meaning in life" played the role as a protective shield from unsafe sex in females. Psychological health was powerfully with the idea of "meaning in life" among adolescents.

3. Behavioral factors

Behavioral factors such as permissive sexual attitudes, alcohol consumption, negative or delinquent behavior of peer, and low academic performance can be contributive factors to risky sexual behavior. On the other hand, behavioral refusal skills which served as the intervening variable were also found to help decline the level of risky sexual behavior. The factors that contributed to sexual refusal skills were those such as knowledge, attitudes and perception in contradiction of sexual activities, and peer pressure (Bazargan, Stein, Bazargan-Hejazi, & Hindman, 2010). Moreover, risky sexual behavior mediated through behavioral refusal skills were indirect effects. It was reported that adolescents who remain sexually inactive, the level of perceived peer pressure, refusal skills for avoiding sexual activity, positive attitudes toward practicing safe sex were more positive (Bazargan & West, 2006).

Family factors

The family factors focus on parental characteristics, family structure and family processes (Baxter, 2013; Roojanavech, 2012).

1. Parental characteristics

Socioeconomic status of the family particularly in terms of education and incomes of the parents played a vital role in shaping adolescent sexual behavior. Families with higher income showed a later onset of sexual intercourse and lower tendency of teen pregnancy rates. Besides that, the educational level of the parents was also correlated with adolescents' sexual behavior. Studies revealed that the higher levels of parental education resulted in lower levels of adolescent sexual activity and risks of pregnancy; sexual initiation is shown to be delayed then sexual practices have been shown to be safer (Kahn et al. 2004).

2. Family structure

Family structure was another considerable factor that influenced sexual behavior of adolescents. Families in with both parents living together implied the availability of support, parental supervision, and behavioral control that would have an impact on many aspects of adolescents' lives in years to come. Parents monitoring adolescents' behavior and talking openly on sex issues will provide a safe environment and help delay sexual activity. Therefore, it is strongly encouraged that parents should have open discussions about sexuality with their children prior to their sexual initiation (Rhucharoenpornpanich et al., 2012). Moreover, it is also observable that adolescents' intentions to have sexual intercourse in the future were somewhat

associated with maternal orientation towards the children when they engaged in romantic relationships.

3. Family processes

Relationship, communication and control within the family are parts of what is called family processes. Adolescents who are surrounded by adults or peers with restrictive attitudes towards premarital sex tended to delay sexual activity; while parental influence and care (Oladepo & Fayemi, 2011) helped to motivate sexual abstinence. Parental relationship and bonding with children, particularly with girls, could lead to positive outcomes and help delay sexual debut in such a way that it provided a good role model of a healthy relationship for them to learn from (Aronowitz, Todd, Agbeshie, & Rennells, 2007). As female teenagers prefer to obtain reproductive and sexual information from their parents (Causarano et al., 2010), it is therefore essential for parents to discuss such sensitive issues in an understanding manner. Besides that, the level of the religious commitment of individuals is partly shaped by values and behaviors of the family as well as personal issues one may have experienced.

Therefore, it can be said that if parent-child closeness is well fostered to make a good family relationship, it can consequently help reduce a youth's inclination towards engaging in premarital sex as a result. Also, moderate parental control is said to be a more effective tool to discourage premarital relationships than lesser or greater degrees of control (Farahani et al., 2011). The quality of parent-adolescent relationships and parental communication are important factors that helped promote health and well-being among adolescents (Rhucharoenpornpanich et al.,

2012; Zain Al-Dien, 2010). Parkes et al. (2011) suggested that developing autonomy and encouraging sex only within a relationship by encouraging adolescents' skills and values can possibly promote their potential in a positive way. Furthermore, it is revealed that the reasons behind getting discomfort around discussions of these issues were mainly due to cultural filters rather than being entirely religious (Athar, 2003).

The family environments that promote closeness and unity, and positive peer networks were among the factors that diminished the level of unsafe sexual behavior in adolescents. Regardless of the religiosity level of a family, risky sexual behavior was shown to be minimized by strong bonding between parents and adolescents. Parents who pay attention to adolescents' activities and their peers; environments, join in family time, and promote strong parent-child relationships are the ideal contributor that helped shielding adolescents from undesirable sexual behaviors (Manlove, Logan, Moore, & Ikramullah, 2008).

Greater religious involvement is associated with living in a two parent family, having a mother as the primary caregiver, and greater parental monitoring, which also could be considered protective factors against teen sex. Religiosity contributes to the delay of sexual intercourse because of perceived consequences of sexual activity, such as guilt for having sex, lack of respect on behalf of a spouse, knowing that sexual intercourse will upset one's mother, and by reinforcing a sexual ideology that is negative toward teen sex (Rostosky et al., 2003). Girls, however, must weigh the benefits and risks when deciding on having sex or not, they tend to consider like their parents or their partner (Meier, 2003). Studies revealed that the attitude and subjective norms (i.e. mothers, fathers, and peers) were essential instruments in

predicting a teenager's possibility to abstain from early sexual behavior. Compared to fathers and peers, mothers were the most influential individuals for girl teenagers of an early age in making a decision whether to abstain themselves from early sexual behavior (Doswell et al., 2003).

However, girls who have strict and faithfulness to religious principle are at a greater risk and more prone to unsafe sex. A religious doctrine, specifically a doctrine that forbids sex before marriage, may offer few resources to female adolescents when they are faced with sexual dilemmas. These girls are not only at a greater risk of being forced into sex; if and when they do decide to have sex, they are more likely to let the boys control the use and types of birth control. They are most likely to have a lack of knowledge about birth control and do not know where or how to get it. Adolescents who do not have much connection to religion and expect positive emotional outcomes after sex and less negative effects concerning pregnancy and sexually transmitted diseases are factors associated with teen sexual debut (Rostosky et al., 2003). Lower levels of religiosity are known to influence the adolescents' decision to have sex for the first time (Meier, 2003).

Extra-family factors

Extra-family factors emphasize peers, and mass media.

1. Peers

Peers are the primary source of information (Baxter, 2013) and their sexual activity was associated with having sex (Bauermeister, Elkington, Brackis-Cott, Dolezal, & Mellins, 2009). Many studies have encouraged sexual abstinence

behavior (Childs, Moneyham, & Felton, 2008; Oladepo & Fayemi, 2011). On the other hand, the result of several studies showed the negative side. Sieving et al., (2006) conducted a study examining friends' influence on adolescent sexual debut. They found that students who initiated sex had friends who reported more benefits from sex than students who did not report their first sexual intercourse encounter. Sexually active students also reported stronger beliefs that their friends would hold them in high esteem if they were sexually experienced. Results also revealed that adolescents who initiated sex reported higher levels of involvement with peers.

2. Mass media

Mass media is very influential in the lives of adolescents and this could result in these adolescents being involved in risky sexual behavior (L'Engle, Brown, & Kenneavy, 2006). The mass media that offers a poor quality of information about sexual behavior is prone to initiating adolescents in having sex. The girls who were more likely to be listening to music and reading magazines related to sexual issues, approved of teens having sexual intercourse from interpreting the sexual messages. The influence of the media made against adolescents abstaining include decreased self-esteem and self-worth (Miller & Benson, 2001).

3. Social norm

In social norms, Shoveller, Johnsonb, Langillec, and Mitchell, (2004) investigated explanations for youth who engage in sexual behavior. The result showed that social norms and structures are embedded in processes and are pathologized with sex, so it creates a sex-based shame environment. The religious congruency and participation of the family and religious leaders in reducing risky sexual behavior or

committing towards sexual abstinence before marriage among early adolescents should be of concern.

The factors obstructing the intention of sexual abstinence behavior of Muslim female adolescents are presented in the following;

1. Peers influence Peers play an important role on adolescent sexual activities. Research studies have shown that the sexual activity of peers was related to the influence of others (Baxter, 2013; Sieving et al. 2006). The perception of peer behaviors has a stronger influence on adolescent sexual activity resulting in a high risk of early experience with coitus (Mary, McWatters, Jeffery, & Smith, 2005). Sieving et al. (2006) conducted a study examining friends' influence on adolescent sexual debut. The researchers evaluated social factors as predictors of sexual intercourse. Therefore, family context should be encouraged for providing parental bonding and monitoring, good communication to delay sex and other aspects of healthy sexual behaviors. The school setting is influential for creating a context of peer norm behavior as well as supporting educational context (Mary et al., 2005; Sieving et al., 2006).

2. Media influence Issues regarding media influence have become a serious matter nowadays because it is vital for adolescents as they are growing up with their own beliefs. Although a connection between the media and teenage sexuality is still a challenge in an abstinence decision when compared to other social variables from many research studies. To help reduce the effects on young people of watching sexual content on television, parents can play an important role in explaining their own beliefs about sex and the behaviors showed in television

programs with their teens (Collins et al., 2004). Nurses should encourage these family discussions.

3. *Inadequate knowledge of sexual and reproductive health* This issue may be the result of many problems. In Pattani, a survey was carried out about the determinants of sexual health behaviors, the results also showed that the average age for a first sexual intercourse encounter of the samples was voluntary at 15 years old. The results from this survey are in the same direction with other Muslim countries, that inadequate knowledge about sexual and reproductive health including unintended pregnancy and contraception methods were associated with more permissive values on behaviors of premarital sex (Malek, Shokoohi, Faghihi, Bina, & Shafiee-Kandjani, 2010; Wong, 2012).

As mentioned above, youth especially girls are prone to the risk of physical and mental issues. With regard to collaboration, teens, parents, and health professionals, can promote healthy sexual behaviors and attitudes to benefit teens themselves, their families, and society. Many studies showed that teen-parent communication provided several important benefits for adolescents (Oros, 2012; Kantor, 2015); especially mother–daughter communication (Chareonsuk et al., 2013; Askelson, Campo, & Smith, 2012). Several benefits were presented, for example, a high comfort level discussing sensitive topics, regular prayer and use of faith in making decisions, and positive parental involvement in teens' lives (Oros, 2012). These may create a good environment where female adolescents can negotiate to exercise their right to health and education based on their religion and faith. Parent education should be included into specific programs to add clarity to parent-teen

communication about sexuality to teens. It will contribute to the design of Islamic specific model to encourage sexual abstinence behaviors among early Thai Muslim female adolescents. All things considered, the need for parents, and schools to work together is an important strategy for solving problems.

From studies related to intention to abstain from sexual intercourse, attitude towards abstinence was presented as the strongest predictor of engagement in sexual behaviors when compared with perceived peer beliefs and perceived family beliefs among female adolescents (Akers et al., 2011). A study of adolescents in Indonesia found that the combination of experience with sexual intercourse, “perceived behavioral control, attitude and subjective norms” of peers and parents predicted the intention of sexual abstinence (Leerlooijer et al., 2014). Then, adolescent females who improve attitudes toward premarital sex will resist pressure from friends or partners and build negotiation skills in intimate relations (Jain et al., 2014).

In Thailand, the study of young Thai female adolescents’ sexual abstinence intention showed high levels of control beliefs with increased sexual abstinence intention, which is in the same direction with other studies (Kopacz, 2000; Bazargan & West, 2006). For “control beliefs” is a vital element of intention, the improvement of control beliefs relevant to many factors is useful in encouraging healthy sexual behavior in young adolescents. Therefore, “control beliefs” and “perceived behavioral control” act as predictors for the intention of sexual abstinence.

As mentioned above, most studies stated that personal factor was more important than other factors (Skinner et al., 2008; Wang & Hsu, 2006). Several

factors positively and negatively affected sexual abstinence behavior in adolescents. Adults can support adolescents to promise to delay sexual initiation, and promote self-awareness to avoid sexual risk in the future (Bersamin, Walker, Waiters, Fisher, & Grube, 2005). According to the reproductive health policy and strategy of Thailand (2000-2014), health care institutes emphasize the development of reproductive health in youth with collaboration and participation in every sector. To promote adolescent development and adjustment of sexual risk situation encounters, adults play a vital role in adolescent identification.

Intention of sexual abstinence behavior in Islamic philosophy

Intention of sexual abstinence behavior

Intentions are paths of actions that a person anticipates to follow. If a person intends to do something, they tend to actually do it than if they do not intend to do it. From previous studies, intentions strongly influence behaviors, however, three issues should be of concern in the actual behavior (Kirby et al., 2011).

1. "The strength of the intentions". For instance, in the case of adolescents who strongly intend to maintain sexual abstinence until they get older, they feel strong to maintain sexual abstinence more than those who have weak intentions to abstain from sex. Thus, increasing the strength for healthy intentions is so important.

2. "The skills or capability of the individuals to implement their intentions". For instance, adolescents may intend to maintain sexual abstinence, but if

they do not have the skills that prevent or avoid an awkward situation, they might be close to having a sexual relationship, and are then less likely to maintain sexual abstinence.

3. “Environmental support for the intentions”. Whether or not intentions are transformed into behavior depend on whether or not the environment impedes or encourages the intended behavior. For instance, adolescents may intend not to have sexual relationships, but they may have the opportunity when they are left in a situation without supervision.

Based on Islam, the intention of an action is regarded as important under the wording "All actions are judged by motives, and each person will be rewarded according to their intention", a report of the legal document and sayings of Muhammad (*hadith*) is the most important of the sayings of “Prophet Muhammad” (peace upon him). The acceptance of one's religion and deeds by God is the most vital principle in Islam, and generally it is followed as part of one’s normal routine every day. The believers’ action is along with pure intention, this action was accepted and rewarded by God. "Sincerity to God" concept would be "purity of intention". Internal and external peace in a human being comes from pure intentions. The first step to creating peace in relationships is focused on working with intentions towards Allah. Intention helps humans to stay with their life purpose at all times. Good intentions are to trust in Allah, and humans put in the effort and accept their best attempt (Abdulsalam, 2009, Oct 4).

In conclusion, intentions of sexual abstinence may influence an actual behavior. The intention to behave with sexual abstinence may need the strong

intention of Islam, skills to be trained how to perform the intentions and provision of a positive environmental for encouraging the intentions.

Islamic philosophy

Islamic Philosophy is a divine philosophy. The principal is “the love of wisdom and a quest for ultimate truth”. The objective evidence of the role of Islamic doctrine is on the promotion of abstaining from sex or the prohibition of approaching sexual acts outside of marriage. Marriage is an act of worship. Single people were recommended as the Quran says, "And those who cannot marry should practice restraint (or abstinence) ‘till Allah enriches them out of His bounty." (Quran, 2012, 24:33).

Islamic philosophy provides a statement in the Quran to clarify the understanding of sexual health within an Islamic context. The teaching in the Quran stresses that mankind control their sexual urges and avoids behavior and habits which could arouse sexual desires and lead to unlawful sexual contact. The sexual health in Islam is explained under the concept of Islamic sexual morality which relates to intention of sexual abstinence behavior.

The concept of Islamic sexual morality

The Islamic view of sexual morality involves a belief that the sexual desires of humans are basic instincts for which a person must take responsibility through the Islamic moral way. There are two main concepts in sexual health from the

Islam perspective should be emphasized: 1) the concept of sexuality (*nikah* and *zina*), and 2) the concept of modesty (Rizvi, n.d.).

1) The concept of sexuality (*nikah* and *zina*)

Sexuality from the Islamic perspective involves a difference between sex within marriage (*nikah*) and premarital sex (*zina*).

Nikah. The term for lawful marriage is "nikah" which accurately means sexual intercourse. Islam highly recommends marriage along with the principles of Islamic jurisprudence (Islamic law). Marriage as a good deed, and in Islam it is believed that marriage can fulfill completely the human synchronization. According to Islamic sexual morality, marriage is a highly recommended deed. Allah says, "Marry the spouseless among you...if they are poor, God will enrich them of His bounty." (Quran, 2012, 24:32). To attain spiritual perfection and prevent Muslims from sins, marriage is considered a helping factor for enhancing the acts of worship.

In the Quran it is stated that virginity is considered an asset in marriage. Prophet Muhammed (PBUH) said:

1. "When one of you has sex with your wife it is a rewardable act of charity". The acquaintances were astonished and asked, "But we do it out of our desire, how can it be counted as a charity?" The Prophet replied "If you had done this with a forbidden woman, it would have been counted as a sin, but if you do it in legitimacy it is counted as a charity?"

2. "Let not the one of you fall upon his wife like a beast falls. It is more appropriate to send a message before the act".

3. "Do not divulge secrets of your sex with your wife to another person, nor describe her physical features to anyone".

Zina. In Islam, zina or adultery, including premarital sex and extramarital sex, is a criminality with a person and the society "Do not approach adultery" means illegal sex, and anything which promotes prohibited sex, is illegal. Therefore condemned are dating, stimulating dress, nudity, free sex, rudeness and pornography which can lead to illegal sex. Allah says in the Quran: 1) "Do not come near to adultery. Surely it is a shameful deed and Evil, opening roads to other evils ". 2) "Say: Verily, my Lord has prohibited the shameful deeds, be it open or secret, sins and trespasses against the truth and reasons". 3) "Women impure are for men impure, and men impure are for women impure and women of purity are for men of purity, and men of purity are for women of purity".

The perspective of Islam states that sexual abstinence behaviors refer to not approaching or engaging in any sexual activity between two persons including any type of genital contact or sexual stimulation. Kissing, heavy petting, oral sex are also prohibited because these actions may lead to sexual acts outside of marriage (zina) (Quran, 2012: Al-Isra, 17: 32). These acts including masturbation and homosexuality is also prohibited because this issue is very serious in forbidding thing and leads to a person committing haram (illigal) deeds such as transmitting sexual disease, and being unhappy in life and relationships. In summary, zina is a disapproved and evil way, (Quran,2012, 17:32), is just and true.

2) The concept of modesty

Modesty is “a part of the faith (*Al-Bukhari*)”, that was noted as the outstanding Quran with faithful person in the group of *al-Muminun* (The Believers): “Successful indeed are the Believers – those who humble themselves in prayers; who avoid vain talk; who are active in giving *zakah* (compulsory charity); who guard their chastity except with those joined to them in the marriage bond” (Quran, 2012, 23: 16).

Based on Islamic guidelines, some aspects that could support Muslims to maintain only lawful sex are described as follows:

1. *Early Marriage*. Islam encourages marriage as a legal way to satisfy sexual desires, so marital relationship is permitted. As Prophet Muhammad (PBUH) advised young Muslims that “Young men, those of you who can support a wife should marry, for it keeps you from looking at strange women and preserves your chastity, but those of you who cannot marry should fast, for it is a means of cooling the sexual passion (Quran, 2012, Al-Naysaburi)”.

2. *Lowering of the gaze*. Looking at forbidden things such as looking at the bodies of others, and faces of members of the opposite sex is prone to stimulate sexual arousal. “The eye is the key to the feelings, and the look is the messenger of desire, carrying the message of fornication or adultery” (Quran, 2012, Al-Qaradawi). Thus, Islam protects against illegal sexual acts by lowering young men and women gaze as stated: The Prophet prayed for his forgiveness. "Say to the believing men, that they should lower their gaze and guard their modesty; that will make for greater purity, and God is well acquainted with all they do". "And say to the believing women that they should lower their gaze and guard their modesty."

3. *The Awrah*. The awrah in Islamic legal words denotes “the parts of the body that are to remain covered”. Exposing some part of the body would be in violation of the dictates of the Shariah (Islamic law). From the statement of Prophet Muhammad (PBUH) who stated that the `awrah of a Muslim woman, and the girl who reaches the menstruation periods, her face and hands (Sunan Abi Dawud, Hadith no. 2152, pp. 246-247) were acceptable to expose, and covered from the navel to the knees for men (Hanbal, Ahmad bin. N.D. Vol. 2, p. 187). Furthermore, Prophet Muhammad (PBUH), stated to “avoid the women who try to resemble men and the men who try to look like women, either in clothing or manners” (Sahih al-Bukhari.Hadith no.773) for preventing sexual misrepresentations.

The Beginning of Sexual Life from an Islamic Perspective

Sexual desire is a motivational state in human at the puberty. Child age-appropriate sex education is very important to prepare children before the period of puberty. According to Islam, puberty (*bulugh*) was defined by one of the signs as following:

1. Age refers to “fifteen lunar years for boys and nine lunar years for girls”.
2. Internal change (in boys only) refers to “the first nocturnal emission. Semen accumulates in the testicles from puberty onwards and more semen may be formed than the system can assimilate; when this happens, semen is expelled during the sleep”. It is defined “nocturnal emission wet dream”.

3. Physical change refers to “Growth of coarse hair on the lower part of the abdomen”. At puberty, the sexual urge that begins should be fulfilled only through marriage, marriage is allowed for male or female who reach the puberty period. According to physical maturity, adolescents have not developed adequate to handle marriage responsibilities; in the same way, *rushd* (maturity of mind) is also important.

The way that Muslim adolescents should follow

In Muslim late adolescents, they can get married without the problems of financial issue with four possibilities as stated in the following:

1. Family Support. If the parents can support their Muslim adolescent’s marriage until they are financially independent and ability to support themselves. With regards to the agreement of liberty made between a slave and his master, from the statement in Quran says, ". . . and give them of the wealth of Allah which He has given you..." (Quran, 2012, 24:33)

2. Community Support. The Muslim organizations should create funds to encourage young Muslim adolescents who want to get married but who have a shortage of finance. The religious leader might propose an example of how the community can help the Muslims adolescents in beginning of marriage life for preserving the Muslim community in an ethical atmosphere.

3. Marriage contract. Young adolescents can do the Islamic marriage contract (*'aqd*), the marriage ceremony was delayed until they completed their education. They remain staying with parents after their Islamic marriage

contract. They are permitted to see each other without Islamic law (*shar'i*) opposition. When they make decision for having a sexual relationship, in this case contraceptive was allowed to delay pregnancy.

4. Married with a Simple Life-Style. Both young male and female adolescents can do their *'aqd* and the marriage ceremony but delay the child-bearing process. For that reason, they can satisfy their sexual relationship and feel free from financial problem.

Handling Sexual Urge before Marriage

If adolescents cannot marry in the period of sexually and mentally maturation, they should manage the sexual urge. In this section, several ways of fulfilling the sexual urge before marriage were described. According to having appetites and impulses in sex, Quran mentioned the demands and responses of sexual appetite in three different ways (Quran, 2012, Al-Qaradawi, n.d.):

The first approach is to response sexual need or desires in human being without restriction on moral or religion. The devastation of the building family and of all society was the result.

The next approach is to suppress the sexual arousal; this approach is supported by religious teaching. The inhibition of a natural appetite is opposing the purpose of God and natural order.

The last, is to regulate the satisfaction of human desire within limitation of the religious framework. The sexual drive in Islam recognizes the role of satisfaction in marriage life.

According to sexual appetite in an Islam perspective, female adolescents' urges may be resolved by 2 stages.

Step 1: To decrease things that may stimulate desire in humans, including as below:

1. Follow one glance at the opposite sex

The look is “a way of desire and feeling, carrying the message of adultery (*zina*)”. It was stated in Quran: “the believing men and the believing women alike to lower their gaze together with His command to guard their sexual parts” (Quran, 2012, 24:30-31).

The Prophet (peace and blessings of Allah be upon him) said: “Do not follow one glance with another, for the first is allowed but not the second.” Looking directly at young men and thinking about their attractive looks, or looking at pictures in magazines and movies were not allowed in Islamic way. The Prophet (peace be on him) considered hungry and lustful looks at a person of the opposite sex as "the zina of the eye," according to his saying, "The eyes also commit zina, and their zina is the lustful look" because it gives sexual desires and gratification in an unlawful way (Reported by al-Bukhari and others).

2. Taboo of gazing at the 'awrah of others

Gazing at the 'awrah (means parts of the body of the same or the opposite sex that Islam is not allow to expose to others). Man covered from his navel to knee. The whole body excepting only her face and hands for woman except her father or brother, it is different.

3. Privacy (Khulwah)

The teaching of Islam forbids places that promote living alone between male and female. Although the person intends to avoid sexual contact, a private environment might provide the chance for sexual relationship such as touching, kissing, or even for intercourse. Therefore, a mahrem who is any male relative with whom marriage is permanently forbidden, such as her father, grandfather, son, brother, uncle or nephew, should stay with the women to prevent any kind of sexual intimacy (Quran, 2012, Tafsir of al-Qurtabi, 14: 228).

4. Wasting of time from haram hobbies

There are several benefits for useful of hobbies. However, some hobbies may lead to haram things such as reading internet websites with sexual aspect.

5. Away from the public place where male and female mix

In a mixed environment, girls should restrict the relationships of friendship and have to remain modest, serious and dignified.

Step 2: To reinforce the influences that will lead to avoiding acting according to one's drives.

The way to achieve the above:

1. Empowering the faith in one's heart and passion with God.

The reminding the names and attributes of God, reading the Quran, dictation in prayers. The heart and soul belief will be strengthened, and it encourages the avoidance of temptation. Thinking about what Allah has prepared for the right

behavior for girls (Quran, 2012, al-Ahzaab, 33:35) and recheck the things that are immoral and a threat to our life.

2. Fasting

Fasting as mentioned by the Prophet (peace and blessings of Allah be upon him) when he said: “O young men, whoever among you can afford to, let him get married, for it is more effective in lowering the gaze and in guarding one’s chastity. Whoever cannot afford it, then let him fast, because fasting diminishes his sexual desire.” (Quran, 2012: Al-Bukhaari and Muslim). This is identified to male and female. The goal of fasting is to encourage the power of body and mind in humans who can control desire. Therefore, a human who fasted is more likely to abstain from sex (Kagimu et al., 2012). The supportive teaching from the Holy Quran is as follows: “O you who believe! Fasting is prescribed for you as it was prescribed to those before you that you may learn self-restraint.” (Quran, 2012, 2:183).

3. Strengthening one’s resolve and will power

Empowering a person to raise their strength. This will make a female avoid and regulate her desires.

4. Finding the proper way in Islam, according to teaching

The believer should compare the effects of satisfaction when a girl directly responds to an illegal thing. The preference of wish is better than the desires of enjoying haram things. The important action is calling upon Allah and asking Him for help. This is the way showed that believer recognize in God.

Integration of Islam sexual morality into practice

The integration of Islam sexual morality into a nursing model. This research employed “The Wisdom Approach or *Al-Hikmah*” from Islamic perspective (Leaheem, 2017) as the guidelines for adjusting adolescents’ behavior that is different from their Islamic way of life in the south of Thailand. This approach composed of six main actions.

1) “Getting to know or *At-Ta'aruf*” refers to the establishing of a healthy relationship by getting to be familiar with each other, and participated in goal setting.

2) “Seeking knowledge or *Al-Ilmu*” refers to the exploration in accuracy of knowledge and understanding behavior in relation to life within Islamic principle.

3) “Self-assessment or *Al-Muhasabah*” refers to the reflecting and reviewing of habit strength and a direct effect on the present performance that is in the quality of agreeing or corresponding within Islamic principles.

4) “Reviving and changing behavior or *At-Tajdid*” refers to the recovering performance that has been acting along with the Islamic way so that existing behavior corresponds with the Islamic way by bringing back to life the principles of Islamic faith, practice, and ethics.

5) “Improving the mind or *At-Tahdib*” refers to encouraging learning about the values, rules, and guidelines of Islam and Muslim community.

6) “Organizing a last orientation or *Al-Wadah*” refers to the motivation and attitudes towards good values in Islamic ways of behavior, and raising adolescents’ spirits to apply the knowledge added to everyday life.

Sexual Abstinence in different contexts

Sexual abstinence in the modern context refers to the decision to avoid sexual activity prior to marriage. Abstinence is mentioned in many contexts and meanings in various disciplines. In the Merriam-Webster Online Dictionary (2014), abstinence is defined as “voluntary patience especially from sexual intercourse”. Norris, Clark, & Magnus (2003) defined sexual abstinence as “a specific set of behaviors used to actively avoid sexual intercourse by persons who are not married but are interested in a romantic relationship with a partner” (p.141). One abstinence-only programs in previous study with directors, instructors, and participants stated that abstinence as “not engaging in sexual activity, sexual/ vaginal intercourse; oral sex, anal sex or pre-coital behaviors comprised of petting, kissing and touching, behavior that induces sexual intercourse; behavior with the purpose of sexual arousal and non-sexual behaviors” (p.94) (Goodson, Suther, Pruitt, & Wilson ,2003). In addition, the term abstinence has religious and moral meaning for many people, in that abstinent behaviour was considered to reject such behavior as kissing and touching. These are the first steps towards coitus, due to a state of arousal (Goodson et al., 2003).

Interestingly, Beshers (2007) reported adolescent sexual behavior interpretations by the different stakeholders. Adults commonly defined abstinence as “freely choosing not to engage in sexual activity until marriage”. Sexual activity was

defined as “any type of genital contact or sexual stimulation between two persons including, but not limited to, sexual intercourse”. Conversely, adolescents referred abstinence as “not having sexual intercourse” which tends to be more concrete and formal. Saunder (2009) defined abstinence as “not engaging in vaginal or anal intercourse, and oral sex”.

In Thailand, Supametaporn et al., (2006) investigated the maintaining sexual abstinence process among Thai Buddhist female adolescents aged between 18-23 years. In this study, sexual abstinence is defined as “refraining from sexual intercourse for the first time”. This definition is similar to “Rug Nuan Sa Nguan Tou” in traditional Thai society which is the female strategy to prevent improper sexual relationships with men (p. 26). In addition, Danaidussadeekul (2004) studied sexual abstinence factors for late-adolescent girls in Bangkok, Thailand. The researcher defined sexual abstinence as “not engaging in sexual intercourse with a male”. Suthinphuak et al. (2010) defined sexual abstinence as “the act of secondary school students who refrain from penile-vaginal sexual intercourse with men before marriage” (p. 7).

From the previous literature, most of the studies define the term sexual abstinence as refraining from heterosexual intercourse including oral or anal intercourse, and not to engage sexual activity although the term “sexual abstinence” has had partially different definitions. Many studies have presented the variation of defining sexual abstinence among adolescents to be determined by age, gender, ethnicity, religion, sexual conservativeness and sexual experience (Bersamin et al., 2007). In Thailand, all of studies related to sexual abstinence have presented similar

definitions of sexual abstinence as “not engaged in sexual intercourse” (Danaidussadeekul, 2004; Supametaporn et al., 2006; Suthinphuak et al., 2010).

To sum-up this section, the intention of sexual abstinence behavior is necessary to engage Muslim female adolescents in accepting mutual responsibility. Striving to facilitate “the Islamic sexual morality”, the concept of sexuality (nikah and zina), and the concept of modesty, to prevent any unlawful and immoral action. Thus, sexual abstinence is the proper strategy for preventing the major sins (sexual acts outside of marriage) in Islam through religious teachings by avoiding certain situations and controlling sexual urges. It is very important to protect youth from zina, and promoting sexual abstinence based on Islamic thought should apply in Thai Muslim female adolescents.

