

# The Effect of Flashcard Education on Premarital Sexual Behavior in Adolescent

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## ABSTRACT

**Background:** Adolescent who experience puberty in their bodies appear sex hormones that begin to work, resulting in a sense of attraction to the opposite sex. Premarital sex is a behavior that is carried out based on sexual desire in adolescents. Adolescent knowledge and sources of information received by adolescents are important points in efforts to prevent premarital sexual behavior. The preventive efforts can be done by providing education about the right information through various methods and media. One of them is education using flashcard media.

**Purpose:** The purpose of this study was to analyze the effect of education on premarital sexual behavior using flashcard media.

**Methods:** This study design was a quasi-experimental pre-test-post test design with control group. The number of samples were 60 which were divided into two groups and the inclusion criteria being adolescents aged 15-17 years and were or had been dating. The intervention group received treatment in the form of pre-marital sexual behavior education with flashcard media. The control group received pre-marital sexual behavior education using the lecture method. Before and after the intervention, researchers conducted a pretest and posttest using a pre-marital sexual behavior questionnaire and data were analyzed using the Wilcoxon test.

**Results:** There was a difference in the average score of premarital sexual behavior in the intervention group after receiving flashcard education intervention with p value = 0.010 (p < 0.05).

**Conclusion:** Education using flashcard affects premarital sexual behavior in adolescents. Preventive and promotive efforts of premarital sexual behavior in adolescents using flashcard media are an alternative for nurses in providing counseling.

**Keywords:** adolescent, flashcard, premarital sexual

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**BACKGROUND**

A teenager will experience both physical, psychological, and emotional changes also puberty and sexual maturity. Adolescence was a very beautiful time when they began to have a sense of affection for the opposite sex. Interest in the opposite sex is influenced by the presence of sex hormones that begin to work at the time of adolescent puberty. In Indonesia in 2017 it was filled by 25% of the population adolescent age between 10 – 24 years. This will be one of the demographic bonuses in the coming years, but this situation also has a negative impact because of the high probability of reproductive problems in adolescents, including sexual behavior, pre-marital sex (Syafitriani, Trihandini, & Irfandi, 2022).

Sexual behavior is a form of action carried out by someone supported by sexual desire with the opposite sex or the same sex can be the act of dating, flirting, and physical relationships (Andriani & Suhrawardi, 2022). In recent years, there has been a global rise in pre-sexual behavior among adolescents, in the western world. In Southeast Asia, teenagers who have sex before marriage are 37.9% in Malaysia, 11.3% in Brunei Darussalam, and 24.1% in Thailand (Syafitriani, Trihandini, & Irfandi, 2022). In Indonesia about 4.5% of teenagers and 0.7% of teenage girls aged 15-19, have having pre-marital sex. On average, they start dating at the age of 15-17. Approximately 34.5% of adolescents and 33.3% of adolescent girls start dating when they are under 15 years of age. It's a risk to them because at that age they're worried they don't have adequate life skills that can lead to unhealthy dating behavior (Andriani & Suhrawardi, 2022).

The negative impact caused by sexual behavior is divided into four categories: psychological, social, physiological, such as pregnancy, and physical impacts such as infections with sexually transmitted diseases (Andriani & Suhrawardi, 2022). Premarital sex behavior can be dangerous to both herself and her family, such as unwanted pregnancies, abortions, sexually transmitted infectious diseases, and bribery of the family's good name as well as changing the public's view of her and the family as a disgrace to the family (Nadia, Lisviarose, & Ruspita, 2021).

Premarital sex behavior is influenced by several factors including media access, teacher role, perception, knowledge and virginity values (Ulfah, 2018). Another study concluded that the variables associated with meaningful sexual behavior in adolescents are the sources of information or media variables (Fitriwati & Meinarisa, 2022). Factors that cause teenagers to have sexual intercourse include dating status, low knowledge, exposure to pornography, and peer influence (Febriana & Pratiwi, 2022). Based on the results of the study, it can be concluded that the knowledge of adolescents and the sources of information received by adolescents are important points in the preventive efforts of the occurrence of premarital sexual behavior.

As far as preventive efforts are concerned, they can be done by educating adolescents about the right information through various methods. The methods and media of educating adolescents become a special challenge due to the growth and developmental stages of adolescents that are more mature than childhood and their ability to think more critically of something or situation. Flashcards are the choice of learning media for teenagers. According to the study, a study conducted by Yulia & Saadah (2022) used flashcard media effectively to improve teenage students' understanding of Sex education (Yulia & Saadah, 2022). The study conducted by Yulia & Saadah (2022) explained that the flashcard used consists of several points, namely physical health, sexual autonomy, and sexual behavior without involving teenagers to express opinions on related topics. While the novelty in this study the contents of the flashcard focus on preventing pre-merital sexual behavior that must be done by teenagers and directing teenagers to provide opinions on each content of the flashcard.

