Review Articles

Sexual Abstinence in Adolescents: A Literature Review

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Abstract

Background: Sexual abstinence promotes well-being and purposive results in various contexts. This behavior is the primary response to maintaining well-being and preventing health problems, unwanted pregnancy, and sexually transmitted infections in adolescents. Nurses are essential in promoting sexual abstinence and need substantive knowledge of this behavior. The applications of findings will be the direction for promoting sexual abstinence.

Aim: This paper provides a literature review of sexual abstinence.

Method: Researchers searched the literature in both English and Thai language. There were Scopus, CINAHL, PubMed, PsycINFO, ProQuest, and Google Scholar databases, including dissertations and theses.

Result: Forty-three studies provided information on definitions and factors related to sexual abstinence. Modifying and interpersonal factors are perceived as essential factors in encouraging sexual abstinence.

Discussion: Perceived sexual abstinence's definitions, factors, and nursing implications for promoting sexual abstinence were discussed.

Keywords: Sexual abstinence; Nurse's roles; Literature review

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Introduction

"Sexual abstinence," or "Delaying sex until the right time," is widely used to promote sexual health among adolescents, especially during school years⁽¹⁾. Delaying sex improved their psychological and emotional motivation to study, resulting in academic performance and graduation. This behavior is significant for female adolescents' health because it helps maintain well-being and prevents health problems, unintended pregnancy, and Sexually Transmitted Diseases (STDs). Remaining sexual abstinence, healthy female adolescents were more likely to achieve academic success and continue studying in higher education⁽²⁾.

Adolescent physical growth and early sexual maturation were influenced by gender, race, body mass, environment, and overall health status^(3,4). Previous evidence presented that the median age at menarche has remained between 12 and 13 years across populations in developed countries. The reproductive organs become functional, and secondary sex characteristics increase in size, which affects the sexual hormone. Adolescents are highly involved in a relationship that can enhance the desire to engage in sexual activity. Besides, body weight gain, high animal protein intake, family stressors, and peer pressure were associated with increasing engaging early sexual debut in adolescence^(5,6).

The concepts of sexual abstinence have been provided among cultures for more than 20 years but are rare currently. Studying sexual abstinence was highly emphasized in developed and developing countries^(7,8). However, existing literature on sexual abstinence reveals a lack of conceptual clarity, a heterogeneous use of the terms, and unclear factors. Literatures provided inconsistencies in their definitions of sexual abstinence^(9,10). For instance, the term has often meant never engaging in penile-vaginal intercourses⁽¹¹⁾. Some researchers have operationally defined abstinence as not engaging in vaginal and anal intercourse⁽¹²⁾. Furthermore, in studies of undergraduates, many researchers found students did not define oral-genital contacts^(12,13) and not reaching orgasm as "having sex," though the behavior placed them at risk for STDs, HIV, or unwanted pregnancy⁽¹⁴⁾.

However, little is understood about sexual abstinence among healthcare professionals-those involved in promoting the current use of this behavior, The Comprehensive Sexuality Education (CSE) program, or The Abstinence-based programs⁽¹⁵⁾. Previous research suggests factors that enable sexual abstinence are complex and involve individuals and the environment. Adolescents have to decide whether to adopt sexual abstinence, with their body's right to have sex when and with their willingness. Information acquisition and processing

essentially promote a particular direction in health promotion programs throughout the family, school, and community.

For the above reasons, this paper will provide an overview of this concept to enrich an understanding of sexual abstinence concepts and provide more ways to improve promoting sexual abstinence. Furthermore, this review will provide conceptual knowledge representation, definitions, and factors by considering evidence from multiple resources.

Objectives

This paper aims to review sexual abstinence in adolescents focusing on the perceived definitions and factors.

Methods

Methods of this review were specified to commencement in a study protocol; the protocol referenced Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines⁽¹⁶⁾ and recommendations of Soares⁽¹⁷⁾.