Religious belief of sexual health education

Most of the Muslims of the southernmost provinces of Thailand speak Malay, while the other parts of Thailand speak in Thai, both at home and in public (Yusuf, 1999). The primary source of traditional Islamic knowledge came from the hadith, or traditions and sayings of the Prophet Muhammed, and the Holy Quran. Islam religions propose guidelines for being a good person and for achieving a good life. A good person must behave based on the six pillars of belief and five pillars of Islam. For the cultivation of young people, Islam empowers the youth in the manner as stated: "Leave him free for seven years... discipline him for seven... and be his companion for seven" (Quran, 7: 80–81). For example, with the age of 7-14, the

religious instruction on how the person behaves in the right way as guided by Islam principles by focusing on the inner self including the natural elements of her personality until the period of adolescence. For the age of 14 to 20, the cultivation of good adolescents has been continued as “supervision over the adolescent tendencies of the individual personality continues until the person behaves in a normal manner that takes the futuristic developments into consideration” (Quran, 7: 80–81).

The members in family are responsible for encouraging in their girls the religious teachings, and the morality training of Islam along with their physical healthy. The older has responsible to the younger, father will provide guidance for boy and mother will teach girl. If they have no parents, a Muslim male teacher for boys and a Muslim female teacher or nurse for a girl. A person of the same gender as a child can provide guidance of Islam teaching that is appropriate to their age.

The teaching in Islam encourages open talk about matters that related to sex, so sex education should provide consideration of sexuality in terms of both scientific knowledge and morality. Islamic studies are taught from the elementary to high school level in the southern border of Thailand in the following way; 1) Islamic studies in a core curriculum at elementary school and Islamic curriculum studied after school hours at the mosque in the village (*Tadika*), and 2) students in middle and high school (grade 7 to 12) have three options for studies; general education, private Islamic schools (Islamic curriculum and general education) and pondok (Islamic-only curriculum) in school hours. After school hours, they will study the book of Holy Quran (*Al-Kitab*). Friday and Saturday is the school holiday. Religious teaching will be given to children both in school hours and after school hours from kindergarten.

Additional to sexual health education issues and religious belief, the “Sexuality Information and Education Council of the United States (SIECUS)” that presented the mission to provide sexuality and sexual and reproductive health education. SIECUS developed the several materials with few obvious in moral messages, it may confuse on moral decisions because of the materials offensive to Islamic teachings.

There are three major issues of sex education in current practice at school that violate Islamic principles (Halstead, 1997) include the following areas;

1. Some materials in sex education violate the Islamic teaching.

Muslim students argue sexuality within the context of unobtrusive and single-sex classes which are provided by an instructor of the same sex. The dressing of Islamic style in public and mixed-sex activities were important issues (Khoei, Whelan, & Cohen, 2008). Some practices in the classroom such as presenting on using a condom; nude videos will cause offense to Muslim students and result in sin according to Islamic beliefs.

2. Sex education tends to accept behaviors that have a sinful message for Muslims.

Some issues of sexual health education address behaviors that Muslims believe are sinful (e.g. adultery, homosexuality) as acceptable. In Islam teaching, sex before marriage, or any kind with the opposite sex, are acts of adultery, ‘a shameful deed and evil, opening roads to other evils’ (chapter 17, verse 32). Therefore, the issue of ‘romantic dating, free sex and boyfriend/girlfriend relationships as is commonly practiced in general, violates the law and Islam behavior. As stated in the

Quran, relationships in same sex and homosexual behaviors are a prohibition in Islam but it presented as 'alternative lifestyles' (The Quran, chapter 7,verse 80–81). Wording such as 'spending time together alone' and 'getting to know each other', presented as non-Muslim offense to Islamic principle.

3. Sex education is perceived as declining the Islamic thoughts

The family institution plays an important in Islamic community for teaching and explaining the Islamic principle of the Holy Quran, Hadith and Sharia (Islamic law). This is the way to protect adolescents from the 'choice and preference' model that violated to young Muslim. As stated in the Quran, "one's sexual behavior should not be based entirely on a matter of 'personal choice', but must be within Allah's laws" (chapter 22, verses 5–7; chapter 7, verses 80–81).

For most adolescents puberty is confusing regardless of the environment. Adolescents are less likely to express a desire to learn about sexual health because of cultural taboos (Causarano, Pole, & Flicker, 2010) and the rigidity of sexual norms in Muslim society (Smerecnik, Schaalma, Gerjo, Meijer, & Poelman, 2010). Thus, particularly for Muslim girls there is not enough the information about sexual health and reproduction.

In addition, the resources of gaining sexual information should be of concern. Malek et al. (2010) studied the resources of gaining sexual information among adolescents in northwest Iran. They found that the first three main groups of resources are peer, pictures or magazines, and social media, respectively. Therefore, parents, schools, and official sources should be concerned and more educated sexual knowledge provided to adolescents (Malek et al., 2010).

Ahmadi, Anoosheh, Vaismoradi, and Safdari (2009) explored the experiences of Muslim (13–17 years old) young people and 12 parents on puberty in the Iran. The study addressed the four major themes of “shame and embarrassment, anxiety, transition, puberty orientation and management”. Moreover, studies in Malaysia indicated the problem of being involved in premarital sex in the Muslim culture and that most girls are at a high risk of being engaged in having sex with their boyfriends (Ghani, Abdullah, Akil, & Nordin, 2014) due to the lack of religiosity and religious acts among girls (Hamjah et al., 2012). To sum, the sexual health education and parenting skills should be improved to develop positive values toward self-respect for adolescents (Ghani et al., 2014).

Existing Program related to abstinence and intention

The strategies of abstinence-only or comprehensive sexuality education are still in debate as to which program is most suitable for high school students. A basic element of comprehensive education contains the abstinence topic but comprehensive sex education (CSE) curricula or the program of abstinence-plus and abstinence-only-until-Marriage (AOE) have some differences. Both interventions exist to abstain from having sex as the optimal choice for preventing HIV. The program of abstinence-plus encourages safer sex strategies such as using a condom. In contrast, abstinence only programs present abstinence as the exclusive option for HIV prevention, without promoting safer sex. Comprehensive sex education curricula or

abstinence plus programs took a risk reduction approach; while, abstinence-only-until-Marriage focused on the risk avoidance approach.

Comprehensive sex education curricula or abstinence plus programs

To avoid STIs and unintended pregnancy, comprehensive sexuality education (CSE) focused on abstinence. Many interventions have also included communication skills, decision-making, sexual orientation, and gender identity in topics and contain data about abstinence about condoms and contraception. Comprehensive sexuality education claimed with the delayed sexual initiation and reduced number of sexual partners, and increased condom use (Kirby, 2007). The results of systematic review in abstinence-plus programs was presented, most of programs presented a statistically significant protective effect on one or more than one sexual behavior (Underhill et al., 2008). The abstinence-plus programs did not seem to show any negative effects on adolescents. However, some aspects may conflict because of differences in sexual values in Islam such as using a condom (Hodge, 2002).

Recent studies of sex education stated commonly the strategies to decrease the risk of sexual activity are comprehensive sexuality education programs. One program developed in 2003, Program for Appropriate Technology in Health (PATH) in Thailand has accomplished in conducting sexuality education curricula in schools. This curriculum of comprehensive sex education into school were worked on prevention education curriculum for students as modified from SIECUS. The curriculum, titled “Scaling up”, is presented in a total of 15 hours of prevention

education distributed in one semester. The themes of the curriculum are sexuality, positive youth development and experimental learning. The goals of this curriculum are to decrease the risk of STDs, AIDS, unintended pregnancy, sexual violence and to promote positive youth development. The comprehensive sex education package has claimed to have had impact on sexual risk education, however this program was not introduced and integrated into all schools around Thailand, particularly in the three southern border parts of Thailand.

Interestingly, Ekwarangkoon (2012) conducted research to evaluate the results of PATH projects in the upper south, Phang Nga, Krabi, and Ranong provinces, and found that a comprehensive sex education intervention has not yet been integrated and taught in all schools. Only 16 out of 90 schools could continuously and systematically integrate and enhance the comprehensive lessons covering all six main topics of sexuality education at least 16 hours/academic year in the curriculum. The problems in conducting sexuality education included: 1) lack of monitoring and support from a master trainer in improving facilitating skills, 2) lack of support from school administrator, and 3) teachers did not truly understand the process of the learning management of sexuality education. The researcher suggested to successfully introducing the program, cooperation among the Ministry of Education and other sectors in the community including individuals (students) should be involved in the sexuality education program to prevent teenage pregnancy in the community.

For the lower south of Thailand (Pattani, Yala and Narathiwat province), the PATH program has been introduced in some schools since 2009 (four

schools in Pattani). Unfortunately, this program has not been successfully integrated yet because of the unrest situation. From informal interviews with the coordinator of PATH in the lower south, he reported that it was hard and challenging to integrate this program in the three provinces on the southern border of Thailand. One challenge was that many school administrators would not fully support and cooperate with teachers because of focusing on academic excellence. School administrators and teachers did not see the relevance of sexuality education. Secondly, most of school administrators, teachers, health care providers who act as a coach and have experience in teaching, had no time to work as a teaching coach. Thirdly, there was a high turnover or a high number of teachers moving out of these areas. Also, the instruction aids for teaching are expensive and limited (UNESCO, 2012).

More importantly, the offence of particular words used such as condom use or contraceptive methods were barriers to introducing this project in the lower south of Thailand because of Muslim culture. Also, the number of hours in teaching sexuality education remains low at only four to six hours per year (UNESCO, 2012) which may not enough to provide covering the content in the program. More importantly, the goal of PATH is safer sex but from the Islam perspective there is abstinence only before marriage. Also some objective material mentioned about transgender or gender identity which does not go along with the Islam perspective and some activities in class showed a lack of awareness in regards to touching by the opposite sex. This is not personnel belief but it is a religious rule. This presents the vital need to be culturally appropriately and to approach the

sensitive issues with regard to the Islamic perspective when working with Islamic people.

There were two studies using participatory action research to develop pregnancy prevention in adolescents. Both are similar to a study among early adolescents (11-15 years old), predominantly Buddhist students who lived in the study with a high prevalence of pregnant women less than 20 years of age. The first study by Pongsa, Sritapa, & Chaisayan (2010) was conducted in the Vangchai Municipality, Numpong District, Khonkaen province, Northeastern of Thailand. Participants were the representative of leaders who lived in the community including guardians, community leaders, health volunteers, teachers, and students. The Plan Do Check Act (PDCA) cycle was used as a framework of the study.

The results showed that to prevent adolescent and teenage pregnancies in the community, collaboration was needed among all local sectors in the community who should be involved in the project. At a school level, teaching and learning at school of sex issues should be modified and integrated into health education and also other subjects, there should be teenager corner/rooms for consulting by friends and teachers, a teenager club for doing activities after school hours, and good communication is needed among community leaders, parents, health volunteers, and teenagers. At the community level, there should be a learning center for health promotion and sexual and reproductive health for teenagers for disseminating knowledge between parents and teenagers. At a Tambon level, promoting health hospitals is needed, as well as providing clinics and a hotline service for consulting related to sex and promoting health. One suggestion from this study addressed

motivation should be encouraged among teenagers to join in with community activities. Improving attitudes about sex to parents and teachers must be of concern. Participation in planning must be conducted by their leaders in the community (Pongsa et al., 2010).

The second study, Chaikoolvatana et al. (2013) studied the development of a school-based pregnancy prevention model in northern Thailand. Participants were recruited by mixed purposeful sampling and applied Problem Behavior Theory (PBT) in study. Four sectors were involved in this study; adolescents (individual), families, schools, and the community. The researchers purposed that to prevent pregnancy in adolescents, individual sectors should promote recreational interests. The family sector should encourage family relations, communication and roles. The school sector should create from peer leaders, provide sex education with morality. The sexual reproductive health services for adolescents should set up in term of school, family, and community network. Moreover, the important strategies in the four sectors comprised of: “sharing information, supporting and involving, sharing environment, supporting and promoting, and collaboration”. The need for ownership and involvement of the family, school, individuals and the community was the crucial concepts of the model development in teenage pregnancy programs.

These two studies were conducted with students in the public school region in the majority are Buddhist, therefore, they might not generalize to adolescents in a different cultural context such as the Muslim community. Moreover, the program of pregnancy prevention does not seem relevant to Islam principle. In

Islam, the value of family and raising children is unquestioned among most Muslims. The contraception method such as the withdrawal method or coitus interruptus practiced at the time were permitted and can be practiced for a variety of reasons at the discretion of the married life (Bukhari, 7:135-6; al-Muwatta, 29: 34). This means that the pregnancy prevention program should not be promoted among unmarried adolescents. In order to promote understanding of sexual behavior and scientific knowledge in early Muslim adolescents, the principle of Islam should be modified into the program of sexual abstinence intention.

Although comprehensive sex education curricula or abstinence-plus programs are commonly apply in the program of pregnancy prevention, it does not seem relevant to Islamic principle. In order to promote the understanding of sexual behavior and scientific knowledge in early Muslim adolescents, the religious leaders in religious institutions will need to take a spiritually role with teachers, public health nurses, others in the community. Because of some particular views relevant to Islamic law, these issues will be of concern in promoting programs.

Programs related to abstinence and intention

Adolescents' education on sexual health is valuable knowledge that can be used over a life time, and that can result in positive effects in their life. Practicing abstinence has been one of the strategies most strongly recommended to young people for preventing diseases from sexual intercourse such as STDs and HIV/AIDS since the beginning of the pandemic (Barnett & Parkhurst, 2005). This part reviews the existing programs in the promotion of abstinence behavior.

Literature was reviewed for the intervention relevant to abstinence behavior that promoted abstinence among female adolescents. Articles, papers in electronic articles, which met the selection criteria, were retrieved, using selected key words from the search of Scimedirect, CINAHL, Medline, and BMJ Journal. The inclusion criteria included: (1) full-text and original articles, English references; (2) published between 2004 – 2014; (3) a majority of adolescents served by the interventions were less than aged 20 years; (4) evaluation of the impact of the interventions on at least one sexual health outcome measured in adolescence, such as refusing to have sex, intention to refuse sex, or self-efficacy. The exclusion criteria were the male participants, pregnant adolescents, homosexuals, and sexual abuse.

Generally, the content of intervention programs mainly includes primary prevention strategy. Most curriculums act in accordance with Title Vs "A through H" guidelines in abstinence-only education. The evaluation of the abstinence-related interventions have reported the behavioral and psychological outcomes; 1) intermediate outcomes such as , intention to maintain abstinence, behavioral intention, future plan, abstinence efficacy, abstinence values, peer, commitment and chance to have sex (Liebermman & Su, 2012; Pierangel, 2006; Borawaski, Trapl, Lovegreen, Colabianchi, & Block, 2005; Rijsdijk et al., 2011; Weed, Ericksen, Lewis, Grant, & Wibberly, 2008), and 2) behavioral outcome such as delay sexual initiation (Jemmott, Jemmott, & Fong, 2010).

The programs presented on variation and complexity over a range of activities, with the components of education, behavior, psychosocial aspect. Programs that were conducted to be effective that were suitably corresponding with adolescents

in diverse aspects such as social and emotional developmental stage (Smylie, Maticka-Tyndale, & Boyd, 2008). These programs took the program with using social or media campaign and communication on sexual abstinence (Fatusi, Wang, & Anyanti, 2008; Rijdsdijk et al., 2011; Thato, Jenkins, & Dusitsin, 2008), promising program (Bersamin et al., 2005), peer education (Caron, Godin, Otis, & Lambert, 2004), community participation by using social marketing strategies (Tanner, Raymond, & Ladd, 2009) and those that involved parents (Vandenhoudt et al., 2010).

Previous studies use a theoretical basis with targeting abstinence-only sex education program (Pierangel, 2006), based on Bandura's Social Learning theory (Denny & Young, 2006; Thato et al., 2008, Weed et al., 2008), safe sex behavior (Rijdsdijk et al., 2011) with mixed based on the theory of planned behavior and the health belief model, interpersonal communication about abstinence based on IMB model (Fatusi et al., 2008). However, interventions were existed based on a theory, studies rarely specified the process of theories design and implement interventions.

The literature relevant to adolescents, therefore, is limited and inconclusive, particularly in the area of interventions for early adolescent girls. In the singular integrative review on abstinence plus programs, as found in the literature, only one study out of 13 studies exclusively targeted adolescent girls (Underhill et al., 2008). Morrison-Beedy and Nelson (2004) identified the need for more intervention studies that targeted girls only. Such programs appear to be most successful with adolescents who have not yet experienced sexual activities (Aarons et al., 2000; Aten, Siegel, Enaharo, & Auinger, 2002)

However, the effectiveness to promote intention to adopt sexual abstinence was studied in the study of Lieberman & Su (2012) conducted *Choosing the Best* (CTB) the curriculum at school and community. Theories based on the theory of planned behavior with reasoned action were used. These interventions were conducted as middle school and high school programs. They found that many lessons motivated adolescents to set life goals, have proper decisions, maintain healthy relationships, and choose abstinence. Although this program showed impact on intention of sexual abstinence, an experimental study was not realistic for sensitivity of the subject matter. Additional to the length of program (10 months), the maturation of participants was a concern. Many findings addressed that the developing strategies in female adolescents should contain some or all of these protective factors in formal programs. For example, abstinence adolescent programs should be designed to enhance their efficacy with adolescents (Pedlow & Carey, 2004). The program that focused on the positive in sexual abstinence may be more sensitive for girls. In addition to the components within the interventions, future plans, the mother-daughter relationship, will encourage strategy developers to apply for developing an effective approach to preserving abstinence (Morrison-Beedy, Carey, Côté-Arsenault, Seibold-Simpson, & Robinson, 2008).

Furthermore, the activity designed should be sensitive to community values and concerned with available resources (Kirby, Faris, & Rolleri, 2006). The participation of public health institutions in practical activities on sex education which involve adolescents' families, schools and communities to promote sexual abstinence behavior (Suthinphuak et al., 2010). This is in the same direction with a qualitative

study which emphasized the importance of the participation of parents, media, schools, faith-based institutions and non-governmental organizations in encouraging the abstinence acceptance (Oladepo, & Fayemi, 2011). Islamic specific interventions should be concerned with promoting sexual abstinence in early Thai female adolescents (Chareonsuk et al., 2013).

Prevention efforts have been focused on the program for supporting abstinence among adolescents. Previous studies presented that abstinence-only until marriage programs are not effective in postponing early sexual activity and preventing sexually transmitted diseases (STDs) and undesired pregnancy (Kirby, 2007, 2008; Kohler, Manhart, & Lafferty, 2008; Trenholm et al., 2007, 2008). On the other hand, some studies addressing AOE show that there may be an effect on positive attitudes toward abstinence and short-term and long-term delays in first intercourse (Denny and Young, 2006). The present study of National Abstinence Education Association (2013) indicates that adolescent outcomes were improved by sexual risk avoidance abstinence education programs. Therefore, it means abstinence-only programs can be effective with adolescents.

WHO promotes healthy adolescence as a key stage of life, thus the social determinants of health and gender, equity and human rights were focused on stage of life. The strategy of European child and adolescent health 2015-20 (WHO, 2014) also proposed strategy based on four guiding principles for adolescents health: 1) adopting a life-course approach; 2) using an evidence-informed approach; 3) promoting strong partnerships and intersectoral collaboration; and 4) adopting a

rights-based approach. These new strategies focused strongly on health promotion policies and interventions for providing a happy life for children and adolescents.

Sexual abstinence is an accepted method to encourage the health promotion approach with Muslim adolescents. Therefore, it is important to understand introducing sexual health education for spiritual development in Muslim community. The way to develop the Islamic model for strategy should be encouraged among early Muslim adolescents. Most of studies in Thailand emphasized factors affecting safer sex behavior in middle and late adolescence (Khumsaen & Gary, 2009; Rasamimari et al., 2007; Wayuhued, Phancharoenworakul, Avant, Sinsuksai, & Vorapongsathorn, 2010). A few studies were conducted on sexual abstinence among Muslim female adolescents (Supametaporn et al., 2010; Panurat, 2009; Bencharat, 2010). These findings are insufficient for exploring, understanding and acting with sexual abstinence in the Muslim community.

As mentioned above, the way of sexual health education to promoting sexual abstinence presents great value among Muslim adolescents. Sexual abstinence is an accepted way to encourage the health promotion approach. Therefore, it is important to understand the introducing of sexual health education for personal development in the Muslim community. At the International Conference on Population and Development (ICPD) in Cairo in 1994, addressed “Recognizing the rights, duties and responsibilities of parents and other persons legally responsible for adolescents to provide with the evolving capacities of the adolescent, appropriate direction and guidance in sexual and reproductive matters” so an important challenge facing educators is to assure that adolescents will be healthy people. Addition to the

ICPD Beyond 2014 International Conference on Human Rights, general assembly was still highlighted the action in improving access to information, education and services on sexual and reproductive health with human right.

In addition, the Prevention and Solution of the Adolescent Pregnancy Problem Act, B.E.2559 (2016) in Thailand was proposed for solving the repeated number of births among adolescents aged 10–19 years. This law focuses on adolescents' rights and adolescent pregnancy prevention. They need access to accurate reproductive health information and services in greater promotion of the rights and sexual and reproductive health. Schools must offer knowledge of comprehensive sexuality, be consultants on adolescent pregnancy prevention and allow teen mothers to continue their studies at school until graduation. Thus, parents and adults need to provide space to discuss sexuality with young adolescents for unintended pregnancy prevention, including the rights to continue education, social protection and referral services for teen mothers.

For the process of experiential learning, this approach was engaged in adolescents' direct experience and reflection for gaining knowledge and new skills, with understand values by collaborating and reflecting. The five steps of experiential learning consists of (Experiential learning, n.d.):

1. "Experiencing/Exploring" is defined as "learning from the experience by performing or doing on experience".

2. "Sharing/Reflecting" is defined as "sharing experience through a set of self-reflection prompts, reflect feelings from the past experience through the future".

3. “Processing/Analyzing” is defined as “discussing, analyzing and reflecting their experience related to future experiences and discuss the way to accomplish or overcome the problems”.

4. “Generalizing” is defined “the step provide “real life” principles that connect the experience with real life”.

5. “Application” is defined “raising issues that it can be useful or not in future situations. The improvement for effective behaviors will be learned”.

The instructor acts as facilitator, and adolescents will choose to engage in the learning experience by themselves.

Thus, the collaboration from stakeholders is very important to encourage adolescents in focusing on their future and academic success, which reduces their involvement in risky sexual behavior (Kogan et al., 2013; Yu, 2012). According to MacDonald (2012), the participatory action research (PAR) is traditional social sciences that seek collaboration by stakeholders. The complexity of relationships indicates the need for research study by using a PAR approach. The finding will gain knowledge for action, promote intention of sexual abstinence behavior and health practices to Muslim females adolescent and support sustained efforts and also provide a greater understanding and awareness for nurses.

Critical Social Theory and Action research

The philosophy underpinning the study is critical social theory that contributes to action research. Critical social theory guides researchers to know how

to operate in social, cultural, and economic contexts including the ways people act in everyday situations (Kemmis & McTaggart, 1988). This study adopted critical social theory as the research methodology to develop the basis of knowledge by the researcher in social sciences (Holter & Kim, 1995).

Critical social theory is “a multidisciplinary knowledge base with the implicit goal of advancing the emancipatory function of knowledge”. Habermas (1984) explored critical social theory with two aspects: 1) a metatheoretical theory; and 2) a theory of communicative action. This approach promotes interpersonal understanding and the action of the participants on their own individual successes along with mutual understanding and harmonious interpretations (Habermas, 1984). Therefore, the researcher has to realize how the participants produce the reasons and contribute to the emancipation (Kim, & Holter, 1995).

In nursing science, the critical social theory expanded health vulnerabilities to include health problems by encouraging the role of criticism in the development of nursing knowledge. The theory emphasizes a review on nursing practice for solving problems (Kim, & Holter, 1995). In this study, critical social theory highlights the connection between social systems and person for empowering and emancipating among participants to improve their situation.

Action research can be referred as “collective, self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices” (Kemmis & McTaggart, 1988). The objective of action research is to enhance practice based on the evidence gathered changes, and to participate and collaborate through involving the people who, in turn,

take actions to improve their own health. Action research has been developed over time since 1993 and focused on raising awareness and empowerment.

The theoretical root of action research was developed by Dewey (1933) who created a model for reflective thinking. The participation of all parties is important strategy in this model. In 1946 Lewin used 'action research' for generating knowledge about a social system. Action research was applied to problems in American industry conflicts. From 1980, Grundy, Kemmis and McTaggart predisposed the development of action research in health care settings. Action research was developed over time and focused on raising awareness and empowerment. Action research proposed for closing the gap between theory and practice (Holter & Schwarz-Barcott, 1993) presented in nursing and education.

This philosophical framework of action research is informed by a critical social theory that deliberates the development of knowledge as "a consciousness-raising, and liberating act" (Wicks, Reason, & Bradbury, 2008). Based on realism, this theory is a view of truth as universal and independent of human perspective. The critical social theory paradigm on the epistemological, the researchers consider observation to be subjective and mediated by value. The important of transforming the epistemological standards of judgement was focused (Wicks, Reason, & Bradbury, 2008). Methodology reflects its ontological realism and epistemological subjectivity. The aim of this is to inspire those who are always rejected from the process of notifying, so that research participatory for social improvement is made (Habermas, 1984).

There are three main aspects of action research, consisting of the technical collaborative approach, the practical/ mutual collaborative approach and the emancipatory/ enhancement approach (Holter and Schwartz-Barcott, 1993; Grundy, 1982).

1) Technical Collaborative Approach.

The objective of the researcher is the examination of a specific intervention based on a pre-specified theoretical framework. Technical facilitator is the cooperation between the researcher and the practitioners. In this approach, the researcher identified problem and a specific intervention. The practitioners are asked to gain interest and agreement to facilitate in the research. The result from this approach is predictive knowledge for validation and refinement of existing theories that is essentially deductive.

2) Practical/ Mutual collaborative Approach.

The researcher and the practitioners work in partnership to find potential problems, and possible interventions from understanding the problem and its causes. The practitioners elaborate a new understanding of their practice and the changes of implementation. Generally descriptive, the development of new theory and inductive approach are generated from this approach.

3) Emancipatory/ Enhancement Approach.

Using this approach, there are two aims for the researcher, the first is to raise the understanding between the actual problems encountered by practitioners in a specific setting, the theory used to explain the problems, and problem resolution.

The second is to support practitioners in identifying and making clear basic problems by “raising their collective consciousness”. The philosophical base is critical sciences. There are three steps of the development of action-orientated critique: theory, enlightenment and action (Grundy 1982:358). The focus of collaboration is mutual emancipation. The researcher facilitates the discussion on assumptions and values and incorporates with the practitioners in critically reflecting on their practice. The changes on personal and cultural norms was emphasized that can be achieved and sustained. Two kinds of knowledge, descriptive and predictive, emerge out of this collaboration.

The principles of the action research approached the participatory character, democratic impulse, and simultaneous contribution to knowledge and social change (practice) (Carr & Kemmis, 1986). There are many features followed by researchers working with and for people (participatory), researchers and non-researchers focus on generating solutions to practical problems, research process engaging and empowering people in improvements, and solutions emerge from the doing research process and of sharing the data with stakeholders (Kemmis & McTaggart, 1988).

Action research was developed by Kemmis and McTaggart (1988). They proposed a series of cycles that are performed such as in a spiral model, this model is consisted of 4 phases: planning, acting, observing and reflecting.

Planning: It involves presenting the decision to act in specific issue and questions in three stages. To clarify the questions, identify the actions and develop an action plan, the planning step will be tried out.

Acting: This stage involves the actual implementation of the new idea or change. The researcher will put effort into emerge the plan in action research cycle and feedback the plan to modify the plan.

Observing: Observation is established while the action step is taking place. The researcher should monitor what happens closely. In this step, the researcher uses various techniques to collect data. The observation requires seeing at what is occurring and explaining correctly.

Reflecting: During the action research cycle, reflection will be undertaken to help the researcher to come up with new ideas. In analyzing, synthesizing, interpreting, explaining and drawing conclusions about the planning, reflection will implement the effect of change and integrate any new ideas in this step. There are three forms of reflection which are critical to action research, they are content, process and premise.

Action research generates knowledge and focuses on promoting social and organizational change at the same time (Reason & Bradbury, 2001). It provides change and helps practitioners for researching in specialty areas. Working with participants in this way is non-hierachical and non-exploitive and offers to make changes and decrease the theory-practice gap. This methodology will provide an appropriate method in terms of improving the quality of health promotions, generate practical knowledge in increasing the standard of nursing and nursing services (Holloway & Wheeler, 2010). Action research will be applied in this study based on its usefulness in improving practice through changes. It will be expected that changes in the current promotion of health will result in developing this model. This model

will help to improve nursing services for the intention of sexual abstinence behavior among Muslim female adolescents, it will become sustainable at last. Action research can be useful for encouraging openness, self-criticism, and reflection in participants. Thus, this method will empower participants to take control of their own work in their situations and gain knowledge from practice. These are the reasons for using action research in my study.

In summary, the action research can apply to support and encourage as well as provide guidance for group effort and the chance for participants to improve their skills in communicating with youth. In this study, the emancipatory approach is chosen and involved all stakeholders at school (Muslim female adolescents, teachers, guardians, and nurses) to develop an appropriate model of Islamic-based nursing for intention of sexual abstinence behavior. This methodology can provide Muslim communities in developing a model to empower adolescents to abstain from sex. Islamic sexual morality will be used as a core component to provide comprehensive understanding of being, knowledge, and values in sexual abstinence intention. This will be useful to generate an Islamic-based nursing model for intention of sexual abstinence behavior among Thai Muslim female adolescents.

Chapter 3

Research methodology

This chapter presents the research design, study setting, participants, ethical consideration, instruments of data collection, research process and data collection, data analysis, and the trustworthiness of the study.

Research Design

The research design of this study was to develop an Islamic based intention of sexual abstinence behavior model for Muslim female adolescents. In this study, participatory action research (PAR) following the emancipatory approach was applied to promote critical consciousness and change. This research approach was conducted to empower the subjects of social inquiry, and not to objectify. To empower is a basic aspect of all research connection to reduce a power imbalance and empower respondents through research. This method decreases the gap between theory and knowledge, issues, and experiences in the current situation (Berg, 2009). The methods and procedures of the research are based on a critical social theory. Therefore, the researcher and the participants gained an understanding and better comprehension of the basic problems related to the intention of sexual abstinence behavior by increasing their collective consciousness. The emancipation and empowerment provided the participants with participation and change strategies. They participated in analyzing their problem related to their intention of sexual abstinence,

made decisions by themselves and achieved their own understanding of their practices after having carried them out (Kemmis & McTaggart, 1988).

PAR involves people being responsible for action in improvement, collaboration, and organizational changes by using a systematic learning process. The researcher acted as a facilitator to create new knowledge from working together with the participants. The participants could identify and view their cultural practice to develop an intervention for the intention of sexual abstinence behavior. Finally, seeking to explore the phenomena, empowering people and changing for the better arose by conducting PAR.

Study setting

This study was conducted at an Islamic private school that is located in one province in the south of Thailand. Most Thai Muslim adolescents in the southern borders of Thailand are bilingual, speaking both their native tongue (Patani Malay or Yawi) and formal Thai language. This school is a not-for-profit educational institution that is different from other compulsory schools in Thailand. The development of the education system of this Islamic private school came from an Islamic Boarding School. The Ministry of Education provided Contemporary Islamic education combining religious education with the national Thai curriculum (Liow, 2009).

