

ความรู้ด้านสุขภาพทางเพศในนักเรียนวัยรุ่นหญิงที่อยู่ในระบบ การศึกษาของจังหวัดเพชรบุรี

Sexual Health Literacy among Female Adolescent Students in the Educational System, Phetchaburi Province

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บทคัดย่อ

การวิจัยผสมวิธีแบบขั้นตอนเชิงสำรวจนี้มีวัตถุประสงค์เพื่อวัดระดับความรู้ด้านสุขภาพทางเพศ และอธิบายประสบการณ์ของนักเรียนวัยรุ่นหญิงที่มีระดับความรู้ด้านสุขภาพทางเพศที่ไม่เพียงพอในการป้องกันการตั้งครรภ์ก่อนวัยอันควรที่อยู่ในระบบการศึกษาของจังหวัดเพชรบุรี กลุ่มตัวอย่างเชิงปริมาณ คือ นักเรียนหญิงอายุ 15-19 ปี ศึกษาอยู่ในระดับมัธยมศึกษา อาชีวศึกษา และอุดมศึกษา จำนวน 8 แห่ง ทั้งหมด 144 คน เพื่อวัดระดับความรู้ด้านสุขภาพทางเพศ และเลือกผู้ให้ข้อมูลจากกลุ่มที่มีความรู้ด้านสุขภาพทางเพศอยู่ในระดับไม่เพียงพอ จำนวน 20 คน ในการศึกษาเชิงคุณภาพ ข้อมูลเชิงปริมาณพบว่า ความรู้ด้านสุขภาพทางเพศอยู่ในระดับปานกลางที่เพียงพอ และอาจมีการปฏิบัติตนเพื่อป้องกันการตั้งครรภ์ก่อนวัยอันควรถูกต้องบ้าง (M = 100.67, S.D. = 13.81) ส่วนการวิเคราะห์ข้อมูลเชิงคุณภาพพบประเด็นหลัก 4 ด้าน ได้แก่ (1) เนื้อหาและวิธีการสอนเรื่องการกำเนิดที่แตกต่างกัน (2) เลือกปรึกษาแม่หรือญาติผู้หญิงก่อนที่จะรับบริการสุขภาพทางเพศ (3) ความเข้าใจที่ไม่ถูกต้องเกี่ยวกับวิธีการคุมกำเนิด และ (4) การเข้าถึงสื่อที่น่าเชื่อถือในการดูแลสุขภาพทางเพศ ควรพัฒนาโปรแกรมเพื่อเพิ่มระดับความรู้ด้านสุขภาพทางเพศ โดยเน้นการสอนวิธีคุมกำเนิดสำหรับผู้ปกครอง และการเข้าถึงสื่อการสอนวิธีคุมกำเนิดที่น่าเชื่อถือ

คำสำคัญ: การตั้งครรภ์ในวัยรุ่นโดยไม่ได้วางแผน, การวิจัยผสมวิธี, ความรู้ด้านสุขภาพทางเพศ, นักเรียนวัยรุ่นหญิง

Abstract

This mixed methods study, employing an exploratory sequential design, assesses sexual health knowledge and experiences of adolescent girls in Phetchaburi province. The sample consists of 144 female students aged 15-19 across secondary, vocational, and tertiary education, revealing a moderate knowledge level (M = 100.67, S.D. = 13.81) with some correct preventive practices. Qualitative analysis identifies issues like variations in reproductive health education, reliance on female relatives for advice, misconceptions about contraceptives, and use of unreliable media. Recommendations include enhancing sexual health knowledge, emphasizing contraceptive education for parents, and ensuring access to reliable educational resources.

Keyword: adolescent unplanned pregnancy, mixed method study, sexual health literacy, Female adolescent students

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Introduction

Global initiatives, aligned with the United Nations' Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs), aim to reduce adolescent birth rates by 2030¹, a pivotal indicator for Goal 3 emphasizing well-being. Despite Thailand's declining rates (28.7 in 2020)², concerns persist due to associated risks, including health consequences, newborn risks, abortions, infant abandonment, and repercussions on mental health, education, family dynamics, and the national economy³. Notably, 56.1% of affected adolescents were students before pregnancy, 35.6% discontinued education, and 65.6% faced unintended pregnancies, with 44.2% forgoing contraception due to a lack of anticipation of sexual intercourse. Contributing factors include limited contraception knowledge (28.8%)⁴, reliance on unreliable sources (excluding public health agencies)⁵, low health literacy for preventing unplanned pregnancies (95.5%), and moderate health literacy related to pregnancy prevention (71.3%)⁶. This underscores challenges tied to inadequate communication skills for disseminating information about preventing premature pregnancies, with adolescents encountering difficulties in accessing reliable health information, often accepting media content without scrutiny or critical thinking⁷.

