



The Effect of Counseling Using the "Peri Book" Media on Interest in Healthy Pregnancy Postponement Among Premarital Women

Jusmawati^a✉, Dhea Sabrina Permata Hati^b, Kartika Asli Hasmi^a

^aMidwifery Department, STIKES Yahya Bima, Indonesia.

^bMidwifery Department, Abdi Nusantara College of Health Sciences, Indonesia.

Abstract

Background: Pregnancy postponement requires proper preparation among prospective mothers and deserves serious attention, as it affects maternal health, fetal growth and development, the delivery process, and helps reduce the risk of abnormal birth outcomes. To examine the effect of counseling using the Peri Book media on the interest in healthy pregnancy postponement among premarital women at Kalibaru Public Health Center, North Jakarta, in 2023. **Method:** This study used a quasi-experimental design with a one-group pre-post test design. The population consisted of all prospective brides who visited the health center during the study period, totaling 15 participants, selected using total sampling. Primary data were collected through observation and analyzed using the Wilcoxon test. **Results:** The results of the Wilcoxon statistical test showed that counseling using the Peri Book media had a significant effect on the interest in healthy pregnancy postponement among premarital women at Kalibaru Public Health Center, North Jakarta, in 2023, with a p-value of 0.001 (< 0.005). **Conclusion:** Health workers are expected to provide additional information and actively disseminate or deliver education during health counseling sessions regarding pregnancy postponement in preparation for a healthy pregnancy. This is important in preventing complications and reducing the risks associated with problematic pregnancies.

Keywords: Giving Sari Vigna Radiate, Postpartum Mothers, Breast Milk Production.

1. Introduction

The prevalence of child marriage in Indonesia has decreased by more than half in recent years. However, it remains one of the highest in the East Asia and Pacific region (BPS, 2021). In line with the various efforts undertaken by the government to reduce early marriage rates, the National Population and Family Planning Agency (BKKBN) has actively conducted campaigns. Nevertheless, these efforts have not yet been optimal. Through the GenRe (Planned Generation) program, it is expected that the rate of early marriage in Indonesia—defined as below 21 years for females and below 25 years for males—can be reduced (BKKBN, 2020).

Premarital preparation in Indonesia is still limited to providing tetanus toxoid (TT) immunization and does not yet include comprehensive education on reproductive health. From the perspective of health services, there is a lack of professional educators, and the limited knowledge of prospective couples often leads to the absence of pregnancy postponement planning. In fact, pregnancy under the age of 20 may lead to various complications during childbirth. Babies born to mothers under 20 years old face a 50% higher risk of stillbirth or death within the first few weeks of life compared to those born to mothers aged 20–29. Additionally, babies born to mothers under 20 years old are more likely to have low birth weight with long-term health implications (Sri Astuti et al., 2017).

One of the indicators used to assess maternal health status in a region is the maternal mortality rate (MMR). According to the World Health Organization (WHO), there were approximately 303,000 maternal deaths worldwide in 2020. In the ASEAN region, the MMR was 235 per 100,000 live births (ASEAN Secretariat, 2020).

Data from the Indonesian Ministry of Health in 2022 reported 3,986 maternal deaths, a decrease from 7,389 cases in 2021. Maternal deaths were primarily caused by inadequate pregnancy preparedness or pregnancies occurring at high-risk ages—under 20 or over 35—as well as poor early detection of pregnancy complications such as hemorrhage, gestational hypertension, and anemia, all of which can result in maternal mortality (Kemenkes, 2022).

Pregnancy postponement should involve proper preparation and is a crucial concern, as it significantly affects maternal health, fetal growth and development, the birthing process, and helps reduce the risk of fetal abnormalities. A healthy pregnancy is supported by preconception health checkups. Several factors influence the preparedness of prospective mothers or brides for a healthy pregnancy, including knowledge, education level, and economic status or family income (Pudjiastuti, 2018).

Education can be provided through counseling methods using the Peri Book as media. The Peri Book or bride's pocket book (available in both printed and digital formats) is a health promotion tool designed in an illustrated booklet format to convey information through simple language and visuals in an engaging manner (Srimiyati, 2020). Its advantages include being suitable for self-learning, easily accessible at any time, shareable, visually engaging, practical, and straightforward (Srimiyati, 2020). According to Putri (2023), aside from being practical, attractive, and portable, the Peri Book is also more affordable than audiovisual media.

According to data from the Jakarta Provincial Health Office in 2021, only 98.90% of prospective brides received healthcare services, indicating that not all couples are fully covered, which can affect their pregnancy preparedness (Dinkes DKI Jakarta, 2021). Meanwhile, data from the Cilincing Subdistrict Health Center showed that there were 4,606 prospective brides in 2021, increasing slightly by 0.002% in 2022 to 4,617, with 644 (13.95%) identified as having risk factors.