The goal of education in an Islamic institution is to maintain the teaching of Islam along with secular values, and this is one of the main reasons in the decision-making of Muslim parents in sending their students to an Islamic private school (Wisalaporn, 2009). The basic thought framework within all aspects of the

human being consists of faith, devotion, and good deeds. There are three basic teachings that are developed from “faith related to matters of belief in God, laws related to matters of behaviors, and good deeds related to good behaviors”.

This school provides education from primary school to high school. The primary school building is located next to the high school. There are boys and girls. The timetable in the classroom consists of compulsory religious subjects in the morning from 8 am to 12 pm. and from Tuesday to Saturday again in the afternoon from 1 to 4 pm. The semester breaks depend on religious festivals (Eid’s day or Hari Raya day). The attendance rules do not permit students to go out of school before class has finished unless their guardians pick them up. The Islamic principles are followed in school regulations, for example, in regards to students’ uniforms, female adolescents wear long dresses that cover their entire body except for their face and hands, and boys wear a shirt and long trousers. Between girls and boys, the activities are separated including sitting in class, places for eating at lunch time, parking zones, and different days for sport.

With regard to school location, the school has many places surrounding it. There is a mosque located next to the school. Furthermore, there are several entertainment areas (i.e., pubs, bars, karaoke businesses, motels or resorts) which are located around seven kilometers from the school or around twenty minutes travelling by motorcycle. The beach is located on the opposite side of the school which is a popular dating spot for students at nighttime. This school was selected for this study due to its preserved Islamic traditions.

Participants

The participant selection in action research requires persons who can provide the most relevant information. Participants in this study comprised of Muslim female adolescents, teachers, mothers/ fathers and/ or guardians and nurses. The key participants consisted of Muslim female adolescents. Associated participants consisted of teachers, guardians and nurses.

Muslim Female Adolescents

The 12 representative Muslim female adolescents were from a high school (private religious Muslim school). The criteria for selection were 1) being a Muslim female adolescent aged 12-14 years, who was studying in Grade 8 at the time of the study; 2) can communicate in either the central or southern Thai dialect and has speaking skills; 3) willingness to participate; 4) is a student leader in the class or is chosen by peers or a teacher in the class; and 5) has parents who agree to participation in the study after receiving a letter of invitation.

Teachers

There was one teacher (class teacher) who had worked at the school and two teachers who had experience in teaching and working with issues related to sexual health.

Mothers /Fathers and /or Guardians

A total of 5 mothers, fathers, and /or guardians were invited to participate in the study. The selection criteria were: 1) lives near the school, and 2) can communicate in either the central or southern Thai dialect.

Nurses

Two public health nurses, who had worked in the district health promoting hospital in Tanyoungluloh district, were asked to participate in this study. They had experience in teaching students about health education and reproductive health. They coordinated with the teachers in order to provide scientific information related to sexual health and reproductive knowledge at the high school once a year. Their major roles were providing health care services and health education both in the community hospital and the community including health promotion (such as family planning, child and maternal health care, teenage pregnancy and screening for health assessment) and home visits.

Ethical Consideration

The Institutional Review Board (IRB) of the Faculty of Nursing, Prince of Songkla University reviewed and approved the procedures in the study. The permission from the school administrator was provided for the teachers. All participants were informed clearly of the objectives of this study. The researcher protected the identities of participants by maintaining anonymity and confidentiality. The researcher made it clear to participants that they had the freedom to withdraw at any time if they so desired.

The responses of adolescents, teachers, guardians and nurses were recorded anonymously. Information about adolescents' names and the school's name were coded. Written assent (see appendix E) was gained and adolescents who decided to participate in the study were asked for written permission from their parents or

guardians. The researcher distributed the informed consent form (see appendix E) and information sheets to adult participants prior to data collection. The protocol in this study was given to participants, and the risks and potential benefits in participation were described. The researcher emphasized that the study would not affect their scores.

Information about the participants' names was coded. The consent form was gained from those who decided to participate in the research study. Data photographs and faces were covered. To ensure confidentiality, all information that was collected from all the participants was used in this research only. The data were deleted after the completion of research. All data in audiotapes, transcriptions, field notes, pictures and files in the computer were kept confidential and were stored in a secure container.

Instruments of Data Collection

The instruments for data collection were the researcher, personal data forms, in-depth interview guidelines, focus group interview guidelines, observation record forms, a personal life checklist based on Islamic principles, sexual abstinence intention questionnaire, audiotape-recorder and camera.

1. Researcher

The researcher has worked as a lecturer in the Pediatric Nursing Department at the Faculty of Nursing, Prince of Songkla University, Pattani Campus. The researcher is Muslim and lives in a Muslim community, and therefore has an understanding of the Muslim lifestyle of adolescents. As she already works closely

with the people around the study setting, she has been accepted and is respected and therefore is able to garner their cooperation. Moreover, the researcher prepared to be a qualified researcher by studying in an advance qualitative data analysis course at the Faculty of Nursing, Prince of Songkla University. This course provided 30 hours to practice in data collection procedures and data analysis.

Although the position of the researcher as a “cultural insider” can make it easier to conduct a study, there are some disadvantages for such a researcher (Suwankhongl, & Liamputtong, 2015). When the researcher conducts the research within familiar sociocultural contexts, the researcher may assume commonalities of experiences and knowledge and jump to conclusions. Consequently, an important issue in the study may be the loss of adequate explanations regarding the situation being studied. This issue can have an influence on the results of the study in a way that impedes the rich explanations of the occurrence under investigation (Ergun & Erdemir, 2010).

2. Personal Data Forms

The Personal Data Form has been developed by the researcher for collecting the background data on female adolescents such as age, grade level, GPA, religion, parental educational level, parental marital status, and personal income. The Personal Data Form for teachers, guardians and nurses was used to collect data from the participants of the study. For teachers, age, subject taught, number of years of teaching, and other responsibilities for adolescents were assessed. These questions included information about age, marital status, educational level, number of children, and the family income of the mothers or fathers (see appendix D).

3. Interview Guideline

The Interview Guideline consists of open-ended semi-structured questions for Muslim female adolescents and teachers. Two Interview Guidelines were developed consisting of: 1) Interview Guideline for key participants (Muslim female adolescents); and 2) Interview Guideline for associated participants (teachers, guardians and nurses) (Appendix A).

4. Focus Group Interview Guide

This Focus Group Interview Guide for the adolescents (Appendix B) assessed needs and obstacles in promoting intention of sexual abstinence behavior and also the need for change to a better way. It focused on three main aims; 1) To learn about what helps girls to abstain; 2) To learn about personal sexual health information; and 3) To learn about the circumstances that motivate a girl in the intent of sexual abstinence behavior. The focus group interview guide was applied to gain information at the beginning of each cycle as well as for the participants' opinions during the research process, and any action for change in the following cycles.

5. Observation Record Form

The Observation Record Form has been developed to record informal conversations and interactions among the participants. The physical setting and behavior of the participants were recorded in note form. Documentation of participant observation data took place during the interviews and focus groups throughout the data collection (Appendix C).

6. Sexual Abstinence Intention Scale

Chareonsuk's et al., (2013) The 'Parent-Daughter developed Behavior Sexual Abstinence Communication Questionnaire' and the 'Sexual Abstinence

Intention during the School Years Questionnaire' are instruments used with Thai girl students in grades 7-9. This instrument consists of 168 items and has been tested on 470 Thai girls students aged between 12-16 years. The reliability of this instrument was established by Cronbach's alpha, which ranged from 0.70 to 0.96 in the previous tests.

The researcher modified the self-report questionnaire based on the studies of Chareonsuk et al. (2013) (permission to use and modify the instrument was allowed by Chareonsuk), modified by pilot testing and renamed as "Sexual Abstinence Intention Scale" in this study (Appendix G). The Sexual Abstinence Intention Scale consisted of 94 items. The researcher deleted items from the original instrument that were not related to Islamic culture and changed some words to focus on Muslim female adolescents. Three experts in gender, and sexual behavior of adolescents reviewed and approved the contents of the modified scale. The content validity index (CVI) of the questionnaire was acceptable (.80).

The questionnaire was divided into two sections as follows:

1. "The Sexual Abstinence Communication Questionnaire" comprised of fifteen items measuring adolescents' perceptions about the negative outcomes of sexual initiation, parent-daughter communication related to suitable manners (such as dressing, avoiding risky situations) and "good girl" characters. This tool was rated by a 3-point Likert scale (1=Never to 3= Often). Total possible scores ranged from 1-45 where a higher score reflected greater sexual abstinence communication between parent and daughter.

2. "The Sexual Abstinence Intention during the School Years Questionnaire" is comprised of the four main constructs: a) *Behavioral Beliefs*: These

were composed of 16 behavioral beliefs subscales and 16 outcome evaluations subscales, and were rated on a 3-point Likert scale. Behavioral beliefs were measured on a 3-point self-report scale (1= Disagree to 3= Agree). Based on the importance of the level of sexual abstinence, outcome evaluations were rated 1= Unimportant to 3= Important. Total scores ranged from 2-96 and a higher level presented greater in positive behavioral beliefs. *b) Normative Beliefs:* These were identified in two subscales containing 10 normative beliefs and 10 types of motivation to comply, and were rated on a 3-point Likert scale. Normative beliefs were rated 1=not to do to 3= do and motivation to comply was also assessed by a 3-point scale (1=little to 3=much). Total possible scores ranged from 2-60 where higher scores represented greater influence of others on sexual abstinence behavior. *c) Control Beliefs:* These were two subscales comprising of 10 control beliefs and 12 perceived power items, and were rated on a 3-point Likert scale. Control beliefs were rated 1= difficult to 3= easy and perceived power was also rated on a 3-point scale (1= unlikely to 3= likely). Total possible scores ranged from 2-66 and higher scores showed higher perception in sexual abstinence intention. *d) Sexual Abstinence Intention:* There were four question related to sexual abstinence intention rated on a 3-point Likert scale. The higher possible scores presented higher in intention of sexual abstinence with total possible scores ranging from 1-9.

7. Digital voice recorders and camera

A digital voice recorder, Sony ICD-UX543F, was used to record the participants' communication during the interviews and focus group discussions. To concentrate on a specific activity, a camera also was used to record visual data throughout the research process.

Data Collection Method

Data collection methods consisted of in-depth interviews, focus group interviews, and participant observations. These methods were conducted throughout the research process. Questionnaires provided baseline data about sexual abstinence intention among adolescents.

In-depth Interview: This interview method was designed to explore the phenomena of the participant's viewpoint on this research topic (Mack, Woodsong, Macqueen, Guest, & Namey, 2005). The participants can express their thoughts or beliefs in their own words (Esterberg, 2002). This helps the interviewer to understand the way in which people interpret particular events. In this study, each adolescent, teacher and mother and /or father was interviewed by probing questions to gain an insight into their perspective related to the topics of the study. Interviews are also especially appropriate and collect specific information for addressing sensitive topics. The interview focused on the viewpoint of the interviewee in their understanding of the intention of sexual abstinence behavior. The questions included "Tell me what having sex means" and "What is an appropriate time to have sex?" and were asked of Muslim female adolescents, guardians, teachers, and nurses. The next interview was conducted at the end of the study. It focused on asking the questions related to how the participants' perspectives had changed throughout the study. The questions were "What changes do participants perceive as a result of their involvement in the program?" (Appendix A). The interviews took around 45 minutes to one hour, and were tape-recorded. The tape recorder was used throughout all in-depth interviews.

Focus Group Discussions: From this an understanding was gained of what was the generally accepted opinion among the group and this data collection method enabled the collection of a large amount of data in a short period (Mack et al., 2005; Esterberg, 2002). Within this study, the participants who were Muslim female adolescents, teachers, and guardians were asked to share their views on the current situation. An example of the questions for teachers included “What do they teach adolescents in promoting the intention of sexual abstinence behavior for Muslim female adolescents?” and for guardians “How often do you talk about sexual abstinence behavior?” and for all groups “How can Islamic principles be modified to solve this problem?” (Appendix B). The focus group discussion took around 60 to 90 minutes and was conducted in a private room. The participants were involved in a debriefing session, and prepared for the next focus group. The following focus group discussion occurred at the beginning of each cycle for exploring the participants’ feelings and opinions of their involvement in each cycle of the study, the problems faced while participating in the process, and suggestions/strategies for improving the intervention in the next cycles. The questions included “What are the strategies, processes and attitudes that can effectively change management?”, “How to improve and decide on the next step?” (Appendix B).

All focus group meetings were tape recorded. Audiotapes were transcribed verbatim by the researcher and checked with the participants to validate the data in each cycle. The data gained in each cycle was provided as a norm regarding the concerns or responses provided by the participants to propose or implement actions. A debriefing session was held for the researcher after each focus

group. The findings in the adolescents' group were shared with the adults for their thoughts on the findings.

Participant Observation: This method helped the researcher to deeply understand and provided a clear picture in the context of the study during the process of collecting data. The verbal and nonverbal responses including interactions in female adolescents with other participants were recorded during the period of diverse activities in the classroom. These activities included teaching activities of school teachers, communication and relationships between Muslim female adolescents and school teachers in the school, and communication and relationships between female adolescents and their mother or father when they had activities in the school. Also, body language, moods, or attitudes, the general environment, and other information were noted (Appendix C). Data on various events with different dates, times and places during the research process were noted briefly and written down using keywords during the data collection process and it was expanded on later. This method of observation was undertaken during data collection and analysis and in conjunction with other methods. Data were noted on the observation record form (Appendix C). The objective notes and any situation changes were noted for gaining an understanding of the relationships among the participants including behaviors and activities during the progression of the study.

Research Process

The research process in this study was allocated into two phases as following: preparation phase and action research phase. The preparation phase

included the literature review and pilot study. The action research phase encompassed planning, acting and observing, reflecting and revising plan.

1. Preparation phase

The preparation phase consisted of three steps as follows:

1.1 Reviewing the existing literature

To develop an Islamic based nursing model, a literature review was performed to survey scholarly articles, books and other sources. This survey involved sexual abstinence, intention related to a sexual abstinence program, educational program, experiential learning, PATH and abstinence-only programs in adolescents and Islamic sexual morality of Islamic philosophy to find the gaps of knowledge and to gain ideas to focus on in the research study. From this, the tentative model of the intention of sexual abstinence behavior was developed and is shown in Figure 3.1.

1.2 Pilot study

The purpose of this pilot study was to build rapport, test the data collection process, gain assurance in participatory action research techniques, and to develop and implement the tentative model as well as training for the researcher in action research.

The pilot study was conducted with two Muslim female adolescents, two teachers, one guardian, and one nurse who were recruited in the pilot study. They joined to share information, identify and define problems, discuss their needs, and how to solve the problems based on the Islamic perspective.

The overload of teaching classes for two teachers was considered to be an obstacle in promoting sexual abstinence. They taught many class at Mattayom 1 to six in health education. The preparation for interactive teaching was decreased in the

classroom. For guardians, they worked hard, spoke less with their adolescents and controlled their adolescent's behavior. The nurse's role in a public health promotion hospital was emphasized in vaccination and antenatal care clinics, while sexual health promotion was ignored.

The data from the pilot study presented four issues in this study. One issue was less positive communication between Muslim female adolescents and guardians. For teachers, a less interactive teaching method and workload in teaching hours were the main issues in encouraging the intention of sexual abstinence. A less open channel in communicating about sexual health for Muslim female adolescent was a nurse's issue. The primary Islamic approaches and participant activities for intentions related to sexual abstinence program application were performed in developing the model through action research process.

1.2.1 Building rapport

The beginning of this phase started with participants meeting, and building a good relationship with each other. To build rapport between the researcher and the participants, a positive relationship was built by joining in school activities. A chance to build rapport was provided through informal discussion among the participants. Then, the purpose of the study and research process was described to collaborate in the group process and empower the participants. The researcher gained more information related to intention related to sexual abstinence issues and studied the feasibility of requirements from the participants.

1.2.2 Testing the data collection process

The focus group discussions and in-depth interviews were conducted after having built a good relationship and having been accepted by the

participants. While the interviews and focus group discussions were performed, field notes were done to capture the non-verbal information. The in-depth interviews were conducted with two Muslim female adolescents, two teachers, one guardian, and one nurse to explore their perspectives. It focused on the situation and perspective of early sexual initiation. The interviews took 30-45 minutes and were tape-recorded. The meaningful data were identified and categorized in order to develop a tentative model. Content analysis was conducted to analyze the data.

1.2.3 Develop a tentative Islamic based nursing model

A tentative Islamic based nursing model had been conducted by the researcher and participants based on the concept of sexuality and concept of modesty in Islamic sexual morality. This model was modified based on the data collected in conducting the pilot study. To fit with this context in this study, any changes and modifications were conducted while the model was used on the participants.

Islamic based interviews were conducted with Muslim female adolescents, teachers, guardians, and the nurse to gather their perceptions and experiences of intention related to sexual abstinence program which they have used and the outcomes e.g. Muslim female adolescents identified barriers specific to their own intentions and strategies that helped them address those barriers, teachers addressed the obstacles specific to activities and identified strategies in teaching, guardians addressed the obstacles in specific activities in communication about sex, and the nurse addressed the channels of communication to promote sexual health among Muslim female adolescents. The researcher, Muslim female adolescents, teachers, guardians and nurse analyzed and formulated a primary tentative intention of sexual abstinence program while the religious leader considered and approved the

Islamic content in the program. Evaluation of a primary tentative intention was performed.

Lessons learned from the preparation phase

Participation in the development of the model was practical to the context of the participants. There are several benefits from the preparation phase, which were building rapport, improving understanding, developing the tentative model, and developing the model. Moreover, the researcher explored the school policy that might affect the research process, and model. Importantly, the researcher gained experience in conducting the action research process.

2. Action research phase

The tentative intention of sexual abstinence behavior in adolescents was implemented with reconnaissance, planning, acting and observing, reflecting, and plan revising. Lastly, revising the model in the cycle was done step by step, until at least a minimal outcome was gained in the intention of sexual abstinence behavior in Muslim female adolescents. The steps of the tentative intention of sexual abstinence behavior implementation are as follows:

2.1 Reconnaissance stage

The goal of this phase was to establish the relationship between the researcher and the participants by informal conversation. This stage was provided as a chance for spending time together in building trust and relationships. The researcher introduced the concept of Islam and experiential learning including encouraging the participants to identify problems about the intention of sexual abstinence in the setting.

2.2 Planning

To accomplish the objective of this phase, the researcher followed a series of steps in action research. This step was conducted to plan action and identify the problem and strategies for the plan. For example, strategies for teaching techniques and needs related to teaching for the teacher, receiving training in life skills, attendance or participation in class and on assignments among Muslim female adolescents and also communicating about sex for guardians.

According to the preparation of experiential teaching method for teachers, the researcher explained the principle of experiential learning. The steps of the experiential teaching were identified and demonstrated as teaching method to teachers of small group of Muslim female adolescents. The application of that learning to other experiences or situations was presented and clarified to teachers. The researcher provided a guidebook for teachers (Appendix F). The researcher provided step-by-step instructions in every session including the use of materials supplies needed for activity, for basic knowledge, step of actions for conducting activity, questions suggested for participants' experience, and recommendations activities. Importantly, the Islamic sexual morality was integrated in contents of each session.

Lastly, the researcher and participants planned to establish on-going contact with an individual or group based on their interest and reflection for improving practice. The researcher supported the participants in moving towards the plan.

2.3 Action and Observation

The objective of this phase was to conduct the activities following the plan mentioned in the prior phase to develop the model. While implementing this

phase, the researcher observed and took notes on the participants' behaviors and communication throughout the roles. In addition, the Muslim female adolescents were asked about the personal life checklist based on Islamic principles. All the participants were involved in this step.

In the case of the participants who needed more skills or preparation for conducting the activities with the Muslim female adolescents, such as teachers needing to learn about the experience learning method for teaching, or guardians who needed more skill in communication, the researcher contacted the experts in those areas to provide information and training.

2.4 Reflection

After the acting and observing phase, the participants altogether shared ideas, discussed, and evaluated the outcomes and also problems gained from the implementation of the program. The researcher encouraged all the participants to reflect on their opinions and feelings in implementing the program. Questions asked in this focus group included: "How do you feel after doing your activities?", "What barriers did the participants face?"

Comparison of the initial plan with the actual situation and the identifying of obstacles and facilitating factors for the implementation plan were discussed by the participants.

2.5 Revising Plan

After participants' observations and reflection, participants were asked to analyze the program and revise the implementation to plan for the next cycle.

Then, the second cycle was conducted following 4 steps; 1) planning 2) acting and observing 3) reflecting. Finally, a tentative model of the intention of

sexual abstinence for Muslim female adolescents was established. Questions asked in this focus group included: “How to refine the action plan and decide on the next step?”

After completing the two cycles, a minimal outcome was expected. Therefore, the refinement of the model was shaped later after the study.

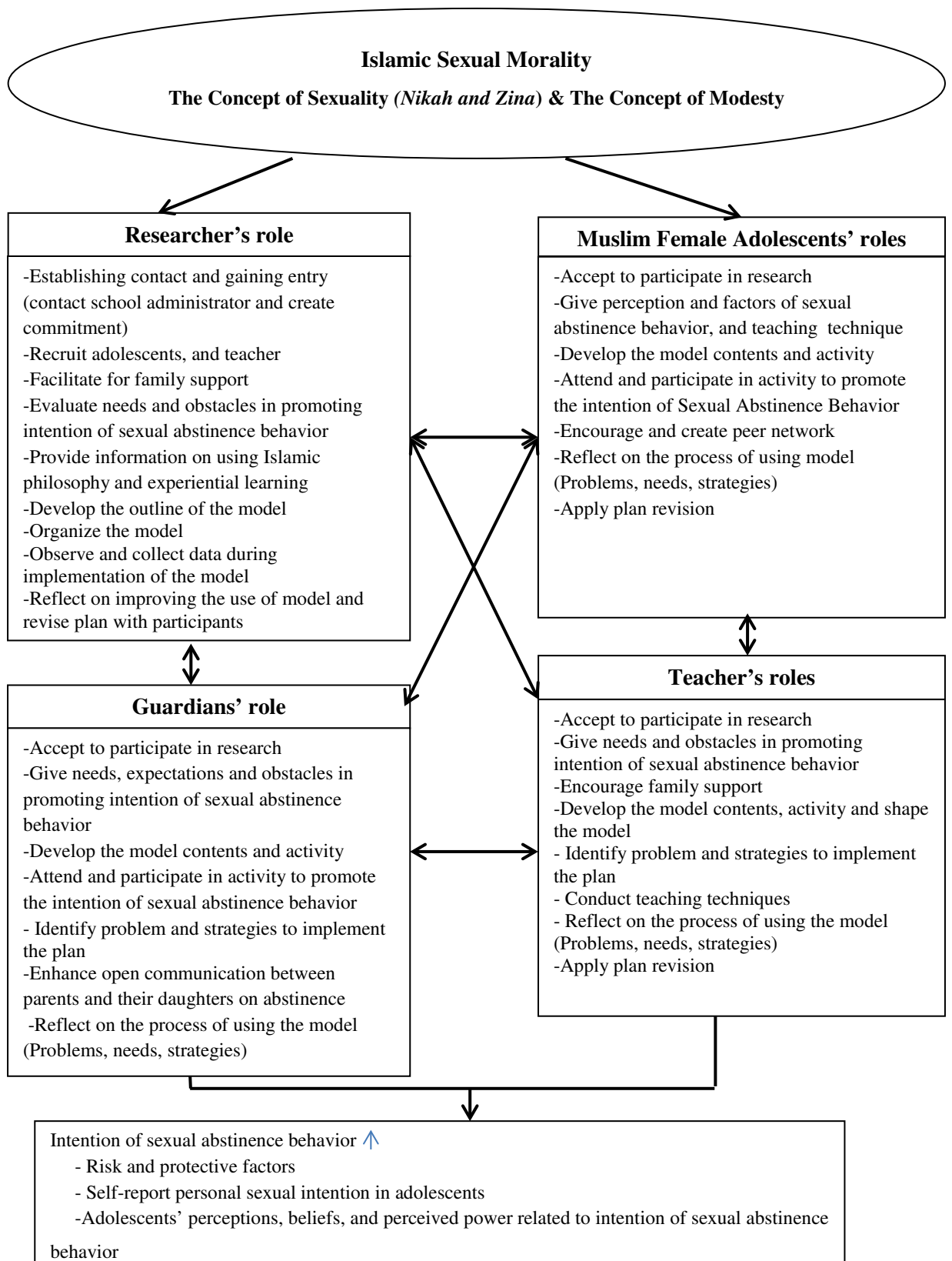


Figure 3.1 The tentative model of intention of sexual abstinence behavior

Data Analysis

Data from the Muslim adolescent females' socio-demographic characteristics were analyzed by using descriptive statistics: frequencies, percentages, means, and standard deviations. The intention to sexual abstinence behavior among Muslim female adolescents both before and after implementing the tentative model was measured by paired t-tests. The sexual abstinence intention questionnaire was provided to the adolescents before and after implementing the tentative model.

Data from the in-depth interviews, focus group interviews and observations were analyzed by using the content analysis at the early stage of the data collection. The 5 steps of content analysis of Miles and Huberman (1994) were used to analyze the data as outlined as follows:

1. Read all subject descriptions to deeply understand the whole situation.
2. Identify and categorize the meaningful data that addresses and directly answers the research question or is relevant to the factors.
3. Create sub-themes and themes of each concept by critical thinking.
4. Create a rich description with information.
5. Conclusion with verification by member-checking.

The data from each phase of research process were evaluated as follows.

The data of understanding the situation

The information from interviews and field note records and transcribed information from digital voice recordings were analyzed using the content analysis to summarize the current situation. Data from the Muslim female adolescents' socio-demographic characteristics were examined by using descriptive statistics: frequencies, percentages, means, and standard deviations.

The data of developing program

The information from focus group discussions, interviews and field note records and transcribed information from digital voice recordings were analyzed to conclude the process of program development, the program components, and the program implementation. All data were analyzed into categories and groupings by using the content analysis.

The data of program evaluation

The information from focus group discussions, interviews and field note records and transcribed information from digital voice recordings were analyzed, categorized, and grouped to conclude the data of process evaluation. Data from the Muslim female adolescents' socio-demographic characteristics were analyzed by using descriptive statistics: frequencies, percentages, means, and standard deviations.

T-tests were used to compare the sexual abstinence communication, and intention of sexual abstinence behavior among Muslim female adolescents both before and after implementing the program.

Trustworthiness of data

The integrity of qualitative research has criteria provided by Lincoln and Guba (1985). The trustworthiness of the data was established through the following standards: credibility, dependability, confirmability, and transferability.

Credibility

The researcher approached the participants with prolonged engagement and provided enough time to establish a relationship of trust in the community. Persistent and repeated observation was important for all participants consciously engaged in the data collection activities providing in-depth information and confirmability in their inquiries. Regarding the prolonged engagement, the researcher had previously known and communicated with the nurse director in PCU, as well as some Muslim female adolescents and teachers before conducting the research. In addition, being a Muslim researcher and also using Islamic philosophy was accepted in Muslim society. Moreover, different data collection methods including the reflection and the interviews provided a check on accuracy in the data. Triangulation of the data collection, such as in-depth interviews, focus groups, and field notes, were conducted to confirm the information from the participants. In an attempt to avoid bias, the data were thoroughly reviewed by the researcher, the advisor and co-advisor. The researcher used materials such as a camera and digital voice recorder to collect the data. All the analyzed data were rechecked and confirmed by the participants.

Dependability

A credible process and procedure was exposed to an audit inquiry which can be expanded for an advance study in the future. Information from meetings

with the numerous sources, focus group interviews, field notes, and documentation were provided in regards to the summary findings and the validation of the issue. The researcher compared, refined, and revised codes several times. The procedure of the study and research process was described and validated and also an advisor was consulted to verify data interpretation and to acquire feedback during the data collection. Data collection, analysis, and synthesis were included for audit in this study. Triangulation of data collection, such as in-depth interviews, focus groups, field notes and questionnaires were used.

Confirmability

Participant validation was another way to verify or confirm the accuracy of the descriptions of situations related to the participants in the research. Therefore, selecting a diverse group of participants was used and proper and sufficient quotes of the participants were informed to avoid the prejudice of data analysis by the researcher (Guba & Lincoln, 1985). This was undertaken to help certify as far as possible that the findings in the study are the informants' ideas and the result of their experiences rather than the researcher's ideas. Thus, the researcher had an ethical responsibility to verify the participants' experiences and their perspectives on the elements and themes.

Transferability

Although the results of a technical action research approach in a particular community might not be directly transferable to another community due to the uniqueness of each, this approach had the potential to create insights that are of influence in other settings also. A rich and contextualized description of the phenomena of interest about the participants, contexts and the whole process of the

study were performed so the reader can have a complete understanding and in which the reader may know of other similar environments to transfer the findings from this study into them. The explanation of the contexts, activities, and events were addressed to understand the phenomena and prevent any weakness of the research study. The sharing of existing knowledge around the sensitive issues in this study contributed to the transferability of the process of PAR which may lead to the facilitation of engaging PAR in other Muslim communities.

Translation Issues

The researcher rechecked the translations in this research to confirm the accuracy of the wording verbatim. Interviews were transcribed verbatim in Thai language, then audited for accuracy by a bilingual translator, and back translated. Twelve interview transcriptions in Thai were translated into English in order to analysis the data. The transcriptions of twelve participants were checked and sent to a bilingual translator with expertise in English. The quality of the translation of the interview guides and some of the verbatim answers was confirmed by checking for errors in the transcriptions. Some errors in translation were edited and re-categorized. However, some of transcriptions were not translated into English, the researcher translated the quotes or statements from the participants on the main findings to create categories and provide the research outcomes.

Chapter 4

Findings and Discussions

This chapter presents the results of the data analysis from participatory action research, using the emancipatory collaborative approach. It is based on a spiral process which consists of four steps which include a study of the actual situation, operational planning, implementation, and evaluation, in order to develop an Islamic-based nursing model for promoting the intention of sexual abstinence among Muslim female adolescents. The findings of this study were based on both qualitative and quantitative data analysis and are presented as follows.

1. Demographic characteristics of the participants
2. The model development using Islamic philosophy to promote sexual abstinence in Muslim female adolescents
 - 2.1 Understanding the perception surrounding Muslim female adolescents sexual behaviors
 - 2.2.1 Less interactive teaching learning methods
 - 2.2.2 Perception of sexual relationship
 - 2.2.3 Intentionary way of having sexual abstinence behavior
 - 2.3.4 Difficulties to continue sexual abstinence behavior
 - 2.2.5 Islamic based perspective for intention of sexual abstinence
 - 2.2 Spiral action research process to develop the Islamic-based nursing model to promote sexual abstinence.

First stage: Raising self-awareness through critical thinking within Islamic sexual morality for Muslim female adolescents.

Second stage: Gaining important skills to maintain the intention of sexual abstinence based on the Islamic concepts

2.3 Final evaluation

3. Discussion

4. Contributions to knowledge development

5. Lesson Learned

Demographic Characteristics of the Participants

The participants in this study consisted of 12 Muslim female adolescents, three teachers, eight guardians and two nurses at a health promoting hospital.

