ประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน

Experiences of sexual health literacy among adolescent students with unplanned pregnancy

RAPEEPAN NARKBUBPHA

Burapha University

2020

ประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน

รพีพรรณ นาคบุบผา

ดุษฎีนิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต
สาขาวิชาNursing Science (Inter)
คณะพยาบาลศาสตร์ มหาวิทยาลัยบูรพา
2563

Experiences of sexual health literacy among adolescent students with unplanned pregnancy

RAPEEPAN NARKBUBPHA

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR DOCTOR OF PHILOSOPHY
IN NURSING SCIENCE
FACULTY OF NURSING
BURAPHA UNIVERSITY
2020

The Dissertation of Rapeepan Narkbubpha has been approved by the examining committee to be partial fulfillment of the requirements for the Doctor of Philosophy in Nursing Science of Burapha University

Advisory Committee

..... Principal advisor
(Associate Professor Wannee Deoisres)

..... Co-advisor
(Assistant Professor Yunee Pongjaturawit)

..... Co-advisor
(Associate Professor Moira Elizabeth Graham)

Examining Committee

..... Principal examiner
(Associate Professor Arpaporn Powwattana)

..... Member
(Associate Professor Wannee Deoisres)

..... Member
(Assistant Professor Yunee Pongjaturawit)

..... Member
(Associate Professor Nujjaree Chaimongkol)

..... Member
(Associate Professor Moira Elizabeth Graham)

This Dissertation has been approved by the Faculty of Nursing to be partial fulfillment of the requirements for the Doctor of Philosophy in Nursing Science of Burapha University

..... Dean of the Faculty of Nursing
(Assistant Professor Pornchai Jullamate)

.....

59810011: MAJOR: NURSING SCIENCE; Ph.D. (NURSING SCIENCE)

KEYWORDS: SEXUAL HEALTH LITERACY, FEMALE ADOLESCENT, STUDENT WITH UNPLANNED PREGNANCY

RAPEEPAN NARKBUBPHA : EXPERIENCES OF SEXUAL HEALTH LITERACY AMONG ADOLESCENT STUDENTS WITH UNPLANNED PREGNANCY. ADVISORY COMMITTEE: WANNEE DEOISRES, , YUNEE PONGJATURAWIT MOIRA ELIZABETH GRAHAM 2020.

Female adolescent’s unplanned pregnancy leads to negative health and social consequences in young people. It is anticipated that this problem is partly caused by limited sexual health literacy leading to poor sexual health outcomes. This descriptive qualitative study aimed to explore experiences of sexual health literacy among adolescent students with unplanned pregnancy in the Phetchaburi Province in Thailand. Participants were 20 adolescent students with unplanned pregnancy, aged between 14 and 19 years, who volunteered to participate in this study. All participants were primiparous and interviewed at a gestational age from 10 to 37 weeks. A semi-structured in-depth interview was used as the main technique of data collection. Data were analyzed using a process of thematic analysis.

The finding revealed that five themes emerged from the analysis. The themes were: a) female adolescents and their sexual health literacy, b) sexual relationship experiences, c) understanding of birth control contraception, d) circumstance leading to an unplanned pregnancy, and e) the pregnancy journeys.

Findings would be encouraging nurses to understand female adolescents unplanned pregnancy in respect of individual, family, and society context. Next research will be intervention research for the development level of sexual heath literacy among adolescents leading to prevent unplanned pregnancy. Finally, finding should be utilized sexual education and enabling information as well as service access for adolescents are essential to ensure that adolescents can access, understand, appraise and apply good sexual health literacy in decision-making to benefit their own health.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude and deep appreciation to my major advisor, Dr. Wannee Deoisres, and my Co. Advisor, Dr. Yunee Pongjaturawit, Dr. Moira Elizabeth Graham, expert involved in qualitative data analysis Dr. Clare Whitfield, and internal examiner Dr. Nujjaree Chaimongkol, for the great encouragement, suggestion, and empowerment me an achieve dissertation. Without her supervision and continuous support this dissertation would not have been achieve. Also, to Associate Professor Dr. Arpaporn Powwattana as an external examiner, for all of their guidance, and valuable advice throughout this study.

I wish to thanks all female adolescents who participated in the study and their parents who provide permission for their adolescent participated in this study.I feel very thankful to my dean, Mrs. Phenchamat Khamthana, Director of Prachomkloa college of nursing Phetchaburi Province, to offer me such a wonderful opportunity for full-time to study.

A special thanks to my instructors at Faculty of Nursing, Burapha University for their academic knowledge as well as thanks for all staff working at Faculty of Burapha University for their assistance for general help and academic letter.

Most importantly, I wish to express my deep love and gratitude to my parents, Mr. Sompong Junkeaw and Mrs. Saysoy Junkeaw to include my grandfather Mr. Bour Junkeaw for their unconditional love and always being there in the background to support me and be in charge of my children while I devote my time for being a student. I am grateful to my family, my husband, for being by side, patience, encouragement, and constant support. Thanks, my children, Lalittapat and Sirapat for their loves, patience and trust on their mother. Special thanks to all my Ph.D. friends and all Thai students at University of Hull for giving kindness and helping during time to study.

Rapeepan Narkbubpha

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

CHAPTER 1
INTRODUCTION

Statements and significance of the problems

Health literacy is a critical determinant of health that can empower individuals and lead to engaging in collective health promotion action (World Health Organization [WHO], 2016b). In addition, health literacy is important in terms of promoting healthy preventive behavior (Nutbeam, 2000). Meanwhile, health literacy refers to personal competencies for access, understanding, appraisal and application concerning health information in order to make sound decisions in everyday life and maintain good health (Ghanbari, Ramezankhani, Montazeri, & Mehrabi, 2016; Nutbeam, 2000).

If most of the country's population had low health literacy levels also had low accessibility to health information and low utilization of health services (Dewalt, Berkman, Sheridan, Lohr, & Pignone, 2004). This means that, the population will be unable to care for personal health care; the number of patients admitted to hospital care will rise and medical care costs are likely to escalate (WHO, 2009). Low health literacy has been linked to poor socioeconomic circumstances, and such circumstances, in turn, have been associated with adverse effects on health (Nutbeam, 2008). Especially, health issues are likely to be encountered at younger ages or adolescents, possibly due to inadequate knowledge and skill in prevention and personal health care.

Adolescence is a transitional period from childhood to adulthood (Steinberg, 2014). The World Health Organization defines adolescence as lasting from 10 to 19 years of age (WHO, 2018). In addition, adolescence is an important period of life, particularly with regard to independent decision-making (Ghanbari et al., 2016). It is, therefore, a crucial time to arm adolescents with accurate and reliable health information, so they can develop lifelong healthy behavior (The National Institute for Health Care Management, 2011). Especially, the important part of health literacy is sexual literacy because of their particularly vulnerable to poor sexual health outcomes is unplanned pregnancy (Slater & Robinson, 2014). Which is caused by adolescents

have rapid physical changes, especially physiological and sexual hormone changes (Freud, 1974). Higher natural sexual hormone function stimulates arousal, causing adolescents to seek or experiment to meet sexual needs (Crooks & Baur, 2005). In addition, lovers or partners usually look for opportunities to stay closer to each other in order to mutually do their interested activities and satisfy their sexual emotion (Atwood et al., 2012). Furthermore, another important factor is inadequate sex education knowledge (Thato, Jenkins, & Dusitsin, 2008).

Every year, an estimated 21 million girls aged 15 to 19 years and 2 million girls aged less than 15 years become pregnant in developing regions (Darroch, Woog, Bankole, & Ashford, 2016; United Nations Population Fund [UNFPA], 2015). Thailand is one developing country that remains confronted with health and social problems due to increased sexual health problem. Among Thai adolescents, 28 percent of males and 23 percent of females enrolled in secondary schools had sexual experience. Only 25 percent of them consistently used condoms; and according to a recent report, the adolescent pregnancy rate in Thailand has become the second highest in Southeast Asia (Bureau of Epidemiology, 2015).

Concerning the situation in Thailand, the teenage birthrate has been increasing the group of adolescents aged 10-19 years old, which poses a challenge for Thai society. In the group aged 10-14 years, the rates were 0.3 percent in 2005 and 0.4 percent in 2015. In the group aged 15-19 years, the rates were 14 percent in 2005 and rose to 14.9 percent in 2015 (Bureau of Reproductive Health, 2015a). Importantly, the rate of repeated pregnancy in 10-19 year adolescents were 11.1 percent in 2006 and rose to 11.9 percent in 2016 (Bureau of Reproductive Health, 2017b).

Moreover, based on the review of literature related to adolescent mothers aged under 20 years, many studies have found most adolescent mothers to have had unplanned pregnancies and to be unready for pregnancy or motherhood (Muangpin, Tiansawad, Kantaruksa, Yimyam, & Vonderheid, 2010; Neamsakul, 2008; Phoodaangau, Deoisres, & Chunlestskul, 2013; Pungbangkadee, Parisunyakul, Kantaraksa, Sripichykan, & Kools, 2008). Because adolescent mothers have no economic security, they need to rely on family and other assistance in raising their children (Littleton & Engebretson, 2002). Furthermore, adolescent mothers are psycho-socially immature (Littleton & Engebretson, 2002; Pungbangkadee et al.,

2008). In addition, adolescent mothers may have insufficient cognitive ability and skills to solve problems, particularly in adolescent mothers who have no assistance or support (May & Mahlmeister, 1994; Muangpin et al., 2010).

Furthermore, the effects of sexual health issues of unplanned teenage pregnancy have been found to have greater direct impact on female adolescents. For example, pregnant adolescents face health issues such as anemia, pregnancy-induced hypertension and increased chance for delivery by cesarean section, postpartum depression (The Health Intervention and Technology Assessment Program, 2014). There is higher occurrence of postpartum hemorrhage and endometritis when compared to the adolescents with higher age (Michaud & Ambresin, 2014). This results in the delivery mortality, sickness and adolescent disability. Also, the risks of perinatal mortality, preterm labor, birth weight below 2,500 grams and asphyxia are 50 percent higher in babies born from girls with age less than 19 years (Haldre, Rahu, Karro, & Rahu, 2007).

There are also socio-economic issues such as loss of educational opportunity. The adolescent parents have the burden to raise children despite of their unpreparedness. In particular, the female adolescents need to suspend their education and may not have an opportunity to return to school (Baird & Porter, 2011; United Nations Children's Fund [UNICEF], 2012; UNFPA, 2013). This leads to the loss of enjoyment of adolescent life and future to grow into the efficient adults. Moreover, the economic issues are also found, for example, lack of educational opportunity leading to limited employment choice. Without knowledge and work skills, adolescents earn small and insufficient amount of income or return for children and family maintenance (Oringanje et al., 2009; WHO, 2007)

One the other hand, an important factor in the circumstances leading to unplanned teenage pregnancy has been found that inadequacy of sex education (Thato et al., 2008). Including areas such as lack of knowledge and misinformation about sex, reproductive health and contraceptive methods; irregular or non-use of contraceptives for a variety of reasons, including forgetfulness, being carried away by emotions, not having enough time and feeling that condoms reduce pleasure for the male partner (UNFPA, 2015). Other contributing factors include lack of parental guidance, social stigma regarding contraception, gender inequality and sharing misleading information

via digital media (Termpittayapaisith & Peek, 2013). The consequences are vulnerability to poor sexual health outcomes, particularly unplanned pregnancies (Slater & Robinson, 2014).

Beside, a survey of comprehensive sexuality education courses in Thai schools has revealed that half of all instructors have not attended instruction training programs. Therefore, most instructors use the lecture approach and provide no opportunities for students to think analyze and raise questions. Meanwhile, the students lack understanding and awareness of birth control in addition to their inability to communicate or negotiate about the essential issues related to their own sex lives. (UNICEF, 2016). Moreover, according to a survey on the causes of premature engagement in sexual intercourse among adolescents by the Strategy and Planning Division (2013), some adolescents remain immature in terms of managing the problems occurring in their lives. Correspondent with a survey on the situation of sexual health literacy problems, particularly adolescent pregnancy, Thai female adolescents have insufficient levels of sexual health literacy to prevent unplanned pregnancies at up to 95.5 percent (Health Education Division, 2014). Consequently, they experience sexual health problems strongly affecting their quality of life and futures.

According to situation adolescent's pregnancy remain a concern in Phetchaburi province, Phetchaburi province in the western region of Thailand the teenage birthrate per 1000 women aged 10-14 years and 15-19 in 2016 has also escalated at 2.1 percent and 48.8 percent, respectively (Bureau of Reproductive Health, 2017b). During this age range, the adolescents are in the school age but they become pregnant, which is mostly unplanned one. These rates exceed the criteria for the indicators set by the Office of the National Economic and Social Development Board (2017), which means no more than 1.4 teenage pregnancies per 1,000 adolescent females aged 10-14 years and no more than 42 teenage pregnancies per 1,000 adolescent females aged 15-19 years. This survey has reflects on the real problem as it occurs at the local level.

Based on the above statistical data, it is obvious that adolescent pregnancy during the school years is a significant sexual public health problem requiring an urgent solution. The problem continually threatens quality of life and is likely to grow

in severity. Thus, building sexual health literacy among adolescents requires the provision of correct knowledge, understanding and decision-making skills tailored for the adolescent group. Furthermore, understanding based on engagement in sexual relations, methods for correctly managing emotions and controlling sexual desires can help reduce the problem of adolescent pregnancy. Nevertheless, the literature review discovered a dearth of studies on the sexual health literacy of adolescents. The studies that were discovered were aimed at developing indicators and using them to assess health literacy with the aim of preventing adolescent pregnancy among female adolescents during the school years (Health Education Division, 2014; Intarakamhang & Khumthong, 2017; Nomsiri, Srisiri, Virutsetazin, & Malarat, 2015)

Nevertheless, the aforementioned studies were no study related to understand concerning the contexts and conditions affecting the early days of motherhood, particularly in-depth studies about perceptions and reflective thinking about previous experiences with access, understanding, assessment and application of data in making decisions about sexual health. Consequently, the above issues could not be clarified and lacked sufficient depth to fully describe the situation of adolescent sexual health literacy during the school years, particularly with regard to the Thai context of unplanned adolescent pregnancy and examination of adolescent perspectives. Hence, adolescent sexual health literacy was examined with a qualitative descriptive approach for the purpose of gaining understanding about experiences with unplanned pregnancy in this group. The research opted to employ a qualitative descriptive approach in the methodology for identifying a complete description of events as they occurred. In this way, the researcher was able to remain superficially near the data in terms of the events and the terms used to summarize or describe them (Sandelowski, 2000).

Hence, the objective of the present study was aimed at examining and gaining understanding about the experiences and sexual health literacy of adolescents with unplanned pregnancy based on the singular experiences and perspectives of the pregnant adolescents themselves. The findings of the present qualitative study have yielded data on the situations and lived experiences of the population studied. In this way, understanding about the contexts, feelings, understanding about nature, living conditions and daily lifestyles concerned with the health literacy of adolescents with unplanned pregnancy. Thus, qualitative descriptive research methodology was

suitable to explore the experiences among adolescent students. It served as a basis for the development of appropriate intervention programs. This body of knowledge is essential for nursing professionals to enhance the quality of care of adolescents and to future promote in the prevention of unplanned pregnancy in adolescents to ensure proper self-care by improving learning experiences and understanding about sexual health literacy as appropriate for adolescents.

Research objective

To explore experiences of sexual health literacy among Thai adolescent students with unplanned pregnancy

Research question

What are the experiences of sexual health literacy among Thai adolescent students with unplanned pregnancy?

Scope of the research

A qualitative descriptive research approach was used for this exploration of the experiences of sexual health literacy among adolescents aged 10-19 years who became pregnant during their school years in Phetchaburi Province. The study was conducted from October 2018 to June 2019.

Definition of terms

Unplanned pregnancy refer to Thai adolescent students get pregnant while in school aged between 14-19 years who reside in Phetchaburi province and being a first-time mother.

Experiences of sexual health literacy refer to the adolescents perception and social skills in access, understanding and application of information in order to promote and care for sexual health. These are composed of six characteristics including access to the sexual health and sexual health service information, knowledge and understanding of sexual health, communication skills for sexual health, self-management skills for sexual health, decision-making skills for sexual health and media literacy on sexual health.

CHAPTER 2
LITERATURE REVIEWS

This literature review was conducted to identify the body of knowledge related to sexual health literacy among adolescent students with unplanned pregnancy. The content has been organized into three sections. The first section addresses understanding of adolescent development. The second is the situation of adolescent pregnancy both globally and in Thailand. The final section is sexual health literacy in adolescents.

Adolescent development

The word adolescence is from the Latin “adolescere”, which means “to grow into adulthood” (Steinberg, 2014). The World Health Organization defines the age of adolescence as being between 10-19 years (WHO, 2016a). Steinberg (2014) divided the adolescent years into the following three periods: early adolescence at ages of 10-13 years; middle adolescence at ages of 14-17 years and late adolescence at ages of 18-21 years. Adolescence is the transitional period from childhood to adulthood. In addition, it is a time of rapid and concurrent changes in several aspects such as physical, cognitive, emotional and social changes.

Physical development in adolescence

Normally, people enter puberty from the ages of 10-12 years old; this age varies with each individual (Slee, Cambell, & Spears, 2012). Outstanding physical changes include: height and weight, muscles and fat, hormone changes during puberty and sexual maturation.

Firstly, upon entry to adolescence, height increases. Females enter puberty at approximately 8 years of age. Female adolescents grow approximately 9 centimeters per year at approximately 12 years of age with overall growth in height of approximately 25 centimeters from entry to puberty until physical growth stops. At the same time, male adolescents enter puberty at approximately 9 years of age or approximately 2 years slower than females. Height increases at a maximum of approximately 10.3 centimeters per year until the age of 14 years. Overall, height

increases by approximately 28 centimeters. In terms of weight, female adolescents gain 4.6-10.6 kilograms per year and male adolescents gain 5.7-13.2 kilograms per year (Carswell & Stafford, 2007).

Next, regarding muscles and fat, male adolescents have more muscle mass than fat. In contrast, female adolescents have more fat mass than muscle mass. Male adolescents develop more muscle than fat with a muscle-to-fat ratio of 3: 1, while female adolescents have a muscle-to-fat ratio of 5: 4 (Feldman, 2008).

Thirdly, it concerns the hormonal changes during puberty. Hormones are powerful chemical substances secreted by the endocrine glands and carried throughout the body by the bloodstream. During puberty, the secretion of key hormones is controlled by the interaction of the hypothalamus, pituitary gland and gonads. The hypothalamus is a structure in the brain best known for monitoring eating, drinking and sex. The pituitary gland is an important endocrine gland that controls growth and regulates other glands. The gonads are the sex glands (Santrock, 2014). Key hormonal changes in adolescence involve two classes of hormones with significantly different concentrations in males and females (Susman & Dorn, 2012). Androgens are the main class of male sex hormones. Estrogens are the main class of female sex hormones. Testosterone is an androgen that is a key hormone in the development of puberty in boys (Colvin & Abdullatif, 2013). As the testosterone level rises during puberty, external genitals enlarge, height increases and the voice changes. Estradiol is an estrogen that plays an important role in female pubertal development. As the estradiol level rises, breast development, uterine development and skeletal changes occur. Furthermore, hormones do not act independently; hormonal activity is influenced by many environmental factors including parent-adolescent relationships. Stress, eating patterns, sexual activity and depression can also activate or suppress various aspects of the hormone system (Susman & Dorn, 2012).

Lastly, with respect to sexual maturation, Santrock (2014) argues that male pubertal characteristics develop in this order: increased penis and testicle size, appearance of straight pubic hair, minor voice changes, first ejaculation, appearance of curly pubic hair, and onset of maximum body growth, growth of hair in armpits, more detectable voice changes and growth of facial hair. Three of the most noticeable areas

of sexual maturation in boys are average age of development in boys and girls for these sexual characteristics, including growth spurts.

The appearance of physical changes in females is as follows: First, breasts enlarge and pubic hair appears. These are two of the most noticeable aspects of female pubertal development. A recent longitudinal study revealed that, on average, girls' best development preceded their pubic hair development by approximately two months (Susman et al., 2010). Later, hair appears in the armpits. As these changes occur, females grow in height as the hips and shoulders become wider. First menstruation occurs rather late in the pubertal cycle; and is considered normal if it occurs between the ages of 9 and 15 years. Initially, menstrual cycles may be highly irregular. For the first several years, female adolescents might not ovulate during every menstrual cycle. Some girls do not become fertile until two years after their periods begin. Pubertal females do not experience voice changes comparable to those in pubertal males. By the end of puberty, the female breasts have become fully rounded.

Cognitive development in adolescence

Piaget's theory states that cognitive development depends on genetic and environmental factors. Therefore, adolescent learning progresses based on cognitive development; adolescence is also referred to as the format operational stage, which is the final stage of cognition in the theory. This stage begins at approximately 11 years of age and extends into adulthood. At this stage, adolescents can engage in abstract thinking. For example, adolescents use symbols to explain abstract thinking. They also have the ability to reason and make various assumptions as well as the ability to thing scientifically by setting hypotheses and solving problems. Logical thinking will be fully developed (Wadsworth, 1996) .

Emotional and social development in adolescence

Sullivan's interpersonal theory of development divides adolescence into the following three stages: pre-adolescence, early adolescence, and late adolescence. During the pre-adolescence stage at the age of 10-14 years, good friends will share the same personality traits (same gender, status and age). Adolescents at this stage will share love, loyalty and emotional intimacy, but will not have sexual relationships. Early adolescence is marked by the onset of puberty, and most adolescents will stay at this stage for approximately four years. During late adolescence, adolescents have the

following three different needs: sexual satisfaction needs, personal intimacy needs and personal security needs. According to Sullivan's interpersonal theory, late adolescence starts when a person seeks to fulfill sexual needs and terminates relationships in terms of both sensuality and personal intimacy. Intimacy in combination with lust results in love and falling in love with another person, which is usually conducive to a firm relationship in the long term during adulthood (Crandell, Crandell, & Vander, 2012).

If pregnancy occurs during adolescence, the situation usually leads to interrupted development, because adolescents remain unable to develop a secure self-image. This results in impact on adaptation and problem-solving ability as well as responsibility toward the maternal role and planning for the future. Consequently, adolescents feel confused and conflicted when they are required to take responsibility for motherhood, childcare and adaptation to the maternal role, while they possess insufficient maturity. In addition, adolescents need to depend on financial and other assistance from parents, which makes them feel a loss of independence (Murray & McKinney, 2006). Therefore, adolescent pregnancy can lead to a crisis in terms of adolescent development.

In the present study, the researcher defined adolescents based on consideration of the criteria set by the WHO (2018), including consideration of physical, psychological, emotional, social and economic components of adolescents within the Thai socio-cultural context, because modern Thai children are entering puberty and adolescents earlier. Physical changes take place rapidly and girls are found to have their first menstrual periods at younger ages with an average age of 10.6 years. This early menstruation is a sign of readiness to become pregnant. If adolescents engage in unprotected sexual intercourse, they will be at risk for pregnancy (Bureau of Reproductive Health, 2011). Furthermore, according to The National Strategy for the prevention and solution of the adolescent pregnancy problem 2017-2026 (2016) set the goal for 2026 to have reduced live birth rates among adolescents aged 10-14 years and 15-19 years not exceeding 0.5 and 25 per 1,000 women, respectively (Bureau of Reproductive Health, (2016b). Moreover, according to the act for prevention and solution of the adolescent pregnancy problem B.E. 2016, adolescent is defined as a child aged over 10 years, but not 20 years of age. In addition, as a result of developments in the educational system, Thai children remain

in the system longer. Thailand's basic educational system is composed of no less than 12 years preceding higher education as follows: 6 years of primary education and 6 years of secondary education including junior and senior high school when adolescents are less than 20 years of age and dependent on their families in terms of lifestyles and economics (Bureau of Reproductive Health, 2016a)

Consequently, this study defines adolescents as people who are undergoing physical, psychological, emotional, social and intellectual changes between childhood and adult maturity at ages of 10-19 years, and adolescent mothers with unplanned pregnancies who are students, namely, pregnant adolescents aged 10-19 years on the first interview date.

Situation of adolescent pregnancy both globally and in Thailand

The adolescent pregnancy is a significant global health issue with the estimation of 21 and 2 million pregnant adolescents aged between 15-19 years and below 15 years, respectively, in developing regions (Darroch et al., 2016; UNFPA, 2015; WHO, 2018). Additionally, the regional difference of adolescent birth rate range from a high of 115 births per 1,000 women in West Africa to 64 births per 1,000 women in Latin America and the Caribbean to 45 births per 1000 women in South-Eastern Asia [ASEAN], to a low of 7 births per 1,000 women in Eastern Asia (United Nations Department of Economic and Social Affairs [UN DESA], 2017).

Consequently, one of the United Nations Sustainable Development Goals [SDGs] aims at reducing the adolescent pregnancy rates among those aged between 10-14 years and 15-19 years. This goal, which countries are required to achieve by 2030, is a part of indicators for the achievement of SDG 3 to ensure healthy lives and promote well-being for all people of all genders and ages (United Nations, 2015).

Many ASEAN countries have high adolescent birth rates. Thailand is one of countries in ASEAN that facing an increasing birth rate of those aged between 10-14 years old rises from 0.6 in 1992 to 1.5 in 2015. Likewise, the birth rate among 15-19-year-old mothers also grows from 40.7 to 44.8 during the same period (World Population Reference Bureau, 2017).

Importantly, over the ten-year period from 2007 to 2016, the rates of repeated pregnancy in 10-19-year-old adolescents rose from 11.0 percent and to 11.9

percent. In particular, repeated births in the group aged 15-19 years increased from 11.2 percent to 12.2 percent (Bureau of Reproductive Health, 2017b). Obviously, therefore, the problem of adolescent pregnancy is escalating in severity and this problem requires an urgent solution.

Consequences of unplanned adolescents' pregnancy

Adolescent pregnancy is a worldwide problem. Furthermore, adolescent pregnancies are highly likely to be unplanned. Most of these young women are not ready for the emotional, psychosocial and financial responsibilities of parenthood (Perry et al., 2018). Thus, adolescent pregnancy results in physiological, psychosocial, and economic and social concerns.

Physiological concerns

Adolescent pregnancy carries serious impacts on adolescents' physical health such as sleeping and self-care issues (Vin et al., 2014). Moreover, pregnant adolescents are at increased risk for maternal anemia, preterm birth, preeclampsia and or HELLP syndrome, postpartum hemorrhage and chorioamnionitis (Kawakita et al., 2016; Torvie, Callegari, Schiff, & Debiec, 2015). Pregnant adolescents are also at greater risk for endometritis than older mothers, and this can result in death in child birth, illness and disability for adolescent mothers (Haldre et al., 2007; Michaud & Ambresin, 2014; Neal et al., 2012).

Additionally, some 3.9 million unsafe abortions among girls aged 15-19 years occur each year, contributing to maternal mortality and lasting health problems (Darroch et al., 2016). The above findings correspond with hospitalization data from the MoPH, hospitals in Thailand in 2015. In the age groups under15 years and 15-19 years, the abortion rates are 1.0 percent and 17.8 percent, respectively, with abortion-related complications at 7.1 percent. The most frequently encountered complications in these cases are hemorrhaging requiring blood transfusion (43.4 percent), followed by systemic infections (27.6 percent) (Bureau of Reproductive Health, 2017a)

The health complications of infants include preterm deliveries, low birth weights, very low birth weights and infant deaths, all of which are growing concerns for infants born to adolescent mothers (Ganchimeg et al., 2014; Kawakita et al., 2016; Ozdogan et al., 2015; Torvie et al., 2015). The above findings correspond with an

analysis of Thailand by (UNICEF, 2015). Based on the birth registration records studied in the above survey, infants born to adolescent mothers are significantly more likely to have low or extremely low birth weights (12.3-17.5 percent) than infants born to adult mothers. The younger age group, mothers aged 10-14 years, is twice as likely to give birth to infants with low birth rates a mothers aged 20-29 years (17.5 percent vs. 9.3 percent; OR = 2.06). This younger age group is also at greater risk for giving birth to infants with low birth weights (17.5 percent) than their slightly older counterparts; mothers aged 15-19 (12.3 percent). Although extremely low birth weights are far less common than low birth weights, infants born to younger mothers aged 10-14 years are over four times more likely to have extremely low birth weights than mothers aged 20-29 years (0.6 percent vs. 0.1 percent; OR=4.36) and mothers aged 15-19 years are twice as likely to have extremely low birth weights (0.3 percent vs. 0.1 percent; OR = 1.94).

Psychosocial concerns

Adolescent pregnancy also affects psychological health due to changes in mental, emotional and social conditions as young girls make the transition into motherhood requiring them to immediately take on adult responsibility, despite the fact that adolescents lack the maturity (Bureau of Reproductive Health, 2015b). The data supports the conclusions of Wiemann, Rickert, Berenson, and Volk (2005) that stigmatized pregnant teenagers often report lower self-esteem, feelings of being isolated from peers and higher levels of depression. And another study on the impact of being an adolescent on depression development during pregnancy found that 39.0 percent of the subjects had mild depression, while 37.1 percent had moderate depression and 10.5 percent had severe depression. Furthermore, depression risk was increased 18.2-fold during adolescent pregnancy (Kamalak et al., 2016). In addition, reports of longitudinal studies concerning the mental states of adolescents over a 4-year follow-up period. According to the findings, 57 percent of the subjects were under moderate to high pressure during the first three months postpartum (Tonelli, 2005). Moreover, teenage mothers also report conflicts between their own needs as both teenagers and mothers. As teenagers, they have a desire to go out for fun, attend school or work, and these wishes are in conflict with their new maternal role and responsibilities (Pungbangkadee et al., 2008).

Economic and social concerns

Adolescent pregnancy can also have negative social and economic effects on girls, families and communities. Unmarried pregnant adolescents may face stigma or rejection by parents and peers as well as threats of violence (UNFPA, 2013). With regards to education, school-leaving can be a choice when a girl perceives pregnancy to be a better option in her circumstances than continuing education, or can be a direct cause of pregnancy or early marriage. An estimated 5 to 33 percent of girls aged 15 to 24 years who drop out of school in some countries do so because of early pregnancy or marriage (World Bank, 2017). Concerning school drop-outs, only 51 percent of first-time mothers aged 15-19 years have been found to be senior high school graduates, while 89 percent of first-time mothers aged over 20 years are at least senior high school graduates (The National Campaign to Prevent Teen pregnancy, 2013). Consequently, these female adolescents have lower education levels than they should, which caused them to lose opportunities for good jobs or even face unemployment (UNICEF, 2012; UNFPA, 2013). Consequently, these adolescents have insufficient incomes for the support of their children and families (Oringanje et al., 2009; WHO, 2007). Hence, this group becomes a burden on families, society and the nation.

Circumstance of unplanned adolescents' pregnancy

The circumstances contributing to the high teenage pregnancy rate include social, family and personal factors as follows:

Social factors

Peer influence: Adolescents with friends at risk for problematic behaviors such as nighttime outings, smoking, liquor/alcohol consumption, substance abuse, gambling and sexual intercourse to become accepted in a group also have boyfriends/ girlfriends and sexual intercourse at the same time. A study conducted by Rattanawiboun and Karnjanumpra (2009) found peer to be important in persuading adolescents to have sexual intercourse.