Search strategy: The search strategy included a primary search combined with a comprehensive secondary search. Original articles, dissertations, thesis, and books were considered. Articles were obtained from Scopus, CINAHL, Pubmed, PsycInfo, Science Direct, Proquest, and google scholar. For searching, the researcher used terms reflected sexual abstinence, abstainer, delaying sex, virgin, postpone sex, and "not" plus sexual intercourse, sexual behavior," "sexual activity," and "premarital sex." The secondary search consisted of citation and reference tracking of critical concepts of sexual abstinence. The search strategy in each database used "AND" to include each general category and "OR" to include each search term within the category. Moreover, the researcher included 20-year-study articles in the review regarding the time of conducting the sexual abstinence research.

Eligibility criteria, study selection, and quality assessment:

Following the search strategy, potentially relevant studies (n=611) were found from searching. Then after excluding duplicate and unrelated records, meeting abstract, personal opinions, and reviews according to the title and abstract (n=429), 182 articles remained. The remaining 58 articles were evaluated based on the full text in the next step. Finally, the rest of the resources included in this review were forty-three resources; twenty-five studies demonstrated the definition, and twenty-three provided factors, while five among them offered

both. The number of records identified in each phase of the research process is provided in Figure 1, PRISMA flow diagram.

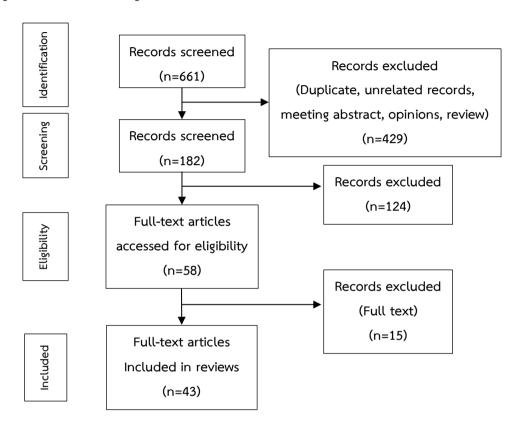


Figure 1 Flow chart of study selection

Results

Definition of sexual Abstinence in adolescent

Twenty-five studies defined sexual abstinence in an adolescent. The literatures were conducted in various countries. There were fourteen in the US with two from Canada, one from South Africa, and one from Nigeria, and the other seven were from Asia; six from Thailand and one from Vietnam respectively.

Table 1 shows that adolescents provided sexual abstinence as a self-determined choice (not lacking the opportunity to have sex). Raspberry and Goodson added that making a conscious commitment to abstinence⁽¹⁸⁾. They maintain sexual abstinence by using strategies for their life's goals⁽¹⁹⁻²¹⁾. In Asia, there remains a firm adherence to traditional conservative

values. These values include abstinence until graduation from school or marriage and faithfulness after marriage⁽²²⁾. Simultaneously, American and African-American adolescents raised sexual abstinence as worth acting on, realizing life goals and benefits to avoid adverse outcomes, physical and emotional negative outcomes⁽²³⁾.

Sexual abstinence is more strict behavior than a virgin. Students and professionals agreed that both not engaging in penile-vaginal and penile-anal intercourses were abstinent behaviors, while virginity is only used as not engaging in penile-vaginal intercourse^(14,24,25). Later on, according to health risk prevention, some infections are spread during oral intercourse; thus, penile-oral intercourse was included in the definition of sexual abstinence⁽²⁶⁾.

Many researchers have provided more details about sexual abstinence. Some included genital touching behaviors ^(9,13,14). For considering activities leading to sexual intercourse, some findings added no deep kissing and no genital stimulation, especially among young adolescent⁽²⁷⁾. In addition, some divided sexual abstinence into two groups: primary abstainers and already sexually experienced or secondary abstainers^(18,28,29). For the time of remaining sexual abstinence, literature provided "the right time" for sexual abstinence after graduation, establishing a career, or getting married. Sexual abstinence until marriage is the most outcome expectation^(8,30).