Muslim Female Adolescents

The total key participants comprised of 12 female adolescents, aged 12 to 14 years old studying grade 8 in high school; the oldest was 14 years old 6 months and the youngest was 12 years old 7 months. The mean age was 12.89 (SD=0.534). Their current GPA ranged from 2.36-4.00 with a mean of 3.40 (SD=0.587). Their daily allowance (baht) ranged from 40-100 baht with a mean of 61.54 (SD= 18.187). Most of the Muslim female adolescents lived with their parents and siblings, one of the 12 came from a separated family, and another came from a divorced family. Family size ranged from 4-8 people (M=5.54, SD= 1.266). Siblings and relatives spent most of their time talking to their parents, for 4-240 minutes a day.

All Muslim female adolescents studied religion or read the Quran after school. Activities during leisure time included playing guitar, reading books, watching TV, surfing the internet, practicing English vocabulary, cooking, interacting on Facebook and playing sports, most activities took place at home with their siblings and friends.

Muslim female adolescents were most likely to learn about sex health from teachers (92.3%), followed by mother (46.2%) and Ustaz (Islamic teacher) (30.8%). Other sources of sexual health knowledge included their father, public health officers, internet searching, religious leaders, and friends in descending order of frequency. One hundred percent of respondents received information about contraceptive use, followed by menstruation information, 92.3 percent, and information on the impact of premature sex on sexual and reproductive health, 53.8 percent. If they had problems with a friend or had a boyfriend, they usually talked or consulted with their mother (84.6%), followed by friends (69.2%), father and ordinary teachers (30.8%). When they had questions or health problems related to body fluctuations, respondents were most likely to seek counseling from their mother (84.6%), followed by friends (61.5%) and teachers (46.2%). Their perceptions of what kinds of behaviors were allowed included: 92 percent thought they could talk, but not touch each other and the rest 15.4% thought they could hold hands with each other. (All Muslim female adolescents claimed that they had no sexual experiences.

Teachers

Three teachers participated in this study, two males and one female aged 30 to 32 years. All of them were married. Both male teachers had graduated in bachelor programs of physical education and the female teacher had graduated with a bachelor degree of mathematics from the Faculty of Education. Their work experience

ranged from 4-6 years. All taught high school students different subjects and also taught more than one subject. Both male participants taught health education which is relevant to sexual health.

Guardians

Another group of informants were the guardians who are important to students. The demographic characteristics of the guardians were six females and two males. Their mean age was 44.12 and ranged from 36-53 years. All of the participants were married. Four out of eight of the guardians household monthly incomes were less than 10,000 baht, while the others were from 10,000 to 20,000 baht.

Nurses at the health promoting hospital

Two nurses at the health promoting hospital participated in this study. They advocated for the healthcare needs of all patients, including services related to reproductive health. One nurse was a head nurse aged 52 years and another one was senior nurse, aged 43 years. Both of them were married and Muslim. Their work experience as a registered nurse ranged from 10-23 years. The head nurse studied had studied a midwifery program and then graduated to be a registered nurse. She worked at a maternal and child health unit in a district hospital before moving to the health promoting hospital 8 years ago. Her work was related to sexual reproductive health about one to three years ago. As a senior nurse, she worked as a counseling nurse for an HIV clinic at a district hospital for 18 years and worked at health promoting hospital for 5 years.

The model development using Islamic philosophy to promote sexual abstinence for Muslim female adolescents

The process of development of the nursing model appropriate under Islamic philosophy to promote abstinence for Muslim female adolescents was developed from literatures related to the intention of sexual abstinence behavior of adolescents, Islamic philosophy, and the intention related to sexual abstinence program. Moreover, the researcher conducted interviews and focus group discussions to gain ideas in order to focus on in the development of the nursing model. This process comprises the following three sections: 1) understanding the perception surrounding Muslim female adolescents sexual behavior; 2) spiral action research process to develop the Islamic-based nursing model to promote sexual abstinence; and 3) final evaluation.

Understanding the perception surrounding Muslim female adolescent sexual behavior

To study the context of Muslim female adolescent sexual behavior, data were collected from adolescents, teachers, guardians and nurses who were involved. The problems and conditions related to intentional sexual abstinence behavior, included perceptions of sexual abstinence behavior, and the religious factors influencing the intention of sexual abstinence behavior for Thai Muslim female adolescents. As a result qualitative data was collected from 1-2 hour group conversations on twice occasions; the main participants of this study were 12, 12 to 14- year-old Muslim female adolescents in Grade 8 in high school. Furthermore, five

guardians whose adolescents were studying Grade 8 in high school also accepted the invitation to take part in this group conversation. Apart from guardians and adolescents themselves, two health education teachers, one class teacher, and one interested nurse from health promoting hospital, who is an expert in promoting sexual health were included in the data collection procedure of this research. The data can be classified as themes and presented in two parts from discussions.

A reconnaissance phase was conducted to understand adolescents' situations and identify problems that needed to be solved through in-depth interviews, and focus group discussion. The findings from the reconnaissance phase were: (1) less interactive teaching learning methods; (2) perception of sexual relationships; (3) intentionary way of having sexual abstinence behaviors; (4) challenges in continuing sexual abstinence behavior; and (5) Islamic based perspective for the intention of sexual abstinence.

1. Less interactive teaching learning methods

Less interactive teaching referred to the teacher took responsibilities for teaching many subjects with too much contents. There were two categorized: "too much content but less interactive learning method", and "less experiential teaching skill". In this study setting, the classroom atmosphere was found to be uncomfortable and not enjoyable.

Too much content but less interactive learning method. Teachers encouraged students to participate in the classroom and extracurricular activities but the time schedule was limited for interactive teaching learning methods as they stated that:

Teachers always taught on focusing in content and read it in classroom, they seldoms to teach with fun. (Female adolescents 1)

The content is so much. When I taught with activities, it took time and unable to finish in time. Therefore, most of classes were conducted by using traditional teaching...like read the lesson, or explain. (Teacher 1)

Most of the teaching styles were instructed and explained from the lessons, they just read the book and listened. Sometimes, teaching with role-playing was conducted in class, I liked to act and can learn more. (Female adolescents 5)

Less experiential teaching skill In this school, two health education teachers have to teach in this subject at Mattayom 1-6. Middle and high schools are required to include sexual health education as part of health education. It is very difficult to teach all the contents and do the activities within 40 minute per section as one teacher stated:

I tried to motivate my student. I changed the environment from classroom to meeting room and used video as teaching aids. Role-play is a teaching technique that allows students to explore the real situations by interacting with their friends in order to develop experience, such as first aid and self-care when they got sick. Anyway, the time in each class section is short, 40 minutes per sections, I have done the random selection of some groups for role-playing in classroom and cannot make a conclusion at the end of my class. (Teacher 2)

Furthermore, sexual education was emphasized more with senior students. This school has an Islamic education curriculum and general education. In Islamic education, the principle of Islamic studies relating to sexual health was less instructed for junior students, because at this age, students are immature and lack critical thinking. However, sexual health was emphasized to senior students, aged 16-18 at high school level. For example, growth, sexual behavior and lifestyle, teens and self-care, drug disorders in grade 7, teenagers and growth in grade 8, and grade 1 to

grade 12, to promote student health. However, health education was discontinued during the semester.

The teachers, who are Muslim, explained that sexual health education is the part of the health education subject that includes two main topics; 1) growth and human development, and 2) life and family. This subject was taught two hours per week by two male teachers. Teaching techniques included several methods provided to students in the classroom, such as weighing the pros and cons, giving examples of real world problems, story telling with integrating ethics. Teachers often taught weighing the pros and cons of a particular situation in order to link with sexual health decision making. However, it seemed to be traditional, and not interactive for learning, because the teacher focused on content and examination. The teacher sometimes used instructional media such as video in the classroom to create awareness of family problems and abortion. The inadequate instructional media and non-interactive teaching are seen as barriers to teaching.

By observation in the classroom, the religious teacher taught and explained the principle of Islam that relates to sexual health. They taught sexual health by focusing on basis of values (*Akhlāq*). Teachers taught by considering the ethical and values aspects of topics based on Islamic principles to be a good man and avoid sins. With regard to the school punishment, the learning behavior of students was expected to be change. The teacher would seek more information from individual close friends, talk directly with and warn those who misbehaved. If student behavior never improved, the teacher informed parents to monitor and observe behavior changes. Lastly, misbehavior such as sexual behavior issues or drug addiction, by students would be punished, as one stated:

I focus on prevention by integrating ethics because of the religious school system. The policy is focused more on the ethical than general school. The teacher is obligated to clarify if misbehavior is to be punished. When problems were found, the school administrator will go along with school rules. (Male teacher 2)

The integrated Islamic curriculum was announced and proposed to be the school policy in 2016, so the subject of sex education disappeared. Teachers worried, because the knowledge about sexual and reproductive health plays an important role for basic life, thus adolescents might lack formal sex education in the school. For teacher roles, teaching life skill and surveillance method were needed to warn and protect adolescents from approaching to early sex: such as communicating and observing online social media, or writing essays about parents' expectations. The important skill in sexual communication needs to improve for solving sexual problems. The teacher found about the parent-daughter relationship from their essays. This is the way to express adolescent' feelings, teacher understood deeply enough to offer simple solutions on their problems.

Moreover, guardians-teacher conferences were established twice per academic year, at the beginning of each semester to build a strong partnership between guardians and teachers. Parents were invited to come in for regular guardians-teacher conferences at school. A form with the conference invitation was sent to students' homes. Sharing the areas of learning, problems and obstacles of management about their adolescents or school policies were discussed. Guardians and teachers find ways to work together to ensure the student's success. However, guardians still participate less in guardians-teacher conferences, the closeness is needed.

From a nurse's view, the problems of adolescent pregnancy are increasing. Teachers and guardians do not have adequate means involving sex education. With regard to sex education from secondary school to high school, it was a good idea to keep them in school and help them to stay away from this problem. The education for self-protection from school is important to avoid inappropriate sex and pregnancy in young girls. Moreover, parents took key persons to teach sex but they thought that "talk about sex" should be done among female adolescents. Importantly, the participation with family and school is very important for preventing problems. Nurses should promote sexual health for female Muslim adolescents by becoming involved with sex education.

2. Perception of sexual relationship

The perception of sexual relationships conceptualized by Muslim female adolescents focuses on premarital sexual satisfaction. To uncover the perception of a sexual relationship in premarital union, sexual terms were discussed to explore their view points. Each group gave their view about sexual relationships and sexual abstinence. The findings presented that "sexual relationship" in Muslim female adolescents, guardians, teachers, and nurses were sexual intercourse between male and female within married life. For "appropriate time to have sex", it was explained that these terms are based on three factors which are puberty, education line and Islamic religion. The findings from the focus group discussion show that there are two core categories: 2.1) the meaning of "sexual relationship" 2.2) appropriate time to have sex.

2.1 *The meaning of “sexual relationship”*

Muslim female adolescents, guardians, teachers, and nurse mentioned that the meaning is have sexual intercourse, have intimate sexual relations between man and woman, or have sex together to have a baby. Even though some subjects were Muslim lesbians who had female partners, they also defined sexual relationship as meaning between women and men, not between women and women. The Muslim female adolescents mentioned that:

A sexual relationship is sexual intercourse, and having sex together to have a baby. (Female adolescent 1)

As the participants explained, women are very sensitive and emotional, while men desired to dominate. Thus, the man is the one who is able to initiate sex with a woman. Additionally, Muslim female adolescents trusted that women and men are physical different. They believed that men are stronger than women and men should initiate sex, not women.

Men are more powerful and physically stronger than women. In contrast, women are weaker than men. Besides they are emotional and sensitive. Women often trust and follow men if men invite them to have sex. (Female adolescent 2)

For adults, they mentioned that “sexual relationship” is a normal part of human life, but it is allowed for married persons. One father who is a religious leader focused on the biological view that "sexual relationship" related to physical differences between women and men. He mentioned sexual relationship is sexual intercourse between a male and female who are married as he said:

Sex is a woman, a male genital organ, pregnancy, menstruation, and wet dream in male... and having a sexual relationship for unmarried persons is not the way of life in Islam. This issue is a huge problem. If you can marry with the one, you should do. (Guardian 1)

From the teachers view, “sexual relationship” is related to psychological and physical aspects which differ according to gender. They mentioned that a sexual relationship is linked to love, and absolutely love will happen after marriage. Wife and husband will journey through good times and bad times, learning how to sacrifice, forgive and understand each other. Later on, sexual desire is love that one partner will give to another partner. In order to complete family married life, children should come after a sexual relationship. A female teacher stated that:

Personally, love leads to sex...but I would say, true love come after marriage, we share our life and have somethings to do after marriage. We try to overcome the tough times and move forward to have a new family. (Female teacher)

For male teachers in southern Thailand, the Islamic sexual moral perspective is used in the classroom. A sexual relationship is a natural psychological need of human beings for producing the Islamic population, and that is allowed within married life as he stated that:

In Islam, having sex is the normal development to response of physiological needs in human. Thus, sexual activities are allowed for married persons to produce an Islamic population. (Male teacher 1)

Sexual, physical and mental characteristics are different by gender, it means woman, a male, genital organ, pregnancy, menstruation, wet dreams in males, physical differences between women and men, and pregnancy and sexuality...about having sex being a natural human need, but humans should control sexual desire in the proper way. (Male teacher 2)

For nurses’ perspectives of a sexual relationship, one nurse mentioned that sexual relationships in general mean that women and men have sex relationships even though they are unmarried. On the other hand, it is sinful to have sex outside of marriage, this is a serious issue in Islam.

2.2 Appropriate time to have sex

The proper time to have sex has wide disparities among Muslim female adolescent's perceptions and the guardians', teachers', and nurses' perceptions. The perception "appropriate time to have sex" in Adolescents, they viewed the education level and maturation. For nurses concerned on maturity, teachers perceived in the psychological view, guardians focused on education and Islamic religion.

In case of adolescents mentioned the "appropriate time to have sex" is when they have grown up enough to take care of themselves or have graduated from university. For guardians, teachers, and nurses, they were also concerned about past experience, level of education, puberty and the context of Islam.

....thought that the appropriate age of having sex is high school (grade 9) or when they are 20 years old. This is a proper time to have sex. Although having sex at the appropriate time when women get pregnant, will not cause any problems. (female adolescent 4)

For the adult group, three parents mentioned the "appropriate time to have sex" is the proper time to have sex but relates to the level of education and psychological development. As guardian said:

In our city area, girls should be educated to at least Mattayom 6 (or high school) or around aged 18-19. In the period aged 12-13, parents should pay more attention to this curious time, because girls want to learn and try new things. I know it well from past experience because I put in less time to take care of my older daughter. Now she has quit from school and married her boyfriend, certainly they have no job. I try to complain about it and mention it as a bad example to my little girl. (Mother1)

In addition, the meaning of ‘adulthood’ and ‘puberty’ in Islam was linked with the “appropriate time to have sex”. As one Muslim mother stated it has a relation to education and Islamic religion. Firstly, adulthood was based on the level of education. This mother interpreted being an adult should mean having graduated from Mattayom 6 (or high school). She stated that education is a very important factor. It is a crucial process in the change of children to become mature. Secondly, the appropriate time to have sex relates to marriage in the Islamic view. She believed that Allah will find a soulmate for everyone when the time comes. Hence, she defined that having a relationship like girlfriend and boyfriend before marriage is prohibited in Islam.

From the teachers’ view, they perceived the “appropriate time to have sex” in the psychological view that women and men should wait to have sex in a relationship until they were 21 years old. At this age, the marks of maturity require psychological and physical development. It seems to require time to grow up from a child to an adult completely and know one’s duty and responsibility.

Teachers believed that in the context of Islam, specifically, in the Deep South of Thailand, the beginning of sexual urges occur in the puberty, but people are entitled to a fulfilling sex life only through marriage. Thus, the boy and the girl who reach the age of puberty, should get married as soon as possible.

From the nurses’ perspective of the “appropriate time to have sex”, maturity was concerned, as one nurse stated:

The state of being mature is demonstrated by responsibilities; took care yourself, and others. I mean, a female adolescent could organize her life and earn income to support herself. After marriage, it means that women behave in a reasonable way like an adult. If women and men were defined as mature at the age of 20.

In this time, true love occurs when one loves another without expecting anything back with unconditional love. (Nurse)

In conclusion, each group defines “sexual relationship” as sexual intercourse or sexual engagement in married life based on the Islamic teaching that having sex before marriage is a sin in Islam. In regard to the “appropriate time to have sex” this was different according to the perception of each group. For adolescents, they were concerned about the level of education. The adult group focused not only on the level of education but also on past life experiences of oneself, puberty, and the context of Islam.

3. Intentionary way of having sexual abstinence behaviors

Intentionary of having sexual abstinence behaviors is the way that adolescents intent to do for leaving from sexual relationship with opposite sex. In this study, the meaning of the word “sexual abstinence” in adolescents, referred to being abstinent, as not having sexual intercourse between male and female, but some adolescents mentioned that other sex play was permitted. As they stated:

Sexual abstinence referred to do not permitting any kinds of sexual relationships with males or anyone. (Female adolescent 1)

Data related to intention to have sexual abstinence behavior from focus group discussions among female Muslim adolescents presented five strategies to avoid having sex as follows: 3.1) avoid going out with a man; 3.2) looking forward to the future and choosing the right way; 3.3) having the skill to refuse and negotiate to maintain interpersonal relationships; 3.4) staying away from attractive boys; and 3.5) controlling self by following religious principles.

3.1) Avoid going out with a man.

Female Muslims Adolescents mentioned that female adolescents should avoid spending time alone with man to whom she was not married. Unexpected events might occur anytime because of the risk of pregnancy or other harm. As three female Muslim adolescents explained:

Keep away from boys. Do not be very close because the mind of female adolescents is very sensitive, it leads to acting in response to desire. The physical response may manifest unconsciously, such as shaking, rapid heartbeat, embarrassment, and sexual desire. (Female adolescent 2)

3.2) Looking forward to the future

Married life will make happiness at the end because one would be well-prepared for the relationship. If they focused and chose the proper way of life goals in the future, happiness will come, as they mentioned:

I am looking to a good married life so my wedding is my goal. (Female adolescent 4)

I think that family means you feel happy because there is a father, mother, and children. (Female adolescent 5)

I believe....because I have a good guy, he is waiting for me in the future. On the other hand, it will negatively affect family life and school. (Female adolescent 2)

3.3) Having refusal skills and being able to negotiate to maintain interpersonal relationships.

Female adolescents emphasized that refusal skills are so important to keep a good relationship between friends and others as one stated that:

In some situations, sex is used in negotiation, survival, evasion, prevention of pregnancy, you should speak softly. (Female adolescent 3)

Refuse him since the first time he invites and this method will not make him to be angry. (Female adolescent 4)

3.4) *Staying away from attractive boys.* There are many steps to flirt with female adolescents. Female adolescents explained the steps that a boy took to try to make a relationship with female adolescents. The steps of flirting with female adolescents were: 1) using flirting body language to attract female adolescents such as; smiling, blowing a kiss, and making eye contact; 2) making friends with female adolescents to build trust; 3) asking for phone number to flirt or talk on online through social media; and 4) inviting female adolescents to go somewhere such as the public garden, beaches, hotels or resorts. When female adolescents went to those places, they might behave inappropriately, such as kissing in public. The ways to avoid this situation were: 1) not gazing with boy or run away from this situation; 2); making friendly relationships; 3) talking as needed or for doing homework; 4) not going alone with a boy and giving some reason to refuse, such as having an appointment with her mother as one adolescent stated:

.....smiling, blowing a kiss, and making eye contact. There are many steps to flirting with female adolescents. Firstly, he will make friends with female adolescents to build trust, and ask for her phone number to flirt or talk on online with on social media. After that, the boy may invite female adolescents to go somewhere, such as the public gardens, beaches, hotels or resorts...prone to have inappropriate behavior, such as kissing in public or not dressing properly. (Female adolescent 4, FGD)

3.5) *Controlling one's self by following religious principles.* Although the feeling of sexual desire can happen, many female adolescents tried to control themselves by following religious principles such as self-confident, judgement based on religion, and ignore with immoral entertainment. They were concerned about the impact of having sex or having children before marriage; unmarried female adolescents are more affected than males:

We know the sins, the fear of hell, God knows it was said in a corrupt way. Even if no one knows, she will be paranoid, fearing the secret will be revealed. (Female adolescent 2)

If you want to have a boyfriend, you have to meet your parents first, and homosexuality is not in the religion.(Female adolescent 8)

Sexual abstinence can delay early sex for adolescents or fasting in day time to control sexual desire. They must concentrate more on their education. Premarital sex does not only affect the sins of a person but their community as well. (Guardian1)

4. Challenges in continuing sexual abstinence behavior

In general, sexual abstinence is a specific set of behaviors used to actively avoid sexual intercourse and sexual engagement by persons who are not married, but are interested in a romantic relationship with a partner. Three groups of participants described the difficulties of sexual abstinence for Muslim female adolescents. Muslim female adolescents who are interested in a romantic relationship will not display sexual abstinence behavior. The data showed that there are several risks to having sex.

The similarities of data among the female adolescent group, adolescents' guardians group, and the teachers group were presented in four issues: 4.1) negative parents-daughter communication; 4.2) low self-awareness; 4.3) online and social media; and 4.4) peers:

4.1) Negative parents-daughter communication. It refers to parental control, having less time to talk to each other and difficulty in communicating on sensitive topics. Muslim female adolescents cannot open up about doing other things, or express their opinions freely, including feelings about an intimate relationship. Muslim female adolescents were concerned about negative family atmosphere because of parental control. Conflicts with family members always occur, so female adolescents go out with friends instead. For adolescents' guardians, they perceived adolescents always speak less and turn to the media or friends in conversations. For teachers, they mentioned the Muslim female adolescents' actions depended on the parents' action. Moreover, lack of time is a great problem for promoting good communication in a family. Three groups of participants mentioned the problems regarding communication:

I know they still love us and are ready to stand beside us. However, the use of parental control and scolding may have a negative impact on female adolescents and affect the atmosphere in the family. I do not like them to fuss over me, punish me with violence, but they should give me reasons. I do not like nagging, and complaining. (Female adolescent 5)

He treats me violently, not listening, no reasoning, I do not want violence, speak reasonably. Parents always complain about doing housework. (Female adolescent 6)

Adolescents' guardians, they said that they had less time to care for adolescents and spoke less to their daughter especially about sex communication because sexual behavior is a very sensitive issue. They have less chance to learn sex education and the risks associated with sex from their parents, as they stated:

My daughter does not like to stay at home. This person (his daughter) does not like to stay home while I must work outside the home. I can say that all day until evening, she goes out and does not take care of her little brother and family members. (Guardian 1)

She (Muslim female adolescent) has nothing and cannot take care of herself because of a lack of communication about sexual health with religious teaching. (Guardian 2)

For the teachers' group, they mentioned that many families are dealing with Muslim female adolescents who have complex problems and also families encountered problems. The teachers met adolescents' families only once per semester, but some families never meet. Thus, the teachers have less chance to communicate with their families. From informal discussion in school meetings, teachers knew that the guardians perceived that this age was so young to gain deep knowledge of sexual health.

In addition to limited communication in the family, they also had little physical contact so female adolescents sought a boyfriend. For those, with a poor family background, parents let the female adolescents go out anywhere someone without asking for permission. Families had limited time for an individual and paid little attention to the female adolescents. As one who came from a broken family stated:

Parents rarely take care of their children. In hard working and broken families, parents work hard and have lots of responsibility, so they have less time with their daughter. She lives with grandpa and grandma. (Teacher 1)

4.2) *Low self-awareness* Adolescents' guardians and teachers were in agreement about poor decision making and awareness among Muslim female adolescents. Adolescents matured only in their body but lacked maturity in their judgment. There are several reasons: 1) acting before thinking; 2) making some mistakes but not consulting anyone, eventhough consulting a friend; and 3) doing the things that lead to have sex. As a guardian and class teacher stated:

My girl makes unintentional mistakes and no one likes to be responsible for them, she always keep quiet. It seems that she is not concerned. (Guardian)

They always do before they think, and feel guilty later. Like upload a photo without a veil. They talk to someone who they do not know. I have approached female adolescents closely. I always ask and warn them all the time to avoid inappropriate speech with a boy and escalating problems. (Female teacher)

4.3) *Online and social media.* Adolescents' guardians and teachers had the same view in this issue. They described many Muslim female adolescents using online resources and social media in an inappropriate and irresponsible manner according to Islam. They ignored housework and had less interaction with family members such as in this example:

Nowadays, she comes back home and chats "online" and "on Facebook" to her friends. If her friends come, she will go with them. The dishes are not washed. She does not do anything, she says in no uncertain terms, let the others work as servants. She is a queen. (Guardian 1)

The phone is very harmful to the youth of this age. We do not know what's on the phone that she talks about. Who's calling? We have to be aware, but it is not easy. Parents did not monitor the phone and media that causes problems like online pornography" (Guardian 2)

Concerning the teachers' aspects, the use of of online media includes many benefits, such as the Internet and social media, but they can be strongly influential to young female adolescents in the wrong way. There are several barriers to having sexual abstinence behavior for Muslim female adolescents:

Most innovative uses of online media have become an increasingly important behavioral domain. (Male teacher 1)

It's important because it's so sensitive, in just one day, they can know a lot of people, just open and chat. (Female teacher)

4.4) *Peers*. It refers to being directly influenced by a person's attitude and gradually being dominated. Adolescents' guardians and teachers mentioned that female adolescents will trust their friends more than their parents. When female adolescents have problems, mostly they do not talk with family. Parents feel less important:

Friends like to visit. Friends are big (important), she believes in friends, friends are more important than parents. (Guardian 3)

At first, female adolescents are well-behaved. At school, good behavior by peers can spread through the group. But bad behavior can also be modeled. Therefore, parents should pull her back [from bad behavior]. (Teacher 1)

Some behaviors have a tendency to cluster among friend groups, as do concerns about body image and life styles, she has to follow their friends without thinking too much. I have to talk to the female adolescents in classroom, it is very easy to talk with them. They do not have to talk a lot if there is not a boy around. Actually, female adolescents are starting to make it (make friends with opposite sex). (Female teacher)

For the adolescent group, personal factors were an important barrier to the intention of sexual abstinence. The personal choice was influenced by perception of sexual beliefs, attitudes, skills, motivations, and intentions, and relationships. This refers to there are three issues, 1) loss of sense of control, 2) prone to sexual engagement in premarital sex, 3) religious misinterpretation; They said:

1. *Loss of sense of control* It refers to adolescents losing the sense of having control over the forces that affect one's life such as attraction to the opposite sex such as they want to have intimacy relationship. They might not have the skills to avoid or prevent negative events as they stated:

Sometimes a female persuaded a male to go out with her, despite what her parents, or teachers taught and warned her about. She desired close male friendships. (Female adolescent 4)

Personally, the main sexual problems came from themselves. Most female adolescents had a boyfriend by friend's exhortation. (Female adolescent 6)

When boys call, they court and talk with her aimlessly, I feel good but shy towards him. (Female adolescent 5)

2. *Prone to engagement in premarital sex.* This refers to being more likely to have sex in these situations in student life and ignoring religious restriction, such as wearing tight fitting clothing or exposing parts of the body, having a boyfriend, going out with a boy or friend, going to a risky place, directly communicating with a boy, without parents' authority. A situation when one is more likely to have sexual behaviour while they were a student. There are many reasons to go out with a boy. However, without parental supervision, there is risk of sexual activity both in and out of the home. This was expressed as place, time, and person as follows:

Personally, a man has both a positive and negative side, for example, every guy does not flirt. To form a relationship, we have to look at their pure mind and gentleness. We may try and try it together before or pretend to do something to test him such as try to trick them with money and invite them to do bad things. (Female adolescent 3)

That boy is good, responsible, and has a good character so I can go out with him. (Female adolescent 4)

3. *Religious misconception.* This refers to adolescents' perceptions that deviated from Islamic teaching. Most of the female adolescents perceived sexual abstinence to be prohibited in sexual relationships but two adolescents had different viewpoints. Two of twelve female adolescents had competing perceptions that may have reflected other social experiences, such as peer or media influences, leading to their more relaxed definition of abstinence as one stated:

Abstinence prohibits vaginal intercourse, but a female adolescent could enjoy other kinds of safe-sex activities which are not leading to pregnancy such as holding hands with boys, hugging. (Female adolescent 3)

Adolescents' guardians mentioned that adolescents might be confused between choices based on religious and choices from their perception such as using contraceptive methods or having an abortion. Religious teaching plays an important role for their life but the teaching method cannot protect a girl from early sexual initiation as they stated:

I think that the choices in real situations are opposed to religious principles either having an abortion or choosing to bring up the baby. Parents' perspective must take care of their female adolescents and give them more time. The teachers' role was to emphasize sexual problems for adolescents. (Guardian 1)

I think that religious teaching is the best choice but these days religious teaching methods cannot control adolescents' behavior. (Mother 1)

Nurses in the Health Promotion Hospital

Nurses from the health promoting hospital mentioned their responsibilities concerning adolescents' health and health promotion. The health officer also cooperated with the health volunteers in this community for surveying adolescent pregnancy. However, problems related to premature and inappropriate sex are rare. In this context, most parents were able to compromise and were ready to take care of the baby when the female adolescents got pregnant. There is no problem of abortion in this area. Female adolescentss who were pregnant in the antenatal clinic and also gave vaccinations were responsible. In the area of prevention, nurses do not have a way to solve this problem. Nurses were asked to give information on epidemic disease prevention and educated older students on sexual health. Sexual issues became sensitive topics to young adolescents who need to protection:

The teacher invited nurses. Maybe we're hard at work. Many schools and parents think that students are too young to teach sex

education. Students cannot think critically about sexual issues. If a nurse taught sexual issues it might be partially to “point out a hole to a squirrel” (Thai proverb or “give the game away” in English). It means giving direction deeply related to sex. (Nurse 2)

Girl should be taught sex education from an early age...aged 11-13 or Mattayom 1-3, because they are not too young but they need to know how to protect themselves from a risky sexual situation to maintain a healthy life. So I think how to get pregnant, or what is the disease that is transmitted from sexual intercourse should be taught to delay sexual initiation. (Nurse 1)

From analyzing the data in the preliminary period, the findings presented issues related to promoting the intention of sexual abstinence behavior for Muslim female adolescents, which are classified by group participants' perceptions. They are summarized as follows:

All groups mentioned issues about positive communication with female adolescents. Each Muslim female adolescent is a unique person thus they should to give advice them by individual needs. The way of communication in female adolescents is dissimilar from young girls. The older female adolescents' attitudes based on their own values and beliefs that cause conflict and stress with adult. Adult should understand and allow them in different circumstances. Thus, the effectiveness of communication was examined as a first priority to improve communication and relationships with adolescents.