Religiosity: Adolescents with experience or lives close to religion have been found to engage in sexual intercourse later than non-religious adolescents due to religious teachings. Lifestyles following religious guidelines prevent these adolescents

from having much interest in sexual intercourse, causing adolescents to turn their attention toward other behaviors (Chamratrithirong et al., 2010).

Television: A study conducted in 2003-2005 found adolescents in the United States watch television for a mean of 3 hours per day and 70 percent of adolescents saw images related to sex at a mean of 5 ties per hour. This percentage increased to 77 percent during primetime with images related to sex (56 percent) and images related to sex only 3.2 times per hour. The findings of this study also found sexual intercourse scenes between lovers at 53 percent, sexual intercourse scenes between men and women who were not lovers (20 percent) and sexual intercourse scenes between men and women without a clear relationship (Kunkel, Eyal, Finnerty, Biely, & Donnerstein, 2005). This may create a need to think about creating attitudes among children and adolescents regarding choices to have sex with people and at what level in a relationship (Apinuntavech, 2016).

Online media: According to a survey conducted by National Statistical Office (2014) Thai adolescents aged 15-24 year have used mobile phones to play online games (76.8 percent) and use the Internet for 1-2 hours per day. These media are more likely to involve sexual content. As a result, children and adolescents easily become familiar with sexual expressions or experimentation, including openly expressing opinions on the topic of sex on a computer screen or electronic device. This causes adolescents to lack restraint or proper control of emotions regarding sexual intercourse. Adolescents may think writing instead of speaking without seeing each other is not a big deal. However, frequent thinking and speaking on this topic will lead to behaviors and adolescents may not be able to control emotions or behaviors in real situations (Apinuntavech, 2016). The above findings are similar to those of a study finding female students studying for a bachelor's degree in the first year at a university to use the Internet as the best consultant on sex education (Wong-arsa, Kongnguen, & Vuthiarpa, 2015).

Sexual stimuli: Such as books, cartoons, drama series and movies, etc., influence earlier sexual intercourse. One study found viewing sexual stimuli and parents' un acceptance of children's sexual intercourse to be a major factor causing adolescents to experiment with precoital behavior, causing adolescents to be more likely to have sex (Atwood et al., 2012; Chamratrithirong et al., 2010). Similarly,

Rattanawiboun and Karnjanumpra (2009) found viewing media related to sex to have stimulated adolescents' desire to determine whether sexual intercourse is different from what adolescents' have viewed.

Crowded environment: A crowded environment with no convenience for quality of life results in a stressful life without comfort. Adolescents who grow up in such a community are likely to have sex early and may have a family from adolescence. These findings are similar to those of a study revealing half of the subjects' community environment to be crowded communities, followed by rented homes, which are another factor influencing adolescent pregnancy (Cheevapunsri, 2013).

Family Factors

Lack of love and attachment in the family: The fact that parents have no time to be close to children and work hard to support the family cause's ineffective communication among family members. A family atmosphere that does not facilitate speech and consultation on different issues causes adolescents to avoid consulting with parents about sexual intercourse. Fighting and arguments between parents, separation or divorce makes children unhappy. This usually results in emotional or behavioral problems among adolescents and adolescents will try to seek happiness from friends or boy/girlfriends. Moreover, pregnant adolescents are usually found to have not been raised with reason tend to have higher divorce rates than female adolescents who were not pregnant (Rakamnuaykit & Prajuapmor, 2013).

Family models: The fact that a parent has history of adolescent pregnancy or child-rearing may cause adolescent children to have sex during adolescence and allow children to become pregnant or have children during adolescence as well. This finding is consistent with a study conducted by Kamphaengphan, Kaewpornsawan, and Apinuntavech (2011) who found history of adolescent pregnancy among mothers or relatives to be a factor influencing adolescent pregnancy. Furthermore, attitude or acceptance from parents with a history of adolescent parenthood creates acceptance when a child has sexual intercourse during adolescence.

Communication about sexual education in the family: The family system in Thailand does not place importance on sex education for children. Therefore, parents usually do not learn proper methods for communication on the issue of sexual

intercourse in adolescents. Thus, the adolescents in this group have difficulty, shyness, embarrassment or no enthusiasm to discuss this topic due to apathy about proper methods of communication. Parents with a poor attitude toward sexual intercourse usually avoid discussions with children, thereby causing children to seek knowledge from other media or persons outside the home, particularly from peer or romantic partners. If children have curiosity after receiving information on sexual intercourse, children can seek an appropriate consultant or explanation (Bureau of Reproductive Health, 2013; Kritcharoen, Phol-in, Ingkathawornwong, & Srithaweewat, 2008). These findings correspond with the findings of the present study, which reveal that mothers' expressions when speaking with children regarding sexual intercourse, expressions of determination to impart the idea of abstinence at a young age to children, open communication on the issue of sexual intercourse and good relationships between mothers and children cause children to delay first sexual intercourse (Lam, Russell, Tan, & Leong, 2007).

Personal Factors

Sex hormones: Some adolescents might be interested in sex in childhood before entering elementary school or during the pre-adolescent period. One reason for this premature interest might be due to sex hormones, namely, testosterone in males and estrogen in females. Adolescents have higher sex hormone function naturally leading to arousal or sexual feelings, and this is the reason adolescents search or experiment in order to meet their naturally occurring needs (Crooks & Baur, 2005).

Brain: The parts of the brain that perceive and respond to sexual stimuli are called the amygdala and the hippocampus. Previous studies have examined stimuli in these parts of the brain in laboratory animals. According to the findings, the fact that animals express more sexual behaviors (Crooks & Baur, 2005), means that if humans are stimulated by sexual stimuli through the five senses, whether through sight, sound, smell, taste or touch, the functions of these parts of the brain will heighten and respond in the form of sexual behavior or emotions.

Having a boyfriend or girlfriend: Adolescents in this group have more opportunities for sexual behavior than adolescents who had not boy/ girlfriends or romantic partners, because they tend to seek opportunities to be near each other, do

things together, pay attention to each other and meet their sexual needs together (Atwood et al., 2012)

Drug use: Adolescents who use drugs such as liquor and alcoholic beverages lose the inhibitions preventing them from performing certain behaviors due to the effects of the drugs or narcotic substances. Being with a romantic partner and drinking liquor increases the likelihood of engaging in sexual intercourse as found in previous studies reporting that male adolescents who drink liquor or alcoholic beverages are at 20-percent greater risk for causing pregnancy than those who do not drink these beverages. Furthermore, alcohol/ drug addictions suppress decision-making ability and put adolescents in this group at risk for having unprotected sex leading to sexually transmitted diseases (Prasartwanakit, Songwathana, & Phetcharat 2009; Ubonsaared et al., 2009).

Knowledge about sex education: An important factor leading to unplanned teenage pregnancy has been found that inadequacy of sex education (Thato et al., 2008), including areas such as lack of knowledge and misinformation about sex, reproductive health and contraceptive methods; irregular or non-use of contraceptives for a variety of reasons, including forgetfulness, being carried away by emotions, not having enough time and feeling that condoms reduce pleasure for the male partner (UNICEF, 2015). The above finding corresponds with the findings of a study by Ubonsaared et al. (2009) who found apathy about sexual health and birth control methods to frequently result in pregnancy. Nevertheless, although some female adolescents are informed about birth control and aware of the chance of pregnancy and sexually transmitted diseases, they are unable to persuade or negotiate with their male partners to use a condom. And other adolescents who intend not to use contraceptives because they want to get pregnant (Chirawatkul et al., 2011). At the same time, other adolescents receive non-comprehensive sex education curriculum and face social stigma regarding contraception (Termpittayapaisith & Peek, 2013)

Concept of sexual health literacy in adolescents

Health literacy is composed of perception and social skills in access, understanding and application of information with various methods in order to promote and care for personal health (Nutbeam, 2000; WHO, 2009). In addition,

health literacy is composed of the following six characteristics adapted by Nutbeam (2009): 1) access to health and health service information; 2) knowledge and understanding of health; 3) communication skills for health; 4) self-management skills for health; 5) decision-making skills for health, and 6) media literacy on health.

Most studies on health literacy have been conducted in medical settings and shown lower health literacy to be associated with poorer health outcomes, health disparities and increased healthcare expenditures (Berkman, Sheridan, Donahue, Halpern, & Crotty, 2011; Dewalt et al., 2004; Speer, 2017; Van der Heide et al., 2013). Furthermore, health literacy is beneficial for sexual health in promoting gender equality, reducing gender gaps in education, improving future economic opportunities, and eliminating chains of intergenerational poverty (WHO, 2016b). Unfortunately, the survey reveals that 95.5% of female adolescents aged 15-21 years have insufficient levels of sexual health literary for unwanted pregnancy prevention (Health Education Division, 2014). It can thus be argued that Thai adolescents are now facing sexual health problems.

Adolescence is an important period of life for lifelong promotion of sex health behaviors through the development of sexual life and needs, especially decision-making skills, and provision of accurate and reliable sex health information to adolescents (The National Institute for Health Care Management, 2011). It is also a right age for enabling them to handle their own sex health conditions (Manganello & Shone, 2013). Their rapid changes of physical conditions and, importantly, of physiological and sexual hormones are the reason why health literacy is crucial for them (Freud, 1974). With higher natural sexual hormones, adolescents seek or experiment different ways of sexual needs satisfaction (Crooks & Baur, 2005).

However, the insufficient sexual health literacy, inadequacy or lack of sex education knowledge as well as misinformation about sex, sexual health protection, reproductive health and contraceptive methods can contribute to sexual health-related problems and irregular or non-use of contraceptives (Thato et al., 2008). Besides, a survey of the Strategy and Planning Division (2013) on the causes of premature engagement in sexual intercourse indicates the inability of some adolescents to deal with problems occurring in their lives. Their individual experience of sexual health problems has a severe impact on their quality of life and future. The aforementioned

factors can eventually result in the risk of poor sexual health outcomes, particularly unplanned pregnancy (Slater & Robinson, 2014), deprived quality of life and health condition as well as higher reproductive healthcare costs for adolescents.

Sexual health literacy refers to the advanced cognitive skills of critical thinking, analysis, decision-making, and problem-solving in sexual health contexts. These are combined with the social skills of communication, and investigation leading to protection of sexual health and well-being (Graf & Patrick, 2015; Health Education Division, 2014; WHO, 2016b). According to Edwards, Wood, Davies, and Edwards (2012); Health Education Division (2014), and Nutbeam (2009), sexual health literacy is composed of six characteristics.

Firstly, the adolescents' accessibility to sexual health care and sexual health service information will enhance their knowledge of search engines/methods to find the right and correct sources of health and health service information. This allows them to verify the information from multiple sources in order to ascertain their own understanding and information reliability for the application in self-care.

Secondly, their knowledge and understanding of sexual health will promote the memorization of important health-related contents, which are the key for deepening their understanding of how to implement the determined plans as well as to rationally analyze and compare health-related contents/ practices.

Thirdly, it is also important to strengthen their communication skill of sexual health so that they can effectively use their speaking, reading and writing skills in convincing friends to accept health-related information for better understanding of such issue.

Fourthly, the self-management skill of sexual health is crucial for enabling adolescents to formulate and plan the practices and targets. They will then be able not only to take actions in accordance with the determined plans but also to review and adjust self-practice for the acquisition of correct health behaviors.

Fifthly, their possession of decision-making skill of sexual health will be useful for them to rationalize or analyze the advantages-disadvantages of alternatives/ practices for realizing good health. As a result, they can make a proper decision to avoid them or to choose the viable one with the least impact on themselves and others.

Lastly, the media literacy of sexual health allows the adolescents to compare the methods of media exposure for avoiding possible risks on themselves and others. By doing so, they will be able to examine the correctness and reliability of health-related information presented by the media and to evaluate which media statements can be translated into a guideline for the society or community.

Furthermore, the review literature indicates 3 levels of sexual health components. Firstly, the functional health literacy involves access to the information, knowledge and understanding of sexual health care and sexual health service. Meanwhile, the interactive health literacy refers to communication and self-management skills of sexual health. Lastly, the critical health literacy skills are decision making skill and media literacy of sexual health.

The review of relevant literatures indicates that the adolescent students with unplanned pregnancy is in the age of childhood to adulthood transition when they face the rapid emotional, physical, mental, and social changes. Hence, the health literacy development is important for adolescents to enhance their understanding of nature of changes because they are in the age that they wish to take actions and make decisions on their own. If skills and knowledge necessary for health decision-making are properly created, correct behaviors and habits of adolescents in terms of health promotion and health problem promotion will eventually be imbued. In particular, the sexual health literacy is a key factor for preventing unplanned adolescent pregnancy.

Nevertheless, the adolescent sexual behaviors are local-specific issue because the influential factors on the engagement in unsafe sexual behaviors leading to unplanned pregnancy may vary with social contexts. Consequently, the qualitative description research is adopted in this research to explore sexual health literacy experience of adolescent students with unplanned pregnancy in Phetchaburi province. In the perception of respondents, the understanding of specific characteristics and the adolescents' abilities to clarify this issue and to deeply explain sexual health literacy phenomenon are promoted.

Thus, this leads to the development of sexual health literacy approach in a suitable and efficient manner that truly meets the adolescents' needs resulting in the care, promotion and sustainable prevention of adolescent health problems. As a result, health outcomes are used as sexual health promotion directed at achieving safe and

suitable sexual behavior as well as good sexual health. This will lead to lower reproductive healthcare costs and decreased use of reproductive health services.

CHAPTER 3
RESEARCH METHODS

This chapter describes research methods used in the present study. First, the part of the philosophical background. Second, the part of research methodology and design. Third, the part of participant in this study. Fourth, the part of research setting. Fifth, the part of research instrument. Sixth, the part of protection of human subjects. Seventh, the part of data collection procedures. Eighth, the part of data analysis. Last, the part of trustworthiness of this study.

Philosophical background

This phenomenon utilizes an interpretive paradigm is employed as philosophical underpinning of this research. The interpretive or qualitative paradigm has the key features similar to Lincoln and Guba's description of "the naturalistic paradigm" also called hermeneutic or interpretive paradigm (Lincoln & Guba, 1985). The paradigm of interpretivists, researchers asserts that behavior can only be understood in context and the thinking process that give rise to it focuses on subjective inner experiences. Observer and subject are affected by the world around them and researchers cannot be a detached observer. The methods used by interpretivists are active and flexible and are also unpredictable in the terms of process and outcome (Parahoo, 2014).

The qualitative researchers accept the fact that there is a relationship between the ontology and the reality's nature and characteristics as well as that the reality is fluid and socially constructed instead of the fixed reality of the positivist paradigm. According to the epistemological assumptions, the qualitative researchers wish to closely understand how they construct their realities. In addition, part of methodology the qualitative researcher's use of inductive method from the very beginning and possible modifications of research questions during the data collection and analysis process for a better understanding of research focus or questions (Carswell & Stafford, 2007).

Consequently, the experience of sexual health literacy among adolescent students with unplanned pregnancies was understood through descriptive qualitative approach which helped to understand experience of adolescent who are different. So, experience of adolescent are multiple realities as basic ontological assumption. The epistemology of lived experience in adolescent students is subjectivity, the reality is complex, holistic and differentiate base on social context, culture, language, art, and ethics. Methodology of qualitative descriptive research requires collect data from adolescent students who have direct experienced in unplanned pregnancies. Thus, data collection procedures used se-mi structured and open-ended interview guide to in-depth interview that appropriate to this study because Sandelowski (2000) suggests that se-mi structured and open-ended interview guide be used to avoid limiting responses and to encourage participants to express themselves freely. Furthermore, a qualitative descriptive approach within the process, the researcher strives to stay close to the "surface of the data and events" (Sandelowski, 2000), where the experience is described from the viewpoint of the participants (Sullivan-Bolyai, Bova, & Harper, 2005).

Qualitative research designs have been predominately used in nursing and midwifery research to provide direct descriptions of phenomena (Sandelowski, 2000). The nursing philosophy is regarded as an important confidence system for reflecting the research perspectives. The nurses should realize that human beings are not objects but are a complex and consequential person as a whole; therefore, the perfect care cannot be provided given that they are unaware of people as humans. As the care and human health experience are the focus of nursing, it is needed to explore adolescent students with unplanned pregnancies in light of their sexual health literacy experience.

Research methodology and design

This research builds on qualitative methodology. Qualitative methodology is an exploration of the perspectives and life world of human beings and the meanings they give to their experience and the goal is to develop a rich understanding of a phenomenon in the real world of individual perspectives (Holloway & Galvin, 2017). Additionally, the major principles of qualitative method are that it addresses knowledge as contextual, and also that reality, to some extent, is socially constructed.

This means that qualitative methodology does not aim to seek generalizable facts, but instead, it intends to describe in-depth patterns within specific fields in order to promote understanding. A qualitative descriptive approach was use because of the goal of qualitative descriptive studies is a comprehensive summary of events in the everyday terms of those events. Additionally, researchers conducting qualitative descriptive studies stay close to their data and to the surface of words and events (Sandelowski, 2000). Therefore, the aim of this study is to explore experiences and understand the phenomenon from the individual perspective in the experience of sexual health literacy among adolescent students with unplanned pregnancies. Thus, qualitative descriptive research methodology was selected for this study because the strength of this approach was is able to provide a complex textual description of the participants' experience.

Participants

The participants in the present study were recruited by a purposive sampling based on the following inclusion criteria: a) the adolescents aged 10-19 years counted until their expected date of confinement, b) get pregnant while in school, c) not pregnant as a result of rape, and d) able to read and communicate Thai. The exclusion criterion was having any serious physical and/or mental problems. Furthermore, the sample size was determined on the basis of theoretical saturation. Saturation refers to no new information being obtained while collecting data (Morse, 1995). Generally, qualitative sampling consists of small sampling units studied in depth and most common size is between 14 and 20 participants (Holloway & Galvin, 2017). In this study the participant was 20.

Research setting

Phetchaburi province is located in the western region of Thailand. The province is divided into eight districts, which are further subdivided into 93 townships and 681 villages. The health care sector, under the Ministry of Public Health, comprises one provincial hospital, seven district hospitals, and 116 sub-district health promoting hospitals in this province. In 2017, Phetchaburi had a total population of 482,375 (233,665 males and 248,710 females) of which 28,197 were aged 10-19 years

(Official statistics registration systems, 2017). Phetchaburi is one of 19 provinces whose adolescent birth rate has doubled between 2000 and 2012 (Termpittayapaisith & Peek, 2013). Moreover, the age of adolescent mothers who give birth continues to decrease. This finding corresponds with the rates for adolescent pregnancy that should a tendency to rise every year. According to Bureau of Reproductive Health (2017b) found that the birth rate of adolescents aged 10-14 and 15-19 years was 2.1 percent and 48.8 percent per 1,000 youths, respectively. These rates exceed the criteria for the indicators set by the (Office of the National Economic and Social Development Board, 2017).This survey has reflects on the real problem as it occurs at the local level.

Research instruments

There are five kinds of research instruments as follows:

Firstly, the researcher had been the main instrument. Hence, the researcher has to competent in every research process ranging from research design to data collection and data analysis. During the study, the researcher had to delicately analyze with observation and sensitivity to any occurrence with the ability to integrate the theoretical framework into the studied phenomenon. Therefore, the researcher required practice with skills and improved knowledge of qualitative research. In this regard, apart from the preparations through the study of academic knowledge and research methodology, the researcher used to learn qualitative research subjects and do the qualitative research under the program of Master in Caring Science (Nursing) Mälardalen University, Sweden and the advanced qualitative research subjects in the Nursing Faculty at Burapha University. Furthermore, the researcher used to learn qualitative data analysis and NVivo 12 data analysis workshop at University of Hull, United Kingdom. In addition, the researcher also had experience in doing 2 qualitative research papers on adolescents as well as in publishing 1 qualitative research on adolescent pregnancy in the international journal.

Secondly, the interview guides conducted based on our research objective. A pilot study was implemented with three Thai adolescents who meet the eligibility criteria. The pilot studies undertaken to test, modify the questions in the interview guide, to assess the appropriateness of interview guide and the protocol of data collection. During the implement of pilot study, the interview guide was a little

modified, but the protocol of the data collection was not modified. After that, the interview guide validated by three experts in the field of qualitative research (Appendix H). Including, the researcher also consulted the dissertation advisory committee of experts on the content and research procedures. Sample questions was include, “Could you please tell me about your previous experience with sexual health literacy before your pregnancy?” “What do you think about sexual health literacy?” “How would you define sexual health literacy?” “What are the characteristics of sexual health literacy?” etc. In addition, the participants allowed to speak freely and follow-up questions used to follow up and deepen the answers as follows, “What do you mean?” “How would you like to respond?” “How do you feel?” (Appendix A).

Thirdly, recorder equipment such an audio recorder used to record the interviews for verbatim transcription and detailed analysis in all processes.

Fourthly, field notes written to record situations, observations and critical insights occurring during the interviews (Appendix B). The field notes comprising the following information: interview situations, observations, and settings as the reminder of events, actions, and participant interaction has been written by the researcher from the beginning of data collection until the study conclusion. Besides, the participant’s behaviors were immediately recorded after the interview in the field notes to store the relevant information for future use in data analysis.

Lastly, the interviews, non-participant observations, and field notes were the data source triangulation used in this study for developing a comprehensive understanding of phenomena.

Protection of human subjects

To ensure the protection of the rights of participants, the research proposal approved by the Research Ethics Review Committee, Faculty of Nursing, Burapha University and the Committee of Public Health Office of Phetchaburi province (Appendix F). During the recruitment process, study purpose and procedures were fully explained to each participant and the researcher answered their questions. Informed written consent was obtained from the participants (Appendix D, E). Two participant who aged more than 18 years was not asked from their guardians to participate. For eighteen particiapnts who aged less than 18 years and had no legal

marital license, written consent/ assent were asked from their guardians to participate in the interviews (National Research Council of Thailand, 2015). The description includes an explanation that the participants able to choose to skip any questions making them feel uncomfortable about answering or discussion; furthermore, they informed that they can subsequently change their minds and withdraw from the study at any time. Moreover, the participants able to choose the time and place of the interview at their convenience and they ensured privacy to decide on a place by themselves. Confidentiality promoted and maintained by storing the recorder, raw data and demographic information in a separate locked cabinet. The researcher presented an overview of the analysis and findings. Some remarks of the participants presented in the qualitative data with the participants' anonymous names and addresses represented by code numbers instead. All data treated confidentially and deleted after the research is completely finished.

Data collection procedures

Prior to the beginning, approval to conduct this study granted by the Research Ethics Review Committee, Faculty of Nursing, Burapha University and number of the IRB approval is 02-09-2561. In addition, by the Research Ethics Review Committee of Public Health Office of Phetchaburi province and number of the IRB approval is PBEC No. 021/ 2561. Then, the researcher met with head of the Antenatal Care Center of community hospital and health promoting hospital in Phetchaburi province. In these met, the researcher introduced myself explain the purpose of the study, discuss the time involved and identify the data collection procedures to be used. After that, the participants have decided to participate; the researcher contacted them to set up an interview in a private room at the hospital or at a place of their choosing to assure confidentiality. Next, the participants received information about the purpose, methods, risks, benefits and rights to participate in this study. All participants free to make decisions whether to participate and ask any questions or raise any concerns about participating in this study. Each adolescent asked to sign an informed assent form. At the same time, approval also be sought from each consenting adolescent's guardian to allow her to participate. This accomplished by way of a consent letter sent home with each adolescent candidate. Those guardians

giving consent asked to sign the letter and have it returned to the researcher by way of their respective adolescent.

After that, this study used in-depth interviews with open-ended questions as a method of data collection (Morse & Field, 1995). A study on the experience of sexual health literacy among adolescent students with unplanned pregnancies is quite sensitive due to potential psychological risks. Thus, a face-to-face interview had been deemed to be the most appropriate method of data collection. Moreover, to ensure confidentiality, permission for tape recording obtained from the participants.
A recorder used to record the interviews for verbatim transcription and detailed analysis. Then, the length of the interviews varies, depending on the participants' responses. Most of the participants were interviewed at their home. Four participants were interviewed at the private room of community hospital as preferred by the participants. Total number of meeting was 32 times. Eight participants were met one time due to the sufficient time for completing the whole interview at once; however, the other twelve of them were interviewed twice because they had no enough time for the first session. Each interview was conducted in Thai with the average time of 30-45 minutes. Some barriers during the in-depth interviews were that certain participants who have granted research participation consent could not be contacted for completing the data collection because of their move of address to other provinces or of their insufficient time for the interview at their boyfriends' houses. As the researcher wished not to interrupt the participants, the interview sometimes had to be stopped and the new participants were chosen to fulfill the number of twenty for data saturation. Finally, the field notes related to the situations, observations and critical insights during the course of interviews were written too.

Data analysis

The data analysis based on procedures for thematic analysis Braun and Clarke (2006) there are six steps to establish key themes as follows:

For the researcher, the first step was to gain familiarity with the data obtained. In the present study, the data was collected from the audio recordings of a set of in-depth interviews conducted by the researcher. These data were transcribed word-for-word in Thai. Next, they were translated into English by bilingual experts fluent in

both languages. The translation was performed by a bilingual expert who translated all of the transcript content from Thai to English. This expert also identified and defined any colloquial dialect or vernacular employed by the respondents. In addition, two native English speakers and one native Thai educator were requested to verify translation correctness. Then reading and rereading the data, noting down initial ideas.

At the second step, the researcher generated codes for the data collected. By using code names, the data obtained was analysed. During the coding, the researcher meticulously reviewed the content obtained from the in-depth interviews and paraphrased, then assigned codes to each data set. Then the researcher, co-advisor, and expert qualitative data analysis that conferred on the transcripts to draw comparisons and highlight differences discovering in the coding process. Next, any problems encountered in terms of coding structure were addressed. The coding process yielded codes and precise interpretations. New codes were added as needed throughout the process as new comprehension of the issues emerged.

For the third step, the researcher searched for themes. In this part of the process, the researcher collating codes into potential themes and gathering all data relevant to each potential theme. This is also the part where the researcher identified the themes that had become apparent.

The fourth step was the phase in which the researcher reviewed the themes that had emerged. In line with the conceptual analysis, the researcher established the main themes manually. Next all the authors including major advisor, Dr. Moira Elizabeth Graham, and Dr. Clare Whitfield worked to elucidate on these themes and link them with the extracts they had previously coded. Then checked in the themes work in relation to the coded extracts and the entire data set, generating a thematic map of the analysis to build comprehension of the movement, position and piecing together of events.

At the fifth step, the researcher defined and names themes. Ongoing analysis to refine the specifics of each theme and the overall story the analysis tells. Next generated clear definitions and names for each theme. Then the authors enhanced the descriptions of individual themes and clearly defined the themes individually.

In the sixth step, the researcher produced the report. In this process, the researcher selection of vivid, compelled extract examples, selected extracts, and

related back of the analysis to the research question and literature. Next the researcher produced the presentation in order to illustrate the connection with existing information. Furthermore, the data extracted from quotations of participants' statements were organized using NVivo 12 (Qualitative Data Analysis Software, 2012). So, that they could be appropriately and adequately exported for the assertion of findings based on actual events. Moreover, it was also able to verify that the said quotations truly belonged to the informants not from the researcher's personal constructions.

Trustworthiness

To establish rigor in qualitative research, the researcher maintained trustworthiness based on Lincoln and Guba (1985) who proposed the following trustworthiness techniques supporting the rigor of research: credibility, dependability, transferability and conformability.

Credibility includes activities that increase the probability that credible findings produced (Lincoln & Guba, 1985). In this study, the researcher conducted in-depth interviews as she observes behavior and environmental factors until there are no questions and the data are transparent. Next, peer debriefing the researcher meeting for discussion on data analysis with expert on qualitative research and dissertation advisory committee. In several time of peer group meeting about the coding, the categories, and the themes. Furthermore, shared ideas and experiences regarding data collection with the classmates who shared their insights and perspectives from Thai culture. The researcher sought ideas and experiences by sharing with both insideers and outsiders' perspectives useful for clarifying and exploring many aspects of culturally complex situations. After that, the researcher summary of the findings submitted to dissertation advisory committee to check and offer recommendations on whether or not the aforementioned are able to answer the research questions and meet the research objectives. From peer debriefing, the researcher slightly modified the classification of themes and categories. In addition, member checking were conducted by presenting the results of the data analysis and a summary of the findings given to the informants to check and affirm with certainty that the summary actually came from the experiences of the informants and was not suggested or new data (Appendix C).

Lastly, this study used data source triangulation to develop a comprehensive understanding of phenomena consist of interviews, non-participant observations, and field notes. Apart from using the interview as the main method for data collection, non-participant observations were the additional mean in gathering information for 2 purposes: to increase the credibility of interview-collected data and to be used in combination with interviews in case of the participants' inability to report certain behaviors accurately. This was to identify the relationships and meanings of occurred phenomena. Meanwhile, the field notes served as the reminder of events and actions as well as activated the thinking process.

Dependability is concerned with the appropriateness of the decisions and methodology used (Lincoln & Guba, 1985). Throughout the study, dependability ensured by interview transcripts and field notes used to record the decision-making process. The researcher takes the data and data codes to consult with dissertation advisory committee until the same conclusions can be drawn.

Transferability refers to the probability that the study findings have meaning to others in similar situations (Lincoln & Guba, 1985). In the present study, the researcher explained about the study site, selection of informants, research methodology and instruments used in the study until clear detail or thick description to ensure that the readers can understand the research processes. As a result, the research findings applied to other populations with characteristics similar to those of the subjects in the present study.

Confirmability refers to maintain of neutrality and prevention of personal bias influence on the research. The technique for establishing confirmability is an audit trail (Lincoln & Guba, 1985). In this study, the researcher systematically compiles various documents to build reliability. For example, about the data transcribed from the audio recordings of the interviews, the field notes and the table of data coding provided, the researcher verified that her findings were not self-created through dissertation advisory committee discussions and critique of the processes used.

CHAPTER 4
RESULTS

This chapter aims to describe the experience of sexual health literacy among adolescent students from viewpoints of these adolescents based on their insight experiences through the reflections of the girl adolescents in the situation.

Demographic characteristics of the participants

Twenty unplanned pregnant adolescents were interviewed in this study. Their age ranged between 14 to19 years old with an average of 16.15 years. All of the participants were Thai nationality. Nineteen participants identified themselves as Buddhists and one participant as Islam. Marital status, 18 cases involved couples who were cohabiting but not married and 2 couples were separated/ divorced. Educational attainment, 65 percent of them attainment junior high school, 30 percent of them attainment primary school, and 5 percent of them attainment senior high school. Grade of school dropped out because getting pregnant, 50 percent of participants attended senior high school, 40 percent of participants attended junior high school, and 10 percent of the adolescents attended vocational school. 30 percent of them were working and 70 percent of them were unemployed. Family income ranged between 3,000 and 30,000 Baht. Most of the participants (65 percent) had their first visit at 1st trimester and (35 percent) had their first visit at 2nd trimester. In addition, stages of pregnancy at interview, 70 percent of participants interview at 3rd trimester, 20 percent of participants interview at 2nd trimester, 10 percent of participants interview at 1st trimester. The demographic characteristics of the participants are presented in Table 1 as below.