In sum, the practice of sexual abstinence becomes inconsistent. Early adolescents count genital touching, kissing, and genital stimulation as part of this behavior $^{(24)}$. Nevertheless, middle, and late adolescents claimed just penile-anal and oral intercourse was abstinent. Furthermore, late adolescents counted every sexual intercourse without orgasm as sexual abstinence or still not having $sex^{(14,25,27)}$.

Table 1 Sexual abstinence definitions

First author, Year	Country	Sample characteristics,	Definitions
		Sample size	
1. Bogart, 2000 ⁽⁹⁾	USA	Undergraduate (22.2±2.2	Sexual abstinence: refraining from vaginal and anal intercourse and
		years; 65% female),	oral intercourse without orgasm
		n=223	
2. Norris, 2003 ⁽³¹⁾	USA	Mean age=13.7 years,	Sexual abstinence: a specific set of behaviors which used to actively
		African American,	avoid sexual intercourse by a person who is not married but is
		seventh-grade students	interested in a romantic relationship with a partner". The set of
		(58% male, 42% female),	behaviors includes 1) thinking; Tell yourself you were making the right
		n=113	decision by waiting to have sex; 2) acting as avoid to pressure; avoid
			being pressured to have sex by making sure you are out with a group
			of people; and 3) interacting; Say "No" to sex; tell her (him) that you
			wanted to wait to have sex
3. Randall, 2003 ⁽³²⁾	Canada	University students	Only not getting an orgasm is claiming sexual abstinence
		n=164	
4. Danaidussadeekul,	Thailand	Female, high school	Sexual abstinence: not having vaginal, oral, and sexual intercourse
2004 ⁽³³⁾		students/ vocational	with males.
		college, n=377	
5. Lefkowitz, 2004 ⁽¹²⁾	NSA	Age 25 or younger,	Sexual abstinence: refraining from vaginal and anal intercourse
		n=2205	

Table 1 (cont.) Sexual abstinence definitions

First author, Year	Country	Sample characteristics,	Definitions
		Sample size	
6. Huglund, 2006 ⁽¹⁹⁾	USA	15-18 years, high school, abstinent African	Sexual abstinence: refraining from vaginal intercourse. Sexual abstinence as a self-determined choice and lack of opportunity
		American female adolescents. n=14	to have sex did not make one abstinent
7. Ott, 2006 ⁽¹⁰⁾	NSA	Aged 11–17 years	Sexual abstinence: choosing not to have sex.
		primary care clinics, n=42	Sexual abstinence as part of a normal developmental continuum.
			"Waiting period," and the onset of sex, is part of a natural
			developmental progression to adulthood.
			- Males and females may need different messages and a different set
			of skills to negotiate abstinence.
8. Bersamin, 2006 ⁽¹³⁾	NSA	Aged 16.3 years	Sexual abstinence:
		Latinos, African	- 89% of adolescents defined abstinent as refraining from vaginal
		Americans, Asian-	intercourse.
		Americans, European-	- 86% in reference to refraining from anal sex,
		Americans, average n=925	- 67% in reference to refraining from oral sex.
			- Virgin may not include oral and anal sex
9. Kaljee, 2007 ⁽²²⁾	Vietnam	15-20 years,	Sexual abstinence: refraining from vaginal, anal, and oral intercourse."
		159 youths, 76 parents,	Sexual abstinence until marriage and faithfulness after marriage
		36 leaders, and 36	
		healthcare providers	