In each group, the specific issues relevant to promote sexual abstinence for Muslim female adolescents are presented below:

Female Muslim adolescent group

1. Low self-awareness plays an important role in their decision-making. Independence and responsibility are the part of the normal development in adolescents. However, the social status and cultural environment influences on their

autonomy. They have poor ability to identify and distinguish between right and wrong. They adopt Western culture without judgement. They desire to be fashionable and act freely without adult authority. Furthermore, they are curious about sex and are at an age where they are at risk of premarital sex.

2. Difficult to handle pressure from sexual desires and external pressures: Female Muslim adolescents are curious about sex and are at a difficult age. They are also similarly influenced by peer pressure and social media. Social and religious pressure encourages them to respect Islam principles but that may cause conflict in their decision making regarding sex. These female adolescents still expressed concerns about how to handle pressure from sexual desires and external pressures to successfully say no to sex.

Guardians

The reason that guardians deviate to answer about sex is because they have difficulty in speaking out about sex. It is hard to think about the proper or easy words about sex to make it clear. Guardians are not confident to talk about sex with female Muslim adolescents because they are of a different sex. Ineffective communication and negative communication about sex was an important issue used to raise their awareness. Guardians perceived that teaching sex education and reproductive health was the teacher's responsibility.

Teachers

The lack of interactive teaching techniques are an important issue in promoting sexual health to students. Teachers perceived that female adolescents still resisted religious restrictions. In addition to religious issues, absence of critical thinking related to using online social media and positive communication in the

family should be a concern. The teacher's methods are not interactive to motivate students.

Nurses

Nurses are a less prevalent channel to communicate and promote sexual health for female Muslim adolescents. Nurses perceived that female adolescents had a lack of critical thinking related to using online social media. Thus, communication in the family and health promotion services plays an important role in providing sexual health education for female adolescents.

In conclusion, the main issues among the participants' groups are compared and contrasted in figure 1. There are seven areas for writing or drawing where the three circles overlap. On the adolescent side, low self-awareness was shown. On the teacher's side, the main problem was "Less interactive teaching technique". On the guardian's side, "Less confident to talk about sex" was true for guardians. Typically on both the adolescent side and teacher side, "Less important skill in sexual communication" was labeled. For teacher's side and guardian's side, "Less opportunities to communicate with each other" was presented to specify the problem. "Less time to share feelings about intimate relationship" was shown between adolescent side and guardian side. In the center, "Difficulty in sharing sexual content in a positive way" was common to all three participants' groups.

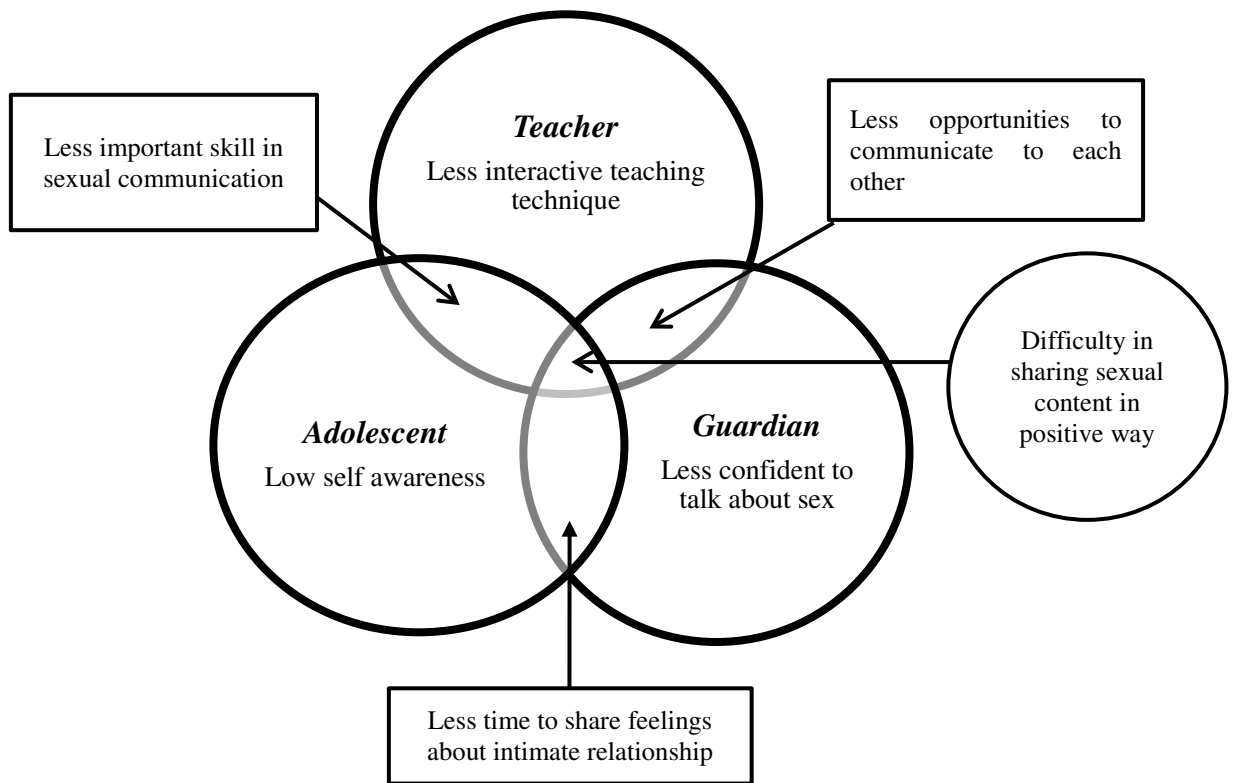


Figure 4.1 Summary of issues in each participants' group

5. Islamic based perspective for the intention of sexual abstinence.

In Islamic sexual morality, in terms of sexuality and modesty, teachers, guardians, and nurses suggested that information related to sexual health was needed in promoting healthy sexual behaviors and the intention of sexual abstinence. The teachers, guardians, and nurses also motivated Muslim female adolescents to not approach to *zina* by focusing on the basis of values (*Akhlāq*) or sincerity to think or to do. In fact, the exploration of the Islamic based perspective for the intention of sexual abstinence found the main reasons for these issues were: 1) guardians' feelings of unease to discuss sexual issues; 2) less interactive teaching integrated Islamic sexuality and modesty by teachers; and 3) less chance to provide sex education based on Islamic teaching in health care services by nurses.

1) Guardians feelings of unease to discuss sexual issues

Guardians want sex education to be formally taught in schools as they felt uneasy and were not ready to discuss sexuality matters with their adolescents. They paid more attention to warning against the undesired behaviors in daily life, rather than offering the influencing factors related to sexual abstinence as one stated:

I always warn her when she comes late from school or uses a mobile phone all the time. (Guardian 3)

2) Less interactive teaching integrated Islamic sexuality and modesty by teachers.

Teachers have high workloads in their regular work time at school. They knew of the importance of sex education relevant to Islamic sexuality and modesty for promoting sexual abstinence but there was not enough time, as one stated:

I thought it is so hard to prepare interactive teaching integrating Islamic sexuality and modesty. However, I always warn and talk to my students about sexual abstinence at the end of a class. (Male teacher 2)

3) Having less chance to provide sex education based on Islamic teaching.

Nurses did not have a chance to provide sex education based on Islamic teaching on health care service and school but were concerned about ways to prevent pre-marital sex. However, most of them focused nursing care on the sexual and reproductive health clinic as one stated:

It is important that the promotion must be in line with Islamic teaching, but only encouraging them to respect Islamic principles away from sex may cause conflict in their sexual decision making. (Nurse)

After gaining information in this situational analysis, the researcher encouraged all groups to provide comments on the data. A situational analysis produces a broad overview of the action research context, current practices, participants, and concerns. From opinions among groups of participants, problems, factors, personal ability of critical thinking among Muslim female adolescents, and developing Islamic-based were a focus.

Spiral action research process to develop the Islamic-based nursing model to promote intention of sexual abstinence

The development of an appropriate nursing model appropriate under Islamic philosophy to promote sexual abstinence in Muslim female adolescents comprised two stages: (1) raising self-awareness through critical thinking based on Islamic sexual morality for Muslim female adolescents; and (2) gaining important skills to maintain the intention of sexual abstinence based on Islamic concepts.

First stage: Raising self-awareness through critical thinking based on Islamic sexual morality for Muslim female adolescents

Based on the findings of the reconnaissance phase, the main issues in all groups of participants were: ineffectiveness of communication in female adolescents and adult group; and absence of critical thinking to make a good decision. Regarding Islamic sexual morality, the researcher put the Islamic instruction from Quran in a manual of sexual abstinence for adolescents.

Planning

The goal of this phase is to develop an appropriate method and activities which guide a way to solve the difficulty in sharing sexual content by using the Islamic-based nursing model among Muslim female adolescents. In terms of positive communication, this method was allowed to openly share, respect and to trust each other to lead a healthy relationship. It has also been linked to self-confidence, empathy, a cooperative personality, and psychological well-being in adolescents. Thus, positive communication is the way to solve difficulty in sharing sexual content. This study was conducted at a school and at the Subdistrict health promotion hospital. In developing an Islamic-based nursing model focusing the intention of sexual abstinence behavior among Muslim female adolescents, guardians, teachers and the nurse participated in both designing and implementing the model.

Goal

Promoting positive communication and raising self-awareness through critical thinking relevant to the intention of sexual abstinence based on Islamic sexual morality for Muslim female adolescents: Two strategies can help accomplish this goal: 1) Enhancing support to communicate in positive ways for creating a comfortable environment for Muslim female adolescents; 2) Creating Islamic based nursing practice and performing interactive education through experiential teaching; and 3) Facilitating the process of experiential learning on Islamic sexual morality within the concept of sexuality and modesty to raise self-awareness through self-reflection for Muslim female adolescents.

Strategies

1. Enhancing support to communicate in positive way for creating a comfortable environment to Muslim female adolescents.

1.1) *Deep listening* It was to promote positive communication.

In-depth listening, Muslim female adolescents often complain that adults do not listen to them. Listening deeply leads to understanding Muslim female adolescents, this is contributes to shaping their direction. The teachers and guardians gave an opportunity to hear the adolescents' feelings and adults' feelings in different situations. Meaningful conversations among adolescents were needed because that could be extremely satisfying; there was an open sharing of thoughts, ideas and observations with adolescents.

1.2) *Open sharing* Guardians and teachers needed to make

themselves available, and open up on what they wanted to do. Importantly, making a commitment, emphasizing positive messages in convincing female adolescents to remain abstinent helped in building trust and confidence in relationships by promising to keep the secret. This is essential to promote communication with adolescents.

2. Creating Islamic based content in performing interactive education through experiential teaching.

This strategy was to educate female adolescents about sexual health based on Islam through the process of experiential learning for teachers. When beginning to think about incorporating an experiential component into course for Muslim female adolescents, there are several steps to take:

2.1) Using the wisdom-approach (*Al-Hikmah*) integrated with the concept of sexuality and the concept of modesty through experiential teaching. The wisdom-approach (*Al-Hikmah*) according to Laeheem (2017) was integrated into the plan. This plan comprised six major activities as follows:

- “Getting to know or *At-Ta'aruf*”: Teachers, guardians, nurses, and adolescents began to build a good relationship by becoming familiar with each other, and jointly setting goals.

- “Seeking knowledge or *Al-Ilmu*”: The teacher provided the resources to search for correct knowledge and understanding related to sexual health based on Islam.

- “Self-assessment or *Al-Muhasabah*”: The teacher motivated adolescents to review the past behavior and to compare with present behavior related to sexual abstinence based on Islam.

- “Reviving and changing behavior or *At-Tajdid*”: The teacher motivated adolescents to remember the behavior related to Islamic sexual morality with sexuality and modesty on their faith, practice, and ethics.

- “Improving the mind or *At-Tahdib*”: The teacher promoted the learning about the values, rules, and regulations related to Islamic sexual morality within the concepts of sexuality and modesty through experiential teaching.

- “Organizing a last orientation or *Al-Wadah*”: The teacher created good values and attitudes towards behavior on Islamic sexual morality within the concepts of sexuality and modesty through experiential teaching and encouraged the youths to regularly apply the knowledge to their daily life.

2.2) *Obtaining the foundation of experiential teaching.* As this of differs from conventional academic instruction, the adolescents’ role is learner and teacher’s role is facilitator in the experiential learning. Thus, the relationship between learner and teacher is different.

2.3) Encouraging to identify appropriate activities and issues.

The researcher facilitated and prepared learners to set up a teaching experience plan, trigger the learners to reflect and discuss what is learned through the experience. The content of sexual health was guided by the concept of sexuality and modesty in Islam. Allowing time for the learners to analyze, this method determined their adolescent needs, and thoughts and responses to react in certain ways to given situations. Integrating the concept of sexuality and modesty within sexual health issues relative to adolescents' lives and social experiences was organized and managed.

2.4) Coaching and participating in introducing learning activities

The introductory step of learning, such as icebreaking, objectives of activities, steps of lessons, methods of experiential learning activities was carried out. The topics in the experiential learning program within the concept of sexuality and modesty in Islam were adapted from the PATH curriculum for Mattayom 2 level from which the researcher selected only 5 from 15 topics and integrated them in programs as suggested by teachers. The five topics were “how others see me”, “understanding each other” (knowing self and others), “I want to tell you that...” (how to communicate with opposite sex and others), “the best salesman” (be aware about use of social media), and “Imagination of love” (how to manage sexual desire and make decisions in the right way). Importantly, Integrating Islamic principles in scenarios was applied in experiential learning activities. Islamic statements were provided in lessons reminding and linking Islamic principles and adolescents' life and social experiences.

Facilitating the learning process on Islamic sexual morality to raise female adolescents' awareness

This strategy way was to link all that was being educated on their own lives, values, memories, and capabilities within the concept of sexuality and modesty as shown in table 1. For example, if they are learning, a romantic picture was displayed by teacher to stimulate their opinions to share their own perceptions. To participate in self-reflection process, teachers elicit personal connections corresponding with the content as presents: “The moment in time of your life when you ... and can fill in the spaces with some things or ideas that relevant to your teaching at that time. For instance, if the message is about the romantic emotion, give the question to students to “think of a time in your life when you felt like.....”

Table 4.1

A Guide to Promote Sexual Abstinence Behavior for Muslim Female Adolescents

Session	Objectives	Activity
Session 1 How others see me (40-50 mins)	1. To know yourselves through the perception and point of view of the people you know 2.To learn how to express your feelings to your friends 3. To set the goals within Islamic sexual morality using a concept of sexuality and modesty.	- Use “Getting to know or <i>At-Ta'aruf</i> ”. -Game, share opinions, self-reflection.
Session 2 Understanding each other (40-50 mins)	1. To point out different expectations from male-female relationship which might lead to conflict between teenagers and adults 2. To suggest resolution to the conflict, communication, thinking and problem solving	- Use“Getting to know or <i>At-Ta'aruf</i> ”. - Use“Improving the mind or <i>At-Tahdib</i> ”. -Scenarios, role-play as parents, teacher, and friend, group activities and discussions.

Session	Objectives	Activity
	skills in order to maintain good friendships within the Islamic teachings.	
Session 3 I want to tell you that.... (40-50 mins)	1. To learn how to express your feelings for someone with respect 2. To be able to refuse the other person's feelings for you without hurting him/her 3. To find the proper knowledge and understanding relevance to behavior within Islam way.	-Use "Seeking knowledge or <i>Al-Ilmu</i> ". -Self-reflection, group activities and discussions
Session 4 The best salesman (40-50 mins)	1. To be aware use of social media 2. To use social media wisely 3. To review the previous behavior and to compare the gap between the previous behavior with present behavior that is relevant to Islam.	-Use "Self-assessment or <i>Al-Muhasabah</i> ". -Scenarios in using social media, self-reflection, and discussions
Session 5 Love in Imagination (80-100 mins)	1. To be able to tell the progress of a relationship between two people who are fond of each other 2. To observe your own desire to be in relationship and for sexual intercourse 3. To evaluate your readiness to take responsibility for the consequences of developing	- Use "Self-assessment or <i>Al-Muhasabah</i> ". -Use "Reviving and changing behavior or <i>At-Tajdid</i> ". -Use "Improving the mind or <i>At-Tahdib</i> ". - Use "Organizing a last orientation or <i>Al-Wadah</i> " -Imagination of love

Session	Objectives	Activity
	your relationship 4. To promote learning about the values, rules, and regulations of Islam by creating good values and attitudes within Islamic sexual morality	picture sets, self-reflection, and discussions

Acting and observing phase

To promote positive communication, critical thinking and self-awareness relevant to strengthening the intention of sexual abstinence based on Islam. Mutual plans were conducted among female adolescents, teachers, parents, nurse, and the researcher. The actions in each group of participants are explained as follows.

1. Muslim Female adolescents

1.1) Creating a comfortable environment for sharing

The creation of the environment for sharing their opinions, need, and knowledge was a concern in experiential learning. The researcher provided a safe space for the Muslim female adolescents group. A safe space consists of a room or a group of classmates, deep listening by cessation of judgment and censorship, and provision of more opportunity to talk, open up and be willing to share. This method can be developed and maintained by building trust, and respect. Creating open discussions, establishing ground rules, and providing lessons on listening to Muslim female adolescents took place. There are several techniques in experiential learning that consist of giving an example, role-play, senario, brain storming, self-reflection and discussions, these were applied in activities for Muslim female adolescents.

Learning techniques were developed by reflection with no conscious control and making commitment to each other.

1.2) Raising personnel awareness related to premarital sex issue and sexual abstinence based on Islamic sexual morality.

The researcher encouraged Muslim female adolescents to build personnel awareness, understanding and control of their thought processes by reflecting on how others perceive them. The researcher reminded them of the concept of sexuality and modesty on Islamic sexual morality and asked them to imagine scenarios concerning general issues that involved other points of view. They could learn basic social emotions such as guilt or shyness involving Islamic sexual morality. “You were quietly picking your teeth, but your friend saw you.” When they were concerned about their sense of self, self-reflection was arranged for adolescents to encourage the ability to effectively solve problems by participating in experiential learning. They had no need to have an immediate answer. These methods helped to develop the ability to separate facts from opinions, and learn through critical thinking. Muslim female adolescents were asked to think about the problem related to premarital sex and how adolescents realize sexual abstinence. Furthermore, the researcher asked adolescents to examine how they perceived the social interaction in their learning by reflecting on their classroom experiences, enhancing their knowledge, their critical thinking and problem-solving skills.

1.3) Facilitating active participation to promote the intention of sexual abstinence behavior on Islamic sexual morality.

The researcher motivated Muslim female adolescents in constructing their understanding by designing, suggesting and implementing learning

situations with strategies such as acting and reflecting, predicting and choosing, interpreting and creating under their circumstances. Brainstorming for finding out the on Islamic sexual morality that appropriate way to fit with this group was carried out. Goal setting together for developing the model for intention of sexual abstinence was conducted to develop specific contents and activities. These activities were provided to make decisions that are guided by adolescents' values and opinions.

They were encouraged to train for decision making by using critical thinking on Islamic sexual morality in specific situations such as having boyfriend, adolescent pregnancy and contraceptive use. Activities were conducted in the classroom involved: being encouraged to express feeling and opinion on the situation, role play in a variety of activities, presenting their opinions to our friends, make decision relevant to romantic or sexual relationship, and reflect on the difference between the situation in activities and their lives.

2. Teacher

Teachers were encouraged to understand the importance of positive communication and interactive teaching skills to promote critical thinking in the classroom. They were inspired to learn about on Islamic sexual morality through experiential teaching and act as a facilitator in classroom. They were educated as follows:

2.1) Facilitating positive communication and experiential

Learning

Teachers were inspired to understand the importance of positive communication and the foundation of experiential teaching with interactive teaching skills by integrating on Islamic sexual morality. Teachers received

information about how to promote critical thinking for adolescents, build trust and relationship between learner and facilitator, such as avoid lecturing, and value adolescents' thoughts and opinions. At the beginning, the researcher described the process and method of organized sessions including strategies to facilitate group experiential teaching with positive communication skills. When the researcher conducted the introduction of teaching points by using experiential teaching to Muslim female adolescents, the teacher was an observer. Lastly, the researcher encouraged teachers to give feedback (comments and suggestions) on the whole process of experiential teaching with positive communication. Teachers were encouraged to explore their feelings, experiential teaching methods and motivation in organizing the five sessions for Muslim female adolescents.

2.2) Motivating in design of experiential learning activities and integrating based on Islamic sexual morality with concept of sexuality and modesty.

Teachers were educated about the foundation of experiential learning activities for the classroom and demonstrated methods to organize experiential teaching with positive communication by integrating Islamic sexual morality with concept of sexuality and modesty. The content of concept of sexuality and modesty. The researcher motivated teachers to conduct experiential teaching for Muslim female adolescents and encouraged teachers to share their reflections to demonstrate how the programme influenced teacher's beliefs. Teachers were guided to observe positive outcomes for students from the start of the programme. The observable changes in student behaviour and outcomes were focused on teacher motivation.

2.3) Coaching experiential teaching activities and integrating Islamic sexual morality related to premarital sex and sexual abstinence

Teachers were provided with an orientation process and the contents of the experiential learning process integrating Islamic sexual morality related to premarital sex and sexual abstinence of Muslim female adolescents. Adolescents were encouraged to participate in reflection related to sexual issues according to their perspective and activities that emphasize critical thinking for the intention of sexual abstinence behavior during 5 sessions, before participating in evaluation. The researcher coached and encouraged the teachers to use experiential teaching activities integrating Islamic sexual morality before, during and after conducting sessions with adolescents.

Before the session, teachers considered and prepared necessary documents and equipment for use in the session. When the session started, the teacher, acting as facilitator, and the learners introduced themselves. Engaging learners and initial rapport was performed by stating name-preferences, and background. Teachers provided rules for safe environment such as no right or wrong, and freedom of speech. In setting up the session, aims, expected outcomes for this session and exploration of learner's prior knowledge and needs were researched. The scenario was explained and the understanding of learners was confirmed before the teacher conducted the session. The instructions including the length of roles, rules for timeout, and place for all learners (observers, facilitators, and learners) were clarified for learners. Teachers motivated learners to identify problem experiences and the desired outcomes on a flip chart. Self-assessment for learners was encouraged to provide feedback on needs such as skills that needed improvement. Opportunities

were given for all learners to give opinions on solving the problems. At the closing session, teachers summarized the main points or asked learners to summarize them. Learners were asked for their commitment and to explore their motivation for further participation.

3. Guardians

Guardians play an important role to encourage adolescents' their decisions based on Islamic sexual morality. They need to help young people deal with Islamic sexual morality issues to reach a positive outcome. Guardians need to talk openly in the family and be good listeners with positive communication skills.

3.1) Obtaining information about young adolescent's development.

The researcher encouraged the participants to explore their perspectives and understanding of young female adolescents development and the situation of early sexual initiation by conducting focus groups and an individual approach, evaluating and stimulating the sharing of experiences. Guardians attended and participated in activities to promote the intention of sexual abstinence behavior, learned about young adolescent's development, and how to be open-minded when listening to female adolescents.

3.2) Educating on the importance of positive communication and sexual communication in the family

Guardians were inspired to understand positive communication and received information about how to promote positive communication with adolescents, and value adolescents' thoughts and opinions. They received and participated in activities about positive communication, and sexual communication in

the family by using scenarios in experiential learning activities to improve positive communication. Before using the scenarios, the researcher gave them a short questionnaire about the negative sentences in daily life such as “Why are you lazy?, I work very hard to earn money for you.” or “ If I know you have boyfriends, I will do something to control you.” Guardians explored their feelings and asked themselves when they heard these sentences. Guardians were asked to rewrite the sentence in a positive manner. In the scenario session, the researcher provided the guardian participants with a simple situation related to Islamic sexual morality in their life such as a story related to menstruation of their daughter or an intimate relationship, and how to deal with this situation or use the proper words to do so. In the case of communication involving sex, the researcher provided common questions about sexual issues and motivated guardians to practice giving answers and using simple words to answer.

3.3) Enhancing tips for positive communication with their daughters.

The most important thing is to keep the lines of communication open with adolescents. Positive communication is an important parenting skill. Importantly, positive communication is built on good relationships between parents or guardians and adolescents that is also the key to building self-esteem. The researcher provided tips for positive communication with Islamic sexual morality issues which comprised: 1) keeping positive and meaningful relationships with adolescents, parents did this by listening to them and paying attention, being honest and dependable, and enjoying their time together; 2) focusing on important milestones or achievements, it is important to an adolescent to ensure they use goal setting and value important life

events; 3) deep listening with eye contact and speaking less, listening is the key to building and maintaining a healthy, open, and respectful relationship, not making judgments and asking open-ended questions; 4) being flexible and reasonable about rules, parents should give more opportunities for adolescents to create rules and provide feedback; 5) be a role model by demonstrating respect in all of your adult relationships; 6) create a “safe zone” for asking questions especially related to sexual issues. Parents or guardians communicated positively with their daughters on their life and abstinence. Thus, expressions of direct and indirect communication with adolescents, such as demonstrate your love using physical contact, celebrate the achievements, forgive their mistakes, listen to them and how they plan to solve problems, influenced their relationship.

4. Nurses

Nurses are health care professionals who are able to coordinate and educate on initial preventive sexual health with Islamic sexual morality that is important for inexperienced adolescents. It is the most appropriate time for encouraging intention to abstain from sex.

4.1) Coordinating in the provision of health knowledge on Islamic sexual morality

As facilitators, nurses are engaged in the coordinating in the provision of health education and Islamic sexual morality in schools and preparing the place for educating on sexual health knowledge at the Health Promoting Hospital.

4.2) Encouraging the participation and interaction of nurses

The researcher encouraged nurses’ participation and interaction with Muslim female adolescents. Nurses were motivated to provide the

knowledge and the skills required to deliver sexual health information to adolescents. Nurses educated and applied a combination of sexual health knowledge, Islamic sexual morality and the necessary skills to make a positive impact on adolescent Islamic sexual morality.

Reflecting phases

The researcher realized that active engagement in learning plays an important role to promote the thinking skills and self-awareness that is relevant to promoting the intention of sexual abstinence in Muslim female adolescents. Importantly, all participants agreed that they were committed to the work of educating Muslim female adolescents in a way that is consistent with Islamic sexual morality and they believed that God would provide good things in the future.

Impact of Islamic-based nursing model for intention of sexual abstinence behavior among Muslim female adolescents

1. Improved ability of experiential teaching and positive communication

For process of program development, all groups had committed to their roles for improving intention of sexual abstinence on Islamic sexual morality among Muslim female adolescents. Concerning sustainability in solving addressing this issue, all participants believed that insiders could enact this role because they knew these young people well. After conducting the program, participants expressed their opinions about the program as follows:

After developing the model contents and activity, adolescents and teachers shared their experiences and gave comments, and suggestions. In the beginning when developing the model, the researcher started with a focus group or personal interview with the school's administrator, teachers, and guardians to develop questions, to gather information on the issues and problems, or to help with designing a survey.

All participants were concerned about the problems related to sexual relationships and premarital sex among Muslim female adolescents, however, one teacher, who was one of the administrators family members worried that any negative findings in this study might be exposed to the public. In this case, the researcher explained the objectives of this study including the research process for clarifying their concerns. Importantly, the commitment to keep the anonymity of participants and the school's name was done to ensure their honor was protected. The objectives and desired outcomes of this intervention were defined and considered activities that formed part of their work. A pre and post surveys provided evidence that the program made a difference.

In regard to the time schedule at school, students studied from Sunday to Thursday from 8 am to 4 pm. Religious teachings were provided from 8 to 12 am, and general subjects from 1 to 4 pm. Teachers mentioned if the program contained many lessons, it would interrupt the teaching plan and extra-curricular activities of the usual classes. The program in this research was organized and finished within 13 weeks. The title and sequences were approved by all participants. They worked together to develop a model for the intention of sexual abstinence with a goal setting approach. As one teacher said:

The schedule time at school was so busy and some class will be cancelled because teacher goes to meetings or training related to academic teaching. Anyway, we have free time on Wednesday morning for one hour in the first period to conduct this program at school. The researcher can use space in the teacher's room to organize this program with Muslim female adolescents. (Female teacher)

For nurses, at the beginning of program, the researcher told nurses that group activities among adolescents had ceased for some weeks because of the semester break. Nurses provided the essential equipment for conducting activities such as television, LCD, microphone and some materials related to sexual health care.

In the program contents, teachers suggested that all essential contents should be were concerned integrating the concept of sexuality and modesty on Islamic sexual morality. The teacher mentioned that adolescents were interested in the content about romantic relationships, pregnancy, and contraception use. Interestingly, when teachers asked Muslim female adolescents to point out some topics such as how to have a baby, and contraceptive methods, they were interested and asked many questions. Muslim female adolescents were curious to know in spite of guardians and teachers' thoughts that they were immature. Because of being the same gender, female teachers could answer their questions better with regard to health education. However, teachers and Muslim female adolescents suggested changing the session of "The best salesman", as the activity related to awareness of advertisements and media, that it is not directly relevant to sexual abstinence. Another topic "Love in imagination", was about the relationship between two people who are fond of each other which can develop in various ways depending on their choices and decisions. Regardless of their options, both sides are responsible for the consequences of everything they do together. Each topic was conducted over two sessions of two hours

(one session for one hour), but teachers and Muslim female adolescents suggested that they should be conducted for a duration of one hour.

Regarding the implementing method, Muslim Female adolescents reflected about new styles of teaching. They said that they liked this method and gave many reasons as followed:

The teacher looked so kind and did not stress. Some topics should focus on sex without marriage in Islam much more than this. (Adolescent 1)

It is so fun because I did not control my answers. My answer depended on my thoughts, not my teacher's thoughts. (Adolescent 2)

Normally, the activities in school do not stimulate creative ideas or freedom to think, It is just only what the teacher asks, we answer using the knowledge in the textbook. (Adolescent 3)

However, they commented that some sessions in experiential teaching should be emphasized. Moreover, they complained that the explanation in some processes of activities was not clear to understand:

She spoke unclearly and not smoothly in some processes, sometimes she still opened the book, to use the questions. She should ask short questions, because long questions made me confused. Anyway, this is so different from general class, it is not only style but the teacher's character is more kind as well....They also gave some suggestions and some topics overlapped in content, it should be added to the new one or deleted. Importantly, female adolescents hesitated to answer about boyfriends because the teacher still did not trust them. ...The teacher asked who had boyfriend...I think no one answered because if you answer, you will be punished...if you do not answer, she will tell you that she knew. So we still stay silent on this matter. (Adolescent 2)

Guardians mentioned that the teacher had the main role of providing sex education related to sexual abstinence because the teacher has academic knowledge and young adolescents also obeyed the teacher. Some parents were concerned and did not want their female adolescents to know the methods and get

involved in the content about sexual intercourse and contraceptive use because of immaturity and guidance to have sex at an early age.