Tables 1 The demographic characteristics of the participants (N = 20)

Characteristics	*N*	%
Age ($\bar{x}$ = 16.15, *SD* = 1.35) (year)		
14	2	10.00
15	4	20.00
16	7	35.00
17	5	25.00
19	2	10.00
Religion		
Buddhist	19	95.00
Islam	1	5.00
Marital status		
Cohabitation	18	90.00
Separated	2	10.00
Educational attainment		
Primary school (grade 6)	6	30.00
Junior high school (grade 9)	13	65.00
Senior high school (grade 12)	1	5.00
Grade of school dropped out		
Junior high school (grade 7-9)	8	40.00
Senior high school (grade 10-12)	10	50.00
Vocational certificate	1	5.00
High vocational certificate	1	5.00
Occupation		
Unemployed	14	70.00
Employee	4	20.00
Caterer	2	10.00

Tables 1 (Continued)

Characteristics	*N*	%
Family income (Thai Baths/ month) ($\bar{x}$ =12,810, *SD* = 6,453.55)		
3,000 -5,000	2	10.00
5,001-10,000	8	40.00
10,001-15,000	5	25.00
15,001-20,000	4	20.00
20,001-25,000	0	0.00
25,001-30,000	1	5.00
Stages of pregnancy at first antenatal care		
First trimester 0-12 week	13	65.00
Second trimester 13-27 weeks	7	35.00
Stages of pregnancy at interview		
First trimester 0-12 week	2	10.00
Second trimester 13-27 weeks	4	20.00
Third trimester 28-40 weeks	14	70.00

The findings of this study

Following the in-depth interviews, the researcher transcribed and translated the recordings verbatim. The interview transcripts were then read and re-read carefully, then coded and organized important statement. The findings of this study are classified into five themes, eighteen categories, and sixty-two codes all of which emerged from the analysis describing sexual health literacy among adolescent students with an unplanned pregnancy in Phetchaburi province. The summary of themes, categories, and sub-categories from the coding of data are presented in Table 2 below.

Tables 2 The experiences of sexual health literacy among adolescent students with an unplanned pregnancy in Thailand by themes, categories, and codes

Theme	Category	Code
1. Female adolescents and their sexual health literacy	Meaning of the term sexual health	- Taking care of my health by using protection - Using protection against STDs - Preventing an unplanned pregnancy first - If he won't wear a condom, then got to be controlled
	Characteristics of adolescents with good sexual health	- A perfectly healthy body - Protections itself during sexual relations - No sexually transmitted diseases - No substance addictions to drugs
	Source of the meaning of the term sexual health	- Teachers - Health care providers
2. Sexual relationship experiences	Dating the opposite sex	- Dating characteristics - Age when she began to like boys - The period since first meeting boyfriend until they went out together - The channel they met the opposite sex - Deciding to tell parents about boyfriend - The reaction of parents to knowing about a boyfriend

Tables 2 (Continued)

Theme	Category	Code
	Consenting to have sexual intercourse with boyfriend	- Duration of dating boyfriend until consenting to have sex - The situation leading to engagement in sexual intercourse - Reason for consenting to have sexual intercourse with boyfriend
	Finding a solution of female adolescent after sex	- Feelings about having sexual intercourse for the first time - Finding a solution after having sexual intercourse for the first time - Reactions of parents to knowing about having sexual intercourse with her boyfriend - Solution after abnormal physical symptoms
3. Understanding of birth control contraception	Sources of knowledge about birth control	- Taking with mothers - Sharing from female relatives - Learning from teachers - Learning from health care providers - Sharing from friends - Getting from social online media
	The behavior to use birth control	- Method for taking birth control pills - Method for taking emergency birth control pills
	Birth control methods used before the	- Birth control on the part of the man

Tables 2 (Continued)

Theme	Category	Code
	pregnancy	- Birth control on the part of the woman
4. Circumstance leading to an unplanned pregnancy	Misconceptions about birth control on the part of the woman	- A packet of birth control pills - History of illness in the past - A symptom of irregular period - Do not use any contraceptive methods
	Misconceptions about birth control on the part of the man	- Preventing pregnancy by using condoms - A packet of birth control pills - Misunderstand to be sterile - Misunderstand to be infertility
	The decision to select contraception method in women	- Inability to access and select sources of credible information about problem-solving methods for the side effects of birth control - When problems or side effects occurred as a result of oral contraceptives, no one was ever consulted - When forgot to take birth control pills, no one was consulted or no additional information was sought from other sources. The female adolescents decided on their own. - Inaccurate advice was received about what to do when her forgot to take birth control pills

Tables 2 (Continued)

Theme	Category	Code
		- Unable to negotiation to refuse to have unprotected sex
	Men and contraceptive use	- Condoms - Ejaculating outside the vagina
5. The pregnancy journeys	Unusual physical symptoms required a consultant	- Presenting symptoms of pregnancy - The event leading to confirmation of pregnancy
	The immediate reaction on hearing the discovering	- Feelings and reaction of girl adolescents after learning about pregnancy - Feelings and reaction of boyfriend after learning about pregnancy - Feelings and reaction of parents after learning about pregnancy - Feelings and reaction of teachers after learning about pregnancy
	Take good care of themselves	- Source of Take good care of themselves - Content of knowledge
	Take care of themselves to prevent complications during pregnancy	- Complications during pregnancy - Source of information on solving the problem of complications during pregnancy
	Planning for the future after giving birth	- Go back to non-formal education - Find a job to pay for my baby's expenses

Tables 2 (Continued)

Theme	Category	Code
		- Take care of the baby by myself - Intent to use contraceptive implants after birth

Theme 1: Female adolescents and their sexual health literacy

The first theme, "Female adolescents and their sexual health literacy", was represented by three categories: "Meaning of the term sexual health", "Characteristics of adolescents with good sexual health", and "Source of the meaning of the term sexual health."

Meaning of the term "sexual health"

From the participants viewpoints, sexual health was interpreted as the ability to prevent sexually transmitted diseases and a premature pregnancy by being able to select a birth control method as stated by the participants below:

"Taking care of my own health by using protection against STDs, so I don't get any of them." (Kit, 16 years old)

"Prevent pregnancy first. It's got to be controlled. If he won't wear a condom, then I have to take oral contraceptives, get an injection or have a birth control implant." (Wan, 17 years old)

Characteristics of adolescents with good sexual health

The female adolescents reflected on the characteristics of adolescents who had good sexual health had they identified the following three key characteristics: physical health: a clean, healthy body that is free from sexually transmitted diseases; sexual behavior: a need to know how to have protected sex every time with no sexual promiscuity and no health risk behaviors, which meant no nighttime activities and no substance addictions to drugs, cigarettes or alcohol as revealed in the following statements from the informants:

"No sleeping around and no multiple boyfriends…no sexually transmitted diseases. You can't be addicted to drugs, cigarettes or alcohol." (Rat, 15 years old)

"A perfectly healthy body that is strong and free of STDs." (Ta, 17 years old)

"Protection…you've got to be somebody who protections herself when you have sexual relations." (Sara, 16 years old)

Source of the meaning of the term sexual health

The young women stated that their understanding of the term sexual health came from school, both from teachers in health education on self-care during adolescence subjects and from health care providers on self-care of their bodies subjects as revealed in the following statements from the informants:

"My teacher at school had taught us in health education since we were in the sixth grade. That's it. It was about taking care of a woman's body or a man's body." (Sara, 16 years old)

"I heard about it when we studied it. Our teacher at school taught us about health education. And the officials who had come to teach us at school had also taught us about caring for our bodies like this." (Luck, 16 years old)

Theme 2: Sexual relationship experiences

The second theme, "Sexual relationship experiences", was represented by three categories: "Dating the opposite sex", "Consenting to have sexual intercourse with boyfriend", and "Finding a solution of female adolescent after sex."

Dating the opposite sex

The female adolescents began to feel attracted to the opposite sex from 10-18 years of age. Female adolescents in this study stated that when they were aged 10-12 years they had liked the opposite sex but did not date the opposite sex. They reported that between the age 13-18 years they were in 'dating' relationships but they did not have sexual intercourse. Some young women however did have relationships, and had engaged in sexual intercourse and become pregnant. The period from first meeting and entering a relationship and becoming boyfriends/girlfriends varied from one month to two years. Half of all adolescents meet from the channel for the first acquaintance was social networking via Facebook. Six adolescents met at school because the adolescents were older or had friends in school. Two female adolescents had been introduced to their boyfriends by close friends and two female adolescents

had met their boyfriends at work when working for extra income during term breaks to pay for tuition as the young women revealed in the following statements:

"We met on FB when I was in the 8th grade. We talked for about 3-4 months. Then he came to see me at home." (Tum, 14)

"I frequently went to see him at his shop when he was working. He worked at a pork shop. When we met, he was working at the shop and I was working at another shop nearby. I was a waitress. When I was in the 9th grade about to go into the 10th grade, I needed more money for my education. He asked for my telephone number and my Facebook ID. We talked on Facebook for 4-5 months before we decided to see each other as a boyfriend." (Luck, 16 years old)

"I had my first boyfriend when I was in 7th grade. I met him when I was going to a friend's house. My friend introduced us. Then he kept spending time with me and teasing me. He asked for my phone number and my FB ID. It was how we talked. Sometimes, it was through FB or phone calls. We talked for a long time. After three months, we agreed to see each other." (Suta, 16 years old)

Furthermore, female adolescents were found to have met boyfriends by meeting at home and being introduced by their brothers-in-law. As one of the participants expressed:

"When I was in the 8th grade, he came to the house. He was friends with my brother-in-law. He sent his brother-in-law to ask for my number and FB. We talked on FB and by telephone. Before we saw each other, we talked for a year. I had him come to see me at home. My parents let us meet at home." (Ta, 17 years old)

In this study, female adolescents explained that they had a boyfriend because they felt happy when seeing their boyfriends. They also explained their reasons for choosing their boyfriends. Most of the female adolescents chose boyfriends because they had secure occupations, an independent income, for their diligence at work, talent, honesty, and faithfulness and because they cared for and supported the young women with their personal expenses when necessary. In addition, the female adolescents chose boyfriends who were able to get along with their parents and relatives. One participant reflected:

"We had been seeing each other since he was in the 8th grade and I was in the 9th grade. I'm one year older than he is. He was nice and worked hard. He even

had extra jobs when he was studying. He repairs and installs air conditioners on the weekends. We met at school and talked by telephone. When my mother asked who I was seeing, I said that I was seeing Beam. She didn't say anything. She knew Beam's parents." (Wi, 17 years old)

Consenting to have sexual intercourse with boyfriend

The female adolescents had significant differences in time spent until they agreed to have sexual intercourse with their boyfriends for the first time. Eight female adolescents spent 1-8 months and 12 female adolescents spent 1-3 years. According to the findings, the situations leading to sexual intercourse consisted of going outside the house to meet elsewhere, which gave the adolescents an opportunity to be close to each other, which led to their sexual intercourse. Most of the female adolescents (14 female adolescents) were invited to visit their boyfriends' homes. The boyfriends gave the excuse that they should meet his parents or that he needed to pick up something he'd forgotten, but often no one was home. In the case of four female adolescents, the boyfriends took the female adolescents to friends' homes and workers' lodgings when no one else was home. In the case of two female adolescents, these two female adolescents went to do extra work and had to stay in the same dormitory as their boyfriends to save on expenses; the female adolescents were also afraid of danger from travelling back home at night. The boyfriends came to the dormitories to talk with the female adolescents and asked to have sexual intercourse as in the following statements from the young women:

"It was my boyfriend's house. He picked me up to go to his house, but there was no one there that day. He said he was going to introduce me to his parents." (Wan, 17 years)

"He said for me to go and stay at his dorm to save on both of our expenses. My house was in Wang Tako but I was working in Phetchaburi. I had to run home every day. It was scary. The way was lonely, so he said to just go to his dorm and he'd pay for it. It did save me a lot of money." (Luck, 16 years old)

On the other hand, some of the female adolescents reported being able to refuse sexual intercourse with their boyfriends by saying to wait until they, the young women, had graduated. Also, that the boyfriends could wait if they loved them. The

young women also told their boyfriends that they felt unready and were afraid of getting pregnant as in the statements below:

"The first time he asked, we had seen each other for 5 – 6 months. I refused. I was afraid of getting pregnant. I was afraid of making a mistake. I wondered if I would graduate if I got pregnant. If he loved me, he should let me, graduate, first. If he loved me and if we were going to live together, he could wait." (Ta, 17 years old)

"He asked to have sex after we'd been seeing each other for five months, but I told him I wasn't ready and I was afraid of getting pregnant. My boyfriend didn't say anything. He said it was alright if I didn't want to." (Rat, 15 years old)

After refusing sex for the first time, the female adolescents waited in their relationships until they were sure they loved their boyfriends and that their boyfriends would take responsibility if a pregnancy occurred. Once they felt sure, they had sex. The young women explained their reasons for this stating that they were afraid of their boyfriends feeling angry, hurt or that the female adolescents did not love them. Moreover, the boyfriends reassured the young women that their sexual intercourse would not lead to pregnancy, because the males would use condoms:

"We were together for nine months and went out together as usual. He asked me again, and I trusted him. He told me not to worry about pregnancy, because he'd use a condom and I wouldn't get pregnant." (Su, 14 years old)

"I said no to him at first. I told him my mom would be upset because she was not my real mother, but she had raised me. I was afraid he was going to feel hurt, so when he said that he would wear a condom, I let him do it." (Sri, 17 years old)

There were also young women who did not refuse first sexual intercourse with their boyfriends, because they trusted their boyfriends as shown in the following statements:

"We had been together for nearly a year before we did anything. I didn't tell him no, because I could trust him." (Luck, 16)

"He came to me in my room. At the time, I was working part-time in Bangkok during the term break. He came to pick me up and go out with me. After he dropped me off, he asked to do it with me. He questioned my love for him, said that I wouldn't get pregnant and that he would use protection. I went along with him,

because we'd been together for a long time, and he was quite nice." (Da, 19 years old)

Finding a solution of female adolescent after sex

After agreeing to have sex with their boyfriends for the first time, all of the female adolescents were afraid of getting pain and getting pregnant. The young women were concerned about pregnancy regardless of whether or not birth control was used. Furthermore, they were not confident in the use of condoms. Consequently, they decided to seek advice about birth control. The adolescents consulted their own parents, teachers, and close female friends who had previous experience with sexual intercourse as in the following statements from the informants:

"*I was afraid. I was worried it would be painful, but I loved him. Because I was scared of getting pregnant, I had him use a condom. Even then, though, I was not confident. That's because I knew condoms were not 100% effective. So, I told my paternal grandmother and an older cousin about it. My grandmother was shocked that it had happened. But it had already happened, so she told me to control it well and either take birth control pills or get birth control injections. My older cousin also told me to watch out." (Su, 14 years old)*

"After I reached my friend's house in the evening, I told my friend about it. My friend then went to buy emergency birth control pills for me. I asked my friends about it because she went out a lot like I did and did a lot of the same things, but never got pregnant; it's because she used the pill." (Cha, 15 years old)

After their first sexual intercourse the young women stated that they also used online social media to search for information about birth control. Even though their boyfriends used condoms, they felt unconfident and additionally used emergency birth control pills. One participant reflected:

"He used a condom, and I took the emergency pill. I searched Google about it, and the results said to take an emergency pill. So, I went to the pharmacy and bought it. The pharmacy said they had both emergency and 28-tablet packet types." (Rat, 15 years old)

After the female adolescents told their parents about the decision to have sex with their boyfriends, their parents expressed anger, sadness, shock, and disappointment in the female adolescents, since the parents had already warned the

adolescents to be careful about having sex. However, because the parents were also worried that the adolescents might get pregnant, the parents gave the adolescents advice about birth control and consented to the traditional ceremony of taking the bride to the groom's family to avoid neighbors' gossip as in the following statements from the informants:

"His mother was upset. She complained and asked why we didn't believe her. Then she had me go on the pill." (Ya, 16 years old)

"At first, my dad was really angry, and he wanted to hit me, but my mom stopped him. Then my mom said that it had already happened and to just let it be. Then they had my boyfriend go through the traditional ceremony. They told us not to get pregnant first and to just stay together for a while, at least until after I had finished Matthayom 3 and was more ready, could take care of a child and had a job or something of my own." (Wan, 17 years old)

In addition to looking for self-care methods after sex, some of the female adolescents experienced abnormal physical symptoms such as vaginal discharge, irritation, vaginal discharge caused by a fungal infection and endometritis. As a result, the adolescents looked for self-care methods, consulted their female parents or relatives and visited doctors to treat their symptoms as in the following statements from the informants:

"After I had had sex with my boyfriend, the vaginal discharge increased. So, I asked my aunt if something was wrong. My aunt said it was just discharged. At the time, I also had pain in the lower abdominal area, so I thought I was sick and went to see a doctor. My doctor asked questions and decided it was a diagnosis of leucorrhea. The doctor kept asking questions and performed an internal examination. The discharge was caused by a fungal infection, so the doctor gave me medications for it." (Sri, 17 years)

"I told my older sister about it. The itchiness was getting worse and worse. And there was a foul odor. So, my older sister took me to see a doctor at the hospital. The doctor said it was a vaginal discharge caused by an infection. The doctor gave me some oral medication to get rid of the infection." (Ta, 17 years old)

Furthermore, one of the female adolescents was found to consult her female guardian and was advised to see a doctor. However, due to her embarrassment, she

did not see a doctor immediately but opted to use online social media instead to search for knowledge about the care of vaginal discharge together with abdominal cramps until she was confident that her vaginal discharge was abnormal and required a doctor's treatment. One participant described the following:

"After living with my boyfriend for about 2-3 months, I had heavy vaginal discharge. I'd never had anything like it before, and I had terrible abdominal pain. At first, it was yellowish. Then it changed into brown. I asked my aunt. She told me to see a doctor right away, but I was embarrassed at first, so I searched on the Internet. I typed in Google, "vaginal discharge, pain in the lower abdominal, what to do." A lot of search results popped up, but I couldn't believe the websites anymore. Every website was about the same. They said I had to see a doctor if the vaginal discharge was heavy. So, I went to the hospital. The doctor told me I had endometritis. I took the medicine for about a month and it went away." (Suta, 16 years old)

Theme 3: Understanding of birth control contraception

The third theme, "Understanding of birth control contraception", is represented by three categories: "Sources of knowledge about birth control", "The behaviour to use birth control", and "Birth control methods used before the pregnancy".

Sources of knowledge about birth control

Based on information given by participants, all the female adolescents were found to opt for birth control methods for both men and women when engaging in sexual intercourse. Therefore, possessing knowledge, understanding, and ability to correctly and properly apply knowledge about birth control was an important factor. Some female adolescents were found to have received inaccurate knowledge on taking birth control pills in packets after forgetting. Some of the adolescents mothers did not provide instructions and three adolescents in this group reflected inaccurate knowledge received from mothers on taking birth control pills in packets after forgetting to take medications by taking one pill on the next day at the same time, taking two pills at the same time, taking two pills in the next two days at the same

time and taking both pills at the same time. Unfortunately, female adolescents used these methods in their birth control. One young woman revealed:

"If I forgot one pill, my mother said to take one pill on the next day and two pills at the same time. If I forgot to take more than one pill, she said to take them right away for two days. If I forgot two pills, she said to take two pills for two days at the same time." (Na, 15 years old)

Aunts and older sisters were also found to have provided instructions for adolescents regarding methods for taking birth control pills in packets without providing instructions on how to take birth control pills after forgetting to take pills. One female adolescent stated:

"I asked my older sister. She said to take birth control pills. I saw her taking them. She said to take this brand." (Kan, 17 years old)

In addition, to family adolescents received knowledge from trusted friends who informed adolescents about the benefits of taking birth control pills in packets. One participant reflected:

"I talked about it with my friend. She recommended birth control pills in packets. She said it was good and I wouldn't make a mistake." (Wan, 17 years old)

The participants explained that they had been instructed by a variety of people at school including teachers, senior students, and health care providers. All the female adolescents had previously received instruction about birth control at school from teachers who began to teach them about birth control from Grade 5 to Grade 9. The topic was taught every year about self-care when physical, emotional, and social changes upon entry to adolescents and contraception. Furthermore, mostly involved instruction in the form of lectures. The teachers used the area in front of classrooms for instruction about birth control. For this reason, some of the female adolescents reflected on their feelings while received the instruction from their teachers, stating that they had felt like they did not dare to ask questions because they were embarrassed to do so in front of friends because they all studied together in the same class as the young women revealed in the following statements:

"Our teachers started teaching us about preventing pregnancy in Grade 6 and taught us about it every year until Grade 7 or Grade 8. They taught us about birth control and told us to use condoms every time we had sex. Then they taught us

about how not using condoms could lead to sexually transmitted diseases such as AIDS. When we studied about preventing pregnancy by using condoms, I sometimes wondered as our teacher was teaching us why we had to use condoms, but I didn't dare to ask the teacher, because the entire class was studying and my friends would have looked at me. They might have thought I was interested in this topic and would use it with my boyfriend." (Sam, 16 years old)

"Our teachers taught us when we were studying health education at school from Grade 7 to Grade 3. They taught us everything taking birth control pills and self-care during our periods. Then I wondered about birth control methods, but I didn't ask because I was embarrassed to do so in front of my friends. At the time, the teacher was teaching us in the classroom." (Rat, 16 years old)

Further, the female adolescents were found to have received instruction from health care providers who provided education on contraception in schools in Grades 5 -9 students every year, including lectures, demonstrations, and teaching in small groups. The female adolescents reflected good understanding when educated by the officials because the providers provided detailed education. One young woman expressed:

"We had health care providers teach when I was in Grade 8 or Grade 9. They taught about using condoms in detail and they had models to show how to wear condoms. They also taught about protection types and birth control pills. When I had questions, I was able to understand. I can't take birth control pills by reversing the arrows and I take them by following the arrows." (Sri, 17 years old)

Although health care providers taught in small groups, one female adolescent did not ask questions because not every student in the small group was a close friend. One female adolescent reflected:

"I had questions, but I didn't dare to ask. There were many of my friends around. Even though they separated girls and boys into groups, I was still embarrassed because I wasn't close to everyone." (Sam, 16 years old)

Also, some of the female adolescents reflected having had no curiosity because female adolescents thought contraception was not related to them because female adolescents did not have boyfriends. This caused the female adolescents to not

pay attention and learn in the classroom, thereby preventing female adolescents from remembering the content on contraception. One young woman described:

"I was just listening and not paying attention. I only remember that I should use condoms to prevent AIDS and pregnancy. I don't remember anything about birth control pills." (Wi, 17 years old)

By contrast, one of the female adolescents had been instructed about birth control by senior students at school. The adolescent described positive feelings while being informed by her senior students. She felt close to her senior students because they had similar ages. She also thought her senior students' method of informing her accompanied by pictures gave her a deeper understanding of the content than the teacher lecturing or descriptions. One young woman reflected:

"Our senior students advised us in a training program. The senior students were the adolescent leaders, and they came to give us instruction when we were in junior high school. The leaders provided us with more in-depth information than the teachers' lessons. What I mean is that the teachers taught us from our books and explained the content, but our senior students had pictures for us to view and say that it would be no good to do this or that things like going out at night and not using condoms, or things like that. If we are closer to our senior students than our teachers, we seek each other's facial expression and knowledge. We'd have a good understanding of birth control and rhythm method of counting days for safe periods." (Ta, 17 years old)

Due to a lack of understanding about the benefits of condoms in the classroom, one female adolescent chose to return to consult with her mother at home. The female adolescent reported being closer to her mother and more able to ask her mother than her teacher. One young woman expressed:

"I went back home to ask my mother about condoms. She said they're used to prevent sexually transmitted diseases and pregnancy. It's like she's closer to me. I can talk to my mother about anything." (Sam, 16 years old)

This was consistent with the findings, which revealed seven female adolescents to have received knowledge on contraception at home with mothers because trusted not always accurate knowledge on contraception methods. There are contraception methods including methods for taking birth control pills, benefits of

using condoms, side effects of emergency birth control pills and recommendations for birth control after giving birth by using contraceptive implants. One female adolescent reflected:

"My mother said to use a condom every time if I wanted to have sex and to take birth control pills if I was not sure that something would happen. She said to take the pills by following the arrows, so they would be effective. She also told me that there are emergency birth control pills, but I've never used them. It's because my mother said it's not good to take emergency birth control pills, that it makes my uterus lose capacity and makes it difficult to have children. My mother said to get an implant after the pregnancy if I got pregnant. I mean, she was afraid that I would have sex without using protection and that I'd get pregnant. She said contraceptive implants can prevent pregnancy for up to three years." (Porn, 15 years old)

Pharmacists are another source and information. Three female adolescents received knowledge about taking emergency birth control pills and birth control pills in packets including the complications of emergency birth control pills from drugstore pharmacists. This led to female adolescents choosing to take birth control pills in packets according to the pharmacist's recommendations because female adolescents were afraid of the complications arising from emergency birth control pills. One female adolescent stated:

"I went to the drugstore who sold the pills said taking emergency birth control pills would make the walls of my uterus thin. Who said to not take emergency birth control pills frequently. In one month, I shouldn't take it more than two times or I might have an ectopic pregnancy. So, the pharmacist at the drugstore recommended the birth control pills in packets." (Da, 19 years old)

However, one female adolescent reported receiving information from a pharmacist on methods for taking emergency birth control pills. The female adolescent also read about correct methods for taking the pill from the label on the side of the box. However, at the time when the female adolescent decided to take the pill, the female adolescent thought that it was difficult for her to take the pill. Therefore, she searched for more information by using online social media and found a website with opinions from adolescents to take two pills at the same time. The adolescent decided to trust the data from that website with opinions from adolescents

and took emergency birth control pills at the same time as revealed in the following statements from the informants:

"The pharmacy told me to take one pill before having sex and another one twelve hours later, but I didn't trust him/her. I trusted what they said on the Internet to take both pills. Another thing is that I have difficulty taking pills. I remembered that it was just a website where people commented. The commenters said to take both pills at once. They were teenagers, too. There are chat rooms where I can set up threads and answer." (Suta, 16 years old)

Ten female adolescents reported using a variety of online social media such as Google Search, Pantip, Facebook, YouTube, and the Love Care website to search for knowledge on birth control after sexual intercourse. Female adolescents searched works on Google, viewed many websites and chose to believe data with matching answers from multiple websites without identifying websites as websites of the Ministry of Public Health or reliable personnel. Female adolescents searched from Google and used web blogs such as "Pantip". Female adolescents chose to believe information from matching responses and opinion of several people without being specific regarding who opinions belonged to as the young women revealed in the following statements:

"When we began to have sex, I searched about how to prevent pregnancy on the Internet. I wanted to know if I could get pregnant by using a condom or from ejaculating externally. The website said there are risks of pregnancy but it's very minimal. I searched and compared several websites but I did not remember the names. When I searched, it was shown on a list and I viewed almost everyone. I trusted the ones that were most alike. And I found on Google that I don't have to wait to have a menstrual period to take birth control pills. I mean, I can take it right away by following the arrows. I don't remember what the website's name was, though." (Sri, 17 years old)

"I scrolled and found out what to do after having sex on FB. It showed up and I looked at several pages. I read about emergency birth control pills. Then I went into Google again and into Pantip. I read the experiences and opinions posted on Pantip. I saw how their experiences were before using birth control pills." (Da, 19 years old)

Furthermore, one female adolescent used information from health care providers on additional sources of information on contraception methods to search the "Love Care" website and used the knowledge of contraception. She stated:

"The Love Care website had sent staff to teach at school. They said that we can go to search if there's a part where we don't understand. I read and I understood. I looked up taking birth control pills and pregnancy prevention methods." (Ta, 17 years old)

The behaviour to use birth control

After the female adolescents received knowledge on contraception, most of the female adolescents chose to take 28-tablet packets of birth control pills and when necessary emergency birth control pills. The female adolescents reflected on accurate and inaccurate instructions for taking birth control pills. Female adolescents began immediately after the end of the menstrual period by beginning from the hormone pill to the placebo pill and taking one pill per day at the same time every day. One young woman stated:

"I take one pill per day before bedtime. I take them by the arrow after my period. I had a period for four days and I took the pills right after." (Kit, 16 years old)

Concerning reflection on inaccurate methods, the female adolescents were found to have taken the next packet immediately without waiting to have a menstrual period. She revealed:

"I take the birth control pills in packets by following the arrows. I continue taking them right away without waiting for a period." (Ta, 17 years old)

All of the female adolescents in this study taking birth control pills, showed a lack of understanding of the methods for taking pills after forgetting their pill. When female adolescents forgot to take one pill, female adolescents took two pills on the next day at the same time. When female adolescents forgot two pills, female adolescents took two pills on the next two days at the same time. Besides, some female adolescents stopped taking birth control pills after forgetting and continued to take one pill per day as before as the young women revealed in the following statements:

"I forget some days. After several days, I take two pills. If it's just one day, I take one pill. If I forget for two days, I take just one. I don't take more." (Sam, 16 years old)

"I forget sometimes but I don't take extra frequently. It's about 2 – 3 times per month. I don't forget every month. It's just some months. Sometimes, I forget once. Sometimes, I forget twice. When I forget once, I take two pills, like that. If I forget two pills, that's the way I take it. I take two pills at the same time for two days, you know." (Porn, 15 years old)

Furthermore, the findings revealed nine female adolescents who had taken emergency birth control pills. While girl adolescents were shy or ashamed to use it so they bought it in hurry without taking the pharmacist's advice or their boyfriends or friends were asked to buy it resulting in its incorrect use and side effects. Six female adolescents were able to take the pills correctly. After receiving instructions from information sources, the female adolescents confirmed the methods on the labels at the side of boxes until female adolescents felt confident. The female adolescents took the first pill immediately after sexual intercourse and the second pill 12 hours after the first pill as revealed in the following statements from the informants:

"I shy to use it so use boyfriends to buy it and then I read about the emergency birth control pills at the label at the side of the box. It says to take it after sex and then take another pill 12 hours after that. I set an alarm on my phone to take the second one. I took it at three in the morning. I took the first one at three in the afternoon." (Sri, 17 years old)

"I ashamed to use it so use boyfriends to buy it and then I looked at the side of the box. It said to take the first pill immediately after sex and the second one twelve hours later." (Ta, 17 years old)

However, three female adolescents were found to have not taken emergency birth control pills correctly by taking the first pill immediately after sexual intercourse, the second pill 24 hours after the first pill and both pills at the same time 24 hours after having sexual intercourse as in the following statements from the young women:

"I bought by myself but I shy to use it so I bought it in a hurry without taking the pharmacist's advice and the pharmacist didn't say anything. Also, I think have to a

method of taking at the side of the box. I read the medical label at the side of the box and took one pill after having sex. Then I took the second pill 24 hours after the first one." (Luck, 16 years old)

"I use boyfriends to buy it because I shy to use it. I read a medical label at the side of the box and took it in the evening at six o'clock. Tomorrow, I have to take it at six o'clock in the evening. It has to be taken like that. It has to be taken at the same time every day." (Wan, 17 years old)

Birth control method used before pregnancy

Most of the adolescent girls explained that, when they had sexual intercourse with their boyfriends for the first time, most of the men were responsible for birth control by using condoms. This persuaded the adolescent girls to consent to have sexual intercourse because they were certain that the condoms would prevent them from getting pregnant as shown in the following statements:

"The first time we were together, I was afraid of getting pregnant, you know, but he told me he'd wear a condom and that I wouldn't get pregnant, so I consented." (Suta, 17 years old)

"The first time, my boyfriend wore a condom. My boyfriend used it himself. He said I definitely wouldn't get pregnant." (Son, 19 years old)

When the couples had sex more frequently, the adolescent girls felt uncertain and were afraid of pregnancy. Hence, they had to search for birth control methods on their own, including using birth control pills in packets, using the rhythm method to count for safe days and emergency pills. Each of these methods depended on the frequency of the adolescents' sexual relations. Nevertheless, having insufficient knowledge and understanding about taking oral contraceptives resulted in pregnancy as revealed in the following statements from the informants:

"We had sex frequently. I was afraid of getting pregnant because I was still studying. So, I took birth control pills in the 28-tablet packets, but I forgot to take them sometimes. But I never forgot them for more than a day. Once I thought of it, I took them instantly. I'd taken about two packets when I got pregnant." (Rat, 15 years old)

"I counted the days when I was ovulating because my boyfriend works in another province. Sometimes it was months before we would get to see each other. I'd

once taken those 28-tablet packets of birth control pills, but I was only able to take one packet and stopped taking them. I don't like to take pills every day, and we weren't together every day, so I changed to taking the morning-after pill." (Da, 19 years old)

Besides, once the adolescents had been having sex for a long period, the adolescent girls had to be the ones who took responsibility for birth control. Most of the adolescent girls opted for birth control by using packets of oral contraceptives. Nevertheless, due to insufficient knowledge and understanding about the methods for taking oral contraceptives, the girls sometimes forgot to take the pills. Furthermore, the girls had no access to correct knowledge until pregnancy occurred. One female adolescent reflected:

"I took the 28-tablet birth control pill packets because my boyfriend wouldn't wear a condom. He said he didn't like to wear them, so he had me take the pills. I took them every night before I went to sleep, but I sometimes forgot. So, I asked my mom and she said to take two pills at once the next day if I'd forgotten to take one. So, I took two pills for two days at the same time. That's how I took them. I'd taken about 20 packets of them before I got pregnant." (Na, 15 years old)

Also, the adolescent girls had to take responsibility for birth control, because they were afraid of getting pregnant. Regardless, the girls were unable to practice birth control continually, because they continued to have insufficient knowledge and understanding about problem-solving concerning the side effects of oral contraceptives in packets. When side effects occurred, the girls would stop taking the pills. Furthermore, the girls don't know to search for or access sources of correct and credible knowledge in selecting suitable birth control methods for themselves. One young woman explained:

"We were together frequently. I was afraid of getting pregnant because I was still in school, so I had to take medication- those birth control pills in the packets. I'd taken two or three packets when I stopped taking them. I took them and felt dizzy. And I gained weight, too. I didn't ask anybody. I thought I was having a negative reaction to birth control, so I stopped taking the pills altogether." (Kit, 16 years old)

Besides, the adolescent boys were found to continue to not have a role in shared responsibility concerning birth control. When they forgot to buy condoms,

they would have the adolescent girls take emergency birth control pills, take oral contraceptives in packets and have contraceptive injections, but side effects occurred as a result of taking the medications. Thus, the adolescent girls stopped taking the pills and injections and had the boys use condoms. Nevertheless, the adolescent boys frequently forgot to buy condoms until the pregnancy was the eventual result. One young woman revealed:

"Later on, he frequently forgot to buy condoms, so I had to start taking the medication. At first, I took the morning-after pill. Then I changed to 21-tablet packets of birth control pills, but I felt like my period was irregular after taking only one packet, so I stopped taking them and changed to injections. After getting only one shot, I stopped again, because my period was irregular again. Then I had my boyfriend handle birth control. He wore condoms irregularly, so I got pregnant." (Ta, 17 years old)

In conclusion, although all of the adolescents explained that they had been instructed by a variety of people at home, school, pharmacies, and online social media, the knowledge they received remained inaccurate, insufficient to meet the needs of adolescents, involved no shared responsibility for birth control on the part of the adolescent boys and had barriers to accessing the correct knowledge and understanding from health care providers. Consequently, adolescent girls were unable to apply the knowledge they received to prevent pregnancy.