In Puskesmas Kalibaru, Cilincing, as of September 2023, there were 18 cases of pregnancy outside of marriage among girls under 18 years of age, and 52 prospective brides were aged under 20. Interviews conducted from October 23–26, 2023, at Puskesmas Kalibaru with six respondents under 20 years old revealed that five of them had no interest in healthy pregnancy postponement. Based on these findings, the researcher was motivated to conduct a study titled: "The Effect of Counseling Using the Peri Book Media on Interest in Healthy Pregnancy Postponement Among Premarital Women at Kalibaru Public Health Center, North Jakarta, in 2023."

2. Materials and Methods

This research is a quantitative study using a quasi-experimental design with a one-group pre-post test design. The study was conducted in the working area of the Community Health Center (Puskesmas) at the sub-district level from December 17 to 31, 2023. The population in this study consisted of all prospective brides and grooms who visited the Puskesmas during the study period, totaling 15 participants, selected using total sampling. The data collected included both primary and secondary data. Data analysis was performed through univariate and bivariate analyses, using the Wilcoxon signed-rank test.

3. Results

3.1 Univariate Analysis

Table 1 Average interest in delaying pregnancy before counselling using fairy books Year 2023 (N=15)

Group	Mean	Min	Max	Std. Deviation
Pre	60,5533	33,30	83,30	13,1671
Post	88,8867	66,70	100	11,6417

Based on table 1, data was obtained that before being given catin counseling using fairy books to 15 respondents, it was known that the average interest in postponing pregnancy was 60.5533 with a minimum of 33.30 and a maximum of 83.30 and a standard deviation of 13.1671, after being given catin counseling using fairy books was 88.8867 with a minimum of 66.70 and a maximum of 100 and a standard deviation of 11.6417.

Table 2. Data Normality Test (Shapiro Wilk)

Variable	Shapiro Wilk	
	P	Normality
Average interest in postponing pregnancy before being given counseling using fairy books	0,762	Normal distribution
Average interest in postponing pregnancy after being given counseling using fairy books	0,008	Not normally distributed

*Paired Sample T Test

Based on Table 2 above, data was obtained that the data normality test with Shapiro Wilk the significance value of Sig. on the interest of postponing pregnancy before being given counseling using a fairy book was $0.762 > 0.05$ (normally distributed)

and after $0.006 < 0.05$ which means that it was not normally distributed, so the Wilcoxon test (2-related sample) was carried out.

3.2 Bivariate Analysis

Bivariate analysis was carried out to determine the effect of counseling with fairy book media on interest in healthy pregnancy delay in women at the Kalibaru Health Center, North Jakarta in 2023, which can be seen in table 3 as follows:

Table 3. The effect of counseling with fairy book media on interest in healthy pregnancy delay in women at the Kalibaru Health Center, North Jakarta in 2023

Variabel	Mean	N	Std. Deviasi	P Value
Pre	60,5533	15	13,1671	0,001
Post	88,8867		11,6417	

*Uji wilcoxon

Based on Table 3 above, data was obtained that fairy books are very effective in the interest of healthy pregnancy delay in women at the Kalibaru Village Health Center, Cilicing, North Jakarta Year, from the Wilcoxon test with a significance value of < 0.05 , which is 0.001, so H_0 was rejected so that it was concluded that there was an influence of counseling with fairy book media on interest in healthy pregnancy delay in women at the Kalibaru Health Center, North Jakarta in 2023. There was an increase in pregnancy delays known to mean delays before (60.5%) and average delays after being given counseling using fairy books (88.8%).

4. Discussion

4.1. Average Interest in Pregnancy Postponement Before Counseling Using the Peri Book in 2023

Based on the research findings, it was found that before counseling using the Peri Book was given to 15 respondents, the average interest in pregnancy postponement was 60.5533, with a minimum of 33.30, maximum of 83.30, and a standard deviation of 13.1671.

Health communication media refers to all means or efforts to convey messages or information from the communicator—whether through print media (e.g., Peri Book, magazines, newspapers, leaflets, posters, flip charts), electronic media, or outdoor media—so that the knowledge of the target audience increases, ultimately leading to positive behavioral changes regarding health (Waryana, 2018).

In line with Kusumawati's (2023) study, McNemar's test showed a significance value of 0.001 in the experimental group, indicating a significant difference before and after the intervention, whereas the control group showed a significance of 0.424, indicating no significant difference. These findings suggest that the Peri Book on reproductive health and preconception screening positively influenced the attitudes of prospective brides toward healthy pregnancy preparation, with the average knowledge level before the intervention being 45% (low).

The researcher assumes that the lack of interest in pregnancy postponement is due to limited information regarding reproductive health, leading to poor understanding among respondents. Various factors may contribute to low interest in pregnancy postponement, including unwillingness to seek information and indifference to personal health in preparing for a healthy pregnancy. It is hoped that, based on the findings, prospective brides will be more encouraged to seek information about healthy pregnancy postponement as part of overall pregnancy preparation.