Adolescent pregnancy prevention has been a priority in Thailand since 2011⁸, leading to the Prevention and Solution of Adolescent Pregnancy Problems Act, B.E. 2559⁹. Various sectors implemented the National Strategic Plan for Prevention and Solution of Adolescent Pregnancy Problems 2017-2026¹⁰, with guidelines established in the Royal Gazette. Vocational and higher education institutions were required to offer age-appropriate sexuality and life skills education, promoting health literacy, and reducing unplanned pregnancies among adolescent students¹¹.

Health literacy involves utilizing health information for personal well-being¹², encompassing access, knowledge, communication, self-management, decision-making, and media literacy¹³. Lower health literacy correlates with poorer outcomes and higher healthcare costs¹⁴. Enhancing health literacy, including sexual health literacy, supports gender equality, reduces educational gaps, improves economic prospects, and breaks intergenerational poverty cycles¹⁵. Regrettably, 95.5% of female adolescents aged 15-21 lack sufficient sexual health literacy⁶. Advanced sexual health literacy could reduce the risk of early pregnancies¹⁶. A literature review in Health Region 5 reveals commendable overall health, yet Phetchaburi, a western Thai province, tops the region with a 30.46% live birth rate among 15-19-year-old females¹⁷. Research on challenges hindering sexual health knowledge in adolescents, especially females, is lacking. Investigating sexual health literacy among female adolescents, the author used a mixed methods approach¹⁸ to explore experiences, challenges, and obstacles, aiming to prevent unplanned pregnancies. This contributes to a comprehensive understanding, aiding officials and educators in tailoring solutions for adolescent sexual health literacy.

Objectives

1. To measure sexual health literacy level among female adolescent students in educational system
2. To provide explanations regarding the experiences of female adolescent students with inadequate sexual health literacy for preventing unplanned pregnancies.

Methods

This study employed an explanatory sequential mixed methods design¹⁸, utilizing

descriptive and phenomenological approaches. The quantitative phase assessed sexual health literacy among female adolescents in 39 educational institutions using multi-stage random sampling¹⁹. Eight institutions were randomly chosen (4 secondary, 2 vocational, 2 higher education) at a ratio of 4,000:1. Data collection occurred from September to November 2020. The qualitative phase focused on preventing unplanned pregnancies, targeting adolescent females with sexual health literacy scores <119. Twenty participants were purposively selected from a pool of 133 individuals, and data collection took place from January to April 2021.

Samples

Quantitative Phase: The study targeted 192 unmarried females aged 15-19 across diverse educational levels in Phetchaburi province, representing a population of 32,000 students in 39 institutions. G* Power software, with Effect Size = 0.25, Alpha = 0.05, and Power = 0.80, was used, assuming moderate adolescent knowledge²⁰. The sample size increased by 20% for sensitivity. Inclusion criteria comprised ages 15–19, communication ability, questionnaire completion skill, and a minimum 1-year enrollment. **Qualitative Phase:** For the 133 females with sexual health literacy scores <119, purposive sampling recruited 20 participants. In-depth interviews followed Holloway and Galvin's recommendation, continuing until data saturation was achieved or a minimum of 20 informants²¹.

Study Procedures

Quantitative phase: Descriptive research assessed sexual health literacy in female students across education levels. **Qualitative phase:** Phenomenology design explored individual experiences²¹ via in-depth interviews.

Instruments

The study utilized a quantitative approach with a health literacy questionnaire for Thai female adolescents⁶, covering demographic data and 38 questions assessing health knowledge, information access, communication, management skills, media literacy, and decision-making for unplanned pregnancy prevention. Scores below 119 indicated insufficient sexual health knowledge. In the qualitative phase, semi-structured interviews with three Thai adolescents, validated by three experts, explored pregnancy prevention knowledge, information sources, methods, and memorable information, with follow-up queries for elaboration after pilot testing.