Theme 4: Circumstance leading to unplanned pregnancy

The fourth theme, "Circumstance leading to unplanned pregnancy", is represented by four categories: "Misconceptions about birth control on the part of the woman", "Misconceptions about birth control on the part of the man", "Decision to select contraception method in women", and "Men and contraceptive use."

Misconceptions about birth control on the part of the woman

The problem of having sexual intercourse prematurely is a risk potentially leading to pregnancy. Prematurely engaging in protected sexual intercourse or opting to use a birth control method is based on the learning, thoughts and beliefs of the adolescents themselves. This finding corresponds with the findings of a study of five female adolescents who had never used any birth control method in combination with

a number of the following reasons: previously hearing a close female friend say that taking oral contraceptives caused obesity causing the female adolescents to be afraid of an unattractive image and not dare to take oral contraceptives; unfamiliarity with birth control pills, but remembering that public health officials had taught about birth control at school and not being able to remember the content of the lessons on birth control, so they did not listen, thinking that the issue did not concern them; some of the girls had the idea that they had reproductive problems that made it difficult for them to become pregnant, because they had a history of previous endometriosis and previous history of allergies to pain relief medications for menstrual cramps causing the female adolescents to think they would also have an allergic reaction to oral contraceptives as in the following statements from the young women:

"I thought we needed protection, but I didn't want to take pills. I was afraid I'd take them and get fatter, or something like that. I once heard my friends talking about it and saying they got fatter when then took it." (Tum, 14 years old)

"I've never taken birth control pills. I'm not familiar with them…. contraceptives, but we once had a lecturer who came to teach us about preventing pregnancy, but it was like I wasn't ready…birth control…I didn't use any knowledge about it, because I couldn't remember anything. At the time, I'll admit that I wasn't really interested. I thought it didn't concern me." (Son, 19 years old)

"I was confused, you know…it's like I wondered that we'd been together for a long time, so why was I able to get pregnant. It had been almost five months. I thought my uterus was no good, because I'd once had endometriosis, so I thought it would be difficult for me to get pregnant." (Cha, 15 years old)

"I didn't use anything, because I was afraid of having an allergic reaction like the one, I'd had when I took pain relief medication for cramps, so I didn't dare to take them." (Arit, 16 years old)

In addition, one of the female adolescents thought oral contraceptives in packets would make her fat. The adolescent also thought the fact that she took hormones for larger breasts had resulted in an irregular menstrual cycle and made it difficult for her to have children. Thus, the adolescent opted for using emergency birth control pills and condoms on some occasions until she eventually became pregnant. One young woman revealed:

"I was afraid, because I had a friend who got fat after taking over 20 birth control pills, so I was afraid to take morning after pills, so I had my boyfriend wear a condom. But he sometimes forgot to buy them. And it was what I said about how I shouldn't be able to get pregnant because I was taking hormones, too. And those hormones…my period sometimes didn't come for a month or two, so I didn't think I'd get pregnant." (Luck, 16 years old)

Misconceptions about birth control on the part of the man

Furthermore, the reasons leading to the current pregnancies also stemmed from the erroneous thought processes on the part of the men about various types of birth control methods. Five men were found to use no birth control method at all, because the men had certain ideas and beliefs preventing them from using birth control. The aforementioned ideas and beliefs were composed of the following: some of the men did not like wearing condoms, because wearing the condoms did not feel natural; oral contraceptives in packets caused the female adolescents to gain weight and some of the men thought they were sterile as the young women revealed in the following statements:

"He didn't like to wear condoms. He said it wasn't natural." (Sam, 16 years old)

"He doesn't wear them. He told me he didn't like wearing them, so he had me take birth control pills instead. I take the birth control pills in packets." (Na, 15 years old)

"My boyfriend doesn't use condoms. He says he trusts me to take care of birth control myself." (Cha, 15 years old)

Apart from not liking to wear condoms, one of the men was also found to have the idea that oral contraceptives would make adolescent females fat. He didn't not like obese adolescent girls, so he had his adolescent girlfriend stop taking birth control pills. One female adolescent expressed:

"He didn't like to wear them, so I took birth control pills. And he told me to stop taking them. He told me I wouldn't feel dull or listless after the fifteenth pill, but that I would begin to feel dull after the sixteenth pill. I was starting to feel that way, so he made me stop taking them, because he was afraid, I'd get fat." (Sara, 16 years old)

Furthermore, one of the men thought he was sterile because he had been married before and had never used birth control of any kind, but his former wife had never become pregnant. Thus, the man did not think his adolescent girlfriend would become pregnant either. One young woman revealed:

"I didn't think I would get pregnant. At first, my boyfriend told me he had reproductive issues, so it wouldn't be easy for me to get pregnant, because he'd once had a wife and they were together for a year, but she never got pregnant. They didn't use any birth control either." (Suta, 16 years old)

And another man opted for using condoms for birth control, but did not wear condoms regularly. If he forgot to buy condoms, he did not use them. He did not think that not using birth control only once or twice would be able to result in pregnancy, because he was infertility or had reproductive difficulties due to frequent electric shocks. One female adolescent reflected:

"At first, we used birth control. Later on, we didn't use it much. My boyfriend by wearing a condom sometimes. Other times, he forgot to buy them, so we didn't use anything. He told me he was sterile, too, so I didn't think it was likely that I would get pregnant. He told me he'd frequently had electrical shocks, which could have made him infertility." (Ya, 16 years old)

The decision to select contraception method in women

According to the findings of a study of fifteen female adolescents, despite the fact that the adolescents used oral contraceptives in the form of 28-tablet packets for periods of 1-20 months, sometimes used emergency birth control pills (morning after pills) and had contraceptive injections, the adolescents still had unplanned pregnancies. The main reason for this occurrence was that the female adolescents were unable to access and select credible sources of information about methods for solving the problem of side effects from oral contraceptives. When abnormal symptoms such as dizziness, nausea and weight gain, most of the adolescents opted to seek consultation with close female acquaintances such as mothers-in-law or close female friends and were advised to stop taking the oral contraceptives. Therefore, the female adolescents changed their birth control methods by having their male partners practice external ejaculation. Thus, the adolescents became pregnant. One young woman stated:

"Well, I took 28-tablet packets of birth control pills, but I had a negative reaction to them, so I didn't use any birth control. I was dizzy and wanted to sleep. I also felt nauseous, but didn't vomit. So, I asked my mother-in-law and told her I didn't know what was wrong with me. I explained my symptoms, so she told me she suspected that I might be having a reaction to my birth control pills. Well, I believed her and stopped taking them. I'd only taken about three pills. My partner ejaculated outside and then I got pregnant." (Sri, 17 years old)

In addition, one of the female adolescents was found to have once used condoms, emergency pills, contraceptive implants and contraceptive injections, because her partner frequently forgot to buy condoms. She had abnormal symptoms such as very light menstrual flow after taking oral contraceptives. Therefore, the adolescent consulted her mother and older sister who advised her to use contraceptive injections. After the injection, she had abnormal symptoms such as acne and weight gain, so she made the decision herself by returning to using condoms for birth control, but her partner forgot to buy condoms, so they only used condoms sometimes. Then she eventually got pregnant. One female adolescent reflected:

"We used condoms for several months…around three or four months, you know. Later on, my boyfriend started forgetting to buy condoms, so I had to start taking birth control pills, right? At first, I took morning after pills then changed to 21-tablet packets of birth control pills. But then I started to feel my period would briefly come and go after taking only one packet. So, I told my older sister and my mom. My mom said it looked like I was beginning to have a negative reaction to the birth control pills I had been taking. So, my mom took me to get an injection. After only one injection, my weight went up and I started having acne, so I stopped. I had my boyfriend practice birth control like before, but he didn't wear a condom sometimes, so I got pregnant." (Ta, 17 years old)

Moreover, when some of the female adolescents had problems with the side effects of oral contraceptives, they never consulted anyone or searched for credible sources of information. Thus, the adolescents made decisions on their own, thereby ceasing to take oral contraceptives and changing birth control methods by having their partners wear condoms. Nevertheless, the men forgot to buy condoms, which made

the condom use irregular until the female adolescents became pregnant. One young woman expressed:

"We had sex frequently, so I was afraid of getting pregnant, because I was still in school. So, I had to take the birth control pills in packets…the ones the school staff had taught us to use. They had told us to take one pill a day before bedtime, so I took them as directed by the arrows, you know. I'd taken about two or three packets and stopped. I felt dizzy when I took them and my weight went up, too. After that, I didn't take them anymore, so I had my boyfriend buy condoms. Sometimes he wore them, other times he didn't. He sometimes forgot to buy them, so we made a mistake, you know." (Kit, 16 years old)

Another key reason revealed was that the female adolescents frequently forgot to take oral contraceptives until they became pregnant and offered the explanation that they had forgotten to take birth control pills. In other words, the female adolescents finished their homework late at night, worked late hours and worked irregular hours when they had special jobs to earn additional income during term breaks from school. Furthermore, the female adolescents went out with their boyfriends at night and came home late. Moreover, when the female adolescents forgot to take oral contraceptives, they did not consult or search for additional information from other sources. Thus, the adolescents decided on their own to take the oral contraceptives incorrectly when they forgot. One participant explained:

"At the time, I was on a term break from school and I wanted a little extra spending money, so I sold things with my boyfriend's aunt. We sold vegetables in Bangkok and we got home from Bangkok at midnight. Then we were up again at four in the morning to buy things. Then we went to make things in the evenings and a vehicle came to pick us up at ten or eleven at night, so we went on. At the time, I forgot to take the pill, so I thought I'd get up the next morning and take two pills, taking the pill for the day before, too. So, I doubled the dose on the next day." (Wan, 17 years old)

Furthermore, one adolescent female was found to have asked her mother when she forgot to take oral contraceptives. Her mother advised her about how to take birth control pills when she had forgotten or taken them incorrectly. One participant reflected:

"After that, I bought those 28-tablet packets of birth control pills. I had taken about half of the packet and got pregnant. I had taken them as directed by the arrows at one pill per day before bedtime. I sometimes forgot, so I called my mom. My mom told me to take two tablets the next day if I'd forgotten the day before, so I took two pills before bedtime." (Sam, 16 years old)

In addition, some of the adolescent females were found to be unable to negotiate their refusal to engage in sexual intercourse. When the adolescents had unprotected sexual intercourse with their boyfriends, the female adolescents generally consented and solved the problem afterward by searching for birth control methods after having sex, using online social media, seeking advice from teachers and boyfriends and receiving information advising the adolescents to take emergency or morning after birth control pills. Therefore, the female adolescents took emergency or morning after birth control pills. However, using emergency birth control pills for long consecutive periods of time not only makes this birth control method less efficient than regular birth control pills, but can also lead to ovarian and uterine abnormalities in addition to risks for ectopic pregnancy as the young women revealed in the following statements:

"I took two of those morning after pills. I took the first one right away and the second one twelve hours later like it said to do on the side of the box. Then I searched on Google and it showed up. It said to take morning after pills, so I went to buy them. The pharmacist told me how to take them." (Rat, 15 years old)

"Well, I was afraid of getting fat, so I asked him whether or not he had condoms. He told me his friend had taken it to play with, so I told him I was afraid he'd abandon me once we'd had sex and made a mistake or something like that, but I consented. Then I got up the next morning and went to see my own homeroom teacher. I consulted my teacher right away and she went out to buy it for me, because I couldn't leave the school. There were emergency pills and a packet of regular pills." (Sara, 16 years old)

"Well, we'd been using condoms all along. And then there was this one time when we had unprotected sex and I was afraid I'd get pregnant, so he went and bought the morning after pills for me to take. I didn't ask anyone. I only discussed it

with my boyfriend. He was the one who went and bought the morning after pills for me." (Sri, 17 years old)

Men and contraceptive use

According to the findings, fifteen of the men used condoms for birth control and sometimes did not wear condoms, offering the excuse that they had forgotten to buy them, but wanted to have sex, so the ejaculated externally, which is an uncertain method of birth control as the female adolescent revealed in the following statements:

"At first, my boyfriend wore condoms. He sometimes forgot to buy them, or something like that, you know. He told me he could definitely control it and that I would not get pregnant." (Wi, 17 years old)

"I used condoms for nine months and didn't use them once or twice. The reason we didn't use them is that we didn't have any. My boyfriend hadn't gone out to buy them yet, so we hesitated, you know. But he said I couldn't get pregnant after only one or two times, so we went ahead and did it anyway." (Su, 14 years old)

Theme 5: The pregnancy journeys

The fifth theme, "The pregnancy journeys", is represented by five categories: "Unusual physical symptoms required a consultant", "The immediate reaction on hearing the discovering", "Take good care of themselves", "Take care of themselves to prevent complications during pregnancy", and "Planning for future after giving birth."

Unusual physical symptoms required a consultant

After getting pregnant, all of the female adolescents began to have unusual physical symptoms. The presenting symptoms of pregnancy were perceived differently for each individual and depended on the observation of the signs and symptoms of a pregnancy. This study shows that the earlier signs and symptoms of teenage pregnancy were perceived differently by seven female adolescents. When menstruation is lost, teenage girls who have regular menstrual cycles will begin to suspect pregnancy. One female adolescent stated:

"My period didn't come for a month and I was dizzy, so I suspected it, you know. Actually, my period is usually regular. If it didn't come, I was going to wait

until the day it was supposed to come in August, but it didn't come." (Da, 19 years old)

Thirteen teenage girls who had irregular menstrual cycles recognized the possibility of pregnancy much more slowly. All of the pregnant women knew about pregnancy when they noticed the following physical changes: breast tenderness, breast enlargement, appearance of facial acne, nausea triggered by smelling food, frequent drowsiness and exhaustion, dizziness, nausea and vomiting, and abdominal enlargement. One young woman reflected:

"I felt dizzy and I would vomit in the mornings, you know. I felt weak and wanted to sleep all day long. I didn't want to get up and go to school, and I missed my period for two months. I didn't think anything about it at first, because my periods were irregular anyway, sometimes at two months per time." (Suta, 16 years old)

Most of the adolescent girls were unsure that they were pregnant, but wondered about their symptoms of physical changes. Therefore, the girls consulted with their boyfriends, mothers, grandmothers, older sisters and close friends they could trust about the symptoms. They also asked those persons to purchase pregnancy tests for them at the pharmacy, because they were too shy to go themselves. One young woman revealed:

"At first, my period didn't come for two months. Then I was frequently dizzy, so I wondered. I told my boyfriend and had him go and buy a pregnancy test for me. I didn't dare to go there myself. I was embarrassed, you know. And the test came up with two marks." (Son, 19 years old)

Regardless, there were four adolescent girls who felt concerned and wondered about their unusual symptoms, but did not consult anyone and opted to buy pregnancy tests themselves. One female adolescent revealed:

"I was worried when my period didn't come for two months. I was always hungry, but couldn't really eat at all. And when I smelled food, it smelled bad and I would be nauseous and vomit, so I wondered and went to buy a pregnancy test. It showed two marks." (Rat, 15 years old)

There were two adolescent girls who were unaware of any presenting symptoms of pregnancy, but the girls' paternal and maternal grandmothers wondered

about the unusual symptoms occurring and went to buy pregnancy tests to confirm pregnancy. One young woman reflected:

"I didn't realize it at first. Then my grandma noticed my symptoms and asked why my period hadn't come. It hadn't come, so I told her I really didn't know. At first, I felt like it wasn't regular. For example, if it was supposed to come on the tenth of the month, or something like that, it would sometimes come at the end of the month, but it hadn't come for a month and a half this time, so she wondered and went to buy a test for me to check." (Arit, 16 years old)

In addition, one of the adolescent girls did not notice any presenting symptoms of pregnancy and thought she was suffering from an illness. Thus, the girl saw a doctor at a hospital for treatment. One female adolescent stated:

"It felt like everything smelled bad. I wanted to vomit. It was like I was sick, so I went to see a doctor. The doctor said it sounded like I was pregnant, so the doctor had me tested and it was positive for pregnancy." (Sri, 17 years old)

The immediate reaction on hearing the discovering

The negative emotional reactions of most female adolescents were described in terms of fright, feeling of sorry and desire to finish education before being pregnant. Apart from the concern about economic unpreparedness, they were afraid of being punished by their parents because, in the adolescents' view, unplanned pregnancy violated cultural norms and deprived the prestige of their parents and family. Besides, the adolescents and their family members were worried about being blamed by others, especially when they made decision to disclose and continue the pregnancy as the young women revealed in the following statements:

"I was startled and sorry, you know. I had wanted to finish school first. And I regretted it, because there was only one more term left and I would be able to practice working as an intern and make some money. I'd get a certificate too." (Sara, 16 years old)

"I was startled and scared that my dad and grandpa would hit me, too, because they knew I had a boyfriend, but they had never known that we went places together. I always snuck out when I was supposed to be at school, so they would complain about why I'd done something like this. I saw my dad cry, but he didn't hit me. My grandpa looked like he was going to hit me, but my grandma stopped him.

Then my dad had my boyfriend come and we held the ceremony for sending me to live with him according to the tradition, so people wouldn't gossip about us." (Su, 14 years old)

Some adolescent girls were startled and wondered about making mistakes in birth control because they thought they had always taken oral contraceptives, but did not realize that there were incorrect methods for taking the contraceptives when they forgot. Furthermore, they were confident that external ejaculation was a certain method of birth control as the female adolescent revealed in the following statements:

"Well, I was startled and wondered, you know. I wondered how I could have gotten pregnant if I'd been taking birth control pills all along." (Wan, 17 years old)

"Well, I was startled and wondered, you know, because I was certain. My boyfriend had told me that ejaculating outside was a sure way to prevent pregnancy." (Wi, 17 years old)

On the other hand, one adolescent girl felt discouraged, because her boyfriend took no responsibility. Regardless, she encouraged herself that she would be able to raise her child alone because she received encouragement from her parents. One young woman revealed:

"I felt discouraged at first. I didn't know what to do. When I told my parents, all they said was that it would pass, that the matter would pass. So, I told myself that it was only a child and I had to fight for him/her." (Arit, 16 years old)

In addition, after perception about pregnancy, eight of the teenage girls first discussed their pregnancy with their boyfriends. The boyfriends' reactions to the news of the pregnancy indicated that they felt happy and ready to take responsibility, because they were economically prepared. Furthermore, the boyfriends agreed to be supportive and have a stronger connection with the girls as shown in the following statements:

"I told my boyfriend first. He was happy. He told me he'd take responsibility, because he was already working." (Ta, 17 years old)

"He told me we could take care of the baby if I was pregnant, because he was about to graduate from Grade 9. He already has an extra job. He's hired to repair and install air conditioner, but he only works on Saturdays and Sundays. As

for me, I already have work to do at home every day in the evenings, so we think we can take care of the baby. And we'll go tell my mom together." (Wi, 17 years old)

However, two boyfriends felt confused, because they thought they were sterile, but took responsibility for support. One female adolescent reflected:

"He was confused. We'd been together for a long time, so he wondered why I had just gotten pregnant. He had frequently been exposed to electrical shocks and thought it would be difficult to conceive, but took responsibility for support." (Ya, 16 years old)

While nineteen of the participants had boyfriends, who agreed to support them through their pregnancies, one of the participants did not. When she told her boyfriend, the boyfriend did not resolve the problem, but instead ignored it and never contacted her again, leaving the teen girl to solve the problem by herself. The girl was left feeling discouraged and didn't know what to do. She did not want to bring a child into the world without a father. The girl was concerned about the pregnancy not being accepted by society. This teenage girl had once considered (abortion), but did not follow through, because she was afraid of committing a sin that would stay with her. One female adolescent stated:

"We talked about it positively at first, but once I'd bought the pregnancy test kit, my grandma told me to call him on the phone and he didn't answer. Then I sent him a chat message, but he didn't answer. I had to wait until he got off work, but he still didn't reply, so I sent him a message asking him, "What do you want to do about it?" So, he told my older sister, "I'm not taking responsibility for it." So, my grandma took me back home. I felt discouraged and didn't know what to do. I was going to be pregnant without a father. What would everybody say? I considered an abortion, you know, but I was afraid of committing a sin that would stay with me, so I didn't do it." (Arit, 16 years old)

In part of parents, eighteen of the pregnant teenagers in the study spoke of their parent's reaction to the news that they were pregnant. The initial reaction of the parents was sadness, disappointment, anger and complaints about why the teenagers were that way. However, the parents had to accept the situation, help and say that they would raise the baby together and forbade having an abortion. Once a wedding ceremony was performed, the pregnancy was accepted and the couple would then live

together. If their family had good status and money, and the boyfriend has a job, the girlfriend would continue to study. After the delivery of the baby, the teen mother would finish her studies as well. One young adolescent described:

"My boyfriend took me to see my mother and I said "I'm pregnant. Can you accept that?" Then she cried but she didn't beat anyone down. Then my mother said, "If the baby is going to be born, we can let it grow up with us." My father cursed me in the beginning, but he didn't hit me. He asked why I was so bad like this and how we could raise the baby. My boyfriend said that he'd take responsibility, but he doesn't have much money so we'll just live together. We're not married. My parents had him come live with me at home. Every day, he gives all of his money from his work to me. My parents help with expenses. I think I will drop my classes for a year because I have to take care of my baby. Then I should go back to study and graduate from Grade 12. I might ask relatives to help take care of the baby." (Porn, 15 years old)

On the other hand, the study found one family to have poor status and not much money. The mother told the adolescent to get an abortion, because their family had financial problems; her mother was not sufficiently employed to support one person, much less a baby. But the boyfriend had a job and stopped the teenager from having an abortion. Then the parents of both parties agreed for the boyfriend and girlfriend to get married and move to the boyfriend's house. The boyfriend's family helped with expenses. Thus, the female adolescent thought to work and continue her non-formal education after giving birth. One young woman reflected:

"My stepfather and my mother were sad. They said to get an abortion. They asked directly if I wanted to have an abortion. I said, "I don't want to do it." I have two more siblings at home. They're my stepfather's but I'm my mother's only child. My father is the only one who works. He's probably stressed. He said that he doesn't have much money and he probably can't raise it, so I should get an abortion. But when I went to tell my boyfriend, my boyfriend wouldn't let me. So, my mother called my boyfriend to talk with him and his family. Then they agreed that we can get married. Right now, I'm not living with my mother. After I got married, I came to live at my boyfriend's house. His parents help us and the relatives next door bring us food. My boyfriend's father cooks for us every day. I think I'll raise the baby by

myself for one year. Then I'll let my mother raise it before completing non-formal education in Grade 12 and going to work" (Son, 19 years old)

In another direction, parents chose to arrange marriages for pregnant female adolescents to solve problems and preserve their reputations and their families. However, if the adolescent couple were not able to live together due to lack of learning and sufficient knowledge about one another, which led to separation, female adolescents felt guilty about becoming pregnant and most burdens in raising the baby were placed on the adolescent's parents. One female adolescent revealed:

"My boyfriend came to the ceremony. But after I got pregnant, my mother helped with every problem, especially now that my boyfriend has changed. He's very attached to his friends. He came home after dark every day and he was not paying much attention to me. I told my mother, so my mother had me come back to our house. I've moved back to live with my mother for almost two months. I couldn't keep up. We fought so frequently. My mother said that when I have a lot of stress, there will be effects on the baby. My mother had me separate from him when I was almost four months pregnant. We fought frequently, but he called me sometimes and sent me 1,000 baht a week to spend. I didn't like that he was going out so much and I'm very sad. I shouldn't have gotten pregnant." (Kit, 16 years old)

Furthermore, the study found one family to have poor status and little money. After the adolescent girl's family learned about the pregnancy, the family tried to follow-up on the boyfriend to take responsibility, but the adolescent boy would not accept responsibility. Therefore, the adolescent girl's family encouraged the teenager and helped with expenses. This encouraged the adolescent girl to continue the pregnancy and plan to work and care for the baby. However, the adolescent girl would not go back to study. One young woman reflected:

"They said if it's a mistake, it's a mistake. My mother cried and was sad. My father was quiet, but he didn't hit me or do anything to me. There was my grandmother's sister and my half-sister from a different mother. And there was my sister's mother and my aunt. They helped me talk with my boyfriend, but he was not moved. My grandmother said to not follow him and that she'd raise the baby and we could take care of it ourselves. She said to just stop communicating with him. My parents just said for me to let it pass and it will pass. So, I told myself that I had to

fight for this baby. I'm not working right now and my mother helps with everything. She provides for the household expenses. I think I will raise the baby until it's one year old and then I will go back to work and help with the household expenses and raise the baby, because more money will be needed as the baby grows up. I probably won't get to study again." (Arit, 16 years old)

In part of teachers, all of the interviewed pregnant teenagers reported being able to continue education with no reprimands from schoolteachers and reported support provided by teachers regarding studying time, homework and tests. However, because pregnant teenagers felt embarrassed as their abdomens grew larger, the pregnant students were afraid of being blamed for being "a bad or troubled student". If the participants continued to study, the participants would be gossiped about when their unplanned pregnancy was noticed by others. In addition, pregnant teenagers had burdens to care for babies, causing pregnant teenagers to suspend their education as revealed in the following statements from the informants:

"My teacher didn't say anything. She said for me to catch up on work and homework. But I was getting bigger. I was embarrassed in front of my friends, so I dropped out and didn't study the second term." (Son, 19 years old)

"As my belly got bigger, I was embarrassed in front of my friends, so I asked to drop out. I'll look at the expenses another time. If it's not enough, I'd have to work, wait for the baby to grow and wait for me and my boyfriend to get on our feet before studying in non-formal education to finish Grade 12." (Luck, 16 years old)

"I went back to study as usual. The teacher knew, but didn't say anything. I wasn't very big, but I was dizzy frequently. I had to stop frequently, so my teacher had me stop on certain days and send my work to her and take tests. I finished Grade 10. When my son/daughter is 3 – 4 years old, I will look for work to help with the household expenses. If I have an opportunity, I will study in non-formal education to finish Grade 12." (Ta, 17 years old)

Take good care of themselves

Pregnant teenagers are a high-risk group due to incomplete physical growth and possible improper self-care, creating risks for complications involving both the teenagers and their fetuses. According to the findings, all of the adolescent girls gained acceptance for pregnancies from families and boyfriends, causing the

adolescent girls to accept their pregnancies and resulting in self-care. The adolescent girls reasoned that they had to take good care of themselves to prevent potential danger to fetuses, because fetuses are the most important thing at the time. Therefore, the adolescent girls sought knowledge for Take good care of themselves consisting of antenatal care at the hospital and self-care based on advice from the teenagers' parents. In addition, the adolescent girls used online media to search for additional information, causing adolescent girls to have the following knowledge: dietary habits, maintenance of physical hygiene, rest, and avoidance of heavy work as revealed in the following statements from the informants:

"There was the antenatal care book and doctors and nurses recommended drinking a lot of milk, so my baby would be healthy. And they told me to not lift heavy things." (Kan, 17 years old)

"The hospital gave me an antenatal care book. I read it and searched on Google using the words "care during pregnancy". I also watched on YouTube and typed in "care during pregnancy by gestational age," so I could see how I have to take care of myself at different gestational ages. It showed how I have to take care of myself in the first and second trimesters. I looked it up and followed it." (Son, 19 years old)

"There were recommendations in the antenatal care book and recommendations from doctors and nurses when I was getting antenatal care. My boyfriend's mother said to drink a lot of milk, so the baby would be healthy and she didn't let me do hard work or lift heavy objects." (Sri, 17 years old)