Table 1 (cont.) Sexual abstinence definitions

First author, Year	Country	Sample characteristics,	Definitions
		Sample size	
10. Morrison-Beedy,	USA	14-19 years, African	Sexual abstinence: worth doing, realizing her life goals, benefits to
2008 ⁽²³⁾		American (88%) girls,	avoid adverse outcomes; physical and emotional negative outcomes.
		n=24	
11. Abbott, 2008 ⁽²¹⁾	NSA	16-18 years, mean age	Personal choice and commitment
		=17.2 years, n=103	
		60 sexually abstinent	
		43 sexually active	
12. Byers, 2009 ⁽²⁷⁾	Canada	university students, 18-	Sexual abstinence: no genital stimulation, no deep kissing
		28 years, n=298	
13. Panurat, 2009 ⁽³⁴⁾	Thailand	14-19 years, female	Sexual abstinence: an act of female adolescents omitting vaginal, oral,
		students from high	and anal sexual intercourse with males during the school year.
		schools, n=1,360	
14. Rasberry, 2009 ⁽¹⁸⁾	USA	College undergraduate	1. Primary abstainers were those who responded that they had
		men and women,	1) never had vaginal sex and 2) made a conscious commitment to
		n=1,133	abstinence (defined as a "conscious commitment to refrain from
			sexual activity for an extended period of time").
			2. Secondary abstainers were those who had 1) engaged in vaginal
			sex and 2) reported being currently committed to abstinence.
			3. non-abstainers were participants who had either 1) never
			committed to abstinence or 2) reported they were not currently
			committed to abstinence.

Table 1 (cont.) Sexual abstinence definitions

First author, Year	Country	Sample characteristics,	Definitions
		Sample size	
15. Suthinphuak, 2010 ⁽³⁵⁾	Thailand	13-19 years female, n=420	Sexual abstinence: an act of female adolescents refraining from penile-vaginal intercourse with males before married.
16. Supamethaporn,	Thailand	18-23 years, female	Sexual Abstinence:
2010 ⁽²⁰⁾		adolescents, n=19	- refraining from having sexual intercourse for the first time,
			- response in perception and management of a sexually abstinent
			lifestyle.
			- the means for life goals
17. Dunsmoore,	NSA	College students, n=1410	Present sexual activity status: (Choose only one)
2010 ⁽²⁸⁾			Virgin (I have never engaged in sexual intercourse before)
			Sexually Active (I had sex in the past and am not committed to
			abstinence)
			Presently Abstinent (I had sex in the past and have recommitted to
			remaining abstinent until a specified time in the future).
17. Dunsmoore,	NSA	College students, n=1410	Present sexual activity status: (Choose only one)
2010 ⁽²⁸⁾			Virgin (I have never engaged in sexual intercourse before)
			Sexually Active (I had sex in the past and am not committed to
			abstinence)
			Presently Abstinent (I had sex in the past and have recommitted to
			remaining abstinent until a specified time in the future).

Table 1 (cont.) Sexual abstinence definitions

First author, Year	Country	Sample characteristics,	Definitions
		Sample size	
18. Buhi, 2011 ⁽³⁰⁾	USA	7 th -8 th grades n=998	Sexual abstinence: remain sexually abstinent until marriage. Sexual abstinence and sexual activity in not opposing constructs
19. Hans, 2011 ⁽²⁵⁾	USA	Ages 20-24, 454	Sexual abstinence: refraining from sexual activities that involve vaginal,
		university and 126	anal intercourse.
		sexuality professionals	Virginity is lost by engaging in penile-vaginal intercourse
20. Hensel, 2011 ⁽²⁴⁾	NSA	14–17 years, female,	Sexual abstinence: absence of any vaginal and anal intercourse
		n=387	
21. Aderemi, 2013 ⁽³⁶⁾	Nigeria,	12–19 years, male and	Sexual abstinence: refraining from vaginal and anal sex, including
		female n=300	kissing.
22. Mokwena, 2016 ⁽¹¹⁾	South	15-18 years, male and	Sexual abstinence: not having sex.
	Africa	female, secondary	Abstinence as protection from sexually infectious diseases and
		school, n=50	unwanted pregnancy, which ensures a better future.
			Promoters of Abstinence included parents, teachers, guardians, and
			the Christian religion.
			Community as a resource for the promotion of Abstinence
23. Barnett, 2017 ⁽¹⁴⁾	NSA	18-29 years, universities,	Sexual abstinence: refraining from vaginal and anal sex.
		n=956	virginity: having sex but not including orgasm
24. Piriyasart, 2018 ⁽⁸⁾	Thailand	12-14 years old, an	A prohibition of "not having any kind of sexual relationships with
		Islamic school, n=24	males or anyone."
25. Wannarit, 2021 ⁽³⁷⁾	Thailand	2 Universities, 17-19 years	Sexual abstinence: refraining from oral, vaginal, and anal sex until
		n=660	graduation from high school

Factors influencing sexual abstinence

Twenty-three studies were conducted in several countries; the USA, Canada, Sub Sahara, Kenya, Nigeria, Puerto Rico, South Africa, Indonesia, Nepal, Taiwan, Vietnam, and Thailand. 58% of studies demonstrated in America, 27% were conducted in Asia, and 15% were studied in Africa.