For teaching aids, there are some limitations concerning nude pictures and models used to illustrate the reproductive system for males and females such as show on how to use a condom correctly, the use of obvious videos, portraying nude people or detailed diagrams of the human form. In the case of realistic presentation of human bodies in the classroom, such as sexual organs, this is in conflict with Islam, even watching people kissing on TV or in the street is also in conflict with the principle of modesty in Islam. Thus, contemporary sex education and practices not only conflict with Muslim adolescents' moral and value perspectives about sexuality, but with their sexual view. Teachers must be careful to use the proper media and teaching aids that are in line with Islamic teaching, such as using a cartoon picture instead of portraying nude people or video animation in explaining the differences between male and female sexes in anatomy and physiology as one teacher said:

In public schools, the teaching aids use every kind of material but it is not the case in an Islamic private school. We have some limitations for using teaching aids in private religious schools because of incompatibility with Islamic teaching. Some teaching aids may not be related to sexual intercourse but can lead to stimulate sexual desire and lead to premarital sex. As stated in the Quran "Do not approach adultery" is more sensible, not only illegal sex is prohibited, but anything which leads to illegal sex is also illegal." Teachers must be concerned. (Male teacher 1)

2. Improved ability of self-awareness on Islamic sexual morality through critical thinking with experiential learning

According to the impact of experiential learning processes, teachers explained that this method helped to improve critical thinking and self-awareness in adolescents and evaluate outcomes from adolescents' responses in activities, as she said that:

They understood the method of experiential learning processes for Muslim female adolescents. This method links the relationship between teacher and students. They listened and obeyed when I warned them and they walked in to consult me. I observed that adolescents fully participated every session. When I asked the way to solve the problem in the scenario within Islamic sexual morality, they could answer with reasons. In the case of female adolescents who have a boyfriend, the activities should be conducted in a group atmosphere rather than in the classroom. (Female teacher)

However, Muslim female adolescents still felt less confident and experienced difficulty in handling pressure when they met boys as one girl said:

I know what I can do, I try to avoid being close with boys...but sometimes it's hard to calm down my heart rate. My friend told me that my face became red, my body froze and I couldn't say anything. (Adolescent 3)

Overall, they improved their ability to communicate within the family. After participating, parents tended to communicate about sex, or sex at school age more frequently than before participating. Importantly, female adolescents realized their own value based on Islamic sexual morality, however, it was not enough to build self-confidence to insist, decide or negotiate their situation.

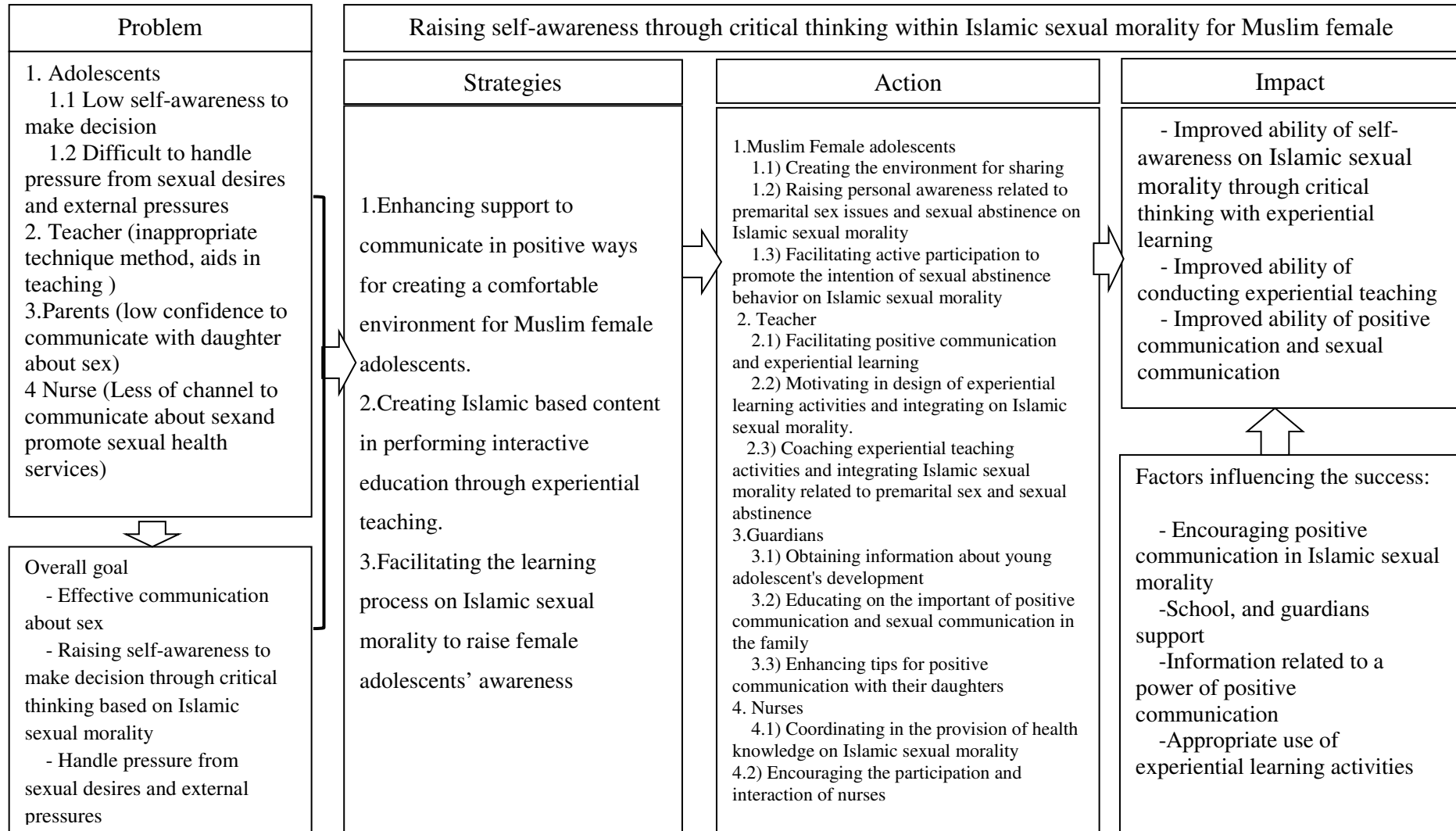


Figure 4.2 First stage: Raising self-awareness through critical thinking within Islamic sexual morality for Muslim female adolescents

Second stage: Gaining important skills to maintain intention of sexual abstinence based on Islamic concepts

In the second stage, Muslim female adolescents were confronted with crucial decisions about relationships, sexuality, and sexual behavior in different cultures. Making decisions among adolescents can impact on health and well-being for the rest of their lives. Thus, female adolescents have confidence to maintain concept of sexuality and modesty within Islamic sexual morality if they choose abstinence. Sexual health education with religious teaching gives them the important tools they need to make decisions. In addition to abstinence, it must provide Muslim female adolescents with age-appropriate information and important skills to help Muslim female adolescents take personal responsibility. This stage provides empowerment to Muslim female adolescents for maintaining their decision to abstain from sex.

According to the findings of the reconnaissance phase, the main problems are low self-awareness among Muslim female adolescents, less confidence to talk about sex with guardians and interactive teaching technique of teachers.

Also, in this stage, Muslim female adolescents expressed their intention to abstain from sex. However, they still felt difficulty handling pressure from sexual desires and external pressures. Some experience conflict in sexual decision making, while social and religious pressure also encourage them to respect Islamic sexual morality. Empowerment for adolescents is important to handle and

maintain self value. This stage took approximately four months for the implementation and development of the model.

Planning

The goal of this phase was to gain important skills to maintain sexual abstinence intention and adapt knowledge related to sexual and Islamic sexual morality with the concept of sexuality and modesty to maintain sexual abstinence intention. According to Laeheem (2017), the wisdom approach (*Al-Hikmah*) was applied to a plan that composed of six major activities by focusing on empowerment for maintaining the decision to abstain from sex as followed:

- “Getting to know or *At-Ta'aruf*”: Teachers, guardians, nurses, and adolescents maintain a good relationship, and in jointly setting the new goals.
- “Seeking knowledge or *Al-Ilmu*”: The teacher provided the knowledge focusing on Islamic sexual morality with concept of sexuality and modesty
- “Self-assessment or *Al-Muhasabah*”: The teacher motivated adolescents review the behavior that related to sexual abstinence based on Islam and behavior that approach to sexual immorality.
- “Changing behavior or *At-Tajdid*”: The teacher motivated adolescents to behave and pointed out the positive side of sexual abstinence that related to Islamic sexual morality with sexuality and modesty on thier faith, practice, and ethics.

- “Improving the mind or *At-Tahdib*”: The teacher encouraged and empowered them to concern the Islamic sexual morality within concept of sexuality and modesty through experiential teaching by looking forward to the heaven.

- “Organizing a last orientation or *Al-Wadah*”: The teacher still created good values and attitudes towards behavior on Islamic sexual morality within concept of sexuality and modesty and empowered youths to encounter to handling pressure in daily life.

The following specific objectives were focused on: improving the ability to make decision of intention of sexual abstinence; developing important skills for abstinence; empowering Muslim female adolescents to remain abstinent by integrating Islamic sexual morality with sexual health education; encouraging the participation of teachers, guardians, and nurses to ensure the fulfillment of goals:

Goal

To gain important skills to maintain sexual abstinence intention and handle pressure from sexual desires and external pressures to keep sexual abstinence on Islamic sexual morality. Several strategies were identified to help accomplish this goal.

Strategy

1. Facilitating mutual goal-setting and decision making to remain abstinent with Muslim female adolescents

This strategy was to facilitate mutual goal-setting and decision making to remain abstinent based on Islamic sexual morality. Muslim female adolescents were motivated to abstain from sex needs to feel confident about setting goal and making decision on their own thoughts.

2. Encouraging important skills by using experiential learning within Islamic sexual morality and sharing lessons learned.

The strategy was to motivate important skills for maintaining intention of abstinence based on Islam, and sharing lessons learned among groups of participants for empowering adolescents' confident.

3. Emphasize positive messages in convincing female adolescents to remain abstinent within Islamic sexual morality

The third strategy was to promote positive messages. The positive messages about sexual abstinence provided the positive effects for promoting intention of abstain from sex. This approach was conducted continuously to shaping their direction. Keeping a commitment, this helped in improving their confident in remaining abstinent.

Acting and observing

The action plans of each group of Muslim female adolescents, guardians, teachers, nurses and the researcher were presented and described as follows.

1. Muslim female adolescents

The Muslim female adolescents participated in activities to empower themselves to maintain the intention of sexual abstinence. These activities focused on benefit of abstinence to promote positive belief about abstinence and make decision by integrating concept of sexuality and modesty within Islamic sexual morality on sexual health education.

1.1 Enhancing the ability to make appropriate decision of sexual abstinence

Muslim female adolescents wanted to learn more about making friends of the opposite sex. They made an effort to understand the possible advantages and disadvantages and whether a person of the opposite sex wants to be their girlfriend or just a friend. They tried to apply the knowledge of sexual development and the concept of sexuality and modesty with the benefits of abstinence in daily life in the future.

1.2 Encouraging important skills for abstinence

With assistance and support from teachers, guardians, and nurses, the adolescents actively participated in improving their skills for abstinence and their intention of sexual abstinence. The important skills, communication skill, refusal skill, negotiation skill, were performed in a scenario of experiential learning to develop their abilities in dealing with the specific situation. They developed their skills through using participatory learning; such as video, role play, and integrating within the concept of sexuality and modesty.

1.3 Motivating to share lessons learned among groups of participants

Muslim female adolescents shared their thoughts and opinions with teachers, and guardians by working on assignments and through informal discussion. They were allowed plenty of time for self-reflection and decision making as part of experiential learning. After these activities were conducted, they felt highly confident and intended to remain abstinent in sexually active social climates. This was because

understanding the benefit of abstinence, and the benefit of protecting their healthy relationship, the intention of sexual abstinence was a concern. Moreover, concerning their attitude towards falling in love in an early age; awareness of avoiding risky behavior and maintaining abstinence were increased.

2. Teachers

Teachers collaborated with the researcher to teach the important skills and give support for Muslim female adolescents comprising: communication skills, refusal skill, negotiation skills to maintain a healthy relationship; empowering Muslim female adolescents to remain abstinent by integrating the concept of sexuality and modesty with sexual health education; and sharing lessons learned.

2.1 Providing the communication skills for abstinence with Muslim female adolescents

Teachers assisted Muslim female adolescents to improve awareness of preventing from sex before marriage and the ability to make decisions for healthy relationship by providing important skills. Teachers provided information about making friends, differences between friends of good and bad character and skill when facing peer pressure. The way to communicate and negotiate when making friends both of the same sex and opposite sex was also focused on.

2.2 Empowering Muslim female adolescents to remain abstinent by integrating Islamic sexual morality with sexual health education.

When the Muslim female adolescents' were taught sexual health education the teacher found that some topics were not clearly revealed and different from Islamic teaching. Thus, the teacher taught Muslim female adolescents about the

benefit of abstinence to give them autonomy over their own bodies, choices, rights, relationships and education in an Islamic context. As one teacher narrated:

In experiential learning class, I taught them with positive messages convincing female adolescents to remain abstinent. I gave an example related to the consequences of unprotected, premature sexual involvement in Muslim life, how it was harmful, physically and mentally to their girls. On the other hand, the door of heaven will open to welcome them, if they still respect and protect themselves from premarital sex. (Class teacher)

2.3 Sharing lessons learned among the group of participants

Teachers shared their thoughts and opinions with the adolescents, and guardians by informal discussion. They reflected on the lessons learned from facilitating experiential learning with Muslim female adolescents. They felt confident to provide the benefit of abstinence, and the benefit of protecting their healthy relationship by using both of Islamic sexual morality with sexual health education. As one teacher stated:

Although the world will challenge them throughout their lives, I believe that Islamic sexual morality will come up in their mind for choosing the proper way in making decisions. (Health education teacher)

3. Guardians

Guardians continued to provide the necessary information and emotional support to Muslim female adolescents comprising: open communication about sexual health, provide sexual health information and emotional support with adolescents, and sharing lessons learned.

3.1 Emphasizing positive communication about sexual health information and emotional support with Muslim female adolescents

In convincing female adolescents to remain abstinent, guardians used positive messages with open communication about sex to ensure a constructive and relaxed conversation. Moreover, guardians provided sexual health information and emotional support for Muslim female adolescents to remain abstinent.

The researcher constantly provided tips for sex talk for adolescents by using positive reinforcement with other participants and promoted Muslim female adolescents confidence in making the decision to maintain sexual abstinence within Islamic sexual morality. Moreover, the researcher provided the necessary information about how to converse with adolescents: encourage positive communication; starting with a friend's pregnancy, news article, or a TV show; listening more than talking; avoiding jumping to conclusions; answer questions simply and directly; respecting adolescent's views; share thoughts and values together; and teaching ways to make good decisions about sex and coach them on how to get out of risky situations.

3.2 Sharing lessons learned among groups of participants

For the meeting for informal discussion, guardians also shared their thoughts and opinions with adolescents, and teachers. They reflected on the lessons learned from participating in experiential learning and observing Muslim female adolescents' behavior. They were glad to endorse the benefit of abstinence, and the benefits of protecting their healthy relationship by using both of Islamic sexual morality and sexual health education with positive messages. As one guardian stated:

I am always aware of the words to say to my girl, I realized that some words made her painful, she wanted the right information and a good consultant as a guardian. (Guardian 1)

4. Nurses

Nurses provided sexual health counseling services to Muslim female adolescents and facilitated and organized the activities for Muslim female adolescents in the health service.

4.1 Making connection to provide more opportunity to learn sexual health for Muslim female adolescents

Nurses suggested that Muslim female adolescents access the health service and by telephone or simply walk-in. Nurses welcomed providing advice for sexual health problems. Nurses expressed concerns of trends among Muslim female adolescents, when involved in an intimate relationship. The issue of trust is common in adolescence and sex without protection will be faced. Therefore, before having medical tests like HIV testing and counselling, they can find informal friendly services or gain proper information resources. Importantly, nurses kept messages private for building trust and confidence in relationships.

4.2 Encouraging and facilitating to conduct the activities for Muslim female adolescents in both of the school and health service

Nurse organized a room for conducting sexual health activities and encouraged Muslim female adolescents to actively participate in experiential learning activities at the health service.

Reflecting phase

Muslim female adolescents reflected the impact of interventions, and their feelings on methods to abstain from sex before marriage. Their intentions about sexual abstinence include these influencing factors.

1. Impact of Islamic-based nursing model for intention of sexual abstinence behavior among Muslim female adolescents

This Islamic-based nursing model for the intention of sexual abstinence behavior in this stage was to raise self-awareness through critical thinking for Muslim female adolescents to maintain the intention of sexual abstinence based on Islamic sexual morality that involved: 1) accepting the way to promote sexual abstinence; 2) developing confidence to make decision to maintain sexual abstinence; and 3) encouraging adolescent-parent relationship with positive communication.

1.1 Accepting the way to promote sexual abstinence based on Islamic sexual morality.

All participants agreed on the way to provide information and how to communicate about sex within Islamic sexual morality. Before the program started, the adult group worried that talking about sex with young girls will encourage them to have sex. After participation in the program guardians and teachers including female adolescents understood the importance of communicating about sex with young adolescents as they commented:

In my opinion, these activities are good for my girl because she learned and understood about sexual intercourse and the consequences of early sex before marriage. If she has early sex, I would be disappointed. I am her grandmother, not her mother, but I can do my best like her mother. (Guardians1)

I like to join this program because the activities allow me to express my ideas, and speak out about something in my mind. It is so fun when I acted role-playing with my friends. (Muslim female adolescent 2)

1.2 Developing confidence to make decision to maintain sexual abstinence.

Building confidence in making decisions for healthy relationships and open communication is important. Thus, they had confidence in their decision to delay sex and maintain sexual abstinence.

I have made big changes after participating in this program. I felt confident to talk and share my opinion, not only sexuality, but also general health topics. I thought I am 99% confident, more than in the past. I understood how to approach or keep away from premarital sex (zina), the method of preventing sexual intercourse in early age, and the pros and cons to dress in the proper way for a Muslim girl. (Muslim female adolescent1)

1.3 Encouraging adolescent-parent relationship with positive communication

By participating in the second stage of this Islamic-based nursing model for intention of sexual abstinence behavior based on Islamic sexual morality, Muslim female adolescents, teachers and guardians were encouraged to participate in practicing positive communication and listening skills for building and maintaining positive relationships. For the adult group, they had more understanding of the signs of normal development in female adolescents. For female adolescents, positive communication skills helped them learn to communicate effectively with their friends, teachers and guardians. All participants had mostly fulfilled their expectations in adolescent-adult relationships.

In the past, I did not know about my girl's life, just knew her routine daily life such as wake up, go to school, and come back home...that's all. After participating in this program, I knew that it is time to pay attention to her school life. I had asked how she learned and how easy or difficult it was to study, and how she is in class. She was allowed to use a mobile phone according to rules. If she wanted to go out of the house, I asked her reason and gave a reason to talk to her as well for ensure her safety. (Guardian 3)

In the past, my daughter could easily get frustrated and angry with me. She seldom asked me questions about her life. Nowadays, she obeys me, talks in a polite voice, and uses less emotional stress with me. I feel better than in the past. (Guardian 4)

When they participated in activities and reflected on their feelings about early sexual initiation, they knew which one was right or wrong and understood their friends, guardians, and teacher's feelings. (Female teacher)

2. Factors influencing Muslim female adolescents to increase the intention of sexual abstinence behavior

In the second stage of this Islamic-based nursing model, the main influencing factors were: 1) encouraging positive communication in Muslim thoughts; 2) school and guardians support; and 3) belief in self-efficacy in Muslim female adolescents

2.1 Encouraging positive communication in Muslim thoughts

Promoting proper understanding and self esteem will protect Muslim female adolescents from the world that they encounter throughout their lives.

2.2 School and guardians support

Muslim female adolescents generally wanted more accurate SRH information, especially from parents. For abstinence-only education, Islam allows a person to learn information including sexual health. In this study, girls had the chance to learn about acceptable options other than abstinence. The school and guardians allowed information about sexuality that did not oppose Islamic teaching by comparing the sexuality information and Islamic sexual morality while the teacher

conducted experiential teaching in the classroom. The school provided the facilities and resources every time the teacher conducted activities in school.

I thought that I had had enough time for conducting four to five sessions but the schedule was so full. If I can conduct the activity club period every week, this program would be run more quickly. (Female teacher)

2.3 Belief in self-efficacy in Muslim female adolescents

The ultimate way to empower Muslim female adolescents is to give them autonomy over their own bodies, choices, rights, relationships and education.

For me, I am a facilitator of experiential learning. In the past, I always controlled my students strictly, order them to do or not to do things and follow me. I was not open to students' opinion. Now, I try to change myself, talk in a friendly way, relax and I am flexible to girls. I opened widely to students' opinion. On the other hand, girls talked more with me such as...my teacher I would...I think...not add emotional stress or get angry with each other. I thought that it reflected their progress. (Female teacher)

According to the results of the data analysis, Table 4.2 presents the mean score of each variable three months after attending the program, and the results of the comparison of the mean score of each sexual abstinence intention variables.

1. Sexual Abstinence Communication

The findings showed that the parents and daughter communication was related to practice sexual abstinence. As shown in each item, the participants rated "my parents taught me a refusal skill to refuse sex during the school years" as the highest level ($M=2.46$), followed by "my parents told me to avoid staying alone with a boy in private places", "my parents are a good role model for expressing love" and "my parents told me having sex before marriage is zina" (see Table 4.2). These

findings reflected an Islamic teaching using to prevent Muslim female adolescents from unlawful sex in Islam way.

2. Sexual Abstinence Intention There are four sub-dimensions.

1) *Behavioral Beliefs*: For the behavioral beliefs measure, the results revealed Muslim female adolescents strongly agree that prevent unintentional pregnancy, and make parents felt proud with mean of 2.92 and keep away from losing out on educational opportunities, build more self-esteem with mean of 2.77. These findings presented the Muslim female adolescents' belief that sexual abstinence was seen as the important way to prevent them from sexual before marriage and the adverse effects of sexual intercourse, especially concerning unintended pregnancy. Furthermore, they concerns parents' expectation and education achievement in their life.

2) *Normative Beliefs*: The findings of this study revealed that beliefs about fathers/mothers or guardians and teacher's reaction have the highest scores of all normative beliefs. This shows that Muslim female adolescents believed mothers, guardians and teacher as significant persons to support sexual abstinence intention and motivation to comply on their behavior with mean of 2.92, and 2.83 respectively. Interestingly, the beliefs about boyfriend to have the lowest scores of all normative beliefs with mean of 2.50, so demonstrating the unimportant person in approving of the intention of sexual abstinence and motivation to comply sexual abstinence than the others.

3) *Control Beliefs*: The results showed that the item of "awareness of self-esteem" and "concern about a bright future" was rated as the highest with

mean of 2.85, followed by “pay attention to studies”, and “think of my parents”. These findings presented that Muslim female adolescents concerns self-actualization to control their behaviors. Furthermore, they concerned about parents/ guardians who control over sexual abstinence behavior during the school years. The same direction with perceiving power, Muslim female adolescents rated “Pay attention to studies”, “Think of my parents” and “Awareness of self-esteem” at the highest level with mean of 2.77. These results showed that Muslim female adolescents perceived those factors could support them in carrying out sexual abstinence on their own power to maintain sexual abstinence.

4) *Sexual Abstinence Intention*: Muslim female adolescents also rated the item, “In case a boyfriend asks to have sex, I resist by refusing” as the highest score with mean of 2.38, which reflected their confident to maintain the intention of sexual abstinence.

Table 4.2

A Comparison on Mean Score of Sexual Abstinence Intention Variables Before and After Implementation of Islamic Based Nursing Model (n=12)

	Possible range	<i>Before</i>		<i>After</i>		<i>t</i>
		<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>	
1. Sexual Abstinence Communication	1-45	2.17	.47	2.31	.31	.416
2. Sexual Abstinence Intention during the School Years						
1) <i>Behavioral Beliefs:</i>						
Behavioral beliefs	1-48	2.38	.33	2.50	.32	.731
Outcome evaluations	1-48	2.25	.17	2.56	.23	4.046*
2) <i>Normative Beliefs:</i>						
Normative beliefs	1-30	2.27	.51	2.47	.48	1.309
Motivations to comply	1-30	2.61	.39	2.97	.08	10.748
3) <i>Control Beliefs:</i>						
Control beliefs	1-36	2.14	.28	2.18	.40	.360
Perceived power	1-36	2.15	.32	2.24	.33	.987
4) <i>Sexual Abstinence Intention</i>	1-9	2.31	.46	2.45	.41	.861

* $p < .05$

Overall of the findings, it presented that the comparison of average score of perception of sexual abstinence communication, control beliefs, normative beliefs, after participating in the program was higher, but not significantly different. The same direction with the average score of intention of sexual abstinence in school age, after participating in the second stage was higher but not significantly different ($t = 0.861, p = 0.408$) as shown in table 4.2. Interestingly, outcome evaluations construct of behavioral beliefs was higher significantly different ($t = 4.046, p = 0.002$). The findings showed that there are some changes among Muslim female adolescents. The

findings were similar to data from interview, adolescents intended to have no sexual relationships which they reflected by feeling proud of themselves when they are able to avoid having sex.

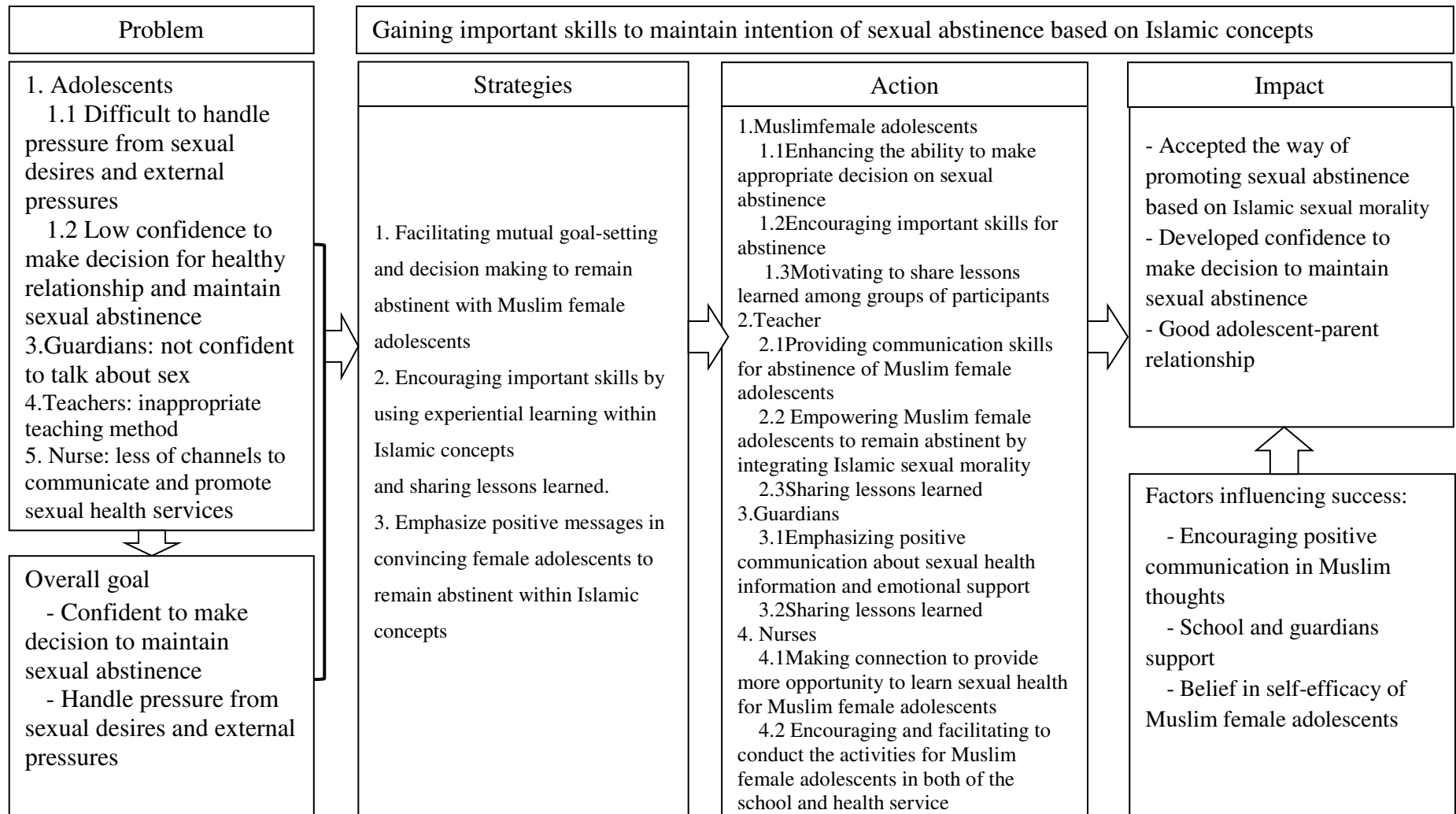


Figure 4.3 Second stage: Gaining important skills to maintain intention of sexual abstinence based on Islamic concepts

Final evaluation

Concerning these findings, the program was developed throughout the two phases of action research. During the first cycle, the three components were created. The implementation activities were planned that integrated the Islamic-based and positive communication skills for improving awareness in Muslim female adolescents. The overall program was reflected on and summarized for refining during the stage of re-planning in the second cycle. The program has accomplished the goal of the intervention for Muslim female adolescents at school. Every implementation was also reflected by all participants including the Muslim female adolescents, the teachers, guardians, and nurses. The Muslim female adolescents were encouraged in their abilities in terms of being more confident and setting the intention to abstain from sex.

When the intervention had finished, the participants were asked about their satisfaction in the process of the implementation of this model. All participants were satisfied with the activities in this program. The sexual health information and experiential learning were accepted as being consistent with Islamic sexual morality that was appropriated for Muslim female adolescents. Finally, after completing all the interventions, the researcher presented the actual Islamic-based nursing model in a group meeting, and evaluated this model based on the reflections of the participants.

I liked role playing in the experiential learning activities because I could more understand myself and my father...and I thought my father has more understanding in myself as well. He talked more and I felt confident in sexual abstinence when I gained more knowledge.
(Adolescent 8)

I felt relaxed when I participated in this program. This is my first time to join in like this. I intended to keep to myself until I graduated from university. (Adolescent 10)

Components, Stages and Strategies of Islamic-based nursing model for intention of sexual abstinence behavior among Muslim female adolescents

The Islamic-based nursing model to enhance the intention of sexual abstinence behavior among Muslim female adolescents was generated from the findings of the study using action research methodology (figure 4.4).

The three main components of the model by integration of Islamic-based cultural care for improving the intention of sexual abstinence in an Islamic private school emerged. The first main component for all participant groups was positive communication to overcome the difficulty in sharing sexual contents in regards to Islamic thoughts. The second main component was integrating the concept of sexuality and the concept of modesty based on Islamic sexual morality in the sexual health content. The third main component was the process of experiential learning by using real world examples and enhancing the Muslim female adolescents to share and reflect on their experiences. The uniqueness of this model was rooted in the participants' beliefs and sexual health education based on Islamic sexual morality via experiential learning.