In addition, parents were found to have beliefs that drinking coconut juice would cause the baby to have white skin. One young woman described:

"My boyfriend looks for things like milk, fish meat and eggs for me to eat. And his mother told me to drink a lot of coconut juice so the baby will have a fair complexion." (Ya, 16 years old)

Take care of themselves to prevent complications during pregnancy

Unusual symptoms upon entry to the first - third trimesters of pregnancy consist of the following morning sickness, cramps, aching muscles, vaginal discharge, frequent urination and lower abdominal pressure. Therefore, the adolescent girls searched for information and consultants for self-care. Most of the teenagers visited a

doctor to solve problems because the adolescent girls did not dare to take medications during pregnancy as the young women revealed in the following statements:

"I had cramps, but I didn't dare to buy medications. I told the doctor when I came for antenatal care and she said to drink lots of milk and she gave me calcium." (Luck, 16 years old)

"I asked my doctor when I came for antenatal care. The doctor said a vaginal discharge is normal for people who are close to giving birth. She said to clean and dry myself and to tell her if I had itchiness or a strong odor. But it got better, so I didn't tell her again. Then I had lower abdominal pressure. I asked the doctor about it, and she said to sit and rest if it hurts and the symptoms will improve. If the pain gets more frequent and doesn't get better after resting, she said I should hurry to the hospital because it's real pain and a symptom for women who are close to giving birth." (Na, 15 years old)

One adolescent girl used online media to solve problems with unusual symptoms when the adolescent girl had a fever and an allergic rash all over her body. In addition, the adolescent girl consulted her mother to confirm information and took medications. The adolescent girl thought she would go to see a doctor if symptoms did not improve after taking a pill. One female adolescent explained:

"I had a fever. I searched on Google to see what medications I could take. I found that I could take paracetamol. I took one. It was information from a health website. It was a doctor's recommendation, so I believed it. When I asked my mother, she said I could take it, but not too much. She said to just take it to improve my symptoms. For example, if it didn't get better after one pill, I'd have to see a doctor. I had an allergic rash all over my body. I searched on Google and found a medication for allergies called chlorpheniramine. I found out whether I could take this medication. They said I could. I took one pill and I was better. I thought I'd go see a doctor if I didn't get better." (Rat, 15 years old)

Furthermore, some of the adolescent girls decided to consult with their mothers or their boyfriends' mothers about unusual symptoms during pregnancy and used knowledge in basic self-care. However, if the symptoms did not improve, the adolescent girls thought to see a doctor to be examined and treated as in the following statements from the young women:

"I asked my mother when I had a vaginal discharge. My mother said to wash with a feminine hygiene solution and it would go away. She told me to go to see a doctor if it didn't go away, but it went away after I washed for a while. So, I didn't go to see a doctor. It went away by itself, and it doesn't happen much now." (Wan, 17 years old)

"I had it at first when I got pregnant. I was very dizzy. I vomited whatever I ate. I ate sour foods. I asked my boyfriend's mother and she said to eat sour things. I thought that I'd go to the doctor at the hospital if I didn't get better, but it got better." (Kan, 17 years old)

Planning for the future after giving birth

Nearly all of the teenagers planned to take care of their children for six months to four years. The teenagers planned to work and envisioned disclosing their pregnancy to the public and allowing support for their babies in the future. The teenagers would seek work and ask for support from their parents while they worked. Moreover, the adolescent girls planned to continue their educations, perceiving that graduation at higher levels would result in higher income as the young women revealed in the following statements:

"I will raise the baby myself. After six months, I'll look for a job and let my mother take care of the baby for me. I'll go to work and make money. After my baby is grown up and in kindergarten, I'll go back to study in non-formal education to finish Grade 12, so I'll get a good job." (Kit, 16 years old)

"I think I'll take care of the baby by myself for six months before letting my boyfriend's family help take care of the baby. I will go out to find a job to pay for my baby's expenses. I'll probably work at stores in the market around here. I'll see about my education later. I'll look at the expenses again. If I still have money, then I will go to non-formal education until I graduate from Grade 12 so I can get jobs that are not hard." (Kan, 17 years old)

"I'll raise the baby myself and I'll work, but I probably won't go back to studying now because I'm afraid we won't have enough money to spend. If my boyfriend has a secure income, I'd like to go back to non-formal education until I graduate from Grade 12, so I can get other jobs that pay more." (Wi, 17 years old)

In addition, the adolescents wished to pursue higher education on the belief that their parents would forgive them and give parental supports to them and their babies. They greatly expected that their academic achievement was a mean to widen their employment opportunity and source of income as well as to regain their reputation. The informants' statements were as follows:

"I think I will take care of the baby by myself for six months before letting my stepmother help raise the baby. Then I will go to non-formal education until I graduate from Grade 12. My father asked me to do that." (Cha, 15 years old)

"I will take care of the baby myself for two years. I think I will complete non-formal education at Grade 9 first before continuing in accounting at Khao Yoi Vocational College and getting a job. My mother wants me to complete my education. She and my boyfriend will support me so I can get a good job." (Sam, 16 years old)

Because the pregnancies were unplanned, educational impacts were created. The adolescent mothers usually resigned or suspended their educations because adolescent mothers needed to support themselves. Some adolescent mothers lived with their parents or their boyfriend's families, thereby increasing family burdens and expenses. The adolescent girls perceived mistakes and impacts, thereby causing them to think about preventing pregnancy by asking for recommendations concerning contraception methods after giving birth from public health personnel. The adolescents chose to use contraceptive implants because implants can control birth for three years. This would allow the adolescents to enter adulthood with appropriate maturity and more responsibility as revealed in the following statements from the informants:

"I told the doctor that I was allergic to oral birth control pills and contraceptive injections. The doctor said that she would use contraceptive implant after I gave birth." (Ta, 17 years old)

"I think I will get a contraceptive implant. The nurse recommended it to me when I came to get antenatal care." (Na, 15 years old)

In conclusion, the participants had all planned for a future that included receiving support from their parents, whether it was for continuation of education or employment. Furthermore, the pregnant adolescents needed advice on birth control

from health care providers to prevent a repeat pregnancy. In addition, the adolescents needed their parents' and health care providers' support to meet their future goals.

CHAPTER 5
DISCUSSION AND CONCLUSION

This chapter provides a discussion of the research finding. First, the part of summary. Second, the discussion that focuses on finding discussion based on previous studies which were relevant to the study.

Summary

This study is a descriptive qualitative research. The aimed of this study to explore experiences of sexual health literacy among adolescent students with unplanned pregnancy. The following discussion is organized by the research question is that what are the experiences of sexual health literacy among adolescent students with unplanned pregnancy? Furthermore, participants in this study were 20 adolescents who were dropped out of school because getting unplanned pregnant during the time of research conduct and lived in Phetchaburi province at this time. The use of self as researcher focuses on subjectivity and the researcher is the main instrument. So, semi-structured for in-depth interview was an instrument for the researcher to ensure the important issues to be discussed of the conversation. Field notes written to record situations, observations and critical insights occurring during the interviews and an audio recorder used to record the interviews for verbatim transcription and detailed analysis in all processes. Data analysis was employed Braun and Clarke (2006) strategy of thematic analysis and NVivo 12 used to organize the data of participants' statements (Qualitative Data Analysis Software, 2012).

Discussion

The discussion in this chapter is classified based on the finding themes. Five themes explained including: 1) Female adolescents and their sexual health literacy, 2) Sexual relationship experiences, 3) Understanding of birth control contraception, 4) Circumstance leading to an unplanned pregnancy, and 5) The pregnancy journeys.

1. Female adolescents and their sexual health literacy

"Meaning of the term sexual health", "Characteristics of adolescents who with good sexual health", and "Source of the meaning of the term sexual health" emerging as the main described of knowledge and understanding of sexual health literacy and female adolescents reflected by the girl adolescents.

Meaning of the term sexual health

The meanings of sexual health literacy through the views of female students can be divided into 2 important points: having safe sexual intercourse with ability to prevent sexually-transmitted diseases and to choose contraceptive methods for the prevention of unplanned pregnancy. The meanings given by the sample may derive from the acquisition of sexuality education knowledge. This agrees with the survey findings, which reveal that 90% of Thai secondary and vocational students acquire from their teachers the knowledge of transmission, prevention and treatment of sexually-transmitted diseases and condom use for pregnancy prevention. All these issues are taught in almost every educational institute (UNICEF, 2016). In this regard, WHO (2017) has defined that sexual health is "a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence." It can be said that the meanings of sexual health in the adolescent viewpoints may not cover WHO's content. As a result, Thailand's sexuality education should focus on the comprehensive content, especially the sexuality free of coercion, discrimination and violence.For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled.

Characteristics of adolescents who with good sexual health

Female adolescents have reflected 4 important attributes of adolescents having sexual health literacy, namely, healthy physical, protections itself during sexual relations, no sexually transmitted diseases, and no substance addictions to drugs. The adolescents' good sexual health characteristics can be indicated through their individual behaviors that cause no frequent problem e.g. infection of sexually-

transmitted diseases and drug use in adolescents (Center of Educational Innovation Research and Development for Children and Persons with Special needs, 2013).

Source of the meaning of the term sexual health

Importantly, female adolescents have explained how they learn about the definitions of sexual health literacy. They argue that they have acquired such knowledge from secondary or vocational schools where they study in health education course on the topic of how to do self-care when entering the adolescence. Additionally, they learn about self-care from health care providers. This conforms to a survey of comprehensive sexuality education courses in Thai schools (2016) It reveals that almost all secondary and vocational schools provide sexuality education courses of which principal contents concern sexual organs and reproductive systems as well as development into reproductive age including wet dream in male and menstruation in female.

It is evident that the adolescent girls were able to describe their knowledge and understanding about the main content about self-care when they entered adolescence, which led to explanations about the main characteristics of adolescents with sexual health literacy and the ability to distinguish between the differences between men and women. This reflects the adolescent girls' comprehension about sexual issues as one of six sexual health literacy components (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009).

2. Sexual relationship experiences

"Dating the opposite sex", "Consenting to have sexual intercourse with boyfriend", and "Finding a solution of female adolescent after sex" emerging as significant reflected of sexual relationship experiences among the participants in this study.

Dating the opposite sex

The adolescent girls liked the opposite sex at 10-18 years of age. This conforms to the adolescent's physical development. It is found that the entry to the reproductive age is the result of hypothalamus, pituitary gland and gonad functions, while sex hormones that create libido are produced at sexual glands (Bureau of Reproductive Health, 2014). Furthermore, they had higher sex hormone function naturally leading to arousal. Thus, adolescents searched or experimented to meet

needs (Crooks & Baur, 2005). Most adolescents met boyfriends on facebook where they chatted and talked on the telephone while dating. This corresponded with psychosexual development of adolescents aged 12-18 years. Dating is the first step of building romantic relationships according to Santrock (2014), while modern electronic communication allows teens to meet and share activities via social networks (Carroll, 2012). This corresponds with a study conducted by Lenhart (2012) who found adolescents to use mobile phones and the Internet to interact with known and unknown peers. Some female adolescents are interested in the opposite sex, have boyfriend/ girlfriend relationships and become sexually active due to nighttime outings and peers with boyfriends. This corresponds with studies by Srisuriyawet and Homsin (2014) who found peers to persuade adolescents toward sexual activity. Furthermore, adolescent girls'-based decisions about boyfriends on income certainty. This corresponded with spouse selection principles by Kaeokangwan (2010) who stated that occupations and financial support build security in family life.

After most adolescents had relationships for a while, they informed parents. Furthermore, adolescents received recommendations about preventing sexual intercourse. This corresponded with a study finding communication on avoiding sex during the school years to influence abstinence intention (Chareonsuk, Phuphaibul, Sinsuksai, Viwatwongkasem, & Villarruel, 2013; Hattakitpanichakul, Phuphaibul, Phumonsakul, & Viwatwongkasem, 2019). Some of the adolescents told their mothers because they were sexually active, but not confident regarding birth control. Parents reprimanded adolescents but instructed them about contraceptives. This corresponded with a study finding sexual communication with parents to increase birth control rates and lower adolescent pregnancy rates (Hadley et al., 2009).

Consenting to have sexual intercourse with boyfriend

The adolescent girls spent between one month and three years before agreeing to have sex with boyfriends for the first time. Situations leading to sexual intercourse consisted of going outside the home, meeting at various places and having the opportunity to be close to each other as part of adolescent romantic relationship development (Santrock, 2014). In addition, when adolescents had sex for the first time, boyfriends planned by taking the girls home and saying that they were going to see the boyfriend's parents, but no one was home when the couple arrived. This

created an opportunity for the boyfriends to ask to have sex and frequently led to premature sexual intercourse, because adolescents tend to seek opportunities to be near each other, do things together, pay attention to each other and meet sexual needs (Atwood et al., 2012). Awareness about avoiding situations leading to sexual intercourse remain a major issue in sex education among female Thai adolescents. This corresponds with Sittipiyasakul, Nuwong, Lucksitanon, and Uamasan (2013) found that being alone is a major risk factor for the first sexual intercourse of teenagers.

On the contrary, when men wanted sex, most of the adolescent girls refused. Regardless, men opted for verbal persuasion to build confidence that men would use condom protection to prevent pregnancy. In addition, female adolescents were afraid that the male party would become angry and sullen, thinking that adolescent girls did not love them if they did not consent to having sex. Refusal is a personal right everyone should respect and accept. In addition, good refusal requires seriousness in gestures, words and tone of voice to clearly demonstrate the intention to refuse (Bureau of Reproductive Health, 2013; Thato et al., 2008). Obviously, teenagers lack the skills to refuse sex, leading to important factors that contribute to adolescent pregnancy (UNFPA, 2013).

Finding a solution of female adolescent after sex

Female adolescents had anxiety, fear of pregnancy after having sex and abnormal physical symptoms. Most performed self-care by consulting about birth control. This corresponded with parenting guidelines raising adolescent children stating that parents should teach sex education on knowledge, sexual intercourse, sexual reactions and responses, pregnancy, birth control, sexually-transmitted diseases, functions and responsibility after sexual intercourse (The Royal College of Pediatricians of Thailand & Pediatric Society of Thailand, 2017). Furthermore, most female adolescents used online social media such as Google, Facebook and YouTube. And female adolescents searched on Google and accessed web blogs such as Pantip to find pregnancy prevention knowledge not originating from public health service agencies. The adolescent girls chose to consult sexually active peers. This corresponds with a survey on sources of sex information finding 90 percent of students to learn from online friends. According to studies conducted abroad,

information on sex from the Internet and friends is usually inaccurate (UNFPA and Ingham, 2017). Adolescents receive information on emergency birth control selection. In addition, emergency contraception is a method used to avoid pregnancy after unprotected sexual intercourse and unlike the regular contraceptive methods that are administered before the act (Tamire & Enqueselassie, 2007). Therefore, advised to not use emergency birth control medications more than 3-4 times per month because frequent use can cause more menstrual fluctuations and abnormal bleeding (Faculty of Pharmacy, 2019; Watthanayingcharoenchai & Inthonprasoet, 2018).

Most of the adolescent girls opted to consult with their mothers concerning social relationships with the opposite sex, seeking consultation before and after having sex, because they were uncertain about birth control by using condoms. None of the adolescent girls were able to find information concerning sexual health services from public health officials. Thus, the girls were able to perceive overall comprehension and credibility of the information they found and applied the knowledge obtained to the performance of self-care (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009). Regardless, the adolescent girls had insufficient knowledge to enable avoidance or refusal to engage in sex prematurely. In addition, the girls had limited information and comprehension about birth control because they had received insufficient knowledge from school and home. Furthermore, they selected unreliable sources of knowledge from friends and online social media. This which are the key for deepening their understanding of how to implement the determined plans as well as to rationally analyze and compare health-related practices (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009). Moreover, the adolescent girls did not have sufficient access to information about sexual health services and birth control from medical staff. Consequently, the girls were unable to select correct birth control methods contraception that suitably met their needs.

3. Understanding of birth control contraception

"Sources of knowledge about birth control", "The behavior to use birth control", and "Birth control methods used before pregnancy" emerging as the main described of understanding of birth control contraception described by the girl adolescents.

Sources of knowledge about birth control

Most girl adolescents find birth control knowledge through sources in the surrounding environment along with the receipt of the different interrelated level of social supports beginning from family because teenagers trust the source of information from the mother and old sister. This agrees with the study of Thipsungwan, Srisuriyawet, and Homsin (2013) who found that the mother was the closest source of sexual knowledge for daughter. It was also in line with the research of Flores and Barroso (2017) who argued that parents were the first important source of sexual knowledge because they could promptly give information and answer questions at the time their children raise.

Besides, most of the girl adolescents could be found the community-level data from schools. Unfortunately, the lecture-style instruction used by most teachers might not provide learners with an opportunity to think, analyze, and raise questions. Learning materials and environments failed to motivate and facilitate learning. When students had doubts about contents. They fear to ask resulting in their inability to apply what they learned in actual birth control. This coincided with previous research revealing that sex education in most schools focused on theories, not on comprehensive linkage (Ruanjan, 2013; UNICEF, 2016; Sreemuang, Malarat, & Hunnirun, 2016). Furthermore, that failed to satisfy the adolescent's curiosity (Ruanjan, 2014). Meanwhile, knowledge acquired by female adolescents from health care providers some adolescents were shy to ask about doubtful contents because all friends in the focus group were not the close ones. As a result, some adolescents sought birth control and sexual relation to knowledge from trusted friends. Adolescence is the age of obvious sexual changes and curiosity. This corresponds with the development of teenagers that began to be closer and listen to their friends who were highly influential to their thought and decision making (Bureau of Reproductive Health, 2014). However, some girl adolescents who had no boyfriend at the time paid no attention while in the classroom. She could not remember contraception-related contents when engaged in sexual intercourse. Adolescents should learn through self-study, while their access to information should be enhanced using social media such as LINE and Facebook. This would enable them to seek data

when they were doubtful or wished to solve problems on sexual changes at any time (Olanratmanee, 2018).

The study indicated that girl adolescents sought the information from online social media because they forgot what they learned in school and fear to consult their parents for fear of blame on their engagement in sexual intercourse. Unfortunately, sought the information from online social media not from reliable media from health care providers of Thailand. The social media-based search for answers on their own was the free channel of communications that could lead to misunderstandings and incorrect solutions. This eventually resulted in improper and unsafe sexual behaviors (Bureau of Reproductive Health, 2016b).

After girl adolescents receive information about contraceptive methods from family, school, and online social media. They are decided to buy contraceptive pills at the drug stores. It was found that pharmacists also played a crucial role in giving knowledge on different kinds of contraceptive pills, especially making a decision to use them or refraining adolescents from using emergency contraceptive pills. According to the Faculty of Pharmacy, Mahidol University (2019), the progestin-only emergency contraceptive pill was widely used in Thailand. However, due to its high amount of hormone, it was more prone to adverse drug reactions. The study also revealed that most adolescents stopped using the emergency contraceptive pill after the pharmacist informed them about complications. They then chose the oral contraceptive pill instead. On the one hand, this study found that most girl adolescents were not bought emergency contraceptive pill by themselves. Therefore, they failed to receive correct advice and had to read medical labels on their own. Most of them could well understand and correctly used, while some others were unable to do so resulting in the incorrect intake. In contrary, the emergency contraceptive pill was the dangerous drug under the law. The pharmacist should be ready to give advice (Bureau of Drug Control, 2016). Indeed, every population should have functional health literacy that able to read and understand medical labels on their own (Kickbusch, 2008; Nutbeam, 2008). This reflected the fact that some Thai girl adolescents had limited health literacy affecting their sexual health. So, all adolescents must receive correct advice until could well understand and correctly to use contraceptive pill from pharmacists.

The behavior to use birth control

The receipt of insufficient birth control information led to the improper selection of birth control method and incorrect usage of such a method. Despite the use of oral contraceptive pills by most adolescents, they incorrectly took them. Also, the findings revealed that the adolescents had incorrect practice when they forgot to take 1-2 pills such as taking them all together at the same time or no having them again. To achieve medical action of uninterrupted pregnancy prevention, the continual pill intake from the first to the last one was required (Faculty of Sexual and Reproductive Healthcare [FSRH], 2017). Besides, most adolescents have once used emergency contraceptive pill after unprotected intercourse for pregnancy prevention. In Thailand, such a pill could be purchased from the pharmacy without prescription so it was convenient and fast to buy (U.S. Food and Drug Administration, 2013). However, girl adolescents were found incorrect use because not buy it by themselves. This agreed with many studies indicating that most adolescents incorrectly took an emergency contraceptive pill and misunderstood its application and side effects. They received the pill information from non-medical professionals (Wattanasereekul, 2009). This pill was 58-79% effective in pregnancy prevention if it was taken immediately after sexual intercourse. Indeed, its effectiveness would gradually decrease if it was taken long after sexual intercourse (Gemzell-Danielsson, Rabe, & Cheng, 2013; Shohel et al., 2014). It should not be used more than twice a month (Dilokpattanamongkol, 2011), while normal contraception methods should not be replaced by emergency contraceptive pill because of its low efficiency leading to higher pregnancy chance if it was taken for a long period (Thai Health Promotion Foundation, 2013).

Birth control method used before pregnancy

In engaging in sexual intercourse for the first time, most of the adolescent boys would take responsibility for birth control by using condoms, because they wanted to build confidence in the adolescent girls that they would not get pregnant. This led to consent to engage in sexual intercourse. Once they had been engaging in sexual intercourse for a long period of time, the adolescent girls would take responsibility for birth control by opting to use a variety of birth control methods including oral contraceptives in packets, emergency birth control pills, contraceptive

injections and the rhythm method to count for safe days, depending on the frequency of sexual relations. The above finding corresponds with the findings of a study by Raine et al. (2010) who found that most pregnancy prevention efforts focus solely on women. Moreover, sexual norms and the branding of Thai society left the girls unaware of shared responsibility in sexual relations. Furthermore, the adolescent girls received no support in searching for sufficient information and services concerning birth control, while the adolescents were expected to take responsibility for preventing pregnancy (UNICEF, 2015). In addition, the adolescents received incorrect knowledge, had no access to credible sources of health information concerning oral contraceptives in packets when the adolescent girls forgot to take the medication and how to solve problems when the girls had side effects from birth control. As a result, adolescent girls did not practice birth control continually. This finding corresponds with studies finding the main reasons for adolescent pregnancy to be misinformation about contraceptive methods and irregular use of contraceptives (UNICEF, 2015). When adolescent girls in the present study failed at birth control, they had the adolescent boys take responsibility for birth control by using condoms. However, the adolescent boys did not take responsibility for contraception, tended to forget to buy condoms and used external ejaculation instead. This differed from findings on many young African American men who considered the responsibility to prevent pregnancy as a shared responsibility (Woodhams, Sipsma, Hill, & Gilliam, 2018).
Moreover, the adolescent girls in the present study, had no skills in refusing to engage in sexual relations when they had no protection. This finding concurs with the findings of a study by Chirawatkul et al. (2011) who found that female adolescents are unable to negotiate with their male partners to use a condom. Also, some female adolescents continued to have a misunderstanding about fertilization that leading to the belief that having unprotected sex one or two times could not make them pregnant. This finding corresponds with studies finding the belief that they could not get pregnant (42%) in unprotected intercourse among women wanting to avoid pregnancy (Biggs, Karasek, & Foster, 2012).

Generally speaking, adolescents do not have sufficient access to birth control services. Furthermore, they have inadequate information and comprehension about birth control, insufficient access to credible media sources on information about

birth control, inadequate decision-making skills on the issue of engaging in unprotected sex, impaired skills in refusing to engage in sex and inability to correctly perform self-management skills as suitable for the birth control methods selected. Although adolescents have access to sources of knowledge about a variety of contraceptive methods (family members, mostly mothers), especially concerning methods for taking contraceptives after they had forgotten, when the adolescents received inaccurate information, they made the wrong decisions about using oral contraceptives. Consequently, they were unable to prevent pregnancy. Therefore, seeking confirmation of the knowledge received from numerous sources for the purpose of assuring comprehension and reaffirming credibility verify must be included in the process of applying lessons learned to self-care. The key characteristic of access to information on sexual health care services is one of the primary components of eventual sexual health literacy (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009).

In addition, insufficient information and comprehension that failed to meet the adolescents' needs concerning contraceptive use that was received from school combined with the barrier of shyness and hesitation to ask questions, teaching methods that fail to motivate learning, environments that are not conducive to expressing opinions or asking questions leading to learning, incorrect ideas and insufficient understanding led to the adolescents' inability to prevent pregnancy. Although the above factors are essential to gaining in-depth comprehension of mobilizing set plans in addition to the rational analysis and comparison of various practiced directly lined with health (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009).

Moreover, in having unprotected sex, adolescent boys and girls are insufficiently able to properly exercise reasoning analyze the advantages and disadvantages leading to decisions about selecting contraceptive methods for themselves, which is a key component of decision-making skills in matters concerning sexual health in which the above skills are required (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009). The adolescent girls in this study did not yet have sufficient communication skills in persuasion of their male partners in abstaining from premature engagement in sexual intercourse or having unprotected

sex. Based on all of the aforementioned limitations in sexual health literacy, therefore, it is evident that the adolescents were unable to correctly manage birth control methods on their own, thereby leading to unplanned pregnancy.

4. Circumstance leading to an unplanned pregnancy

"Misconceptions about birth control on the part of the woman", "Misconceptions about birth control on the part of the man", "The decision to select contraception method in women", and "Man and contraceptive use" emerging as the main described of circumstance leading to an unplanned pregnancy.

Misconceptions about birth control on the part of the woman

According to the interviews, misunderstandings about birth control pills were found. The girls thought oral contraceptives would make them fat. Importantly, the teenagers consulted their friends rather than parents, teachers, or health care providers. Regardless, friends might give wrong answers motivating the girls to try and eventually lead to unplanned pregnancy. Furthermore, there were misunderstandings about the presenting symptoms of infertility preventing the adolescents from practicing birth control regularly. This finding corresponds with previous studies identifying the causes of teenage pregnancy as lack of education, friends as 'sexual education consultants' rather than parents or teachers and insufficient reproductive knowledge (UNICEF, 2015).

Moreover, when birth control side effects occurred, the girls were unable to search for information or access credible sources of services. Consequently, the girl's selected inappropriate birth control methods and use condoms incorrectly. This finding corresponds with previous studies identifying the major causes of teenage pregnancies as limited access to sexual education and sexual health services (Salvador, Sauce, Alvarez, & Rosario, 2016). In addition, the adolescents were unaware of contraceptive methods because they could not remember the content taught in school because they were not sexually active at the time. As a result, they were not interested in the content taught at school which eventually led to unprotected sex. Bruner and Austin (1986) believed that the content of each subject had to be prioritize for continual systematic progress from easy to difficult. Thus, the content should delve more deeply and widely based on children's ages and development. Opportunities should be offered for students to learn about basic ideas or topics

repeatedly until students until students are able to conceptualize those subjects. Therefore, lesson content on birth control for Thai students should apply spiral curriculum methods to help student's gain conceptual thinking on birth control and use what they have learned to prevent pregnancy.

Misconceptions about birth control on the part of the man

According to studies on the boyfriends of adolescent girls, most are adolescents aged 16-21 years with the wrong attitudes about condom use, claiming a dislike for condoms and personal feelings that wearing condoms was not natural as their reasons for refusing to share responsibility for birth control. This finding corresponds with surveillance of behaviors related to HIV infection in Thai students in 2017, which found adolescents to not use condoms when they had sex for the first time at a rate of 50 percent (Bureau of Epidemiology, 2018). Although having sex without a condom may seem natural, it puts partners at risk for infection and unplanned pregnancy (NHS England, 2017b). Unfortunately, most studies have found men who take responsibility for birth control to use condoms irregularly, because they believe having unprotected sex only once or twice to not result in pregnancy and use external ejaculation instead, because they believe they believe this method be a sure way to prevent pregnancy. Furthermore, the adolescents had no real knowledge about the presenting symptoms and causes of infertility, which led to irregular or no birth control use. This finding corresponded with the findings of surveillance into the reasons for not using condoms of male adolescents finding the adolescents to not use protection due to misunderstandings about sexual relations, belief that having unprotected sex only once would not result in infection or pregnancy and failure to consider the subsequent impact of unprotected sex (Bureau of Epidemiology, 2018).

Moreover, adolescent boys do not have sufficient knowledge and understanding about sources of correct knowledge about solving the problem of the side effects of oral contraceptives. Moreover, the adolescent boys had no authority as husbands in making decisions about birth control instead of the adolescent girl's birth control. Consequently, the adolescent girls did not practice continual birth control and were not aware of the potential impact, became pregnant and had to drop out of school. According to reproductive rights, adolescent girls have to be entitled to basic

personal rights in terms of independent thinking and family planning (Bureau of Reproductive Health, 2016a). The study of Grace, Ihuoma, and Temitope (2013) found male and female adolescents to share similar perceptions of the causes of teenage pregnancy to be used in solving this problem.

Decision to select contraception method in women

The contraceptive choices of adolescent girls can be divided into three groups, namely, the group with knowledge and ability to choose and take oral contraceptives correctly, but with insufficient knowledge; when they forgot to take birth control pills, no additional information was sought from health care providers. Consequently, the oral contraceptives they took were inefficient in preventing pregnancy. This finding corresponded with previous studies finding all adolescents to have learned about the different types of birth control, but use contraceptives incorrectly, particularly when they forgot to take contraceptives (Geounuppakul, Runggrid, & Ubolsawas, 2013). NHS England (2017a) argue that when oral contraceptives are used correctly, they are more than 99% effective.

The next group has knowledge, ability to choose and the ability to take contraceptive correctly, but cannot access and select sources of credible information about problem-solving methods for the side effects of birth control. Thus, the birth control pills selected should contain the lowest hormone levels with good contraceptive efficiency and ability to maintain a normal menstrual cycle with minimal flow and discomfort (Faculty of Pharmacy, Mahidol University, 2019). However, the female adolescents did not know how to access public health services to seek consultation and solutions with choices for suitable birth control methods. Moreover, the girls felt embarrassed to use the services for consultation about birth control. Thus, the decided on their own based on information from online media that was not credible or from close acquaintances who had incorrect knowledge prompting the girls to stop taking contraceptives and change to other ineffective birth control methods.

Thai society does not agree with having sexually active adolescent girls. Therefore, it is imperative that services be arranged with access for adolescents and confidence that the information on their use of the services is kept confidential. This finding corresponds with work in Great Britain finding links between various services

and schools, arrangement of services at school or a nearby location and/or staff from service providers offerings services to adolescents to visit schools in order to explain the roles and duties of service units and various services available for adolescents, including communication to build trust with the adolescents that the information they receive when they come to receive services will be kept confidential when they use the services, which is the principle of development in sexual and reproductive health service systems with quality and friendliness (UNFPA & Ingham, 2017).

Last is the group with knowledge about birth control methods, but inability to negotiate refusal of unprotected sex requiring the girls to opt for emergency birth control pills. This finding corresponds with previous studies on the reasons for adolescent pregnancy. Although some adolescents had knowledge about birth control, they had no ability to persuade or negotiate with men to wear condoms (Chirawatkul et al., 2012). And another study in sexually active female studies found emergency pills to be the main birth control method used (UNICEF, 2015).