4.2. Average Interest in Pregnancy Postponement After Counseling Using the Peri Book Among Women

After receiving counseling using the Peri Book, the average interest in pregnancy postponement among 15 respondents was 88.8867, with a minimum score of 66.70, maximum score of 100, and a standard deviation of 11.6417. These findings indicate an increase in interest in delaying pregnancy.

The Peri Book is an innovative form of printed learning media. It contains educational content in a physical format that is unique, attractive, and flexible. Its uniqueness lies in its small, full-color design, which encourages users to engage with the content. Its flexible nature makes it easy to carry and use anywhere and anytime. Some have described the term Peri Book as a combination of "book" and "leaflet," meaning it is a hybrid of a traditional book and a compact leaflet-sized booklet (BPTP Balitbangtan Jambi, 2021).

Pregnancy postponement requires thorough preparation and should be taken seriously, as it significantly influences maternal health, fetal growth and development, the labor process, and reduces the risk of abnormal birth outcomes. A healthy

pregnancy is supported by pre-pregnancy health check-ups. Several factors affect the readiness of prospective mothers or brides for a healthy pregnancy, including knowledge, education, and socioeconomic status (Pudjiastuti, 2018).

In line with Rhomatika's (2022) study, health education activities resulted in improved knowledge among adolescents, where prior to receiving the PASMARI Peri Book, 17 respondents (53%) were in the "low" knowledge category, and after the intervention, 27 respondents (84%) were in the "good" category. This demonstrates the significant benefits of such educational efforts.

The researcher assumes that counseling using the Peri Book has increased knowledge and awareness regarding healthy pregnancy preparation, helping women to become more informed and intentional about delaying pregnancy in a healthy manner. It is hoped that the Peri Book will serve as an effective information medium in both community-based and facility-based healthcare services for women.

4.3. The Effect of Counseling Using the Peri Book on Interest in Healthy Pregnancy Postponement Among Women

The results of this study indicate that the Peri Book is highly effective in increasing interest in healthy pregnancy postponement among women at the Kalibaru Health Center in Cilincing, North Jakarta. Based on the Wilcoxon signed-rank test, the significance value was 0.001 (< 0.05), meaning the null hypothesis (H_0) was rejected, and it was concluded that there is a significant effect of counseling using the Peri Book on interest in healthy pregnancy postponement. There was a notable increase in the average interest score from 60.5 (before counseling) to 88.8 (after counseling).

Educational efforts can be delivered through counseling using the Peri Book media. This pocketbook (available in both print and app formats) serves as a health promotion tool that conveys information through simple sentences and illustrations, presented in an engaging and accessible way (Srimiyati, 2020). The advantages of the Peri Book include its use for self-learning, portability, ease of sharing information, and overall practicality (Srimiyati, 2020). According to Putri (2023), in addition to being practical, attractive, and portable, the Peri Book is more cost-effective than audiovisual media.

Consistent with Putri's (2023) findings, there was a significant increase in knowledge and interest in pregnancy postponement after counseling using the Peri Book. The study found that the use of the Peri Book as an educational tool in the family planning program helped improve knowledge among women of reproductive age in Dusun Kragilan. The average pre- and post-test knowledge score was 16.50, with a p-value of 0.000, indicating a significant improvement following the intervention.

Similarly, Carti (2023) reported that premarital counseling using booklet media was very effective in increasing knowledge about pregnancy postponement, which is considered an essential aspect of preparing for a healthy and well-planned pregnancy ($p = 0.000$).

The researcher concludes that the Peri Book media significantly influences interest in healthy pregnancy postponement among women, as evidenced by the increase in average scores from 60.5533 before counseling to 88.8867 after counseling. This finding supports the use of the Peri Book as an educational reference, as it is not only effective but also engaging and easy to use.

5. Conclusions

This study demonstrates that counseling using the Peri Book media significantly increases interest in healthy pregnancy postponement among premarital women at Kalibaru Health Center, North Jakarta, in 2023. Prior to the intervention, participants showed a relatively low level of interest, with an average score of 60.55. After receiving counseling, the average interest score increased to 88.88, indicating a substantial improvement.

The Peri Book proved to be an effective educational medium—practical, engaging, and easy to understand—facilitating the delivery of reproductive health information. This supports its potential as a valuable tool in premarital counseling programs to prepare prospective brides for a healthy pregnancy and to reduce risks associated with early or unplanned pregnancies.

It is recommended that health workers incorporate the Peri Book into routine health education and counseling sessions both within and outside healthcare facilities to enhance awareness, knowledge, and interest in healthy pregnancy planning among women of reproductive age.

Conflict of Interest

There is no conflict of interest

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