Data analysis

Quantitative phase: Descriptive statistics (mean, percentage, standard deviation) were employed, with a Cronbach's alpha coefficient of .85 for reliability. **Qualitative phase:** Conventional inductive content analysis was used, following Lincoln and Guba's criteria for trustworthiness²². Credibility was ensured through discussions with an experienced researcher. Member checking involved feedback from informants. Data triangulation was achieved through observations, interviews, and field notes. Dependability and confirmability were maintained by documenting the research process and peer-reviewing the analysis.

Ethical approvals

Prachomkloa College of Nursing (Approval No. 001/2563) on 11 March 2020 and Phetchaburi Provincial Public Health Office (Approval No. 006/2563) on 15 May 2020. Participant confidentiality and informed consent were ensured.

Results

The sample comprised 144 predominantly late adolescents (75.00% aged 17-19, mean age 17.58, SD = 1.30), with 38.89% being first-year higher education students and 93.75% identifying as Buddhists. Regarding opposite-sex relationships,

36.10% had no prior experience, and 34.00% had. Parental importance was high, with 93.06% valuing their parents greatly.

1. Sexual health literacy level of adolescent female students in Phetchaburi province’s educational system

Table 1: Summarized Sexual Health Literacy Level of Adolescent Female Students (N = 144)

Health Literacy Level	Amount	%
- Adequate self-practice (>120 points) for effective, sustainable unplanned pregnancy prevention, serving as a role model and advisor	11	7.64
- Adequate self-practice with some correct unplanned pregnancy prevention (90-119 points)	104	72.22
- Inadequate self-practice for unplanned pregnancy prevention (< 89 points)	29	20.14
(M = 100.67, S.D. = 13.81, Min = 66.00, Max = 132.00)		

Table 1 reveals 72.22% of adolescents with sufficient sexual health literacy, effective in preventing unplanned pregnancies. Mean scores vary across educational levels, highlighting deficits in communication skills, health knowledge, and media literacy.

2. Experiences of female adolescent students with inadequate sexual health literacy in preventing unplanned pregnancies.

2.1 Differences in contraceptive education content and methods.

2.1.1 Secondary School Level: Female adolescents learn contraception from teachers, family, and online sources, primarily through Grade 5-12 teachers in crowded classrooms. Noise hinders questions, as one informant mentioned.

“The teacher taught in front of the classroom. I understood some but not everything due to noise. Initially, I forgot about menstrual cycle count. I asked after class because of the noise.” (TMBL1)

Female adolescents learn contraception from public health officials in upper secondary schools

through lectures and demonstrations, enhancing their understanding. One informant stated:

“Hospital officials used demonstrations and models for contraception education. It improved my understanding. The teacher gathered students in the high school classroom.” (TMBL1)

2.1.2 In the 1st year of vocational education, female adolescents gain contraception knowledge from officials through lectures, demonstrative instructions, and small group sessions, finding their detailed and enjoyable approach beneficial. One informant stated:

“In the 1st semester, public health officials taught students from various classes about protection methods, condom use, and contraception. Using PowerPoint, demonstrations, and role plays, the session was enjoyable, enhancing my understanding.” (TMPN7)

2.1.3 In the first year of higher education, female adolescents acquire knowledge in an anatomy course with integrated contraception content, including condom use, physical changes, and

fertilization, enhancing their understanding of pregnancy mechanisms. An informant stated:

“In anatomy class, the lecturer explained male and female physical changes, condom use, contraception methods, menstruation, embryology, and ovulation. Improved understanding of pregnancy resulted.” (TMC1)

2.2 Seeking advice from mothers or female relatives before seeking health services.

2.2.1 Being advised about the access to health data and health service centers e.g. reliable websites and health service centers for consulting health problems. According to an informant,

“Health officials advised checking reliable data on vaginal discharge and menstrual cramps from the Ministry of Public Health’s website. Facing irregular periods and dark menstrual blood, I sought information on potential causes and care.” (TMPN5)

However, female adolescents choose to consult mothers or female relatives prior to receiving sexual health problem treatment services from public health officials.

2.2.2 Seeking health care advice from family such as mothers and female relatives before taking services from health care providers or in applying into self-care. The arguments of informants were as follows:

“I had irregular menstrual cycle, and, after my search, I knew that it might be uterine or hormonal abnormality. I consulted my mom, and she took me to the doctor.” (TMPN5)

“I had menstrual cramps in some months. I did not know what went wrong with me at the time so I googled it and visited the hospital’s website, but I could not remember its name. I was told about painkiller named ‘Ponstan’, a pack of yellow, round/oval, relatively big tablets. I also consulted my sister, and she bought it for me.”