In addition, the young ages of adolescent, limited levels of education because most of the adolescent girls had been sexually active since junior high sex, which caused them to believe the adolescent boys, who were older, and consent to having unprotected sex. This finding corresponds with the UNFPA (2018) which found girls without access to quality education and no empowerment to negotiate in their relationships to be more vulnerable to adolescent pregnancy. Refusal skills are necessary for adolescent girls to apply and need to begin by not allowing themselves to go to places away from the sight of other people, because these types of atmospheres are conducive to sexual risk factors (Bureau of Reproductive Health, 2013). Moreover, good refusal requires serious refusal with gestures and speech aimed at expressing clear intention to refuse (Thato et al., 2008).

Man and contraceptive use

Most of the adolescents used condoms irregularly, lacked restraint and used external ejaculation in lieu of condoms due to erroneous beliefs about the effectiveness of external ejaculation, the idea that having unprotected sex only once or twice would not result in pregnancy and misunderstandings about infertility. Male dominance also affected the birth control of adolescent girls who lacked correct knowledge about contraceptives and failed at birth control. The Thai Health

Promotion Foundation developed programs about sex education methods for adolescents, parents and teachers, and adolescents have improved knowledge, attitudes and behavior about condom use. Nevertheless, studies on sex education in Thailand indicate that early adolescents have incorrect knowledge and inappropriate attitudes concerning condom use (UNICEF, 2016). It can be said that female adolescents face the circumstance leading to unplanned pregnancy, especially misconceptions about the use of birth control method due to their inaccessibility to birth control service and their limited knowledge and understanding of contraception. Most female adolescents still misunderstand how to deal with birth control pill side effects and how to take the pills when missing the schedule. They choose to consult with their familiar persons so the knowledge they receive is incorrect and insufficient. Importantly, they have never taken advices from public health personnel on how to choose the birth control method that suits them and what to do correctly after missing the schedule. This results in discontinued and inefficient contraception. Meanwhile, the male adolescent's misunderstanding is that the intake of birth control pills makes female counterpart fat; condom use causes unnatural feeling; engagement in unprotected sexual intercourse once or twice may not cause pregnancy; coitus interruptus is the efficient contraceptive method; and they also misunderstand the indication of infertility and sterility. Likewise, they have never sought consultations in such regard from public health personnel resulting in discontinued contraception and use of inefficient birth control method. In particular, sexual health literacy consists of 2 important characteristics: accessibility to information and knowledge of sexual health service and understanding of sexual health (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009).

It is also found that the female adolescent's limited communication skill to refuse unprotected sexual intercourse due to the mistake of male counterpart (e.g. forgetting to buy condoms) is the cause of problem. Similarly, male adolescents have the limited decision-making skill of contraceptive use; therefore, they are unable to critically think and analyze pros and cons of refuse of condom use. They thus decide to use the withdrawal method, which is the inefficient contraceptive method resulting in the engagement in sexual intercourse without birth control. For male and female adolescents, the inaccessibility to birth control service, limited communication skill to

refuse unprotected sexual intercourse as well as limited decision-making skill, knowledge and understanding of contraceptive use lead to the inability of self-management in using contraceptive methods for pregnancy prevention. All these are 5 important characteristics of sexual health literacy, which is a key factor for preventing unplanned pregnancy in adolescents.

5. The pregnancy journeys

"Unusual physical symptoms required a consultant", "The immediate reaction on hearing the discovering", "Take good care of themselves", "Take care of themselves to prevent complications during pregnancy", and "planning for future after giving birth." emerging as the main described of the pregnancy journeys.

Unusual physical symptoms required a consultant

The findings reveal teenage mothers' perceived pregnancy symptoms to be menstrual suppression and physical changes. Most adolescent girls with regular menstruation perceived pregnancy when menstruation ceased, while others had delayed perception in the third month due to irregular menstruation and insufficient knowledge about pregnancy symptoms. The girls sought consultation with trusted acquaintances to confirm pregnancy. A study on Thailand's sexual education curriculum included early pregnancy signs (UNICEF, 2016), but students forget. Sexual education should promote greater understanding over memorization and help-seeking from government or other agencies.

The immediate reaction on hearing the discovering

The teenagers described negative emotional reactions such as concern about acceptance by parents and blame from others for pregnancy during their school years before economic readiness. This corresponds with many studies finding most of these young women unready for the emotional, psychosocial and financial responsibilities of parenthood with physiological, psychosocial, economic and social concerns (Kamalak et al., 2016; UNFPA, 2013; Vin et al., 2014 ; Perry et al., 2018). Although nearly all boyfriends agreed to support the pregnant adolescents, one boyfriend did not, leaving the girl discouraged with no idea of what to do. Concerned about pregnancy and social acceptance, she once considered abortion, but did not follow through for fear of sin. The findings correspond with

Suwannasri (2012) who found adolescent pregnancy to conflict with Thai social contexts viewing teen pregnancy as a mistake and branding pregnant teens as problems. Adolescent pregnancy creates family problems opposing cultural traditions and creating family suffering from shame and ruined reputations (Tumchuea & Pumprayool, 2018).

Thai tradition condemns families for unmarried pregnancy and wedding ceremonies are the general solution. Reactions of the acquaintances of pregnant adolescents play a significant role in decisions about pregnancy and future relationships with boyfriends. This finding corresponds with research findings on social support. Families can relieve the severity of adolescent pregnancy (Robson & Berthoud, 2003). Other studies have found adolescent mothers to face the difficulty of being unprepared, but are able to survive due to family support factors (Kruachai, Thammasat, & Tunwattanapong, 2011).

On the other hand, teachers offer opportunities and assistance in continuing studies, which corresponds with the Reproductive Health Protection Act 2010 granting opportunities for girls to continue their studies (Bureau of Reproductive Health, 2010). After pregnancy, however, the teenagers have to stop their educations due to embarrassment in front of peers and other people, because Thai society disapproves of school-age pregnancy or sexual relations (Thitimapong, Kruehaew, & Yongwanichsetha, 2017). Most adolescent girls transfer to non-formal education during and after pregnancy to facilitate childcare. Non-formal education offers flexibility in terms of time and place with no age limitations, but opportunities for people outside the formal system (Neamsakul, 2008; UNFPA, 2013). Regardless, some adolescent girls who have to quit school and find work to support their children because men refuse responsibility. These girls lose educational opportunities, thereby leading to occupational limits with no knowledge and work skills.

Take good care of themselves

Acceptance of pregnancy by families and boyfriends with care, recommendations and support during pregnancy from families, public health personnel helps adolescent girls properly transition to the maternal role. This corresponds with studies finding promotion of social support from husbands, mothers or close acquaintances to help adolescents manage stress and anxiety, while

facilitating the transition to motherhood (Phromchaisa, Kantaruksa, & Chareonsanti, 2014). In addition, this study found that nearly all of participants seek information to self-care from online social media and source accurate more than before pregnancy. Access to accurate information from online media as recommended by public health personnel can help teenagers practice self-care, which corresponds with the studies of nursing roles with focus on adolescent mothers' participatory learning by applying technology adolescents have used as media for health promotion during pregnancy such as searching for information via mobile phones (Mekkamol & Wichainprapha, 2018). Therefore, access to accurate sources of information online and accurate knowledge from close acquaintances who are of the same gender are important in leading to appropriate Take good care of themselves.

Take care of themselves to prevent complications during pregnancy

The adolescent girls consulted same gender relatives and acquaintances, particularly mothers, about self-care. In terms of educational attainment, 13 female adolescents had graduated from junior high school. Low educational attainments led to ignorance and misunderstanding about antenatal self-care, particularly concerning complications. At a mean age of 16.15 years, well-supported mid-adolescents were better at critical analysis, abstract linking and systematic problem-solving (Berk, 2012). A provide support can contribute to correct self-care who found pregnant adolescents to require antenatal assistance, care and attention from families (Pongpattananon, 2016). Similarly, the study of Thinkhanon and Chomnirat (2013) found families had tremendous influence over pregnant adolescents concerning attention and health care, which influences mental and behavioral development (Suktuayart, 2008). For the adolescents in the study, discovery of pregnancy meant negative feelings, but with assistance from families or husbands in maternal adaptation and recognition of the benefits of good self-practice in terms of safety for the adolescent mothers and their fetuses. House (1981) stated that people with assistance such as emotional support, news and information or various types of material support from family members or other people feel they are part of society with ability to cope and respond to stress.

Planning for future after giving birth

Motherhood marks an important transition in life and an unexpected event with impact on the lives and future of adolescents in multiple dimensions. Despite the negative mental, social and economic impacts of adolescent pregnancy, there are also positive impacts developing responsibility for premature parenthood with improved family relationships. The findings also demonstrate that adolescent girls can handle pregnancy and motherhood changes by planning for work, education, long-term birth control and child care. This corresponds with studies of motherhood and responsibility for child care inspiring return to school (Thitimapong et al., 2017). Regardless, a study in Taiwan found that girls accepting simultaneous maternal and student roles might be unable to achieve role balance (Lin, 2005). However, a study of maternal adaptation found Thai adolescent mothers returning to both formal and non-formal education to achieve role balance with management a strategy was family assistance and support (Thitimapong, Petpichetchian, & Wiroonpanich, 2015). Which corresponded with studies of teen mothers identifying social support as a facilitating and promoting factor in maternal adaptation (Darvill, Skirton, & Farrand, 2010; Ngai, Chan, & Holroyd, 2011; Thitimapong, Keawpimon, Kritcharoen, & Sripotchanart, 2010). Most pregnant adolescents receive information on long-acting reversible contraception from medical staff and mothers for postpartum contraceptive planning. This corresponds with Pungbangkadee and Ratinthorn (2014) who argued that contraceptive counseling for teenage mothers should be initiated during the antenatal period by increasing awareness about repeat pregnancy and focusing on continuing contraception. In addition, this corresponds with Wilson, Samandari, Koo, and Tucker (2011) found clear information on contraception, access to long-acting reversible contraception and continual care until the postpartum period to reduce repeat adolescent pregnancy risks.

Female adolescents are able to communicate data on self- care, child care, and birth control planning to other persons and to tell about practices for avoiding possible impacts on themselves and their baby. One can thus say that, when male and female adolescents can choose data sources and access to health service, they will gain correct knowledge and understanding; use reliable media; and communicate self-care data to other persons. They engage in self-management for determining life

purpose and plan as well as have good decision-making skill in choosing their own pregnancy care practice. All these are 6 important characteristics of sexual health literacy in adolescents (Edwards et al., 2012; Health Education Division, 2014; Nutbeam, 2009).

Conclusion

The purpose of this study to explore experiences of sexual health literacy among adolescent students with unplanned pregnancy in Phetchaburi Province in Thailand. A descriptive qualitative research was employed in this research study. This approach is appropriate to explore the experiences and generate knowledge that is based on female perspective within their social context. The research question is that what are the experiences of sexual health literacy among adolescent students with unplanned pregnancy? The findings of this study show the limited of sexual health literacy among adolescent students with unplanned pregnancy is not dependent on a single factor but on various factors related to each other.

Firstly, the participants described their experiences of female adolescents and their sexual health literacy as “Meaning of the term sexual health”, “Characteristics of adolescents who with good sexual health”, and “Source of the meaning of the term sexual health.” Regarding teenage girls give meaning to sexual health based on the knowledge previously learned at school and categorize based on clearly visible external physical differences and gender characteristics, including the use of personal experience in having seen boys fight to explain male-female differences in terms of mental state.

Secondly, the participants responded to sexual relationship experiences to being adolescent students with unplanned pregnancy in term of “Dating the opposite sex”, “Consenting to have sexual intercourse with boyfriend”, and “Finding a solution of female adolescent after sex”. The experiences of most female adolescents showed that they met their boyfriends on Facebook and, while dating, they either chatted via Facebook or made phone calls. After a period of dating, they made appointment to meet each other at certain places, especially at boyfriend’s house. Therefore, male adolescents usually requested for sexual intercourse when having opportunity to stay alone together. At the beginning, female adolescents likely refused it. Despite their

fear of being pregnant, they finally agreed to have sexual intercourse after a longer period of dating because of their love and trust in their boyfriends. Male adolescents verbally persuaded that they would use condom to prevent their girlfriends from being pregnant in order to create confidence. After sexual intercourse, female adolescents sought consultations on birth control because they were unconfident about contraceptive method used by their boyfriend and feared of pregnancy. However, some female adolescents spent a short period of time in dating and getting familiar with their ex-boyfriend's families. This could create problems of misunderstandings, physical abuse and non-acceptance by relatives of male adolescents eventually leading to relationship termination.

Thirdly, the participants explained knowledge and understanding of birth control contraception in term of "Sources of knowledge about birth control", "The behavior to use birth control" , and "Birth control methods used before pregnancy". Despite the fact that female adolescents learned from different people at home, schools, pharmacies, and online social media, their acquired knowledge was still inaccurate and insufficient to meet their needs. They not only failed to understand about shared responsibility of male adolescents for birth control but also had barriers to approach health care providers for correct knowledge and understanding. Therefore, female adolescents were unable to apply the knowledge they have acquired in preventing pregnancy.

Fourthly, the participants expressed serious concerns about circumstance leading to unplanned pregnancy in term of "Misconceptions about birth control on the part of the woman", "Misconceptions about birth control on the part of the man" , "The decision to select contraception method in women", and " Men and contraceptive use". It was revealed that women were unable to access and choose credible source of information on how to relieve side effects of birth control pills. As they could not access to correct and reliable information source of public health personnel, they also received inaccurate advices on what should be done after missing birth control pill. Importantly, they were unable to make negotiation in refusing the unprotected sexual intercourse and had incorrect belief on condom. They also lacked accurate knowledge of efficiency of coitus interruptus and of indicative symptoms of infertility and sterility, while patriarchal power was also used in making decision that

certain female adolescents had to stop taking birth control pills. They were unable to access source of accurate and reliable information on the relief of complications of birth control pill too.

Lastly, the participants explained about the pregnancy journeys of the term “Unusual physical symptoms required a consultant”, “The immediate reaction on hearing the discovering”, “Take good care of themselves”, “Take care of themselves to prevent complications during pregnancy”, and “Planning for future after giving birth”. The participants have planned for the future such as receipt of parental support for the continuation of education or employment. Furthermore, the health care provider’s advice on birth control was needed for pregnant adolescents to prevent the repeat pregnancy. Importantly, it was found that adolescents always used social media in learning about sexuality and sought relevant knowledge for self-care. However, they lacked the source of reliable and trustful information on pregnancy prevention that promptly satisfied their needs. Also, they have received incorrect birth control knowledge from close acquaintances. The access to accurate sources of such information and knowledge provided by close acquaintances or by health care providers via online media were the key for suitable pregnancy prevention. Besides, the dissemination of accurate information on reversible birth control by nurses and health care personnel would promote sexual health literacy and prevent adolescent’s repeat pregnancy.

Implication for nursing practice

The public health problem of adolescent pregnancy affects not only the adolescents themselves, but also parents, entire families and the nation as a whole. Therefore, it is imperative that adolescents, families and health care providers exert every effort toward reducing the impact of adolescent pregnancy. Other equally important issues involve gaining understanding about how adolescents perceive sexual health literacy, how adolescents view the experience of unplanned teen pregnancy and what factors are barriers obstructing proper access not only to health services, but to obtaining accurate information about socializing with peers of the opposite sex and refusal to engage in sexual activity/ intercourse because

misunderstanding or inaccurate information about the above can lead to premature sexual intercourse and unplanned teen pregnancy.

For the health care system, providers have a duty to develop sex education interventions including sexual health literacy programs to meet the needs of adolescents with effective strategies aimed at preventing unplanned teen pregnancy and minimizing risky sexual behaviors. In addition, school teachers of adolescents who deliver sex education need to improve course curriculum to ensure that the content of these lessons covers strategies for arranging lesson plans that promote sufficient sexual health literacy for their adolescent students. Nevertheless, parents, particularly mothers, tend to be the people who are closest to adolescents. Hence, parents require training with proper assistance in obtaining effective skills for resolving sexual health issues and encouraging sexual health literacy among their adolescent children, particularly adolescent daughters.

Above all, nurses have a responsibility to not only offer health education, but advice and consultation long-acting reversible contraception methods such as implants and intrauterine devices to every adolescent mother following child birth with full coverage and clear information in order to prevent repeated unplanned adolescent pregnancies.

Implication for nursing research

Nurses should conduct research on methods of promoting adolescents' social skills concerning access, comprehension and implementation of correct information. Thus, sexual health can be promoted among adolescents in the following six components of sexual health: knowledge and comprehension, access to sexual health services and information, communication, self-management skills, decision-making skills and media literacy as appropriate for adolescents' level of sexual health literacy.

Furthermore, the finding of the study can be utilized as basic information for develop nursing intervention research which can development level of sexual heath literacy among adolescents. The students are taught from the age of 10 years old, while the instruction is incorporated into the curriculum, which requires continual teaching in every semester. It emphasizes on teaching methods that encourage

adolescents to reflect their content understanding and additional learning needs, particularly in the interested topics. The focus group allows them to choose group members on their own. In addition, this curriculum must be under the knowledge and supervision of persons surrounding those relevant adolescents including teachers and health care providers, guardians who mainly look after adolescents, adolescent leaders, and community pharmacists.

The next research will be qualitative research aiming to explore sexual health literacy experience of male adolescent students to prevent sexually transmitted diseases and pregnancy in Phetchaburi province. This will lead to an understanding of specific characteristics and the male adolescents' abilities to clarify this issue leading to develop level sexual health literacy that comprehensive both male and female adolescent.

Implication for nursing education

The findings of research on factors related to sexual health literacy influencing the pregnancy can be translated into the prevention and supervision of unplanned pregnancy problem in adolescents as well as applied with the instructional models. This is to develop the body of knowledge and the awareness of importance of socially-oriented nursing. Also, it enhances nursing students' understanding of suitable service provision in accordance with the context of clients who are the adolescents with unplanned pregnancy.

Implication for health policy

In order to succeed at modifying reproductive health services, the findings of research in this field should be implemented in decision-making and cognitive thinking. Thus, the problem of unplanned teen pregnancy can be prevented, while timely aid can be provided by newly designed proactive services featuring sexual health care and other services with new emphasis on adolescent needs in order to make the services more attractive to teens by means of platforms such as online social media providing knowledge about effective contraceptive methods in order to help adolescents access correct information at all times. Besides, reproductive health service facilities need to be established with particularly focus on meeting the needs

of adolescents by offering referral systems, continuous monitoring, consultation and sex education at both health service facilities and schools.

Strengths of the study

This study employed the descriptive qualitative methodology focusing on the individual's perspective to sexual health literacy among adolescent students with unplanned pregnancy. Due to the researcher interest in and study of concepts of sexual health literacy in adolescents from the 1st year of Ph. D. program, the relevant literature has been reviewed leading to the formulation of research methodology and interview guide. With experiences in doing research on factors and impacts of adolescent pregnancy in qualitative approaches, the researcher is able to understand the nature of and create relationships with adolescents for enhancing trustfulness. It examined a very sensitive topic through the development of trustful and reciprocal relationships between researcher and adolescent students with unplanned pregnancy allowing the latter to discuss sometimes intimate and secret information. Apart from greatly enriching the study findings, experiences and perspectives of adolescent students with unplanned pregnancy in Phetchaburi Province were assured by good rapport and mutual conversation with them. This promotes the accessibility to in-depth data on the adolescent sexual health.

Limitations of the study

The first limitation of this study is all of female adolescents aged 14-19 years old were from the western region of Thailand. This homogeneity of participants may result in the inapplicability beyond that particular age group and reduce the transferability of study findings to other Thai female adolescents. The second limitation is the language; the process of data analysis, using back translation from Thai to English. The participants' views may be inhibited and misinterpreted. The researcher, however, solved this gap by using experts who were fluent in both English and Thai languages to edit the language for accuracy.

Summary

When adolescents begin to socialize with opposite sex, most female adolescents are unable to access to health service to acquire correct knowledge of opposite-sex socialization. The sexual refusal skill is also regarded as an important cause of pre-mature sexual intercourse. Respecting the selection of contraceptive method, male and female adolescents fail to access to the source of accurate information on the efficient birth control method, solutions for birth control pill complications and sign of infertility and sterility. This results in their decision to choose the inefficient and unsuitable contraceptive method and their inability to justify the accuracy and reliability of health information they choose from media; therefore, birth-control knowledge is correctly used. Nonetheless, the adolescents' accessibility to data source and public health service after being pregnant allows them to acquire the essence of pregnancy self-care; to have channels in gaining additional knowledge from the accurate and reliable media; to be able to communicate self- and child care methods; and to devise self- and child care plans. This influences their decision to avoid any practices that affect themselves and baby during the course of pregnancy and to choose semi-permanent contraception method for preventing repeated pregnancy.

REFERENCES

Apinuntavech, S. (2016). Adolescent pregnancy and parenthood. In K. Tuntiparacheewa (Ed.), *Adolescent development*. Nonthaburi: Sukhothaithammathirat University.

Atwood, K. A., Zimmerman, R., Cupp, P. K., Fongkaew, W., Miller, B. A., Byrnes, H. F., . . . Chookhare, W. (2012). Correlates of precoital behaviors, intentions, and sexual initiation among Thai adolescents. *Journal of Early Adolescence, 32*(3), 364-386. doi:10.1177/0272431610393248

Baird, A. S., & Porter, C. C. (2011). Teenage pregnancy: Strategies for prevention. *Obstetrics, Gynaecology & Reproductive Medicine, 21*(6), 151-157. doi:https://doi.org/10.1016/j.ogrm.2011.03.001

Berk, L. E. (2012). *Infants, Children, and Adolescents.* (7th ed.). Boston: Pearson.

Berkman, N. D., Sheridan, S. L., Donahue, K. E., Halpern, D. J., & Crotty, K. (2011). Low health literacy and health outcomes: An updated systematic review. *Annals of Internal Medicine, 155*(2), 97-107.

Biggs, M. A., Karasek, D., & Foster, D. G. (2012). Unprotected intercourse among women wanting to avoid pregnancy: Attitudes, behaviors, and beliefs. *Women's Health Issues, 22*(3), e311-e318.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Bruner, J. S., & Austin, G. A. (1986). *A study of thinking*. Piscataway, NJ: Transaction Publishers.

Bureau of Drug Control. (2016). *Drug ACT B.E. 1967 (revision)*. Retrieved from http://www.fda.moph.go.th/sites/drug/SitePages/AD-Rule01.aspx

Bureau of Epidemiology. (2015). *Surveillance reports of behaviors related to HIV infection among Thai student*. Nonthaburi: Bureau of Epidemiology, Department of Disease Control Ministry of Public Health.

Bureau of Epidemiology. (2018). *Surveillance reports of behaviors related to HIV infection among Thai student 2017*. Retrieved from http://www.boe.moph.go.th/http://www.boe.moph.go.th/aids/Downloads/book/2560/13732_HIV_2560_for%20web.pdf

Bureau of Reproductive Health. (2010). *Protection of reproductive health ACT B.E. 2010*. Retrieved from https://www.moe.go.th/moe/upload/news18/FileUpload/19586-8494.pdf

Bureau of Reproductive Health. (2011). *Situation of reproductive health in adolescents*. Retrieved from http://rh.anamai.moph.go.th/ewt_dl_link.php?nid=86

Bureau of Reproductive Health. (2013). *Communication about sex in Thai families*. Retrieved from http://teenact.moph.go.th/ewt_dl_link.php?nid=29

Bureau of Reproductive Health. (2014). *Manual for training sexual communication in family* (4 ed.). Nonthaburi: Center Media and Printing Kaew Chaw Jom.

Bureau of Reproductive Health. (2015a). *Birth rate of mothers aged 10-19 per 1,000 from 1992 to 2015 in Thailand*. Retrieved from http://rh.anamai.moph.go.th/ewt_dl_link.php?nid=147

Bureau of Reproductive Health. (2015b). *The guidelines of adolescent mom care*. Retrieved from http://rh.anamai.moph.go.th/download/all_file/brochure/youthmom-Blue.pdf

Bureau of Reproductive Health. (2016a). *Act for prevention and solution of the adolescent pregnancy problem B.E. 2016*. Retrieved from http://rh.anamai.moph.go.th/download/all_file/index/Teen%20Pregnancy%20Act%20Certified%20Version%20(1).pdf

Bureau of Reproductive Health. (2016b). *The national strategy for the prevention and solution of the adolescent pregnancy problem 2017-2026*. Retrieved from http://rh.anamai.moph.go.th/download/all_file/index/actionplan_tp/the-National-Strategy-on-Prevention-and-Solution-of-Adolescent-Pregnancy-B.E.2560-2569(2017-2026).pdf

Bureau of Reproductive Health. (2017a). *Abortion surveillance report, Thailand 2015*. Retrieved from http://rh.anamai.moph.go.th/download/all_file/brochure/AbortionSurveillanceInThailandReport2015.pdf

Bureau of Reproductive Health. (2017b). *Statistics on adolescent births, Thailand 2016*. Retrieved from http://rh.anamai.moph.go.th/download/all_file/index/RH@2559.pdf

Carroll, J. L. (2012). *Discovery series: Human sexuality*. Boston, MA: Cengage Learning.

Carswell, J. M., & Stafford, D. (2007). Normal physical growth and development. In L. S. Neinstein, C. M. Gordon, D. K. Katzman, D. S. Rosen, & E. R. Woods (Eds.), *Adolescent health care: A practical guide* (5th ed.). Philadelphia: Lippincott Williams & Wilkins.

Center of Educational Innovation Research and Development for Children and Persons with Special needs, F. o. E., Chulalongkorn University,. (2013). *Situations and problems of local children and adolescents*. Retrieved from http://www.dla.go.th/upload/ebook/column/2012/7/2013_5051.pdf

Chamratrithirong, A., Miller, B. A., Byrnes, H. F., Rhucharoenpornpanich, O., Cupp, P. K., Rosati, M. J., . . . Chookhare, W. (2010). Spirituality within the family and the prevention of health risk behavior among adolescents in Bangkok, Thailand. *Social Science & Medicine, 71*(10), 1855-1863. doi:10.1016/j.socscimed.2010.08.020

Chareonsuk, J., Phuphaibul, R., Sinsuksai, N., Viwatwongkasem, C., & Villarruel, M. (2013). Development of the causal model of young Thai female adolescents' sexual abstinence intention. *Pacific Rim International Journal of Nursing Research, 17*(4), 329-341.

Cheevapunsri, K. (2013). Teenage pregnancy risk factors: A case study of pregnant teenager who applied the pregnancy checkup with Public Health Center 34 Phosri, Department of Health, Bangkok. *Journal of the Department of Medical Services, 57*(1), 37-43.

Chirawatkul, S., Kumdee, B., Jongudomkarn, D., Kotanara, I., Sawangchareon, K., Rujiraprasert, N., . . . Kittiwatpisarn, W. (2012). Situation of teenage pregnancy: Perception among adolescents in 7 provinces of Thailand. *Journal of Health Science, 21*, 865-877.

Chirawatkul, S., Rungreangkulkij, S., Jong-udomkarn, D., Sawangchareon, K., Anusornteerakul, S., Wattananukulkiat, S., & Charoenwong, S. (2011). *Prevention of and dealing with teenage pregnancy*. Retrieved from http://www.gender.go.th/publication/book/young_mother_2554.pdf

Colvin, C. W., & Abdullatif, H. (2013). Anatomy of female puberty: The clinical relevance of developmental changes in the reproductive system. *Clin Anat, 26*(1), 115-129. doi:10.1002/ca.22164

Crandell, T., Crandell, C., & Vander, Z., J. (2012). *Human development* (10th ed.). New York: McGraw Hill.

Crooks, R., & Baur, K. (2005). *Our sexuality* (9th ed.). California: Wadsworth Publishing.

Darroch, J. E., Woog, V., Bankole, A., & Ashford, L. S. (2016). *Adding it up: Costs and benefits of meeting the contraceptive needs of adolescents*. Retrieved from https://www.guttmacher.org/sites/default/files/report_pdf/adding-it-up-adolescents-report.pdf

Darvill, R., Skirton, H., & Farrand, P. (2010). Psychological factors that impact on women's experiences of first-time motherhood: A qualitative study of the transition. *Midwifery, 26*(3), 357-366.

Dewalt, D. A., Berkman, N. D., Sheridan, S., Lohr, K. N., & Pignone, M. P. (2004). Literacy and health outcomes: A systematic review of the literature. *J Gen Intern Med, 19*(12), 1228-1239. doi:10.1111/j.1525-1497.2004.40153.x

Dilokpattanamongkol, P. (2011). Emergency contraception. Retrieved from https://www.pharmacy.mahidol.ac.th/th/knowledge/article/54

Edwards, M., Wood, F., Davies, M., & Edwards, A. (2012). The development of health literacy in patients with a long-term health condition: The health literacy pathway model. *BMC Public Health, 12*, 130. doi:10.1186/1471-2458-12-130

Faculty of Pharmacy, M. U. (2019). *Knowledge of emergency contraceptive pills*. Retrieved from https://www.pharmacy.mahidol.ac.th/th/knowledge/article

Faculty of Sexual and Reproductive Healthcare [FSRH]. (2017). *FSRH guideline quick starting contraception 2017*.

Feldman, S. R. (2008). *Adolescence*. Upper Saddle River, New Jersey: Prentice Hall.

Flores, D., & Barroso, J. (2017). 21st century parent–child sex communication in the United States: A process review. *The Journal of Sex Research, 54*(4-5), 532-548.

Freud, A. (1974). *Introduction to Psychoanalysis*. New York: International Universities Press.

Ganchimeg, T., Ota, E., Morisaki, N., Laopaiboon, M., Lumbiganon, P., Zhang, J., . . . Mori, R. (2014). Pregnancy and childbirth outcomes among adolescent mothers: A World Health Organization multicountry study. *BJOG: An International Journal of Obstetrics & Gynaecology*, *121*, 40-48. doi:10.1111/1471-0528.12630

Gemzell-Danielsson, K., Rabe, T., & Cheng, L. (2013). Emergency contraception. *Gynecological Endocrinology, 9*(sup1), 1-14.

Geounuppakul, M., Runggrid, T., & Ubolsawas, P. (2013). Unplanned teenage pregnancy: Reasons for not having an aborting.

Ghanbari, S., Ramezankhani, A., Montazeri, A., & Mehrabi, Y. (2016). Health literacy measure for adolescents (HELMA): Development and psychometric properties. *PLoS One, 11*(2), e0149202. doi:10.1371/journal.pone.0149202

Grace, A. R., Ihuoma, I. H., & Temitope, N. R. (2013). Attitude and perception of adolescents towards teenage pregnancy in Makurdi Metropolis. *African journal online, 11*(1), 5272-5277.

Graf, A. S., & Patrick, J. H. (2015). Foundations of life-long sexual health literacy. *Health Education, 115*(1), 56-70. doi:doi:10.1108/HE-12-2013-0073

Hadley, W., Brown, L. K., Lescano, C. M., Kell, H., Spalding, K., DiClemente, R., & Donenberg, G. (2009). Parent-adolescent sexual communication: Associations of condom use with condom discussions. *AIDS and Behavior, 13*, 997-1004.