Factors influencing sexual abstinence found in the literature were grouped as follows: 1) personal factors, 2) commitment, 3) self-efficacy, 4) benefits and motivation, 5) barriers, 6) parenting, 7) peers, and 8) promotion of abstinence.

1. Personal factors

The factor is proposed to have both direct and indirect effects on sexual abstinence. Many studies identified beliefs and positive attitudes toward sexual abstinence^(10,18,20,35,38-41). The factor includes younger age, gender status, being female, early physical maturation (13 years), not having a boyfriend, and relationship quality with a boyfriend^(42,43) Socio-cultural factors include belief and religious values and perceived norms of sexual abstinence^(10,18,20,21,35).

2. Commitment

Studies provided a commitment or intention to remain abstinent as an antecedent factor of sexual abstinence^(26,30,44), attitude toward sexual abstinence and motivations for sexual abstinence^(45,46), and commitment to sexual abstinence. Studies provided information on the commitment to a plan of sexual abstinence very close to the intention to sexual abstinence. Commitment to a plan of sexual abstinence is composed of female adolescents with an intention and strategies to carry out sexual abstinence during their school years⁽⁴⁷⁾. Intention includes a promise, an aim, or a plan of sexual abstinence. A student who intends to perform sexual abstinence will set goals for life. Then, finding strategies such as finding knowledge and method of sexual abstinence and participation in an abstinence education program or standing firm in adolescent decisions and avoiding people, places, and things, that encourage sexual activity.

3. Self-efficacy

The majority of literature provided self-efficacy as a significant construct for sexual abstinence during school years^(47,48). Adolescents viewed sexual abstinence as under their control, planning to remain abstinent and maintaining sexual abstinence even under pressure situations. Studies examined self-efficacy as two separate constructs: confidence in overcoming

sexual abstinence barriers and perceived self-efficacy of sexual abstinence as confidence in maintaining sexual abstinence.

4. Benefits

Many studies identified the perceived benefits of sexual abstinence during school. Perceived negative consequences of sexual intercourse: severity of AIDS, Diseases, STIs, and pregnancy and fear of bad outcomes were mainly shown^(11,39). The perceived benefits of sexual abstinence during school and perceived negative consequences of sexual intercourse perceived behavior control were related to commitment to sexual abstinence and sexual abstinence during school years⁽³⁹⁾. Additionally, the reasons and motivations for remaining sexual abstinence were not feeling ready for sex, waiting for the right person, waiting until they are older, waiting until marriage, and abstinence ensuring a better future.

5. Barriers

Studies focused on barriers to sexual abstinence during school. Female adolescents were more likely to face barriers to sexual abstinence compared to the male adolescent sample⁽¹¹⁾. Overall, barriers were boyfriend pressure and risk situation as being in a private area with a male that encouraged sexual activity, drinking alcohol or doing drugs, listening to music, watching movies, reading books or magazines, or hanging out with people that inspired sex. For example, boyfriend pressure can obstruct the practice of sexual abstinence; girls know they might lose their boyfriends if they maintain sexual abstinence. The perceived barrier to sexual abstinence was related to commitment to sexual Abstinence and sexual Abstinence in the negative direction^(37,47).

6. Parenting

Parents provide support and modelling to adolescents. Primary sources of interpersonal factors on sexual abstinence are parents. Parents have a role in raising their children by promoting sexual abstinence from adolescence. The literature showed parental influence on sexual abstinence in various dimensions; support, monitoring, love, and connectedness^(20,37,49). Decision-making in sexual abstinence was related to adolescents' beliefs, values, and future goals provided by their parents. Studies also provided child-rearing related to sexual abstinence composed of teaching and lecturing about sexual abstinence; parents used many techniques to teach children the skill of sexual abstinence, including the consequence of not remaining abstinent. Recognizing parental love helps female adolescents know that the parent is the person who wishes them life success^(20,44,47).