(TMBL2)

Besides, female adolescents seeking sexual health problem advice from family without further data from any other sources are found too. An informant claimed as follows:

“I had an awful abdominal pain and stomachache during the period. I told my mom. She bought me menstrual painkiller. I had to get some rest after taking it.” (TMBL1)

2.3 Misconceptions about contraceptive methods

2.3.1 Female adolescents commonly hold misconceptions about contraception, including pill intake, forgetting, suitable timing, and its action, indicating gaps in accurate knowledge about birth control methods. The claims made by informants included:

“If I forget to take monthly contraception pills for 2 days, I can continue taking it the day after, one each daily.” (TMPN7)

Some female adolescents fail to understand menstrual cycle count while at secondary school level. However, after taking higher-education anatomy course with the contents of fertilization, they can understand it. An informant said as follows:

“I initially struggled to understand contraception through menstrual cycle count in secondary school. However, in the first year of higher education, the lecturer clarified fertilization and the connection to menstrual cycle count for contraception.” (TMC4)

2.4 Accessing unreliable media for sexual health information.

2.4.1 Most female adolescents seek sexual health information on online platforms like Google and Facebook, which are not official Ministry of Public Health websites. Consequently, the knowledge obtained may lack reliability for addressing sexual health issues accurately, as per informants.

“When I had menstrual cramps, I read some Facebook posts where experiences were shared saying that a girl had a hysterectomy because she took menstrual painkillers excessively. Although I still had menstrual cramps every month, I stopped taking them and had to tolerate the pains. I did not visit doctors.” (TMPN1)

“I had a problem of delayed period, so I googled and read the first one that I saw. I looked at the first and second pages. I chose the most viewed one.” (TMC6)

2.4.2 Female adolescents often rely on online platforms like Google and Wikipedia for contraception information, favoring websites with high views. However, Wikipedia’s content editability makes it less reliable, as highlighted by one informant.

“I was doubtful about menstrual cycle count. I sought Wikipedia. It was reliable and most people used it too.” (TMC3)

“I googled the topics I wished to find such as emergency contraception pill intake. I chose the first one or the one on the top lines or the one with a high number of views.” (TMC2)

Discussions

1. In Phetchaburi’s education system, adolescent females demonstrate satisfactory sexual health knowledge and practices, potentially reducing early pregnancies. A survey in Health District 5 found their knowledge and skills scores adequate (mean = 63.57)²³. Understanding sexual health empowers individuals for self-care, aligning with a decrease in teenage pregnancies from 533 cases in 2019 to 345 in 2021²⁴.

2. Examining sexual health knowledge across education levels reveals varying competencies. Decision-making skills are highest, aligning with the National Strategy for Adolescent Pregnancy Prevention⁹. Comprehensive sexuality education

spans developmental stages, relationships, growth, behaviors, health, and socio-cultural dimensions⁸. This helps prevent untimely pregnancies through informed choices. Female secondary education students display the lowest proficiency, particularly in communication skills²⁵. In vocational education, misconceptions, especially regarding contraceptives, contribute to teenage pregnancies²⁶. At higher education levels, students lack media and information knowledge, often seeking pregnancy prevention information from non-authoritative online sources⁵. Reinforcing contraceptive knowledge is crucial for informed decisions, enhancing sexual health education for adolescent females’ well-being and development.

3. The study underscores adolescent pregnancy prevention through diverse teaching methods and trust in healthcare providers. Mothers, given their close relationships with adolescents, play a pivotal role in sexual health education. Many adolescents hold misconceptions about emergency contraception, including incorrect timing and effectiveness. Intarakumhang’s findings highlight the influence of sexual health knowledge on preventing adolescent pregnancies²⁷. To ensure proper understanding of contraception methods, comprehensive knowledge, including emergency contraception, should be conveyed. Despite Wikipedia’s unreliability, adolescent females often seek information on online platforms like Google, emphasizing the need for credible sources in enhancing knowledge and reducing reliance on non-authoritative platforms for pregnancy prevention⁵.

Recommendations from the research findings

1. Caregivers, including teachers and parents, must enhance adolescent sexual health awareness, emphasizing communication, knowledge, and media literacy, and addressing contraceptive side effects for

accurate understanding.

2. Schools should empower adolescents with activities/curricula for informed decisions, emphasizing reliable online sources for sexual health information.

Recommendations for future research

Implementing a sexual health program emphasizing communication, knowledge, and media literacy skills requires family involvement for reliability.

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