Haldre, K., Rahu, K., Karro, H., & Rahu, M. (2007). Is a poor pregnancy outcome related to young maternal age? A study of teenagers in Estonia during the period of major socio-economic changes (from 1992 to 2002). *European Journal of Obstetrics & Gynecology & Reproductive Biology, 131*(1), 45-51. doi:10.1016/j.ejogrb.2006.05.002

Hattakitpanichakul, K., Phuphaibul, R., Phumonsakul, S., & Viwatwongkasem, C. (2019). Effectiveness of the dual approach program to promote sexual abstinence in Thai early female adolescents and improve parent-daughter sexual communication. *Journal of Health Research, 33*(4), 280-292.

Health Education Division. (2014). *Health literacy scale for unwanted pregnancy prevention of Thai female adolescents*. Retrieved from https://drive.google.com/file/d/0B2vawgANLTltVy1sX19IaWNVMUk/view

Holloway, I., & Galvin, K. (2017). *Qualitative research in nursing and healthcare* (4th ed.). United Kingdom: John Wiley & Sons,Ltd.

House, J. S. (1981). *Work stress and social support*. Reading, Massachusetts: Addison-Wesley.

Intarakamhang, U., & Khumthong, T. (2017). Measurement development assessment of health literacy and unwanted pregnancy prevention behavior for Thai female adolescents. *Journal of Public Health Nursing, 31*(3), 1-18.

Kaeokangwan, S. (2010). *Developmental psychology: Adolescents-aging*. Bangkok: Thammasatprintinghouse.

Kamalak, Z., Kosus, N., Kosus, A., Hizli, D., Akcal, B., Kafali, H., . . . Isaoglu, U. (2016). Adolescent pregnancy and depression: Is there an association? *Clin Exp Obstet Gynecol, 43*(3), 427-430.

Kamphaengphan, S., Kaewpornsawan, T., & Apinuntavech, S. (2011). Psychosocial factors associated with teenage pregnancy attending antenatal care clinic at Siriraj Hospital. *Journal of ThePsychiatric Association of Thailand, 56*(3), 255-266.

Kawakita, T., Wilson, K., Grantz, K. L., Landy, H. J., Huang, C.-C., & Gomez-Lobo, V. (2016). Adverse maternal and neonatal outcomes in adolescent pregnancy. *Journal of Pediatric & Adolescent Gynecology, 29*(2), 130-136. doi:10.1016/j.jpag.2015.08.006

Kickbusch, I. (2008). Health literacy: An essential skill for the twenty-first century. *Health Education, 108*(2), 101-104.

Kritcharoen, S., Phol-in, K., Ingkathawornwong, T., & Srithaweewat, J. (2008). Teaching sex education through parents and the learning needs of the children. *Songklanagarind Medical Journal, 26*(1), 61-70.

Kruachai, S., Thammasat, P., & Tunwattanapong, M. (2011). Lived experiences of unplanned teenage mothers: A phenomenological study in Ubon Ratchathani province. In S. Chinawong (Ed.), *Proceeding of the 8th KU- KPS conferences* (pp. 1013-1020). Kasetsart University: Kamphaengsaen Campus.

Kunkel, D., Eyal, K., Finnerty, K., Biely, E., & Donnerstein, E. (2005). *Sex on TV 2005: A Kaiser family foundation report*. Retrieved from https://kaiserfamilyfoundation.files.wordpress.com/2013/01/sex-on-tv-4-full-report.pdf

Lam, A. G., Russell, S. T., Tan, T. C., & Leong, S. J. (2007). Maternal Predictors of Noncoital Sexual Behavior: Examining a Nationally Representative Sample of Asian and White American Adolescents Who Have Never had Sex. *Journal of Youth and Adolescence, 37*(1), 62-73.

Lenhart, A. (2012). *Pew research center: Teens, smartphones & texting*. Retrieved from http://www.pewinternet.org/2012/03/19/teens-smartphones-texting/

Lin, L. L. (2005). Multiple role adaptation among women who have children and re-enter nursing school in Taiwan. *Journal of Nursing Education, 44*(3), 116-123.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, California: SAGE Publishing.

Littleton, L. Y., & Engebretson, J. C. (2002). *Maternal, neonatal, and women's health nursing*. Albany (NY): Delmar Thomson Learning.

Manganello, J., & Shone, L. (2013). *Act for youth center of excellence research facts and findings: Health literacy*. Retrieved from http://www.actforyouth.net/resources/rf/rf_health-literacy_0513.pdf

May, K., & Mahlmeister, L. (1994). *Maternal and neonatal nursing: Family-centered care* (3rd ed.). Philadelphia: J. B. Lippincott Company.

Mekkamol, K., & Wichainprapha, A. (2018). The roles of nurses in teenage mother's caring. *Journal of health science research, 12*(2), 69-77.

Michaud, P. A., & Ambresin, A. E. (2014). The health of adolescents around a world in transition. *Georgian medical news,* (230), 54-59.

Morse, J. M. (1995). The significance of saturation. *Qualitative Health Research, 5*(2), 147-149. doi:10.1177/104973239500500201

Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professionals* (2 ed.). Thousand Oaks: SAGE Publications

Muangpin, S., Tiansawad, S., Kantaruksa, K., Yimyam, S., & Vonderheid, C. S. (2010). Northeastern Thai adolescents' perceptions of being unmarried and pregnant. *Pacific Rim International Journal Nurse Research, 14*(2), 149-161.

Murray, S. S., & McKinney, E. S. (2006). *Foundations of maternal-newborn nusing* (4th ed.). St.Louis, MO: Saunders Elsevier.

National Health Service England [NHS England]. (2017a). *How effective is contraception at preventing pregnancy?* Retrieved from https://www.nhs.uk/conditions/contraception/how-effective-contraception/

National Health Service England [NHS England]. (2017b). *What if my partner won't use condoms? Your contraception guides*. Retrieved from https://www.nhs.uk/conditions/contraception/partner-wont-use-condoms/

National Research Council of Thailand. (2015). International ethical guidelines for biomedical research involving human subjects. Retrieved from http://www.ohrs.nrct.go.th/Portals/0/Document/AllGuidelines-1-25_CIOMS2015.pdf

National Statistical Office. (2014). *Survey of the use of information and communications technology in the household*. Retrieved from http://www.nso.go.th/sites/2014/Documents/info/Infographic59/16.ICT/3.ICT.pdf

Neal, S., Matthews, Z., Frost, M., Fogstad, H., Camacho, A. V., & Laski, L. (2012). Childbearing in adolescents aged 12-15 years in low resource countries: A neglected issue. New estimates from demographic and household surveys in 42 countries. *Acta Obstet Gynecol Scand, 91*(9), 1114-1118. doi:10.1111/j.1600-0412.2012.01467.x

Neamsakul, W. (2008). *Unintended Thai adolescent pregnancy: A grounded theory study.* (Dissertation), University of California, San Francisco.

Ngai, F., Chan, S. W., & Holroyd, E. (2011). Chinese primiparous women's experiences of early motherhood: Factors affecting maternal role competence. *Journal of Clinical Nursing, 20*(9-10), 1481-1489.

Nomsiri, A., Srisiri, S., Virutsetazin, K., & Malarat, A. (2015). Development of sexual health literacy indicators for early adolescent. *Thammasat Medical Journal of Consumer Health on the Internet, 15*(4), 609-620.

Nutbeam, D. (2000). *Defining, measuring and improving health literacy*. Retrieved from from http://www.who.int/global-coordination-mechanism/news/Health-literacy-WHO-Geneva-Nov-2015.pdf

Nutbeam, D. (2008). The evolving concept of health literacy. *Soc Sci Med, 67*(12), 2072-2078. doi:10.1016/j.socscimed.2008.09.050

Nutbeam, D. (2009). Defining and measuring health literacy: What can we learn from literacy studies? *Int J Public Health, 54*(5), 303-305. doi:10.1007/s00038-009-0050-x

Office of the National Economic and Social Development Board. (2017). *The national economic and social development plan period (2017-2021)*. Retrieved from http://www.nesdb.go.th/nesdb_en/ewt_dl_link.php?nid=4345

Official statistics registration systems. (2017). *Amount of population in Phetchaburi Province*. Retrieved from http://stat.dopa.go.th/stat/statnew/upstat_age_disp.p

Olanratmanee, B. (2018). Sexuality education for early adolescents: A review of Literature. *Thai Journal of Nursing Council, 3*(3), 67-81.

Oringanje, C., Meremikwu, M. M., Eko, H., Esu, E., Meremikwu, A., & Ehiri, J. E. (2009). *Interventions for preventing unintended pregnancies among adolescents*. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/19821341

Ozdogan, S., Karadeniz, P., Kiray, E., Bulbul, A., Uslu, H. S., & Koc, A. B. (2015). Outcome of adolescent pregnancy: A retrospective cohort study. *West Indian Medical Journal, 2*(2), 90-96.

Parahoo, K. (2014). *Nursing research principles, process and issues* (3rd ed.). Basingstoke, UK: Palgrave Macmillan.

Perry, S. E., Hockenberry, M. J., Lowdermilk, D. L., Wilson, D., Alden, K. R., & Rodgers, C. C. (2018). *Maternal child nursing care* (6th ed.). St. Louis, Missouri: Elsevier.

Phoodaangau, B., Deoisres, W., & Chunlestskul, K. (2013). Maternity experience: A new role of unexpectedly pregnant students. *Thai Journal of Nursing Council, 28*(2), 58-74.

Phromchaisa, P., Kantaruksa, K., & Chareonsanti, J. (2014). Effect of social support enhancement on maternal role among adolescent pregnant women. *Nursing Journal, 41*(2), 98-106.

Pongpattananon, W. (2016). Related factors of teenage pregnancy at Tharua hospital, Phra Nakhon Si Ayutthaya. *Journal of Preventive Medicine Association of Thailand, 6*(2), 161-172.

Prasartwanakit, A., Songwathana, P., & Phetcharat , B. (2009). Sexual beliefs and patterns among Thai adolescents and youths in educational institutions in Songkhla Province. *Songklanagarind Medical Journal, 27*(5), 369-380.

Pungbangkadee, R., Parisunyakul, S., Kantaraksa, K., Sripichykan, K., & Kools, S. (2008). Experiences of early motherhood among Thai adolescents: Perceiving conflict between needs as a mother and an adolescent. *Thai Journal of Nursing Research, 12*(1), 70-82.

Pungbangkadee, R., & Ratinthorn, A. (2014). Factors and consequences of repeat pregnancy among teenagers: A case study in Bangkok Metropolis. *Journal of Nursing Science and Health, 32*(2), 23-31.

Qualitative Data Analysis Software. (2012). *NVivo qualitative data analysis software (Version 12)*. Ruggell: QRS international.

Raine, T. R., Gard, J. C., Boyer, C. B., Haider, S., Brown, B. A., Ramirez Hernandez, F. A., & Harper, C. C. (2010). Contraceptive decision-making in sexual relationships: young men's experiences, attitudes and values. *Culture, Health & Sexuality, 12*(4), 373-386.

Rakamnuaykit, P., & Prajuapmor, V. (2013). *Adolescent pregnancy: The situation and context in Thai society*. Bangkok: College of Population Studies, Chulalongkorn University.

Rattanawiboun, C., & Karnjanumpra, N. (2009). *Social and mass media factors: The elements related to the first sexual intercourse of early teenagers in schools in Bangkok metropolis and its vicinity*. Bangkok: National Research Council of Thailand.

Robson, K., & Berthoud, R. (2003). Teenage motherhood in Europe: A muti-country analysis of socioeconomic outcome. *European Sociological Review, 19*(5), 451-466.

Ruanjan, S. (2013). The situation of sexual risk behaviors of adolescents in pilot area for teenage pregnancy prevention and solving in Uttaradit province. *Khon Kaen University Journal for Public Health Research, 6*(1), 101-110.

Ruanjan, S. (2014). Approach development by learning sex education for secondary school teachers to prevent teenage pregnancy in Uttaradit province. *Phetchabun Rajabhat Journal, 16*(1), 93-100.

Salvador, J. T., Sauce, B. R., Alvarez, M. O., & Rosario, A. B. (2016). The phenomenon of teenage pregnancy in the Philippines. *European Scientific Journal, 12*(32), 173-192.

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research In Nursing & Health, 23*(4), 334-340.

Santrock, J. W. (2014). *Child development* (14th ed.). New York: McGraw-Hill.

Shohel, M., Rahman, M. M., Zaman, A., Uddin, M. M., Al-Amin, M. M., & Reza, H. M. (2014). A systematic review of effectiveness and safety of different regimens of levonorgestrel oral tablets for emergency contraception. *BioMed Central Women's Health, 14*(54), 1-10.

Sittipiyasakul, V., Nuwong, P., Lucksitanon, R., & Uamasan, B. (2013). A survey on sexual experiences, opinions and sexual risk behaviors among teenage students in Thailand. *Journal of Health Science, 22*(6), 979-987.

Slater, C., & Robinson, A. J. (2014). Sexual health in adolescents. *Clin Dermatol, 32*(2), 189-195. doi:10.1016/j.clindermatol.2013.08.002

Slee, T. P., Cambell, M., & Spears, B. (2012). *Child, adolescent and family development* (3rd ed.). Melbourne: Cambridge University Press.

Speer, M. E. (2017). Health literacy and child health outcomes: From prenatal to birth and infant stages. In C. R & T. T (Eds.), *Health Literacy and Child Health Outcomes*. Switzerland: Springer, Cham.

Sreemuang, K., Malarat, A., & Hunnirun, P. (2016). Situation, problem and guideline of sex education learning management for developing the Buddhist way to imprint sexual risk prevention behaviors of lower secondary school students. *Thammasat Medical Journal, 16*(2), 253-262.

Srisuriyawet, R., & Homsin, P. (2014). Mother-daughter sexual risk communication and psychosocial factors related to sexual experience among female students. *The Public Health Journal of Burapha University, 9*(2), 33-44.

Steinberg, L. D. (2014). *Adolescence* (10 ed.). New York: McGraw-Hill.

Strategy and Planning Division. (2013). *Strategic, indicators and guidelines for storage data of Ministry of Public Health B.E. 2014*. Retrieved from http://rh.anamai.moph.go.th/download/all_file/index/

Suktuayart, V. (2008). *Lessons learned from reflection of female school drop-outs with unwanted pregnancy.* (Doctoral dissertation), Changmai University, Graduate School, Changmai University.

Sullivan-Bolyai, S., Bova, C., & Harper, D. (2005). Developing and refining interventions in persons with health disparities: The use of qualitative description. *Nursing Outlook, 53*, 127-133.

Susman, E. J., & Dorn, L. D. (2012). Puberty: Its role in development. In I. B. Weiner, R. M. Lerner, M. A. Easterbrooks, & J. Mistry (Eds.), *Handbook of psychology* (2nd ed., Vol. 6). New York: Wiley.

Susman, E. J., Houts, R. M., Steinberg, L., Belsky, J., Cauffman, E., Dehart, G., . . . Halpern-Felsher, B. L. (2010). Longitudinal development of secondary sexual characteristics in girls and boys between ages 91/2 and 151/2 years. *Arch Pediatr Adolesc Med, 164*(2), 166-173. doi:10.1001/archpediatrics.2009.261

Suwannasri, N. (2012). *Situation analysis of health services of teenage pregnancy family: Case study receiving services at Nongkhai Hospital.* (Master's thesis), Khon Kaen University, Faculty of Nursing, Khon Kaen University.

Tamire, W., & Enqueselassie, F. (2007). Knowledge, attitude, and practice on emergency contraceptives among female university students in Addis Ababa, Ethiopia. *Ethiopian Journal of Health Development, 21*(2), 111-116.

Termpittayapaisith, A., & Peek, C. (2013). *Motherhood in childhood: Facing the challenge of adolescent pregnancy*. Retrieved from http://countryoffice.unfpa.org/thailand/drive/CONTENT_ENG_draft_6.pdf

Thai Health Promotion Foundation. (2013). *His her: What you need to know and what he must know*. Retrieved from http://resource.thaihealth.or.th/library/collection/14408

Thato, R., Jenkins, R. A., & Dusitsin, N. (2008). Effects of the culturally-sensitive comprehensive sex education programme among Thai secondary school students. *J Adv Nurs, 62*(4), 457-469. doi:10.1111/j.1365-2648.2008.04609.x

The Health Intervention and Technology Assessment Program. (2014). *Policy Brief: Impact of teenage pregnancy in Thai adolescents*. Retrieved from http://www.hitap.net

The National Campaign to Prevent Teen pregnancy. (2013). *Teen pregnancy and education 2010*. Retrieved from http://www.thenationalcampaign.org/why-it-matters/pdf/education.pdf

The National Institute for Health Care Management. (2011). *The case for investing in youth health literacy: One step on the path to achieving health equity for adolescents*. Retrieved from https://www.nihcm.org/component/content/article/5-issue-brief/1310-the-case-for-investing-in-youth-health-literacy-one-step-on-the-path-to-achieving-health-equity-foradolescents-issue-brief

The National Strategy for the prevention and solution of the adolescent pregnancy problem 2017-2026. (2016). *Strategy for the prevention and solution of the adolescent pregnancy problem 2017-2026*. Retrieved from http://rh.anamai.moph.go.th/download/all_file/index/actionplan_tp/the-National-Strategy-on-Prevention-and-Solution-of-Adolescent-Pregnancy-B.E.2560-2569(2017-2026).pdf

The Royal College of Pediatricians of Thailand & Pediatric Society of Thailand. (2017). *Manual for parents to promotion knowledge on child development*. Retrieved from http://www.thaipediatrics.org/Media/media-20171010123155.pdf

Thinkhanon, W., & Chomnirat, W. (2013). Development guideline of Antenatal care for adolescent pregnancy by family participation in health care network of Chaiburi district, Surat Thani province. *Journal of Nursing Science and Health, 35*(2), 25-33.

Thipsungwan, K., Srisuriyawet, R., & Homsin, P. (2013). Effects of mother-participating program on sexual communication between mother and early female adolescents. *The Public Health Journal of Burapha University, 8*(2), 69-80.

Thitimapong, B., Keawpimon, P., Kritcharoen, S., & Sripotchanart, W. (2010). Maternal-infant attachment and postpartum adaptation to motherhood of the first-time adolescent mothers. *Songklanagarind Medical Journal, 28*(4), 179-190.

Thitimapong, B., Kruehaew, J., & Yongwanichsetha, S. (2017). Experience of Adolescent Mothers with childrearing and studying in non-formal education. *Songklanagarind Journal of Nursing, 37*(3), 37-47.

Thitimapong, B., Petpichetchian, W., & Wiroonpanich, W. (2015). Achieving balance: Role adaptation process of adolescent mothers returning to school. *Pacific Rim International Journal of Nursing Research, 19*(3), 257-269.

Tonelli, M. (2005). Depression and adolescent pregnancy. *Journal of Pediatric and Adolescent Gynecology, 18*(2), 137-138.

Torvie, A. J., Callegari, L. S., Schiff, M. A., & Debiec, K. E. (2015). Labor and delivery outcomes among young adolescents. *American Journal of Obstetrics & Gynecology, 213*(1), e1-8.

Tumchuea, S., & Pumprayool, P. (2018). Teenage pregnancy: Concept of solving problems with the district health system. *Journal of health science research, 12*(2), 29-38.

U.S. Food and Drug Administration. (2013). FAD approves Plan B one-step emergency contraceptive for use without a prescription for all women of child-bearing potential. Retrieved from http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm358082.htm.

Ubonsaared, K., Kaewcharoentha, P., Bourprim, S., Suksai, S., Sarntha, S., & Narksanong, T. (2009). *The development of participatory of family, teenage and school for protect teenager primary and non-save sex of school student pregnancy ; Lablae District Uttaradit*. Retrieved from http://kb.hsri.or.th/dspace/bit-stream/123456789/2603/3/6.PPT_Kittipong_Uboonsaart.pdf

United Nations. (2015). *Sustainable Development Goals, SDGs*. Retrieved from https://sustainabledevelopment.un.org/

United Nations Children's Fund [UNICEF]. (2012). *Progress for children: A report card on adolescents*. Retrieved from http://www.unicef.org/publications/files/Progress_for_Children_-_No._10_EN_04272012.pdf

United Nations Children's Fund [UNICEF]. (2015). *Situation analysis of adolescent pregnancy in Thailand, synthesis report 2015*. Retrieved from https://www.unicef.org/thailand/160614_SAAP_in_Thailand_report_EN.pdf

United Nations Children's Fund [UNICEF]. (2016). *Review of comprehensive sexuality education in Thailand*. Retrieved from https://www.unicef.org/thailand/sites/unicef.org.thailand/files/201808/comprehensive_sexuality_education%20EN.pdf

United Nations Department of Economic and Social Affairs [UN DESA]. (2017). *Statistics Division. SDG indicators: Global database*. New York: UN DESA.

United Nations Population Fund [UNFPA]. (2013). *Motherhood in childhood: Facing the challenge of adolescent pregnancy*. Retrieved from http://www.unfpa.org/webdav/site/global/shared/swp2013/EN-SWOP2013-final.pdf

United Nations Population Fund [UNFPA]. (2015). *Girlhood, not motherhood: Preventing adolescent pregnancy*. Retrieved from https://www.unfpa.org/sites/default/files/pub-pdf/Girlhood_not_motherhood_final_web.pdf

United Nations Population Fund [UNFPA]. (2018). *Mothers too young: Inequality fuels adolescent pregnancies in Thailand*. Retrieved from https://www.unfpa.org/news/mothers-too-young-inequality-fuels-adolescent-pregnancies-Thailand

United Nations Population Fund [UNFPA], & Ingham. (2017). *Report on strategic review and recommendations for driving adolescent pregnancy prevention and problem-solving strategies under the Act for prevention and solution of the adolescent pregnancy problem of B.E. 2016 by applying evidence-based data and experience from the United Kingdom*. Retrieved from https://thailand.unfpa.org/sites/default/files/pubpdf/UNFPA%20%26%20INGHAM_TP%20report_Thai_final_3-Jul-2017.pdf

Van der Heide, I., Wang, J., Droomers, M., Spreeuwenberg, P., Rademakers, J., & Uiters, E. (2013). The relationship between health, education, and health literacy: Results from the Dutch adult literacy and life skills survey. *Journal of Health Communication*, *18*, 172-184. doi:10.1080/10810730.2013.825668

Vin, S. X., Muhammad, N. A., Sun, T. P., Teck Meng, K. T., Tohid, H., & Omar, K. (2014). Physical and psychosocial impacts of pregnancy on adolescents and their coping strategies: A descriptive study in Kuala Lumpur, Malaysia. *Malaysian Journal of Public Health Medicine, 14*(3), 71-80.

Wadsworth, B. J. (1996). *Piaget's theory of cognitive and affective development : The origins of constructivism* (5th ed.). New York: Longman.

Wattanasereekul, K. (2009). Factors influencing emergency contraceptive pill usage among adolescence in Chanthaburi Province. *Journal of Phrapokklao Nursing College, 20*(2), 21-37.

Watthanayingcharoenchai, R., & Inthonprasoet, S. (2018). *Adolescent: Contraception of adolescents*. Retrieved from file:///C:/Users/Admin/Downloads/FILE_81820bd47be4d6474f5d8549eb9d9392_DOWNLOAD.pdf

Wiemann, C. M., Rickert, V. I., Berenson, A. B., & Volk, R. J. (2005). Are pregnant adolescents stigmatized by pregnancy? *J Adolesc Health, 36*(4), 352 e351-358. doi:10.1016/j.jadohealth.2004.06.006

Wilson, E. K., Samandari, G., Koo, H. P., & Tucker, C. (2011). Adolescent mothers' postpartum contraceptive use: A qualitative study. *Perspectives on Sexual and Reproductive Health, 43*(4), 230-237.

Wong-arsa, W., Kongnguen, P., & Vuthiarpa, S. (2015). Factors affecting sexual risk behaviors among adolescents: A case study conducted in one university. *Journal of Public Health, 45*(3), 285-297.

Woodhams, E., Sipsma, H., Hill, B. J., & Gilliam, M. (2018). Perceived responsibility for pregnancy and sexually transmitted infection prevention among young African American men: An exploratory focus group study. *Sexual & Reproductive Healthcare, 16*, 86-91.

World Bank. (2017). *Economic impacts of child marriage: Global synthesis report*. Washington, DC: World Bank.

World Health Organization. (2017). *Sexual health and its linkages to reproductive health: An operational approach*. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/258738/9789241512886-eng.pdf;jsessionid=4B537B6D0CC278D03CDFBAA5DE20223E?sequence=1

World Health Organization [WHO]. (2007). *Adolescent pregnancy unmet needs and undone deeds: A review of the literature and programmes*. Geneva: WHO.

World Health Organization [WHO]. (2009). *Health literacy and health promoti, definitions, concepts and examples in the Eastern Mediterranean Region*. Retrieved from http://www.who.int/healthpromotion/conferences/7gchp/Track1_Inner.pdf

World Health Organization [WHO]. (2016a). *Adolescent development*. Retrieved from http://www.who.int/maternal_child_adolescent/topic/adolescence/dev/en/

World Health Organization [WHO]. (2016b). *Sexual and reproductive health literacy and the SDGs*. Retrieved from http://www.who.int/healthpromotion/conferences/9gchp/sexual-reproductive-health-literacy/en/

World Health Organization [WHO]. (2018). *Adolescent pregnancy*. Retrieved from http://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy

World Population Reference Bureau. (2017). *Adolescent fertility rate ages 15-19*. Retrieved from https://www.prb.org/international/indicator/adolescent-fertility/snapshot

APPENDICES

APPENDIX A

Interview guide

Interview guide

Title of project: Experiences of sexual health literacy among adolescent students with unplanned pregnancy

a) Demographic question (age, level of education, relationship with boyfriend, family monthly income, source of financial support, place of residence, desire of unborn baby at the beginning, abortion attempt, gestational age at first prenatal visit)

b) How do pregnant adolescents give meaning and respond to sexual health literacy?

- Could you please tell me about your previous experience with sexual health literacy before your pregnancy?
- How would you define sexual?
- What are the differences between female and male?
- How would you define sexual health?
- How would you define sexual health literacy?
- What are the characteristics of sexual health literacy?
- How do you know about sexual health literacy?

c) What are the experiences in accessing, understanding, appraising and applying sexual health literacy before your pregnancy?

- How do you know your boyfriend?
- What is the relationship between you and your boyfriend?
- Have you ever had a sexual health problem? What types of self-care methods did you use?
- What kind of information did you receive about pregnancy during your adolescence?
- What types of sources did you use in searching for information?
- What search methods did you use?
- How did you apply the knowledge you previously received to prevent pregnancy?

d) What are the experiences in accessing, understanding, appraising and applying sexual health literacy after your pregnancy?

- How does your lifestyle when you get pregnancy?
- How do you feel about baby? How do you face with this situation?
- How do your self-care yourself when you during pregnancy?
- Where did you search for knowledge and information?
- What search methods did you use?
- How do you plan your life when you pregnant?
- Who is the most important when you plan for their future?

e) What are the barriers in accessing, understanding, appraising and applying sexual health literacy? Please give me the example?

f) What are the facilitators in accessing, understanding, appraising and applying sexual health literacy? Please give me the example?

g) The participants spoke freely and follow-up questions were used to follow up and deepen the answers

- What do you mean?
- How do you respond?
- How do you feel?

APPENDIX B

Field note

Field note

รหัส	วัน/ เดือน/ปี	สถานที่	กิจกรรม ร่วมกับใคร	กิจกรรมที่ทำ	ผู้อยู่ใน เหตุการณ์	หมาย เหตุ

APPENDIX C

A validated questionnaire

A validated questionnaire

รหัสผู้ให้ข้อมูล.....วัน/เดือน/ปี.....เวลาสัมภาษณ์.....

แบบสอบถามการตรวจสอบความตรงของการนำเสนอประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน

.....

คำชี้แจง: ภายหลังท่านอ่านผลการวิจัยที่นำเสนอแล้ว โปรดตอบคำถามต่อไปนี้

1. การนำเสนอข้อมูลตรงกับประสบการณ์ความฉลาดของสุขภาพทางเพศของท่านหรือไม่อย่างไร? (โปรดระบุเป็นเปอร์เซ็นต์หรือร้อยละ พร้อมระบุเหตุผล)

.....

.....

2. การนำเสนอข้อมูลนี้ มีประเด็นที่ขาดหายหรือไม่ ครบถ้วนหรือไม่ โปรดระบุ

.....

.....

3. ความคิดเห็นและข้อเสนอแนะอื่น ๆ

.....

.....

ผู้วิจัยขอขอบคุณในความร่วมมือของท่าน มา ณ โอกาสนี้

นางรพีพรรณ นาคบุบผา (ผู้วิจัย)

เบอร์ติดต่อ 062-5651457

APPENDIX D

Participant's information sheet

PARTICIPANT'S INFORMATION SHEET

Dear adolescent

I am Mrs. Rapeepan Narkbubpha. I am a doctoral degree student in the Faculty of Nursing, Burapha University Thailand. My study entitled, "Experiences of sexual health literacy among adolescent students with unplanned pregnancy". The objective is to explore experiences of sexual health literacy among adolescent students with unplanned pregnancy, and I would like to invite you to participate in this study.

This study will be a qualitative study and I would like to ask questions about what it is like for you, your thoughts, and your feelings, as well as situations of sexual health literacy. Findings from this research project would be useful in the prevention of unplanned pregnancy in adolescents to ensure proper self-care by improving learning experiences and understanding about sexual health literacy as appropriate for adolescents.

If you decide to join in this research, I will provide you both verbal and written about information sheet of this research project. Furthermore, the study applies the process of in-depth interviews around 45-60 minutes per time in the small room at the Antenatal Care Clinic of community hospitals or health promoting hospitals or your home.

The knowledge acquired through the real perspectives of adolescents is the benefit of this particular research resulting in the understanding of adolescent students with unplanned pregnancy. Indeed, you are the representative who disseminates the truth and the data you have shared will be useful for the introduction of the unplanned adolescent pregnancy prevention guideline. This will then promote the sexual health literacy for the achievement of correct self-care and comprehension of sexual health literacy in an appropriate manner for adolescents.

Participation is voluntary. You have the right to end your participation in this study at any time without any penalty, and not necessary to inform the researcher. You may refuse to answer any specific questions, remain silent, or leave this study at any time. Any information received from this study, including your identity, will be kept confidential. A coding number will be assigned to you and your name will not used. Findings from the study will be presented as a group of participants, no specific information from any individual participant. All data will be destroyed completely within 1 year after publishing or presenting the findings. You will receive a further and deeper explanation of the nature of the study upon its completion, if you wish.

The research will be conducted by Mrs. Rapeepan Narkbubpha under supervision of my major-advisor, Associate Professor Dr. Wannee Deoisres. If you have any questions, please contact me at telephone: 062-5651457 or by email: rapeepan2549@gmail.com, and/or my advisor's e-mail address: wannee@buu.ac.th. Your cooperation is greatly appreciated. You will be given a copy of this consent form to keep.

Mrs. Rapeepan Narkbubpha

PARTICIPANT'S INFORMATION SHEET

Dear guardian

I am Mrs. Rapeepan Narkbubpha. I am a doctoral degree student in the Faculty of Nursing, Burapha University Thailand. My study entitled, "Experiences of sexual health literacy among adolescent students with unplanned pregnancy". The objective is to explore experiences of sexual health literacy among adolescent students with unplanned pregnancy, and I would like to invite your child to participate in this study.

This study will be a qualitative study and I would like to ask questions about what it is like for them, their thoughts, and their feelings, as well as situations of sexual health literacy. Findings from this research project would be useful in the prevention of unplanned pregnancy in adolescents to ensure proper self-care by improving learning experiences and understanding about sexual health literacy as appropriate for adolescents.