The delivery of health education with a flash card media can be an option for the delivery of educational reproductive health in the form of picture and written cards. Applying the learning model learning by doing can improve adolescent understanding of learning when compared to the method of giving lectures.

Based on the above researchers are interested in conducting research on health education interventions for adolescents about premarital sexual behavior using flashcard media.

**OBJECTIVE**

The research aims to find out the effect of education on pre-marital sexual behavior using flashcard media in adolescent.

**METHOD**

The study was a quantitative study with a quasi-experimental design pre test-post test with control group. The research was done at one of the senior high schools in Bantul district Yogyakarta Province. The research was conducted between April 2023 and October 2023. The total sample in this study is 60 samples divided into two groups, the control group and the intervention group with the inclusion criteria are teenagers aged 15-17 years old and are or have been dating. The intervention groups are treated with pre-marital sexual behavior prevention education using flashcard media, while the control groups receive pre-marital sexual behaviour education treatment with lecture methods. Before and after the intervention in each group, the researchers performed pretests and posttests on pre-marital sexual behavior. The researcher did not make observations on the research subjects before giving the pre-test treatment. The pre-marital sexual behavior questionnaire has 27 question items consisting of 15 favorable items and 12 unfavorable items. On each question item there are 4 choices of answers for favorable namely 4 (very frequently), 3 (sometimes), 2 (rarely), 1 (never) and 4 answers to unfavourable ones namely 1 (very frequently), 2 (sometimes), 3 (rarely), 4 (never). The premarital sexual behavior that was assessed included behavior carried out by adolescents when meeting close friends, including hugging, kissing, holding hands, holding their partner's genitals, and sexual intercourse.

The data analysis used was univariate analysis using frequency distribution and bivariate analysis using Wilcoxon tests because the data is not distributed normally.

Standard operational procedure educational intervention using flashcard media is as follows (1) Researchers divide respondents into groups with the number of respondents in a group is 8-10 people (2) Researchers provide rules in education using flash card: (a). One group gets 1 package of flash cards consisting of 11 sheets (b). Respondents sit round to facilitate the discussion, (c). Each respondent is given the opportunity to choose one card, (d). Researchers ask questions to participants according to the instructions of the question (e). Every respondent has been given the chance to answer questions and analyze more detailed images on each card selected (f). The researcher ensures all respondents have chosen one card. When there are cards that have not been discussed because the sample number is less than the card number, then the researchers are entitled to re-determine randomly respondents who will get the card again. (g). Allowed to respondents discuss each other. at the end of the discussion, the group representatives present the conclusions of this educational activity.

This research has obtained the approval of the research ethics committee of Universitas Jenderal Achmad Yani Yogyakarta with the number SKep/171/KEP/V/2023.

## RESULTS

### Respondent Characteristics

The respondent characteristics are shown in table 1.

**Table 1.** Frequency Distribution of Respondent Characteristics

Characteristics	Control Group		Intervention Group	
	f	%	f	%
Age				
17 years	26	86,7	27	90
18 years	4	13,3	3	10
Total	30	100	30	100
Gender				
Male	9	30	12	40
Female	21	70	18	60
Total	30	100	30	100

Table 1 shows that based on the results of the study in both groups, the majority of respondents were female, 60% in the intervention group and 70% in the control group.

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**Table 3.** Mean Differences Before and After Intervention

Group	Pretest	Posttest	<i>p value</i>
	Mean±SD	Mean±SD	
Control	46,63±12,38	46,63±12,38	0,984
Intervention	42,57±14,01	38,63±11,08	0,010

The researchers conducted a normality test of data using Shapiro Wilk because the sample number was less than 50 and the results showed that the data was not distributed normally so the analysis of the test data was different. The Wilcoxon test results indicated that *p value* was 0.010 (< 0.05) in the intervention group and *p value* 0.984 (> 0.05) in the control group. Based on the results, it can be concluded that there is an influence of Flashcard education on premarital sexual behavior in adolescents.

## DISCUSSION

### The Effect of Flashcard Education on Premarital Sexual Behavior in Adolescents

The results of the study showed that the average sex behavior in the intervention group decreased after receiving education using flashcard media, whereas in the control group there was no change in the average sexual behavior. Behavior that experienced a decrease in value after receiving intervention included kissing, holding their partner's genitals and sexual intercourse. According to a previous study, pre-sexual behavior in the risk category had a decrease in the group of respondents who received educational intervention (Sebayang & Saragih, 2020).

There is an effect of education through flashcards on pre-sexual behavior in adolescents. In line with the previous study that the use of flashcard media was effective in improving the understanding of teenage students about sex education (Yulia & Saadah, 2022). Flashcards can enhance knowledge and reduce the anxiety of primigravida mothers (Baska, Madjid, & Idjradinata, 2020). Applying the learning model learning by doing can improve adolescent understanding of learning when compared to the method of giving lectures. The delivery of health education with a flash card media can be an option for the delivery of educational reproductive health in the form of photographic and written cards.