7. Peers

Studies provided beliefs and norms as friends or best friend expectations in performing sexual abstinence^(18,35,41). Peer or close friends influencing sexual abstinence was a very influential factor^(34,37,38). Because adolescents are sensitive to the wishes, examples, and praise of others, they are liable to attempt behaviors for which they will be socially reinforced. Best friend having had sex has a negative direct effect on sexual abstinence^(35,47).

8. Promotion of abstinence

The promotion of abstinence is composed of promoter and promoting strategies. Mokewena provided a resource for the promotion of abstinence was the community⁽¹¹⁾. Supporters of Abstinence included parents, teachers, guardians, and the Christian religion. Promoting sexual abstinence is composed of teaching knowledge of sexual abstinence, the decision not to have sex, and association with the prevention of HIV, STIs, and unwanted pregnancies, sexual abstinence ensures a better future⁽⁵⁰⁾.

Literatures emphasize commitment or intention, self-efficacy, benefits and motivation, and barriers as behavior-specific cognitions factors that support adolescents' decision to adopt sexual abstinence as health-promoting behavior at all stages of adolescence. The interpersonal influence of parenting, peers, and sexual abstinence promotion was related to sexual abstinence among early and middle adolescents. Thus, nurses can adapt all of these factors to promote sexual abstinence.

Discussions

This review demonstrates definitions of sexual abstinence and factors. The definition of sexual abstinence continually changes and differs according to the perceptions of adolescents in each age range. In this study, there were 43 articles, 25 of which addressed the meaning of sexual abstinence behavior. Nine studies of this group included university students, while only one was conducted from a healthcare provider's point of view. The prevalence of sexual intercourse among Thai students reaches 30%⁽³⁷⁾. These findings were lower than those in Western studies, which were 41.62%⁽⁵¹⁾.

Factors related to sexual abstinence are personal factors, commitment, benefits and motivation, barriers, parenting, peers, and promotion of abstinence. In a group of young adolescents, there were interpersonal factors such as parental support, peers, and the promotion of sexual abstinence ⁽⁴⁴⁾. In the older group, it depended on personal factors, efficacy, benefits, and peer influence. Sexual abstinence was reported to be influenced by

peers, and adolescents are more likely to engage in risky sexual behavior, supported by Amare's study, which found that factors associated with risky sexual behavior were peer pressure and drinking alcohol⁽⁵¹⁾. Further studies are needed to provide more insight into the role of modifying and interpersonal factors in shaping adolescents' decision-making in sexual abstinence and style, especially in Thailand.

Nursing implications

Nurses are crucial in promoting sexual abstinence in schools, clinics, and the community, especially in the era of spreading STD infections. Nurses can promote sexual abstinence by applying the definition of sexual abstinence, including 1) Refraining from sexual intercourse and 2) the right time, depending on the purpose of the individual. Various definitions of sexual abstinence may allow adolescents to engage in sexual activities while still maintaining their sense of being sexually abstinent. Incomplete descriptions of abstinence might cause adolescents to put themselves at risk by engaging in sexual activities.

Nurses have to work with parents and teachers in school clinics to promote sexual abstinence education and counselling. Nurses also have to find adequate knowledge to reflect health care providers to use this knowledge to encourage sexual abstinence. CDC recommended that school nurses support sexual health education to be accessible, inclusive, developmentally, and culturally appropriate for all students⁽⁴⁹⁾. Nurses should collaborate with multidisciplinary, which requires knowledge of health and development in the population, incidence, and prevalence of pregnancy, and disease prevention. Besides, school and community nurses must manage to promote sexual abstinence projects and should be able to plan, implement, and evaluate promoting sexual abstinence interventions and projects ⁽⁵³⁾.

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