If your child decides to join in this research, I will provide you both verbal and written about information sheet of this research project. Furthermore, the study applies the process of in-depth interviews around 45-60 minutes per time in the small room at the Antenatal Care Clinic of community hospitals or health promoting hospitals or your home.

The knowledge acquired through the real perspectives of adolescents is the benefit of this particular research resulting in the understanding of adolescent students with unplanned pregnancy. Indeed, you are the representative who disseminates the truth and the data you have shared will be useful for the introduction of the unplanned adolescent pregnancy prevention guideline. This will then promote the sexual health literacy for the achievement of correct self-care and comprehension of sexual health literacy in an appropriate manner for adolescents.

Participation is voluntary. Your child has the right to end their participation in this study at any time without any penalty, and not necessary to inform the researcher. An adolescent may refuse to answer any specific questions, remain silent, or leave this study at any time. Any information received from this study, including their identity, will be kept confidential. A coding number will be assigned to them and their name will not use. Findings from the study will be presented as a group of participants, no specific information from any individual participant. All data will be destroyed completely within 1 year after publishing or presenting the findings. You will receive a further and deeper explanation of the nature of the study upon its completion, if you wish.

The research will be conducted by Mrs. Rapeepan Narkbubpha under supervision of my major-advisor, Associate Professor Dr. Wannee Deoisres. If you have any questions, please contact me at telephone: 062-565145 or by email: rapeepan2549@gmail.com, and/or my advisor's e-mail address: wannee@buu.ac.th. Your cooperation is greatly appreciated. You will be given a copy of this consent form to keep.

Mrs. Rapeepan Narkbubpha

INFORMED CONSENT

Title: “Experiences of sexual health literacy among adolescent students with unplanned pregnancy”

IRB approval number: 02-09-2561

Date of collection data ……Month ……. Years……

Before I give signature in below, I already be informed and explained from Mrs. Rapeepan Narkbubpha about purposes, method, procedures, and benefits of this study, and I understood all of that explanation. I agree to be as a participant of this study.

I am Mrs. Rapeepan Narkbubpha as a researcher had explained all of explanation about purposes, method, procedures, and benefits of this study to the participant with honestly; then, all of data/information of the participants will only be used for purpose of this research study.

_____ _____

Name and Signature of the Participant Date

_____ _____

Name and Signature of witness Name and Signature of the researcher

APPENDIX E

Consent/ Assent to participate in a research study

CONSENT / ASSENT TO PARTICIPATE IN A RESEARCH STUDY

Title: “Experiences of sexual health literacy among adolescent students with unplanned pregnancy”

Date …… Month ……. Years……

Before giving my signature below, I have been clearly explained from the researcher, Mrs.Rapeepan Narkbubpha, about purposes, method, procedures, benefits and possible risk associated with participation in this study, and I understood all of that explanation. I agree to participate in this research project and I have received a copy of this form.

I, Mrs.Rapeepan Narkbubpha, am the researcher has explained to the above-named individual the nature and purpose, benefit and possible risk associated with participation in this research with honestly. All data and information of the participants will only be used for the purpose of this research study.

Signature……participant

(……..……)

Signature……witness

(……..……)

Signature……witness

(……..……)

Signature……the researcher

(……)

I am unable to read. However, the researcher has read this consent/assent form to me; and I well understood. Thus, I am willing to sign my name and/or to stamp my (left/right) index-fingerprint on this form.

Signature ……participant

(…….)

Signature……witness

(……..…….)

Signature……witness

(……..…….)

Signature……the researcher

(……)

The parents / guardian have/has given permission to the young participant to take part in the research study. (Relationship with the participant is ……)

Signature…… parents/guardian

(……)

Signature…….……witness

(……..……..…….)

Signature…….……the researcher

(……..……)

(สำหรับวัยรุ่นที่เข้าร่วมในการวิจัยนี้)

เอกสารชี้แจงผู้เข้าร่วมการวิจัย

การวิจัยเรื่อง ประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน

รหัสจริยธรรมการวิจัย: 02-09-2561

ชื่อผู้วิจัย นางรพีพรรณ นาคบุบผา

การวิจัยครั้งนี้ทำขึ้นเพื่อศึกษาประสบการณ์ ทำความเข้าใจธรรมชาติ การเป็นอยู่ การใช้ชีวิตประจำวันที่เกี่ยวข้องกับความฉลาดของสุขภาพทางเพศ ท่านได้รับเชิญให้เข้าร่วมการวิจัยครั้งนี้ เนื่องจากท่านเป็นนักเรียนวัยรุ่นอายุ 10-19 ปี และตั้งครรภ์โดยไม่ได้วางแผน เมื่อท่านเข้าร่วมการวิจัยแล้ว สิ่งที่ท่านจะต้องปฏิบัติคือ ตอบคำถามจากการสัมภาษณ์ ซึ่งการสัมภาษณ์จะใช้เวลาประมาณ 45-60 นาทีต่อครั้ง

ประโยชน์ของการวิจัยครั้งนี้เป็นความรู้ที่ได้จากความจริงจากมุมมองของตัววัยรุ่นเอง เพื่อทำความเข้าใจนักเรียนวัยรุ่นที่ตั้งครรภ์โดยไม่ได้วางแผน ซึ่งท่านเปรียบเสมือนตัวแทนในการถ่ายทอดความจริง และข้อมูลที่ท่านให้จะเป็นประโยชน์โดยใช้เป็นแนวทางในการป้องกันการตั้งครรภ์ไม่ได้วางแผนในวัยรุ่น ในการส่งเสริมความฉลาดของสุขภาพทางเพศเพื่อให้เกิดการดูแลตนเองอย่างถูกต้อง รวมทั้งมีความเข้าใจเกี่ยวกับความฉลาดของสุขภาพทางเพศที่เหมาะสมสำหรับวัยรุ่น

การเข้าร่วมการวิจัยของท่านครั้งนี้เป็นไปด้วยความสมัครใจ ท่านมีสิทธิการเข้าร่วมโครงการวิจัยหรือถอนตัวออกจากโครงการวิจัยได้ตลอดเวลาโดยไม่มีมีผลกระทบใด ๆ ทั้งสิ้น และไม่ต้องแจ้งให้ผู้วิจัยทราบล่วงหน้า ผู้วิจัยจะเก็บรักษาข้อมูลของท่านโดยใช้รหัสตัวเลขแทนการระบุชื่อ ชั้น และสิ่งใด ๆ ที่อาจอ้างอิงหรือทราบได้ว่าข้อมูลนี้เป็นของท่าน ข้อมูลของท่านที่เป็นกระดาษแบบสอบถามจะถูกเก็บอย่างมิดชิด และปลอดภัยในตู้เก็บเอกสารและล็อคกุญแจตลอดเวลา สำหรับข้อมูลที่เก็บในคอมพิวเตอร์ของผู้วิจัยจะถูกใส่รหัสผ่าน ข้อมูลที่กล่าวมาทั้งหมดจะมีเพียงผู้วิจัยและอาจารย์ที่ปรึกษาเท่านั้นที่สามารถเข้าถึงข้อมูลได้ ผู้วิจัยจะรายงานผลการวิจัย และการเผยแพร่ผลการวิจัยในภาพรวม โดยไม่ระบุข้อมูลส่วนบุคลของท่าน ดังนั้นผู้อ่านงานวิจัยจะทราบเฉพาะ

ผลการวิจัยเท่านั้น สุดท้ายหลังจากผลการวิจัยได้รับการตีพิมพ์เผยแพร่ในวารสารเรียบร้อยแล้ว ข้อมูลทั้งหมดจะถูกทำลาย

หากท่านมีปัญหาหรือข้อสงสัยประการใด สามารถสอบถามได้โดยตรงจากผู้วิจัยในวันทำการรวบรวมข้อมูล หรือสามารถติดต่อสอบถามเกี่ยวกับการวิจัยครั้งนี้ได้ตลอดเวลาที่ นางรพีพรรณ นาคบุบผา หมายเลขโทรศัพท์ 062-5651457 หรือที่ รศ.ดร.วรรณี เดียวอิศเรส อาจารย์ที่ปรึกษาหลัก หมายเลขโทรศัพท์ 082-9933483

นางรพีพรรณ นาคบุบผา (ผู้วิจัย)

หากท่านได้รับการปฏิบัติที่ไม่ตรงตามที่ได้ระบุไว้ในเอกสารชี้แจงนี้ ท่านจะสามารถแจ้งให้ประธานคณะกรรมการพิจารณาจริยธรรมฯ ทราบได้ที่ เลขานุการคณะกรรมการจริยธรรมฯ ฝ่ายวิจัย คณะพยาบาลศาสตร์ มหาวิทยาลัยบูรพา โทร. 038-102823

(สำหรับผู้ปกครองของวัยรุ่นที่เข้าร่วมในการวิจัยนี้)

เอกสารชี้แจงผู้เข้าร่วมการวิจัย

การวิจัยเรื่อง ประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน

รหัสจริยธรรมการวิจัย: 02-09-2561

ชื่อผู้วิจัย นางรพีพรรณ นาคบุบผา

การวิจัยครั้งนี้ทำขึ้นเพื่อศึกษาประสบการณ์ ทำความเข้าใจธรรมชาติ การเป็นอยู่ การใช้ชีวิตประจำวันที่เกี่ยวข้องกับความฉลาดของสุขภาพทางเพศ เด็กในปกครองของท่านได้รับเชิญให้เข้าร่วมการวิจัยครั้งนี้เนื่องจากเป็นนักเรียนวัยรุ่นอายุ 10-19 ปี และตั้งครรภ์โดยไม่ได้วางแผน เมื่อเด็กในปกครองของท่านเข้าร่วมการวิจัยแล้ว สิ่งที่จะต้องปฏิบัติคือ ตอบคำถามจากการสัมภาษณ์ ซึ่งการสัมภาษณ์จะใช้เวลาประมาณ 45-60 นาทีต่อครั้ง

ประโยชน์ของการวิจัยครั้งนี้เป็นความรู้ที่ได้จากความจริงจากมุมมองของตัววัยรุ่นเอง เพื่อทำความเข้าใจนักเรียนวัยรุ่นที่ตั้งครรภ์โดยไม่ได้วางแผน ซึ่งเด็กในปกครองของท่านเปรียบเสมือนตัวแทนในการถ่ายทอดความจริง และข้อมูลที่เด็กในปกครองของท่านให้นั้นจะเป็นประโยชน์โดยใช้เป็นแนวทางในการป้องกันการตั้งครรภ์ไม่ได้วางแผนในวัยรุ่น ในการส่งเสริมความฉลาดของสุขภาพทางเพศเพื่อให้เกิดการดูแลตนเองอย่างถูกต้อง รวมทั้งมีความเข้าใจเกี่ยวกับความฉลาดของสุขภาพทางเพศที่เหมาะสมสำหรับวัยรุ่น

การเข้าร่วมการวิจัยของเด็กในปกครองของท่านครั้งนี้เป็นไปด้วยความสมัครใจ เด็กในปกครองของท่านมีสิทธิการเข้าร่วมโครงการวิจัยหรือถอนตัวออกจากโครงการวิจัยได้ตลอดเวลาโดยไม่มีมีผลกระทบใด ๆ ทั้งสิ้น และไม่ต้องแจ้งให้ผู้วิจัยทราบล่วงหน้า ผู้วิจัยจะเก็บรักษาข้อมูลของเด็กในปกครองของท่านโดยใช้รหัสตัวเลขแทนการระบุชื่อ ชั้น และสิ่งใด ๆ ที่อาจอ้างอิงหรือทราบได้ว่าข้อมูลนี้เป็นของเด็กในปกครองของท่าน ข้อมูลที่เป็นกระดาษแบบสอบถามจะถูกเก็บอย่างมิดชิด และปลอดภัยในตู้เก็บเอกสารและล็อคกุญแจตลอดเวลา สำหรับข้อมูลที่เก็บในคอมพิวเตอร์ของผู้วิจัยจะถูกใส่รหัสผ่าน ข้อมูลที่กล่าวมาทั้งหมดจะมีเพียงผู้วิจัยและอาจารย์ที่ปรึกษาเท่านั้นที่สามารถเข้าถึงข้อมูลได้ ผู้วิจัยจะรายงานผลการวิจัย และการเผยแพร่ผลการวิจัยในภาพรวม โดยไม่ระบุข้อมูลส่วนบุคลของเด็กในปกครองของท่าน ดังนั้นผู้อ่านงานวิจัยจะทราบ

เฉพาะผลการวิจัยเท่านั้น สุดท้ายหลังจากผลการวิจัยได้รับการตีพิมพ์เผยแพร่ในวารสารเรียบร้อยแล้ว ข้อมูลทั้งหมดจะถูกทำลาย

หากท่านมีปัญหาหรือข้อสงสัยประการใด สามารถสอบถามได้โดยตรงจากผู้วิจัยในวันทำการรวบรวมข้อมูล หรือสามารถติดต่อสอบถามเกี่ยวกับการวิจัยครั้งนี้ได้ตลอดเวลาที่ นางรพีพรรณ นาคบุบผา หมายเลขโทรศัพท์ 062-5651457 หรือที่ รศ.ดร.วรรณี เดียวอิศเรส อาจารย์ที่ปรึกษาหลัก หมายเลขโทรศัพท์ 082-9933483

นางรพีพรรณ นาคบุบผา (ผู้วิจัย)

หากท่านได้รับการปฏิบัติที่ไม่ตรงตามที่ได้ระบุไว้ในเอกสารชี้แจงนี้ ท่านจะสามารถแจ้งให้ประธานคณะกรรมการพิจารณาจริยธรรมฯ ทราบได้ที่ เลขานุการคณะกรรมการจริยธรรมฯ ฝ่ายวิจัย คณะพยาบาลศาสตร์ มหาวิทยาลัยบูรพา โทร. 038-102823

(สำหรับผู้เข้าร่วมวิจัยที่อายุน้อยกว่า 18 ปี)

ใบยินยอมเข้าร่วมการวิจัย

หัวข้อวิทยานิพนธ์ เรื่อง ประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน

วันให้คำยินยอม วันที่ .....เดือน.....พ.ศ. .....

ก่อนที่จะลงนามในใบยินยอมเข้าร่วมการวิจัยนี้ ข้าพเจ้าได้รับการอธิบายจากผู้วิจัยถึงวัตถุประสงค์ของการวิจัย วิธีการวิจัย ประโยชน์ที่จะเกิดขึ้นจากการวิจัยอย่างละเอียดและมีความเข้าใจดีแล้ว ข้าพเจ้ายินดีเข้าร่วมโครงการวิจัยนี้ด้วยความสมัครใจ และข้าพเจ้ามีสิทธิที่จะบอกเลิกการเข้าร่วมในโครงการวิจัยนี้เมื่อใดก็ได้ และการบอกเลิกการเข้าร่วมการวิจัยนี้ จะไม่มีผลกระทบใด ๆ ต่อข้าพเจ้า

ผู้วิจัยรับรองว่าจะตอบคำถามต่าง ๆ ที่ข้าพเจ้าสงสัยด้วยความเต็มใจ ไม่ปิดบัง ซ่อนเร้นจนข้าพเจ้าพอใจ ข้อมูลเฉพาะเกี่ยวกับตัวข้าพเจ้าจะถูกเก็บเป็นความลับและจะเปิดเผยในภาพรวมที่เป็นการสรุปผลการวิจัย

ข้าพเจ้าได้อ่านข้อความข้างต้นแล้ว และมีความเข้าใจดีทุกประการ และได้ลงนามในใบยินยอมนี้ด้วยความเต็มใจ

ลงนาม.....ผู้ยินยอม

(.....)

ลงนาม.....พยาน

(.....)

ลงนาม.....ผู้วิจัย

(นางรพีพรรณ นาคบุบผา)

ข้าพเจ้าไม่สามารถอ่านหนังสือได้ แต่ผู้วิจัยได้อ่านข้อความในใบยินยอมนี้ให้ข้าพเจ้าฟัง จนข้าพเจ้าเข้าใจดีแล้ว ข้าพเจ้าจึงลงนามหรือประทับลายนิ้วหัวแม่มือของข้าพเจ้าในใบยินยอมนี้ด้วยความเต็มใจ

ลงนาม……ผู้ยินยอม

(……)

ลงนาม……พยาน

(……)

ลงนาม……พยาน

(……)

ลงนาม……ผู้วิจัย

(นางรพีพรรณ นาคบุบผา)

ในกรณีที่ผู้ถูกทดลองยังไม่บรรลุนิติภาวะ จะต้องได้รับการยินยอมจากผู้ปกครองหรือผู้แทนโดยชอบธรรม (เกี่ยวข้องกับกลุ่มตัวอย่าง……)

ลงนาม……ผู้ปกครอง/ผู้แทนโดยชอบธรรม

(……)

ลงนาม……พยาน

(……)

ลงนาม……ผู้วิจัย

(นางรพีพรรณ นาคบุบผา)

APPENDIX F

The IRB approval

THE INSTITUTIONAL REVIEW BOARD (IRB) FOR GRADUATE STUDIES
FACULTY OF NURSING, BURAPHA UNIVERSITY, THAILAND

Thesis Title Experiences of Sexual Health Literacy among Adolescent Students with Unplanned Pregnancy

Name Mrs. Rapeepan Narkbubpha
ID: 59810011
Doctor of Philosophy in Nursing Science (International Program)

Number of the IRB approval 02 – 09 – 2561

The Institutional Review Board (IRB) for graduate studies of Faculty of Nursing, Burapha University reviewed your submitted proposal. The contingencies have been addressed and the IRB **approves** the protocol. Work on this project may begin. This approval is for a period of one year from the date of this letter and will require continuation approval if the research project extends beyond **October 5th, 2019**.

If you make any changes to the protocol during the period of this approval, you must submit a revised protocol to the IRB committee for approval before implementing the changes.

Date of Approval October 5th, 2018

Chintana Wacharasin, R.N., Ph.D.

Chairperson of the IRB
Faculty of Nursing, Burapha University, THAILAND

Tel.: 66-038-102823
Fax: 66-038-393476
E-Mail: naruemit@buu.ac.th

เลขที่ คจม.พบ. ๐๑๔/๒๕๖๑

สำนักงานคณะกรรมการจริยธรรมการวิจัยในมนุษย์ ด้านการแพทย์และสาธารณสุข จังหวัดเพชรบุรี
สำนักงานสาธารณสุขจังหวัดเพชรบุรี กระทรวงสาธารณสุข
ที่อยู่เลขที่ ๔๘ ถ.ราชวิถี ตำบลคลองกระแชง อำเภอเมือง จังหวัดเพชรบุรี โทร.๐๓๒-๔๒๕-๑๐๐๙ ต่อ ๓๑๐๗,๑๐๙

เอกสารรับรองโครงการวิจัย

คณะกรรมการจริยธรรมการวิจัยในมนุษย์ ด้านการแพทย์และสาธารณสุข จังหวัดเพชรบุรีดำเนินการให้การรับรองโครงการวิจัยตามแนวทางหลักจริยธรรมการวิจัยในมนุษย์ที่เป็นมาตรฐานสากลได้แก่ Declaration of Helsinki, The Belmont Report, CIOMS Guideline, และInternational Conference On Harmonization in Good Clinical Practice หรือ ICH-GCP

ชื่อโครงการ : ประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน (Experiences of sexual health literacy among adolescent students with unplanned pregnancy)

รหัสเลขที่โครงการวิจัย : PBEC No. ๐๒๑/๒๕๖๑

ผู้วิจัยหลัก : นางรพีพรรณ นาคบุบผา

สังกัดหน่วยงาน : วิทยาลัยพยาบาลพระจอมเกล้า จังหวัดเพชรบุรี

วิธีทบทวน : แบบยกเว้น (Exemption) ผ่านการพิจารณาจากคณะกรรมการจริยธรรมการวิจัย ระดับบัณฑิตศึกษา คณะพยาบาลศาสตร์ มหาวิทยาลัยบูรพา (รหัส ๐๒-๐๙-๒๕๖๑)

รายงานความก้าวหน้า : ๑) ส่งรายงานความก้าวหน้าอย่างน้อย ๑ ครั้ง/ ปี
๒) ส่งเล่มฉบับสมบูรณ์พร้อมบทความวิจัย เมื่อดำเนินโครงการเสร็จสิ้น

เอกสารรับรอง : ๑) เอกสารโครงร่างการวิจัย ๒) เอกสารใบยินยอม ๓) เอกสารใบชี้แจง

ลงนาม.....ลงนาม .....

(นายแพทย์สุทัศน์ ไชยยศ)
ประธานคณะกรรมการจริยธรรมการวิจัยในมนุษย์ฯ

(นายฉัตรชัย สมานมิตร)
เลขานุการคณะกรรมการจริยธรรมการวิจัยในมนุษย์ฯ

วันที่รับรอง : ๑๙ พฤศจิกายน ๒๕๖๑ วันหมดอายุ: ๒๐ พฤศจิกายน ๒๕๖๒

ทั้งนี้ การรับรองนี้มีเงื่อนไข ดังที่ระบุไว้ด้านหลังทุกข้อ (ดูด้านหลังของเอกสารรับรองโครงการวิจัย)

โครงการวิจัย : ประสบการณ์ความฉลาดของสุขภาพทางเพศในนักเรียนวัยรุ่นที่ตั้งครรภ์ไม่ได้วางแผน (Experiences of sexual health literacy among adolescent students with unplanned pregnancy)

<u>คำชี้แจง</u> นักวิจัยทุกท่านที่ผ่านการรับรองจริยธรรมการวิจัยต้องปฏิบัติดังต่อไปนี้

๑. ดำเนินการวิจัยตามที่ระบุไว้ในโครงการวิจัยอย่างเคร่งครัด

๒. ใช้เอกสารแนะนำอาสาสมัคร ใบยินยอม และเอกสารเชิญเข้าร่วมวิจัยหรือใบโฆษณา (ถ้ามี) แบบสัมภาษณ์ และหรือ แบบสอบถาม **<u>เฉพาะที่มีตราประทับของคณะกรรมการพิจารณาจริยธรรม</u>** เท่านั้น และส่งสำเนาเอกสารดังกล่าวที่ใช้กับผู้เข้าร่วมวิจัยจริงรายแรกมาที่ สำนักงานคณะกรรมการจริยธรรมการวิจัยในมนุษย์ ด้านการแพทย์และสาธารณสุข จังหวัดเพชรบุรี สำนักงานสาธารณสุขจังหวัดเพชรบุรี ที่อยู่ ๔๘ ถนนราชวิถี ตำบลคลองกระแชง อำเภอเมือง จังหวัดเพชรบุรี รหัส ไปรษณีย์ ๗๖๐๐๐ (โทร.๐๓๒-๔๒๕-๑๐๐ ต่อ ๓๑๐๗,๑๐๙)

๓. รายงานเหตุการณ์ไม่พึงประสงค์ร้ายแรงที่เกิดขึ้นหรือการเปลี่ยนแปลงกิจกรรมวิจัยใดๆ ต่อคณะกรรมการพิจารณาจริยธรรมการวิจัย ภายใน ๕ วันทำการ

๔. ส่งรายงานความก้าวหน้าต่อคณะกรรมการพิจารณาจริยธรรมการวิจัย ตามเวลาที่กำหนดหรือเมื่อได้รับการร้องขอ

๕. หากการวิจัยไม่สามารถดำเนินการได้เสร็จภายในกำหนด ผู้วิจัยต้องยื่นขออนุมัติใหม่ก่อนอย่างน้อย ๑ เดือน

๖. เอกสารทุกฉบับที่ได้รับการรับรองครั้งนี้ หมดอายุตามอายุของโครงการที่ได้รับรองก่อนหน้านี้

(รหัสหมายเลขโครงการ : PBEC No. ๐๒๑/๒๕๖๑)

ลงชื่อ ..... ผู้รับใบรับรอง

(.....)

ตำแหน่ง .....

วันที่ ๒๑ เดือน ก.ย. พ.ศ. ๒๕๖๑ ที่รับใบรับรอง

ลงชื่อ ..... พยานการรับใบรับรอง

(ดร.อุไรรัชต์ บุญแท้)

ตำแหน่ง กรรมการ (ลูกจ้าง)

วันที่ ๒๑ เดือน พฤศจิกายน พ.ศ. ๒๕๖๑ ที่เป็นพยานการรับใบรับรอง

.....

คณะกรรมการจริยธรรมการวิจัยฯ ผู้ทบทวน : ๑. ดร.อุไรรัชต์ บุญแท้

APPENDIX G

Description of participant's history

Description of participant's history

All of the adolescents with an unplanned pregnancy who were interviewed in this study were early and middle adolescents. It was found that 18 adolescents were married and relationships with boyfriends were identified as cohabitation and spousal relationships lasting for eight months - two years. One of the adolescent girls named Kit identified the relationship as separated because her boyfriend like to go out with his friends too much after gestational age 16 weeks but some contact to transfer money to take care of his girlfriend. Another adolescent girl named Arit were separated after the boyfriend found out about the pregnancy and had no contact with her at all. Furthermore, nine of the adolescents had parents who were married, but eight of the adolescent girls had parents who were separated. Thus, they had to live with their mother or father or another relative of one of their parents. Examples of this situation included Sam, Rat, Su, Ya, Wi, Na, Kit, and Suta. Furthermore, three of the adolescents, namely, Sri, Kan, and Cha, had a deceased mother or father and had to live with the other parents or a relative.

In addition, seven of the adolescents depended upon the parents of the girls and their boyfriends for financial support included Sara, Porn, Su, Luck, Da, Na, and Kit. While six of the adolescents depended upon their boyfriends included Son, Sam, Ta, Ya, Kan, and Suta. Three adolescents depended upon their boyfriends and themselves included Sri, Cha, and Tum. One adolescent girl named Rat depended upon the mothers of the girl and her boyfriend. Another adolescent girl named Arit depended upon the parents of the girl. Another adolescent girl named Wi depended upon the parents of the girl, the boyfriend and themselves. And one of the adolescent's girls named Wan depended upon the parents of the girl and the parents of the boyfriend.

Regarding residence, most of the participants lived with their extended families, particularly with the woman's family in twelve cases and the man's family in seven cases. Moreover, only Tum was found to have separated from her family and lived in the accommodations provided by her employer. Although the findings of the study indicated that all of the adolescents had unplanned pregnancies, 18 of the adolescents had given no thought to abortion. Only two adolescents included Arit

and Porn had considered an abortion but did not follow through because parents were against abortion. The descriptions and history of the participants are presented in Table 4-3 below.

Tables 3 The descriptions history of the participant

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
1. Sara	16	18	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 1 year	Married	Parents of girl and boyfriend	Woman's family	No thought
2. Sri	17	17	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 2 years	Her parents had both died since she was five years of age, so she lived with her aunt	Boyfriend and themselves	Man's family	No thought
3. Son	19	22	Wedding ceremony	Good relationship and cohabitation for 2 years	Married	Boyfriend	Man's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
4. Sam	16	42	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 8 months	Her parents were divorced; she lived with her mother and maternal grandparents	Boyfriend	Woman's family	No thought
5. Rat	15	21	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 1 year	Her parents had been divorced since she was three days old, so she lived with her mother who had not remarried	Mother of girl and boyfriend	Woman's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
6. Porn	15	18	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 2 years	Married	Parents of girl and boyfriend	Woman's family	Considered abortion, but did not do it, because parents were against abortion
7. Su	14	17	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 1 year	Her parents had been divorced since she was three months old; she lived with her father and paternal	Parents of girl and boyfriend	Woman's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
					grandparents; her father had remarried			
8. Luck	16	21	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 1 year	Married	Parents of girl and boyfriend	Woman's family	No thought
9. Da	19	20	Paying respects to the parents (No ceremony)	Good relationship and cohabitation for 2 years	Married	Parents of girl and boyfriend	Woman's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
10. Ta	17	31	Paying respects to the parents (Songtua ceremony	Good relationship and cohabitation for 1 year	Married	Boyfriend	Woman's family	No thought
11. Arit	16	18	Separated	Separated after finding out about the pregnancy and no contact	Married	Parents of girl	Woman's family	Considered abortion, but did not do it, because parents were against abortion

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
12. Ya	16	24	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 2 years	Her parents had been divorced since she was six years old; she lived with her mother who had remarried	Boyfriend	Woman's family	No thought
13. Wi	17	16	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 2 years	Her parents had been divorced since she was five years old; she lived with her mother who had remarried	Parents of girl, boyfriend, and themselves	Woman's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
14. Kan	17	18	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 1 year	Her mother had committed suicide by an intentional drug overdose since she was eight years old; her father had moved away, so she lived with her maternal grandparents	Boyfriend	Man's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
15. Cha	15	18	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 1 year	Her mother had died when she was a child, so she lived with her father who had remarried.	Boyfriend and themselves	Man's family	No thought
16. Wan	17	17	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 9 months	Married	Parents of girl and parents of the boyfriend	Man's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
17. Na	15	16	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 2 years	Her parents had been divorced since she was two years old; she lived with her mother who had remarried	Parents of girl and boyfriend	Man's family	No thought
18. Tum	14	20	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 10 months	Married	Boyfriend and themselves	Accommodations provided by her employer	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
19. Kit	16	17	Paying respects to the parents (Songtua ceremony)	Separated because her boyfriend liked to go out with his friends too much since gestational age 16 weeks. There was some contact to transfer money to take care of his girlfriend	Her parents had divorced since she was five years old; she lived with her mother who had remarried	Parents of girl and boyfriend	Woman's family	No thought

Table 3 (Continued)

Participants pseudonym	Age of girl adolescents (years)	Age of boyfriend (years)	Marriage ceremony	Relationships with boyfriend	Marital status of parents	Financial support	Current residence	Attempted abortion
20. Suta	16	18	Paying respects to the parents (Songtua ceremony)	Good relationship and cohabitation for 2 years	Her parents were divorced, so she lived with her paternal grandmother and uncle	Boyfriend	Man's family	No thought

APPENDIX H

Content validators

Content validators

1. Assistant Professor Dr. Manaporn Chatchumni	Department of Adult and Gerontological Nursing, Faculty of Nursing Science, Rungsit University
2. Dr. Atcharawadee Sriyasak	Department of Pediatrics Nursing, Phrachomklao College of Nursing, Phetchaburi province
3. Dr. Nuttapol Yuwanich	Department of Adult and Gerontological Nursing, Faculty of Nursing Science, Rungsit University

BIOGRAPHY

NAME	Mrs.Rapeepan Narkbubpha	
DATE OF BIRTH	25 July 1979	
PLACE OF BIRTH	Phetchaburi	
PRESENT ADDRESS	6 Moo 3 Bangjan Sub-district, Mueang District, Phetchaburi Province 76000	
POSITION HELD	Phachomkloa college of nursing Phetchaburi Province	
EDUCATION	1998-2002	Bachelor Degree of Nursing Science Boromarajonani College of Nursing, Ratchaburi
	2011-2013	Master Degree of Caring Science (Nursing), Mälardalen University, Sweden
	2016-present	Doctor of Philosophy in Nursing Science (International program), Burapha University
AWARDS OR GRANTS	2014	Nursing excellence award of research from Phetchaburi Province Nurses Society
	2015	Nursing excellence award of research from College of central net 2 Praboromarajchanok institute for health workforce development