The use of visual media in the delivery of reproductive health education material will be much more effective and will be more remembered by adolescents than delivered simply by lectures. Flash card activity produced linked verbal and visual data that was more fluid, cohesive, and diverse. It also upended normative narratives of illnesses, allowing participants to consider how their social representations were formed and influenced. The flash card activity was well accepted, but when time or language comprehension was restricted, there were problems with viability (Mapp, 2017).

Flashcards are an effective way to be used in the teaching and learning process, as they create enjoyable learning, give meaningful experiences, develop critical thinking skills in life as well as social skills. Flashcards make it easier for educators to provide impressive and engaging little pieces of information with material that is affordable and readily available in textbooks and magazines. It can also save time and energy; attract attention; clarify problems in various fields, and used by all ages. Media flashcards can also create enjoyable learning, give meaningful experiences, develop critical thinking skills in life and social skills (Baska, Madjid, & Idjradinata, 2020). Flashcard media has an advantage as a means of health promotion due to its small size and practicality in terms of manufacture and use (Aisyah, Ridwan, Huda, Faisol, & Muawanah, 2022). Flashcards, which contain pictures and short words, are easy to remember. Children are more actively involved in playing and guessing with flashcard media, which makes it more enjoyable to use (Sari, Christiono, Fitriani, & Julian, 2023). Flash card media supports students' critical thinking and study skills. This is the motivation behind students' bold talking and their desire to ask and respond to questions. In addition, the appealing images on this flashcard medium may draw in students and prevent them from becoming disinterested in their studies (Munthe & Sitinjak, 2019).

## **CONCLUSION**

Education using flashcard affects premarital sexual behavior in adolescents. Evaluation of the impact of the intervention has not been carried out periodically over a certain period of time. Periodic evaluations are carried out to ensure that the intervention provided needs to be repeated or not. Preventive and promotive efforts of premarital sexual behavior in adolescents using flashcard media are an alternative for nurses in providing counseling.

## **CONFLICTS OF INTEREST**

The researchers have no conflict of interest with anyone.

## **REFERENCES**

- Aisyah, N., Ridwan, R., Huda, H., Faisol, W., & Muawanah, H. (2022). Effectiveness of flash card media to improve early childhood hijaiyah letter recognition. *Jurnal Obesei*, 6(4).
- Andriani, R., & Suhrawardi, S. (2022). Hubungan tingkat pengetahuan dan sikap remaja dengan perilaku seksual pranikah. *Jurnal Inovasi Penelitian*, 2(10).
- Baska, D. Y., Madjid, T. H., & Idjradinata, P. S. (2020). The effect of health education with flashcard media on improvement of knowledge and reduction of anxiety degree in adolescents primigravida. *Global Medical and Health Communication*, 8(1).
- Febriana, E. W., & Pratiwi, T. I. (2022). Faktor penyebab dan upaya penanganan perilaku seksual pranikah pada remaja. *Jurnal BK Unesa*, 12(2).
- Fitriwati, C. I., & Meinarisa. (2022). Faktor-faktor yang mempengaruhi perilaku seksual pranikah pada remaja di MAN 1 Bungo. *Jurnal Kesmas Jamni*, 6(2).
- Mapp, F. (2017). Reflections on using a flash card activity for studying socila representations of sexually transmitted infection. *International Journal of Qualitative Methods*, 16(1).

- Munthe, A. P., & Sitinjak, J. V. (2019). Manfaat Serta Kendala Menerapkan Flashcard Pada Pelajaran Membaca Permulaan. *Jurnal Dinamika Pendidikan*. *Jurnal Dinamika Pendidikan*, 11(3).
- Nadia, F., Lisviarose, & Ruspita, R. (2021). Pendidikan kesehatan dalam pencegahan seks pranikah pada remaja di SMK Migas Teknologi Riau. *Dinamisia*, 5(3).
- Sari, N., Christiono, S., Fitriani, S., & Julian, I. T. (2023). Improving Children's knowledge about when teeth erupt with the use of flashcards. *Gandrung*, 4(2).
- Sebayang, W. B., & Saragih, G. (2020). Pengaruh edukasi seksual terhadap perilaku seks pranikah pada generasi milenial. *Journal Health of Studies*, 4(1).
- Syafitriani, D., Trihandini, I., & Irfandi, J. (2022). Determinan perilaku seks pranikah pada remaja (15-24 tahun) di Indonesia (analisis SDKI 2017). *Jurnal Keskomp*, 8(2), 205-218.
- Ulfah, M. (2018). Faktor-faktor yang mempengaruhi perilaku seksual pranikah pada remaja SMP dan SMA di wilayah eks-Kota Administratif Cilacap. *Medisains*, 16(3).
- Yulia, S., & Saadah, B. (2022). Efektivitas media flashcard untuk meningkatkan pemahaman sex education pada siswa. *Research and Development Journal of Education*, 8(2).