There are two stages of the Islamic-based nursing model for improving the intention of sexual abstinence behavior among Muslim female adolescents: 1) raising self-awareness through critical thinking within Islamic sexual morality for Muslim female adolescents; and 2) gaining important skills to maintain the intention of sexual abstinence based on the Islamic concepts. In the first stage, the Muslim female students' self-awareness was raised through critical thinking. Three strategies were carried out encompassing: 1) enhancing support to communicate in positive ways for creating a comfortable environment for Muslim female adolescents; 2) creating Islamic based content in performing interactive

education through experiential teaching; 3) facilitating the learning process in Islamic sexual morality to raise female adolescents' awareness through self-reflective practice. The implementation for this stage was focused on encouraging positive communication in Muslim perspectives. There were three components to fulfill consisting of: 1) positive behavioral beliefs related to sexual abstinence; 2) school and guardian support; and 3) constantly participating in experiential learning activities by integrating Islamic sexual morality.

In the second stage, the overall goal was to gain the important skills to maintain the intention of sexual abstinence. Three strategies were performed consisting of: 1) facilitating mutual goal-setting and decision making for Muslim female adolescents to remain abstinent; 2) encouraging important skills by using experiential learning with the concept of sexuality and modesty in Islam and sharing lessons learned; 3) emphasizing positive messages in convincing female adolescents to remain abstinent within Islamic sexual morality. Four activities with the active participation of parents were carried out encompassing: 1) empowering girls for sexual abstinence; 2) facilitating mutual goal-setting and decision making with Muslim female adolescents; 3) constantly conducting activities using participatory learning integrated with Islamic sexual morality; and 4) emphasizing positive messages in convincing Muslim female adolescents to remain abstinent.

The major influencing factors for promoting the intention of sexual abstinence behavior among Muslim female adolescents based on Islamic concepts included: 1) mutual goals of parent-teacher and Muslim female adolescents; 2) school and guardian support; 3) information related to the power of positive communication; 4) appropriate use of experiential learning integrated with Islamic sexual morality; and 5) belief of self-efficacy in Muslim female adolescents.

The key success of the model was derived from the active participation of parents, teachers, and female adolescents in applying Islamic-based cultural care in the school programs that addressed the intention of sexual abstinence behavior.

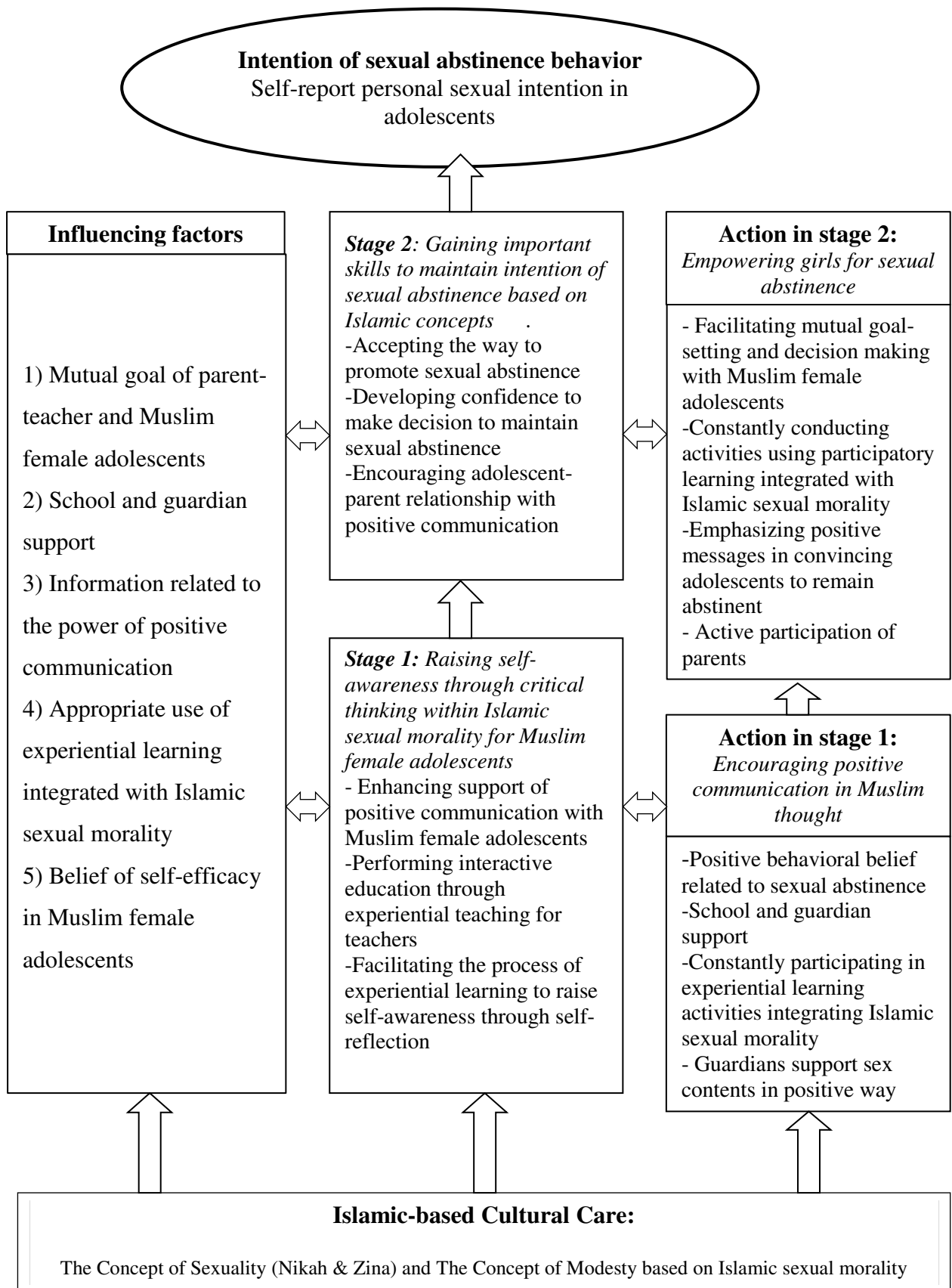


Figure 4.4 Islamic-based nursing model for intention of sexual abstinence behavior among Muslim female adolescents

Discussion

The action research process was an essential strategy for developing the program. Muslim female adolescents, guardians, and teachers had opportunities to share their opinions and express their feelings towards the promotion of the intention of sexual abstinence. This program started from reviewing literature, and the findings from the interviews for developing the tentative model. After developing the model, the researcher sought clarification with the participants to ensure their needs as well as confirm that the model did not offend the Islamic teachings. The action process was seen to affect their learning through having a sense of ownership relevant to the program that turned into a commitment to follow the program, and motivated all the participants. The participants participated for reshaping the program until they were satisfied.

The details of the discussions are compared to previous relevant studies and the findings of this study which revealed some similarities and differences: 1) the perception of sexual relationships; 2) issues related to promoting the intention of sexual abstinence; 3) the development of the Islamic-based nursing model; 4) factors influencing Muslim female adolescents to increase their intention of sexual abstinence behavior; 5) contributions to knowledge development; and 6) lessons learned.

The perception of sexual relationships

Regarding physical and emotional contact related to sexual abstinence behavior, the meaning of the words “having sex” or “sexual relationship” was explained. In the case of romanticizing relationships, Cavanagh (2007) defined romantic relationships in adolescence as a social psychological phenomenon, and this relationship may be different in gender, race, and peer network that define appropriate feelings and behavior. For example, in

Islam, a female is less likely to express herself about a romantic relationship compared to a male. In addition, Kohler, Manhart, & Lafferty (2008) stated that sexual abstinence is related to sexually transmitted diseases (STD). However, the perceptions of sexual abstinence of female Muslim adolescents in this study were defined as: self-protection, and sex outside marriage is restricted by Islam. In the case of self-protection, this was defined as sexual abstinence which protects the female Muslim adolescent from engaging in sexual behavior, keeping to religious principles, and being a good girl.

Compared with the majority of previous studies, the perception and meaning of sexual abstinence were described as refraining from heterosexual intercourse including oral or anal intercourse, and not engaging in sexual activity, although the term “sexual abstinence” has partially different definitions. Variations in defining sexual abstinence among adolescents determined by age, gender, ethnicity, religion, sexual conservativeness and sexual experience were presented. As in previous studies related to sexual abstinence, Thai female adolescents defined sexual abstinence as not having sexual intercourse with the opposite sex before marriage (Danaidussadeekul, 2004; Supametaporn, 2006; Suthinphuak et al., 2010).

In the initial intervention, the participants were asked about the meaning of the word “sexual abstinence”. Most of the Muslim female adolescents defined it as the prohibition of sex “No sexual intercourse is abstinence.” or “... not having any kinds of sexual relationships with males or anyone.” Two girls had different views in interpreting this concept in that they can enjoy other kinds of safe-sex activities which do not lead to pregnancy such as holding hands with boys and hugging. These girls may have reflected other social experiences, such as peer or media influences, leading to their more relaxed definition of abstinence. In previous studies, young adolescents defined the role of abstinence

and practice in different ways across cultures, communities and geographical regions (Bersamin et al., 2005; Mokwena & Morabe, 2016). Thus, the variation in meaning of sexual abstinence depends on the individual backgrounds.

In religious aspects, all Muslim female adolescents perceived that girls who abstain would be safe from bad things in their health and life including avoiding negative effects such as an unintended pregnancy or catching diseases. With regard to the Islamic perspective, sexual abstinence behaviors mean voluntarily choosing not to engage in sexual activity such as any type of genital contact or sexual stimulation between two persons including kissing, heavy petting, and oral sex is also prohibited because these actions will approach sexual acts outside of marriage (zina) (Quran, 2012: Al-Isra, 17: 32). In addition to the meaning of sexual abstinence, the teaching in the Qur'an stresses mankind to control their sexual urge and avoid behavior and habits which could arouse sexual desires and lead to unlawful sexual contact.

Having sex is linked to having a loving relationship. This relationship is based on the Quran, love is the love between a woman and a man, but Islam is focused on the basic framework regarding marriage that marital love leads to a peaceful and happy family life, which is the core of the Muslim society. Marriage is encouraged so as to commit to true love and to respect and honor each other as stated in a number of verses in the Quran: "And one of His signs is that He created mates for you from yourselves that you may find rest in them, and He put between you love and compassion; most surely there are signs in this for a people who reflect" (Quran, 2012, 30:21).

Issues related to promoting intention of sexual abstinence

Youths especially Muslim female adolescents are prone to the risk of physical and mental problems, and are unable to discuss sex issues when needed. With regard to collaboration, Muslim female adolescents, parents, teachers, and health professionals, can promote healthy sexual behaviors and attitudes for the benefit of sexual abstinence of Muslim female adolescents, their families, and their school communities. Problems related to promoting the intention of sexual abstinence include: 1) difficulty in sharing sexual content in a positive way; and 2) less important skills for the intention of sexual abstinence.

1. Difficulty in sharing sexual content in a positive way

All the participants in this study were concerned about communication regarding sexuality within school discussions. However, sharing information in their family, parents often have difficulty communicating about sex. This is similar to another study which found barriers to providing accurate and clear information about sexuality to teens (Brown, Steele, & Walsh-Childers, 2002). Moreover, parents often attempt to express their personal values and behavioral expectations regarding sexual activity for adolescents during discussions such as the moral topics including behavioral expectations, and the dangers of sex (Aspya, Veselyb, Omanb, Rodinec, Marshallc, & McLeroyd, 2007). Adolescents in this study also felt uncomfortable in this situation.

2. Less important skills for intention of sexual abstinence.

According to the Islamic perspective, abstinence is the most essential sexuality topic parents can talk about with adolescents. A great number of studies pointed out that parents signified the strongest influence on adolescents' sexual judgments. The sexual communication skill is essential. When parents and youth have communicate about sex in a positive way, the sexual initiation is delayed when they are of age (Oros, 2012; Kantor,

2015). Thus, communication skills involving sex was viewed as positive communication and was thus added to this program for the guardians to improve the intention for abstinence among female Muslim adolescents. Positive communication, open sharing, respect and trust are all elements of positive relationships, especially in encouraging a good parent-daughter relationships.

The development of the Islamic-based nursing model

The researcher started the process of model development by providing participants with a question about their perception of the practice phenomena of the context. This model was developed based on the actual situation of the participants' practice and the participants need for changes. The program in this study focused on Islamic-based cultural care. The Islamic philosophy was integrated under the concept of sexuality and female modesty which are closely relevant in the promotion of the intention of sexual abstinence. Islamic philosophy played a role in increasing the intention because the role of intention in religion is the acceptability of worshipping God (Abdulsalam, 2006). Thus, adolescents can turn activities into acts of worship by purifying intentions and sincerely seeking God's pleasure through activities in everyday life. The goal-setting in this study was used to remind Muslim female adolescents that life is living for God. Then, they performed the intention to control their sexual urges and avoid misbehavior and habits which could lead to sexual arousal making them prone to having an unlawful sexual relationship.

The concept of Islamic sexuality and female modesty stated the way for the participants to protect themselves from premarital sex by preparing themselves mentally, physically and emotionally. In this research, religious teachings, particularly Islamic sexual morality, provided Muslim female adolescents with a wisdom approach and knowledge, and provided the preventive mechanism for promoting the intention of sexual abstinence. Two

concepts in the content were linked using the teaching learning methods by giving the rule of practice to exercise with the contents in a scenario. The integration of the two concepts in Islam and experiential learning was the important strategy in linking Islamic principle into the real world.

From the relevant research in using Islamic teaching for preventing sex before marriage among Muslim adolescents, it was mentioned that the message in the Quran teaches what is wrong and what needs to be done (Sudan, Hisham, Rahman, & Abdallah, 2012). Islamic teaching is the tool for preventing illegal sex. This is in the same direction with Ghaffari, Gharghani & Rakhshanderou (2015), who found that the religious beliefs and behaviors influenced with the intention of premarital sexual abstinence including correcting behaviors among young Muslims (Mohtasham et al., 2009; Iriyama, Nakahara, Jimba, Ichikawa, & Wakai, 2007; Leaheem, 2017). Therefore, the way to protect Muslim female adolescents from sexual behavior, especially intention to abstain from sex, was by incorporating religion as a protective factor.

Furthermore, previous studies clearly revealed that religious beliefs influenced a change in personal attitudes, values and behaviors. These studies examined the relationship between religious beliefs and behaviors conducive to sexual prevention and promotion (Ali-Faisal, 2014; Arousell, & Carlbom, 2016). Thus, Muslim female adolescents' beliefs, and the contexts in their life were considered in order to create the program components. Moreover, the program recruited teachers and guardians who could influence adolescents. The experiential learning integrated with Islamic teaching was performed in harmony with the participants' religious practices.

Additionally, this action research process enabled Muslim female adolescents and other participants to commit themselves to engage throughout the program development

process, and also during the program implementation and evaluation stage. The program components which were developed in this study could be applied to increase the intention of sexual abstinence in other settings of Muslim female adolescents.

Experiential learning teaching method was introduced because of several reasons. Firstly, it is more flexible and attractive to draw attention of adolescents in the early developmental period. Generally, they become more interested and explore more issues of interest for themselves but are less willing to accept the person who has authority over them such as teachers or parents. Experiential learning was performed to motivate the Muslim female adolescents' competency to maintain their decision of sexual abstinence in this program. Secondly, the concept of experiential learning was aimed to manage and gain control of individual learning by complementing individual learning styles. Any specific learning situation can be created to provide a set of learning abilities in setting life goals including in one's sexual life. This method affected on several developments in adolescents as follows: 1) accepting the way to promote sexual abstinence based on Islamic sexual morality; 2) developing confidence to make the decision to maintain sexual abstinence; and 3) encouraging adolescent-parent relationships with positive communication.

1. Accepting the way to promote sexual abstinence based on Islamic sexual morality

The acceptance by Muslim female adolescents to follow the way of sexual abstinence is promoted as being derived from Islamic teachings and of knowing the advantage of abstinence during school ages. Additionally, sexually inactivity in Muslim female adolescents may have a strong religious basis for their action and they may believe having sex only occurs within the context of marriage. In this study, the researcher addressed abstinence during conversations with sexually inexperienced Muslim female adolescents to

provide essential information. All participants viewed it as a way of preparing Muslim female adolescents for sexual maturation. Importantly, the sexual contents in this program did not oppose Islamic teachings.

2. Developing confidence to make a decision to maintain sexual abstinence intention

One of the goals for conducting experiential learning was to develop social skills including interaction with adults. In the period of early adolescence, there is more likely to be some conflict surrounding adolescents' circumstances such as school and family. They perceived the meaningful interaction with adults that changed their attitude. The activities in experiential learning were taking responsible action as opposed to having more responsible attitudes. Adolescents were provided with the chance to reflect on their feelings, interactions, and the results and outcomes that affected themselves and others. They could learn from given or past experiences that promoted more positive attitudes.

3. Encouraging adolescent-parent relationship with positive communication

Several studies showed that teen-parent communication provided many important benefits for adolescents (Wang et al., 2014; Oros, 2012; Kantor, 2015); especially mother-daughter communication (Chareonsuk et al., 2013; Askelson, Campo, & Smith, 2012; Ramchandani, Morrison, Gold, & Akers, 2018). Several benefits were presented, for example, high comfort level with sensitive topics, regular prayer and the use of faith in making decisions, and positive parental involvement in teens' lives (Oros, 2012).

In this research study, the participation of parents in the program played an important role to clarify parent-teen communication that contributed to the design of a specific model to promote sexual abstinence behaviors among young Thai Muslim female

adolescents. Importantly, it created a good environment where female adolescents could negotiate to exercise their right to health and education based on their religion and faith.

Factors influencing Muslim female adolescents to increase intention of sexual abstinence behavior

There were four main factors influencing Muslim female adolescents to increase their intention of sexual abstinence behavior: 1) mutual goals of parent-teacher and Muslim female adolescents; 2) school, and guardians' support; 3) information related to the power of positive communication; 4) appropriate use of experiential learning integrated with Islamic sexual morality; and 5) belief of self-efficacy in Muslim female adolescents.

1. Mutual goals of guardians/ parent, teacher and Muslim female adolescents.

Mutual goals of parents, teacher and Muslim female adolescents in the development model provided a better chance to influence the students. Moreover, building a common friendly atmosphere with consistent rules is essential in this program development of female adolescents.

2. School and guardian support.

The support and involvement from teachers and parents were likely to promote positive attitudes toward abstinence among the adolescents (Shrestha, Otsuka, Poudel, Yasuoka, Lamichhane, & Jimba, 2013). Additional to the residency area and socioeconomic status, family structure, personal characteristics for instant religious interpretation and school performance influenced sexual abstinence behavior among adolescents (Lammers, Ireland, Resnick, & Blum, 2000). In this study, the teacher was encouraged to provide student-friendly and positive environments, and a formal guidance for students to seek advice and support on academic performance and sexual health issues. For

guardian support and participation, this encouraged positive communication about sexual health issues for promoting adolescents' attitudes and beliefs.

3. Information related to the power of positive communication

Positive communication was encouraged in all participants to promote trust and reduce conflict between adolescents and adults. The adolescents' sources of sexual health information were guardians or parents. Female adolescents are more likely than male adolescents to talk with their parents about sexual health topics (Lindberg, Maddow-Zimet, & Boonstra, 2016). This was in the same direction as this study, in which Muslim female adolescents asked about sexual health with same sex guardians.

4. Appropriate use of experiential learning integrated with Islamic sexual morality.

The process of experiential learning with Islamic teaching was conducted with adolescents for encouraging self-esteem, interest in learning, and personal autonomy. In this study, role playing and a scenario related to romantic relationships with practical problems were applied and triggered their thought or critical thinking process using the Islamic concepts to promote personal and psychological growth with moral reasoning and gain significant experience.

The integration of Islamic teaching helped to produce as well as strengthen the spiritually, physically, intellectually and emotionally aspects of the adolescents (Lubis, Yunus, Embi, Sulaiman, & Mahamod, 2010). According to the content and concept of Islamic sexual morality which created and guided the experiential learning, this played an important role for keeping adolescents in the Islamic way. Islamic teachings provided the statements to guide the design of the interventions for female adolescents that fitted the adolescents' cultural and religious context and perceptions of risks such as having boyfriends

and holding hands openly. Islamic jurisprudence (Islamic law) forms the essence of the basic rules for Muslims. Evidence from Maulana, Krumeich, & Van Den Borne (2009) showed the application of Islamic law and Islamic teaching for HIV prevention, and this method provided the chance for adolescents to clearly understand what is applied in Islamic contexts and what is opposed to Islam.

5. Belief in self-efficacy of Muslim female adolescents.

A high sense of self-efficacy improves individual's positive attitudes and participation in the activities, setting of goals, making a commitment and having life satisfaction (Strobel, Tumasjan, & Sporrle, 2011). Thus, the adult groups in this study provided positive communication and empowerment for the adolescents to promote confidence in the adolescents' decisions.

In summary, the main component of the model for all the participant groups was positive communication within the Islamic way of thinking to overcome the difficulty in sharing sexual content. This model was rooted in integrating Islamic teachings in sexual health education via experiential learning. The implementation of the Islamic based nursing model provided the guidelines for promoting the intention of sexual abstinence behavior within the Islamic way of life among Muslim female adolescents. According to the wisdom-approach or "*Al-Hikmah*" (Laeheem, 2017), the guidelines for correcting adolescents' behavior consisted of six main activities consisted of: "Getting to know or *At-Ta'aruf*" , "Seeking knowledge or *Al-Ilmu*", "Self-assessment or *Al-Muhasabah*", "Reviving and changing behavior or *At-Tajdid*", "Improving the mind or *At-Tahdib*", and "Organizing a last orientation or *Al-Wadah*" that were worked in with the experiential teaching method. In empowering prevention by promoting the intention of sexual abstinence, Muslim female adolescents needed a supportive environment.

Contributions to knowledge development

The Islamic-based nursing model to enhance the intention of sexual abstinence behavior among Muslim female adolescents was developed based on Kemmis and McTaggart (1988). The model was constructed based on the concept of sexuality and the concept of modesty within Islamic sexual morality. With regards to the implementation, the research process contributed to the knowledge development, in terms of ethics, personal knowing, aesthetics and empirics (Carper, 1978). It was the integration of the emancipatory knowledge and patterns of knowledge in nursing.

This model was developed from the explanation of the situation of perceptions and experiences by Muslim female adolescents, teachers, guardians, and nurses. It provided the guidelines for nurses to follow in performing health promotion for Muslim female adolescents and helped nurses in making a plan in advance. The nurses understood the Muslim female adolescents, teachers, guardians including other persons through the processes of reflection and discussions on their practice. This approach developed the consciousness of teachers, guardians, and nurses who were mutually responsible in their ethical behaviour for maintaining the intention of sexual abstinence among adolescents. The cultural values of a society and the Islamic beliefs of the participants were recognition of their intrinsic value of respect that generated the ethical knowledge which protects human dignity.

Furthermore, the knowledge or experience from each person that is shaped through being personally involved in situations and events, was developed through observing role models in practice. This kind of knowledge can be developed through the participants reflecting on the practical experiences in this model that was gained from participation, interpersonal experience and self-awareness. Another kind of 'knowing' involves the

perception of abstract particulars so knowledge gained through aesthetics knowing requires abstraction. For example, knowing and appreciating that a person is feeling frustrated about talking about sex, without it being put into words. Being open to reflective thinking lets the nurse modify the role she or he has taken and also offers an intervention that would fit in the context of this model.

In addition to aesthetics, empiric knowledge was gained through in-depth interviews, focus group discussions, and observations with the professional aspects of what we know in this research process. Gaining knowledge and acquiring problem-solving skills, exchanging information between the practicing participants enabled the development of the participants' knowledge and skills as well as their reflection on their practice. By using this model, the nurses transformed their cultural care behavior and their knowledge, and implemented this into their works, therefore, they gained a better understanding of themselves and of others in this context.

Lessons learned

This action research study based on critical social theory was also used within a school-based curriculum and worked through a set of social values in democratic social contexts.

There were some major concerns in the methodological issues while conducting the research process in this study. Firstly, power imbalance – PAR has one principle that addresses power inequities in society that are created within the interaction of relationships. It can be used it for dominating others or making positive change. Thus, power inequities in a research relationship might be reduced through the processes of PAR. In this study, youth-adult relationships were of concern because the participants had different

backgrounds such as age, social class and gender. (For youth-adult relationships, the power balance is unequal with Thai Muslim society due to gender roles and differences between male adults and girls, or male domination. Adults have often underestimated the abilities of youth (Zeldin et al., 2011). To overcome the youth-adult imbalance, focus groups (a group of adolescents, guardians' group, teachers' group, nurses' group) were conducted to identify problems, needs and the method in initially solving the problem. The second focus groups were conducted after the first focus groups. The goal of the second focus group was to share ideas and identify issues or problems from the different perspectives of the stakeholders to find a solution. One to two representatives of each individual group joined to share information, identify and define problems, discuss their needs, and discuss how to solve the problems based on Islamic sexual morality for promoting the intention of sexual abstinence. All participants wrote down their ideas and/or problems on note paper and posted it on a board. The discussion was done as a big picture, so this approach can help to identify people, issues or things that may get in the way of improvements in regards to future plans. For the participant-researcher relationship, the researcher is interested in the outcome of the participants' action. Therefore, good relationships between the researcher and the participants were essential for the success of this action research. Involving the participants from the beginning of the process was necessary for achieving the balance of power between the participants and researcher.

Secondly, in regard to less participation in talking about sexual issues, Muslim female adolescents are less likely to express a desire to learn about sexual health because of cultural taboos (Causarano et al., 2010) while they are restricted in an uncomfortable environment. This study focused on sexual abstinence intention with views on promoting of

sexual abstinence. However, selecting the participants based on the interests of the research in undertaking this type of research it was less embarrassing and more comfortable for the participants to share ideas with their peers rather than with strangers. Each meeting was started with an integrated activity, so group members could contribute to the interaction of the group and this helped to make the meetings enjoyable. This approach was facilitated the participants' involvement with the research and to generate focus for the group discussions.

Enabling the participation of all people, equality of worth, and the expression of the participants' full human potential among deliberating conditions were of concern. The application of PAR in the school was to support the Muslim female adolescents' group to plan, implement, and evaluate their activities. This was carried out with support from school members acting as researchers exploring priority issues affecting their lives, recognizing their resources, producing knowledge, and taking action to improve their situation.

Chapter 5

Conclusions and Recommendations

This chapter concludes the findings of the study and illustrates the implications, limitations of the study, and recommendations for future research. The implications are described in terms of nursing practice, nursing education and further research.

Conclusions

This participatory action research study was conducted to develop an Islamic-based nursing model of intention for sexual abstinence behavior among Muslim female adolescents through spiral action research process with twelve female adolescents, three teachers, eight guardians and two nurses. All participants were assessed by using focus group discussions and in-depth interviews.

The emerged issues in the reconnaissance phase were: (1) less interactive teaching and learning methods; (2) perceptions of sexual relationship; (3) intentionary way of having sexual abstinence behavior; (4) difficulties to continue the sexual abstinence behavior; and (5) Islamic based perspectives regarding an intention for sexual abstinence. There are four similarities among the female adolescents group, adolescents' guardians group and teachers group: (1) negative parents-daughter communication; (2) low self-awareness; (3) online and social media; and (4) peer. Importantly, three issues from adolescents group were: (1) loss of sense of control; (2) prone to engagement in premarital sex; (3) religious misconceptions which are different from the adult groups.

The model development consists of two cycles including: (1) raising self-awareness through critical thinking within Islamic sexual morality for Muslim female adolescents; (2) gaining important skills to maintain an intention for sexual abstinence based on the Islamic nursing model. Raising self-awareness consists of three strategies which are providing positive communication supports for Muslim female adolescents, providing interactive education through experiential teachings for teachers, and facilitating the process of experiential learning to raise self-awareness through self-reflection. To gain important skills to maintain a sexual abstinence intention, three strategies are used. This includes the adolescents' consent to maintain the sexual abstinence, developing confidence to make decision to maintain sexual abstinence and encouraging adolescent-parent relationship to have a positive communication. The success of this program was a result of influencing factors which affect the intention for sexual abstinence behavior among Muslim female adolescents under the Islamic-based cultural care: (1) mutual goal of parents/teachers and Muslim female adolescents; (2) school and guardians' support; (3) information related to the power of positive communication; (4) appropriate use of experiential learning with Islamic sexual morality; and (5) belief of self-efficacy among Muslim female adolescents.

This model is particularly for the Muslim sociocultural context similar to where this study was conducted. The outcome of this model was primarily related to Muslim female adolescents who developed self-awareness through critical thinking and through maintaining an intention for sexual abstinence by following the Islamic sexual morality.

Implications for Nursing Profession

According to the findings of this study, there were three main implications for the nursing profession: 1) nursing education and practice; and 2) nursing research.

Nursing education and practice: The practice of public health nursing is population-focused and requires unique knowledge, competencies and skills. The roles of public health nursing are not only caring at a primary care unit, but also involve advocacy, community organizing, health education, and social reform. Nurses who learn and understand environmental phenomena will also learn more about proper monitoring and feedback mechanisms. Furthermore, public health nurses must work with the school community, parents and caregivers, students, administrative staff and teachers. These members of the school community shared a responsibility and created effective learning and a healthy social environment. In conclusion, this participatory action research revealed the evidence about the outcomes of the professional knowledge, the professional performance, and health and health context. This aligned with the professional consensus and Muslim female adolescents' preferences.

Regarding nursing education, its aim is to develop the nursing profession. One way to promote the development is to clarify the professional role. Cultural competency is one of the professional roles that nursing students are trained to have in the real world. In the nursing curriculum of the school of nursing, learning modules of cultural care were designed to be sensitive to diverse cultures such as the Muslim-majority area similar to the study's setting. Moreover, the emancipatory knowledge offers several methods that the nursing faculty could use to empower

nursing students to provide care. The strong involvement of religious leaders and teachers were needed. These research findings provided local evidence that highlights the advantages of knowledge about how to take care of Muslim female adolescents. Nursing students who take care of multicultural people need to have a clear understanding about beliefs related to health including sexual behavior, space and time.

These findings provided an empirical evidence that can be applied to promote sexual abstinence intention in adolescents who face offense issues in the secular curriculum. This makes it easier for nursing students in generating shared knowledge from individual knowledge to the collective knowledge. The nurse educator/instructors can accompany the students throughout the process. In conclusion, a clearer understanding of the emancipatory teaching in nursing education assists nurse educators/instructors in forming critical judgments and developing nursing education.

Nursing research: This action research study is a reflective way which is also suitable for the academic field as it supports health promotion curricula. Collaboration and participation in the school community provided the main vehicle to define research problems and develop interventions in this study's setting. The findings of this study could be used as a reference in creating a model of intervention for Muslim female adolescents. The curriculum of sexual health would be congruent with cultures, the concept of sexuality and the concept of modesty based on Islamic sexual morality. In addition, studies on diverse intervention models to improve the sexual health and reproduction in Muslim female adolescents also offer solutions. These effective models help harmonize religious beliefs and cultural values.

Limitations of the study

This action research is only limited to female adolescent population. Its application is also limited to other settings where there are different religious contexts such as various sexual practices and different attitudes toward sexual behaviors. Instruction methods in sex education lessons were explored by examining Muslim female adolescents' views as to whether particular aspects of sex education classes (including the characteristics of teachers, the contents, teaching methods) influenced their responses and interactions in lessons. Concerning gender, interactions in focus group discussions were also analyzed to provide insights into how adolescents interact when it comes to sexual issues. Regarding time commitment, the research process at Islamic private school was interrupted and delayed due to teacher meetings, long semester holiday during two Eid days (Islamic festivals) and absence from school due to health problem. According to the number of the participants, it may not be enough to conclude the findings of the study by using statistic test.

Recommendations

Even though this study provides informative findings about Muslim female adolescents in Islamic private schools, the similar study done with adolescents in public schools is required due to the different context and perspectives. Moreover, during the period of puberty, there are many factors that inhibit the maintenance of intention for sexual abstinence such as psychological factors, physical and social environments. psychological factors, physical and social environments. Importantly, religious leaders needed to work hand in hand with guardians, health education teachers and public health nurses to promote the intention for sexual abstinence

behavior with morality-based education. Islamic sexual morality was the essence of life. Adolescents should be cultivated continuously to behave properly in the way of Islam. Hence, the family, school and government should use the religious and cultural-based approach in preventing premarital sex and create supportive environment for adolescents. However, male adolescents should be also involved. Lastly, the testing of this Islamic-based nursing model of the intention for sexual abstinence behavior among Muslim female adolescents in this study by quasi-experimental design should be conducted to verify its effectiveness.

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Appendices

Appendix A

In-depth Interview Guideline

Interview guideline for adolescents

Questions:

1. Tell me about sexual situation among early adolescents in this community?
2. Tell me what are the appropriate relationships between males and females in Islam?
3. Tell me what are the expectations regarding sexual situation in your community?
4. What do teacher/ parents teach adolescents to promote sexual abstinence behavior for female adolescents? and how.
5. What do you concerns on the sex education that are still unclear or needed to be more clarified? Give some example
6. What are the religious factors influencing sexual abstinence behavior for Thai Muslim female adolescents?

Interview guideline for adults

Questions:

1. Tell me about sexual situation among early adolescents in this community?
and how do you feel?
2. What is sexual maturity in Muslim adolescents?
3. What are the appropriate relationships between males and females in Islam?
4. What are the expectations regarding sexual situation in your community?
5. What are the ways you teach adolescents to promote sexual abstinence?
6. How do teacher/ parents teach and/ or promote sexual abstinence behavior for female adolescents?
7. What is your opinion about early sexual initiation among Muslim adolescents?
8. What are the factors related to sexual abstinence behavior among Muslim adolescents?
9. Who are involved and what role do they play in promoting sexual abstinence behavior?
10. What activities do you employ to promote sexual abstinence behavior for adolescents in your community and how do they work and have so far performed?
11. What are the religious factors influencing sexual abstinence behavior for Thai Muslim female adolescents?

Appendix B

Focus Group Interview Guideline

Reconnaissance Phase

Questions:

1. What is the sexual situation among early adolescents in this community?
2. What are your concerns about this issue?
3. What interventions have promoted sexual abstinence behavior among early adolescents in the past?
4. What are the factors that influence sexual abstinence behavior among early adolescents?
5. What are the difficulties or barriers related to sexual abstinence behavior?
6. How do you cope with such difficulties or barrier?
7. What types of things help youth at this age learn?
8. What do you want to do to promote sexual abstinence behavior?
9. How can Islamic principles be modified to solve this problem?
10. What have you done for instance to help solving problems or issues related to early sexual initiation?
11. What interventions do you use to promote sexual abstinence?

Planning phase

Questions:

1. From sexual situation as we figure out from focus group, what activities are employed to promote sexual abstinence behavior among early adolescents?
2. Who are involved? Are they viewed as appropriate? Why?
3. What should be the key characteristics of such activities?
How to perform them?
4. Who should be the participants? Why?
5. When is the most appropriate time to conduct the activities? Why?
6. If you participate in the activities, what will you do to promote sexual abstinence behavior? Why?
7. How can the activities meant to promote sexual abstinence behavior among Muslim adolescents be evaluated?

Acting and observing phase

Questions:

1. What are the opportunities for effectively solving the problem?
2. What are the strategies, processes and attitudes that can effectively change management?

Reflection phase

Questions:

1. How do you feel after doing your activities?
2. What are the obstacles and the chances to progress the program?

Revising Plan Phase

Questions:

1. How can the action plan be refined and what decisions need to be made in the next step?

Appendix C**Observation Record Form**

Instruction: The researcher uses this form to do field note during the process of participant observation.

Observation record No.....

DateTime.....

Place (observation site).....

Participant Code#.....

Observed data	Reflection

Appendix D

Personal Data Forms

Part 1 Questions for female adolescents

Instruction: Please fill in the blank and write “/” in the space () that is true for you.

1. Participant Code :Date.....

2. Age: years

3. Education: () Mattayom 1 () Mattayom 2 () Mattayom 3

4. Average grade GPA:

5. Personal income:baht per week

6. How many members living within your family from six months until now?

Your family havepersons

Please do mark “/” at these following choices for members living within your family from six months until now. You can answer more than 1 choice

6.1 () you 6.2 () your mother 6.3 () your father

6.4 () your brother or sisterpersons (please identify)

.....

.....

6.5 () your relativespersons (please identify)

.....

.....

7. You attend religious class (tadika) after school hour

7.1 () no class

7.2 () have class

It spends time.....hours per week.

Please identify day in week (such as Monday, Tuesday)

.....

8. Your activities in pastime

8.1 () no activity

8.2 () do activities

What are activities? Please identify.....

.....

.....

Who do you go with?. Please identify.....

.....

Where and when do you normally go? Please identify.....

.....

.....

9. The resources that you gain sexual and reproductive health information. You can answer more than 1 choice

() friends () father () mother () teacher

() health care provider () Internet () religious leader

() Others (please identify).....

Please ascending order from most to least for the resources that you gain sexual and reproductive health information.....

.....

10. What topics related to sexual and reproductive health information that you gain?

You can answer more than 1 choice

- sexual development dating and friendship menstruation
 sexual intercourse contraceptive methods
 risk to early sexual initiation refusal or negotiation skills
 Other (please identify).....

11. What topics related to sexual and reproductive health information that you need more or are still unclear? (please identify).....

12. Who do you always talk to when you have any problems in your life?

- friends parents teacher healthcare provider
 Others (please identify).....

Part 2 Questions for Teacher

Instruction: Please fill in the blank and write “/” in the space () that is true for you.

1. Participant Code..... Age..... years,

Gender () Male () female

2. How many years of teaching?

3. What are the topics related to sex that you teach?

4. How do you teach about sex to your students?

5. How do you feel when you talk about sex during teach?

6. What are the students' response during teach?

7. What kinds of question that students normally ask you related to sex? and how do you responses to them? Please give some examples

.....

.....

8. How do you manage or service when your students have any problems related to sexual health?

.....

.....

Part 3 Questions for guardians

Instruction: Please fill in the blank and write “/” in the space () that is true for you.

1. Participant Code () mother () father () guardian

2. Age years

3. The highest degree or level of school you have completed.

() 3.1 High school or equivalent

() 3.2 Vocational/technical school (2year) or college

() 3.3 Bachelor's degree

() 3.4 Other (please identify).....

4. Marital status

() 4.1 Married or domestic partnership

() 4.2 Widowed

() 4.3 Divorced

() 4.4 Separated

4. How many children under 16 years old live in your household?:.....person

5. Your current household income per month

() 5.1 less than 10,000 baht

() 5.2 10,001-20,000 baht

() 5.3 20,001-30,000 baht

() 5.4 more than 30,000 baht

6. Do you teach or discuss about sexual health with your children?

() never () yes

If “no”, why?.....

If “yes”, what and how?.....

Appendix E

Informed Consent and Informed Assent Forms

E-1 Informed consent

Research Title: The development of Islamic based intention of sexual abstinence behavior model for Muslim female adolescents.

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Dear Participant,

You are invited to join a research study. Please take whatever time you need to discuss the study with your family and friends, or anyone else you wish to. The decision to join, or not to join, is up to you. In this research study, I am investigating the model of Islamic based intention of sexual abstinence behavior model for Muslim female adolescents.

Please read the following explanation carefully before you make decision to participate in this study. It is essential for you to comprehend the goal of the research and how to participate in it. If you are not clear and need more information in this study, please feel free to ask the investigator anytime that you want. The study will be conducted in your district at the Islamic private school. Group discussion and in-depth

interviews will be conducted with participants to explore the current situation of premarital sex in the community and how to overcome it. This study will apply Islamic principles in each research process. These processes will take around two to three months. The benefit of this study will help you to protect your adolescents from sexually risky behavior. In participating in this study, I can't guarantee that you will gain benefits with personal experience. It may be of benefit in the future from the information that is found in this study. Participants' can be assured of anonymity and confidentiality in that all data from you will be coded and kept private. This research is of minimal risk because this study has been approved by the Ethical Committee of the University.

Muslims in the community, you are an important person who protect Muslim youth and guide them in the proper way. Islam principles and the Quran will lead to an understanding of how Islamic persuasion works and how it impacts on sexually risky behavior among Muslim adolescents. I hope that this study will help young Muslim girls to overcome the problem and insist on "no sex before marriage". Your participation in this study is voluntary and by signing this informed consent it means that you have understood, and agreed to participate in this study.

Please contact me if you have questions about the study, any problems, unexpected physical or psychological discomforts, or think that something unexpected is happening during the study.

Signature of Subject or Representative

Date

I have clearly explained the information regarding this study to the informant for his/her informed consent.

Signature of the researcher _____ Date _____

E-2 Informed assent

Research Title: The development of Islamic based intention of sexual abstinence behavior model for Muslim female adolescents.

Researcher: Jitlada Piriyaart

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I am doing a research study about developing Islamic based intention of sexual abstinence behavior model for Muslim female adolescents. A research study is a way to learn more about a problem. If you decide that you want to be part of this study, you will be asked about your current situation, factors related to premarital sex and how to prevent this problem twice or three times per month.

There are some things about this study you should know. This is a participatory action research that will provide in-depth interviews and a focus group for you after school hours.

Not everyone who takes part in this study will benefit. A benefit means that something good happens to you. I think the benefits might be gaining more knowledge and skills to protect you from sexual risky behavior situations.

If you do not want to be in this research study, I will tell you what other kinds of activities there are for you.

When I am finished with this study I will write a report about what was learned. This report will not include your name or that you were in the study.

You do not have to be in this study if you do not want to be. If you decide to stop after I begin, that's okay too. Your parents know about the study too.

If you decide you want to be in this study, please sign your name.

I, _____, want to be in this research study.

(Sign your name here)

(Date)

Appendix F

A guide to promoting sexual abstinence behavior in Muslim female adolescents for Teachers

There are 4 sessions experiential learning to promote sexual abstinence behavior that teachers can conduct by integrated Islamic teaching as identify.

Session 1: “How others see at me”

Rationale: People have opportunities to develop relationship with others. Each and every one we know may look at you in different ways. Knowing how you are seen by others helps you know yourselves better, develop your personality and improve your relationship with others.

Objectives:

1. To know yourselves though the perception and point of view of the people you know
2. To learn how to express your feelings to your friends

Equipment and media:

“How I see myself” and “How you look at me” handouts (enough copies for all participants)

Activities:

1. The moderator explains that this is a self-learning session through other people's point of view and that the session requires everyone's sincerity to point out how they see or know one another.
2. The session begins with participating students saying names of fruit such as mango, orange, apple and banana to identify which of the four groups they belong in.
3. Distribute activity sheets "How I see myself" and "How you look at me" to every participant.
4. Each participant writes about themselves in "How I see myself" sheet in one minute.
5. Mango group pairs with Apple group and Orange with Banana groups. Members of each group exchange their "How you look at me" sheet to their pairs and write about each other down in two minutes.
6. The second pairings are between Mango group and Orange group and between Apple group and Banana group. Ask a second friend to write on "How you look at me" sheet.
7. The third pairings are between Mango and Banana and between Orange and Apple. Ask a friend in the third pairing to write on "How you look at me" sheet.
8. Members of each group pair with each other and ask a fourth friend to write on their "How you look at me" sheet.

9. When the time is up, all participants sit down and read what their friends have written about them and see if it was they write about themselves.
10. 3-4 volunteers will be asked to share their friends' opinions on them that match how they see themselves with other participants.
11. The moderator starts a discussion with following questions.
 - How do you feel when reading your friends' opinions about you?
 - Is there any participant who thinks their friends' opinions about them are not correct and do they want to tell their friends about their personality? A few volunteers among the participants will be asked to share their thoughts.
 - Is anyone surprised with how others look at them? Volunteers will be asked to share their answers.
 - If it is not in written form, can you tell your friends how you look at them by other means?
 - Is exchanging perceptions between friends like this activity useful and how?
12. The moderator concludes the session by asking participants to share their thoughts on benefits of the activity and mentioning following additional points.
 - It is natural that everyone sees things differently because each person comprehends and understands and things based on their own

experiences. Thus, you should not expect others to always think the same way you do.

- Knowing how others see you can help you see yourselves and them more clearly. Also, it makes you realize which part of you needs improvement in order to develop relationship with others.
- “Whoever does good and believes – whether he is male or female – such shall enter the Garden and they shall not be wronged even in the slightest,” the Holy Quran 4: 124.

Recommendations for the moderator:

The moderator ought to emphasize exchange of friendly opinions and observe the participants’ behavior in case some of them overreact to strong comments.

Assessment and evaluation:

Observation of participation in group activities and discussions

End-of-lesson question:

Which part of you needs improvement, how and why?

Session 2: “Understanding each other”

Rationale: Age gap between teenagers and adults usually results in misunderstanding especially regarding relationship, which can lead to conflict and lack of communication. Learning to understand one another by putting yourself in another person’s shoes can help you realize the person’s feelings under the circumstances he is in. This will eventually bring about understanding and improved relationship.

Objectives:

1. To point out different expectations from male-female relationship which might lead to conflict between teenagers and adults
2. To suggest resolution to the conflict, communication, thinking and problem solving skills in order to maintain good friendship

Equipment and media:

Questionnaires for four groups of participants

Activities:

1. The moderator explains the definition of “Understanding each other” session. This session is aimed at helping participants learn what people related to them expect from them and how it affects their relationship with them.
2. Participants are divided into four groups, each tasked with different roles and given the questionnaires. Members of each team will brainstorm to find answers without letting any other group hear their discussions within 10 minutes.
3. When the time is up, each group will play the given roles starting from group 4 (teenagers), group 3 (friends), group 2 (teachers), and group 1 (parents) respectively.
4. During the role play, the moderator observes and notes important points presented by the participants of each group and will bring them up for a joint discussion.

5. The moderator starts a discussion with following questions regarding the noted points presented earlier.
 - How close were the role plays to reality?
 - Do you know that parents, teachers and friends have expectations from your relationship with your girlfriends / boyfriends and how? Are their expectations similar or different from the presentations and how?
 - Why do parents have that kind of expectation from your relationship?
 - What do you think of the expectations of those around you regarding your relationship? Should you care about their feelings and why?
 - How do you manage to reduce conflict about other people's expectations from your relationship?
6. The moderator asks participants what they have learned from the "Understanding each other" session and suggests following additional points.
 - It is normal that teenagers and adults have different points of view on being in relationship as well as other issues. Also, it is common that you would expect those who are close to you to think and do things the same way as you do.
 - A significant conflict between teenagers and adults regarding being in relationship is how they anticipate consequences and some issues are so delicate that they do not talk about them straightforwardly. For instance, adults are worried that premarital relationship will lead to unprotected sex

and unprepared pregnancy and thus choose to forbid it instead of expressing their concerns by reasoning.

- Even though everyone has expectations from your relationship out of concerns and good intention, prejudice, narrow mind and intolerance will even broaden the gap of communication that may be useful such as discussing problems with your boyfriend or girlfriend.
- Understanding your expectations from others and others' expectations from yourself and finding a mutually satisfactory solution helps reduce conflict between you and them.
- Show your love to your parents with gratitude and gentle treatment.

The Quran says, “And lower to them the wing of humility out of mercy and say, ‘My Lord, have mercy upon them as they brought me up [when I was] small,” 17:24.

Recommendations for the moderator:

The moderator ought to build mutual understanding with the participants that premarital relationship is commonly seen these days, Islam imposes strictly that marriage comes first and then flirting, because the religion says it is better to be safe than sorry. It is very common that teens both of boys and girls start having sexual desire and good feelings toward the opposite sex and so do animals. Thus, allowing male and female teenagers to start premarital relation is most likely going to bring negative consequences to each other.

Measurement and evaluation:

Observation of participation in group activities and discussions

End-of-lesson question:

If your parents expect something from you which is against your will, not allowing you to go out at night, for example. What will you do if you are in this situation?

Questionnaires:

Group 1 plays the role of parents with a teenage child in relationship.

- How would you feel as parents knowing that your child is in relationship?
- Do you agree with it?
- What would you expect your child to do?
- What would you want to tell him/her about it?

Group 2 plays the role of a teacher knowing that one of his students is in relationship.

- How would you feel as a teacher knowing that your student is in relationship?
- Do you agree with it?
- What would you expect your student to do?
- What would you want to tell him/her about it?

Group 3 plays the role of friends of someone in relationship.

- How would you feel knowing that one of your friends is in relationship?
- Would you agree with it?
- What would expect your friend to do?
- What would you want to say to him/her?

Group 4 plays the role of a teenager in relationship.

- How do you feel being in relationship?
- What do want to tell people around you about your relationship?
- What do you expect people around you including your parents, teachers and friends to think about your relationship?

Session 3: “I want to tell you that....”

Rationale: There are many ways to express your feelings toward someone you admire but most of all, you must express them with respect and understanding that the particular person might not have the same feelings for you. Even so, it does not mean the end of friendship. If you accept it and adjust your feelings, you can still maintain good terms with that person.

Objectives:

1. To learn how to express your feelings for someone with respect

2. To be able to refuse the other person's feelings for you without hurting him/her

Equipment and media:

1. A4 sheets, each divided into four or six parts
2. Flip chart sheets, tapes and marking pens

Activities:

1. The moderator explains that this session is aimed at learning how to express feelings without hurting others.
2. The moderator introduces participants to the session with question as to how you tell someone when you fall in love with him/her. Two or three volunteers will be asked to share their answers.
3. Each participant is given a sheet.
4. Participants will have to answer the question "if someone admires you, how should he/she tell you to make you impressed?" and write their answers on the given sheet without signing their names.
5. Participants have one minute to answer the question and when they are finished, they will put their answer sheets in the box prepared specifically for this session.
6. Volunteers will be asked to gather their answer sheets and rewrite them on the flip chart sheets. Duplicated answers will be noted with frequencies.
7. In the meantime, participants will be divided into two major parties consisting of several minor groups and given 15 minutes to discuss following questions.

- The first party will discuss “what will you do if someone tells you that he/she falls in love with you and you have the same feeling for the person.”
 - The other party will discuss “what will you do to reject someone who falls in love with you?”
8. Members of each minor group speak out their answers individually first with someone in writing them down on flip chart sheets and after that, brainstorm internally for more opinions. Once they are done, each group member will vote for their best answers out of which they will make role plays.
9. The first major group will carry out “someone tells me that he/she is in love with me, and I like him/her too” role play. Each minor group has two minutes to perform their shows and when they are done, they will ask following questions.
- What do you think of each response?
 - Do you have any other suggestions for response?
10. The second major party carries out “rejection” role plays. When every minor group is finished, they will start a discussion on following topics.
- What do you think about each group’s choice of rejection?
 - Which method do you think will not hurt the other side’s feelings and maintain friendship?
 - Do have any other suggestions on how to reject the other side’s feelings without hurting them and that can maintain friendship?

11. A volunteer will present collected answers on how to let someone know that you are in love with them.
12. A few participants will be randomly asked which of the answers they approve.
13. After all the presentations are over, the moderator will invite all participants to a discussion with following thought-provoking questions.
 - Do you think men and women have different ways of telling the people they are in love with about their feelings and how?
 - If they say “I love you” differently, what do you think is the reason?
 - Is it necessary to tell the person you admire about your good feelings for them and why or why not?
 - If you tell someone that you are in love with them and get rejected, how will you treat them afterwards?
 - If you are rejected by someone, will you be able to remain friends with them and why or why not?
 - What does the Quran say about love and how did Prophet Muhammad (May peace be upon him) express his love?
14. The moderator concludes the session by enumerating following lessons learned from this session.
 - It is natural for teenage boys and girls to start admiring someone and be admired although some have not had a chance to experience such feelings.

- Islam does promote love and considers it as an important matter.
However, the religion has strict rules about love when it involves others.
It is important that you learn what Islam aims regarding this issue.
- In fact, both the Quran and tradition of Prophet Muhammad mention love in beautiful way, the eternal love that will continue in the hereafter, unlike relationship of young men and women in this world. Islam emphasizes marriage and family which are the most important parts of love life.
- Love that is based on feelings alone may not be true love or the love you should look for. This kind of relationship is formed upon affection, fun or perhaps instant desire.
- The expression of a special feeling such as love must be based upon the religion, morality and ethics.

Recommendations for the moderator:

There may be some participants who are in one of the aforementioned situations, some in relationship, some broken up or some in sadness after being rejected. The moderator should consider these circumstances and remain discreet to prevent allusion and mockery.

Assessment and evaluation:

Observation of participation in group activities and discussions

End-of-lesson questions:

- Do you think it is embarrassing to tell someone that you are in love with them and why or why not?

- What will you do if you are rejected by someone you admire?

Session 4 “Imagination of love”

Rationale: Relationship between two people who are fond of each other can develop in several ways depend on their choices and decisions. Regardless of their options, both sides are responsible for the consequences of everything they do together.

Objectives:

1. To be able to tell the progress of a relationship between two people who are fond of each other
2. To observe your own desire to be in relationship and for sexual intercourse
3. To evaluate your readiness to take responsibility for the consequences of developing your relationship

Equipment and media:

1. Imagination of love picture sets for all participants divided into 3-4 groups
2. A4 sheets
3. Marking pens or colored pencils
4. Tapes

Activities:

1. The moderator explains that this session revolves around relationship development between two people who are fond of each other.

2. Participants are equally divided into groups.
3. The moderator hands out a set of three imagination of love pictures to each group..
4. Members of each group brainstorm among themselves and tell stories based on the given pictures with details of time frame, places and what happens connecting the three pictures. Each group has 15 minutes to make up their stories.
5. Representatives of each group present their stories while the moderator may ask additional questions to hear male and female participants' opinions.
 - The first picture is a man and woman imagining about being in relationship.
 - To people at what age can this situation occur?
 - What type of girlfriend or boyfriend do you think most teenagers want?
 - The second picture is about falling in love amid friends.
 - When you fall in love with someone, what will you do to let him/her know?
 - How do you tell him/her that you do not have the same feelings?
 - The third picture is about flirting, phone calls, taking a walk, dining and watching a film together in public.
 - How long does it take from falling in love to flirting?
 - What if the female takes the initiative?

- If someone tries to flirt with you but you do not like it, what will you do?
- If you are the one who takes the initiatives and learn that person you like does not feel the same, how will you feel and what will you do?
- How does it feel to flirt?
- How long do you flirt before you start your relationship?
- What does relationship mean and how do you know that you are already in relationship with the other person?
- How much do you show your affection to each other when you are in relationship? Do kiss, hug your girlfriend/boyfriend or hold her/his hands?
- How long do you need to be in relationship before you do so?

6. After every group was done with their presentations, the moderator starts a discussion with following questions.

- When you like someone, do you tell or consult anyone else about it?
- Before you decide to be in relationship with someone, do you need to ask other people's opinions such your parents or friends? What will you do if they disapprove?
- Who will you tell about your relationship and why?
- If two people start their relationship in the second year of middle school, how long do you think it will last?
- If you decide to start a relationship with someone, will any of you think about breaking up and why or why not?

- What can cause a breakup?
7. Each group discusses how the relationship of the people in the given pictures could might turn out and draw a picture of it in 10 minutes.
 8. Each group has two minutes to present their stories.
 9. After every group were done with their presentations, the moderator starts a discussion with following questions.
 - Can you really decide how your relationship with someone should go on?
 - How do you know in which way the person you are in relationship with want it to turn out?
 - If two people cannot agree whether they should continue their relationship or not, what can they do to resolve the conflict?
 - Is it possible for two people to be in relationship without sexual intercourse and why or why not?
 10. The moderator concludes the session as follows.
 - It is natural that when you become a teenager, you begin to have affectionate feelings for someone but you need to be sure how you want your relationship to go on considering the consequences of your decision. More importantly, the relationship is not just about two people, but it must be within the permissible extent of the religion.
 - When you are in love, always remember that loving for Allah and interacting with brothers and sisters in religion is the greatest form of worship.

- The decision to steer your relationship belongs to you and the other person depending on your “readiness” and it is fine not to tell anyone else about it. But you must be sure and aware of what you are willing to happen to your life. You are responsible to do whatever it takes to make something happen in your life and to prevent something from happening. There will be problematic consequences such as unprepared pregnancy if you have unprotected sex, for example. What would you do about it? On the other hand, what will you do if you plan to develop your relationship gradually and learn more about each other before you decide to marry that person or what will you do if you want to break up with that person?
- The most important thing in relationship is responsibility. The first step to taking responsibility is considering all possibilities in your relationship, helping each other meet mutual expectations and prevent or deal with problems that may undermine the relationship.

Recommendations for the moderator:

- The moderator must be open-minded but not judgmental toward participants’ idea about premarital sex.
- Following are what to do to stay away from sexual incitements:
 - 1) lowering your gazes from things that incite sexual desire (see Quran 24:30), refraining from causing trouble, returning greetings, advocating good and forbidding evil (see Bukhari no.2465 and Muslim no.2121);
 - 2) Women are forbidden from wearing perfume in public because its fragrance can cause tribulations such as provoking men’s sexual desire.

If young men and women follow the above teachings, it will only help them control their sexual desire effectively.

- It is essential that the moderator cultivate the teenage participants to be aware of their emotion and desire to anticipate a way to cope when they crave for being alone with the opposite sex in a sexually inciting situation. The youngsters need to realize that if they are in such a situation, they must stop to think of the consequences both in this world and the hereafter.

Assessment and evaluation:

Observation of participation in group activities and discussions

End-of-lesson activity:

Write a page of a teenage love story with both positive and negative impact.

Source: PATH. (2008). Guideline to Sex Study Management for Matthayom 2 Students.

Appendix G

Sexual Abstinence Intention Scale

Part I The Parent-Daughter Sexual Abstinence Communication Questionnaire

Instruction: Mark × on the number that is the most appropriate to your decision.

Often refers to your perception that your parents always communicate or perform it to you

Sometimes refers to your perception that your parents occasionally to communicate or perform it to you

Never refers to your perception that your parents on no account to communicate or perform it to you

Variables/Items	Never	Sometimes	Often
1. My parents told me having sex during the school years may cause unwanted pregnancy	1	2	3
2. My parents told me pregnancy during the school years may result in loss of educational opportunities or expulsion from school.	1	2	3
.			
.			
15. My parents told me a man who sincere about a woman would not force her to have sex during the school years	1	2	3

Part II

The Sexual Abstinence Intention during the School Years

Questionnaire

1. Behavioral beliefs toward sexual abstinence

The following questions refer to thing that may happen if you have sexual abstinence during the school year. Please mark × on the number that best describes how you belief.

Do you agree that sexual abstinence would	Disagree	Unsure	agree
1. Prevent AIDS and sexually transmitted diseases.	1	2	3
2. Prevent unintentional pregnancy.	1	2	3
.			
.			
16. Insults because nothing is gained from sexual experiences.	1	2	3

2. Outcome evaluation

The following questions are the list of outcomes that may happen if you have sexual abstinence during the school year. Please mark × on the number that best describes how important each outcome is it, or it would be for you.

Behavioral outcome from sexual abstinence during the school year	Not important	Unsure	Important
1. Keep away from losing out on educational opportunities.	1	2	3
2. Praise from friends in virginity.	1	2	3
.			
.			
16. Keep virginity.	1	2	3

3. Normative beliefs

What do you think about the responses of the following persons if you have sexual abstinence? Please mark × on the number that best describes what do you believe each of people mentioned approve or disapprove of the behavior?

The following persons think that....	Disagree	Unsure	agree
1.Father	1	2	3
2.Mother	1	2	3
.			
.			
10. Grandmother	1	2	3

4. Motivation to comply

Motivation to do what each referent thinks you should or should not have sexual abstinence. Please mark × on the number that comes closest to you how likely do you want to do whether each referent thinks about the possibility of you to have sexual abstinence?

Possibility to have sexual abstinence	No	Unsure	Yes
1. How likely you want to do if your father wants you to practice sexual abstinence?	1	2	3
2. How likely you want to do if your mother wants you to practice sexual abstinence?	1	2	3
.			
.			
12. How likely you want to do if your grandfather/ grandmother want you to practice sexual abstinence?	1	2	3

5. Control beliefs

Adolescents' control beliefs regarding each factor that effect their behavioral performance. Please mark × on the number that best describes how easy or difficult is it, or would it be for you to have sexual abstinence during the school year.

Condition that facilitate or impede sexual abstinence	Impossible	Unsure	Possible
1. Pay attention to studies.	1	2	3
2. Awareness of self-esteem.	1	2	3
.			
.			
12. My friends encourage me to have sex.	1	2	3

6. Perceived powers

Please mark × on the number that best describes how likely or unlikely is it, or would it be for you to have sexual abstinence during the school year.

Likelihood of occurrences	Unlikely	Unsure	Likely
1. A chance to pay attention on studying	1	2	3
2. A chance to awareness on self-esteem	1	2	3
.			
.			
12. A chance to go outside alone with a boyfriend	1	2	3

7. Sexual Abstinence Intention

Please mark × on the number that best describes your intention to have sexual abstinence during the school year.

Variables / Items	Impossible	Unsure	Possible
1. In case a boyfriend asks to have sex, I resist by refusing.	1	2	3
.			
.			
3. I intend to not have a boyfriend until I graduate	1	2	3

I intend to practice sexual abstinence until.....years

VITAE

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List of Publications and Proceedings

Publication:

Piriyasart, J., Songwathana, P. & Kools, S. (2018). Perceptions of sexual abstinence among Muslim adolescent girls in southern Thailand. *International Journal of Adolescent Medicine and Health*, 0(0), pp. -. Retrieved 7 Jun. 2018, from doi:10.1515/ijamh-2017-0119

Proceeding:

Piriyasart, J., Songwathana, P., & Wiroonpanich, W. (2017). *Comprehensive education: A vehicle for promoting sexual health in Thai Muslim adolescents at school*. Oral presentation at TNMC & WANS International conference 2017 on October 20-22, 2017, Bangkok, Thailand

Piriyasart, J., Songwathana, P., & Wiroonpanich, W. (2017). *Understanding the Perceptions of Sexual Abstinence among Muslim Adolescent Girl in Southern Thailand*. Oral presentation at Optimizing Healthcare Quality: Teamwork in Education, Research, and Practice on June 22-24, 2016, ChiangMai, Thailand