

***E-Booklet* on Preparation Behavior for Exclusive Breastfeeding of Pregnant Women**

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ABSTRACT

Background: Factors that influence mothers in providing exclusive breastfeeding are lack of exposure to information about lactation management and lack of time for working mothers to provide breast feeding directly. One effort that can be made is providing counseling and demonstrations about lactation management using *e-booklets* to pregnant women to improve preparation for exclusive breastfeeding.

Purpose: To understand the influence of lactation management efforts on behavior in preparation providing exclusive breastfeeding to pregnant women.

Methods: This research uses a *quasi-experimental* research design with *pre-test and post-test with control group*. The number of samples in this study was all primigravida pregnant women in the second and third trimesters, totaling 56 people. Sampling used *total sampling technique*. Data analysis used the *Man-Whitney test*.

Results: The results of the analysis of the intervention group obtained a *p-value* of 0.000, so there was a significant difference in the pre-test and post-test on the behavior of pregnant women regarding lactation management in the intervention group. The results of the control group analysis obtained a *p-value* of 0.272 so there was no significant difference in the pre-test and post-test on the behavior of pregnant women regarding lactation management in the control group. The research results obtained a *p-value* of 0.005, so there was a significant difference in the average behavior of pregnant women between the intervention and control groups.

Conclusion: There is an influence of lactation management efforts on improving the behavior of pregnant women in preparation for exclusive breastfeeding.

Keywords: Exclusive Breastfeeding; Lactation Management; Behavior of Pregnant Women.

BACKGROUND

Exclusive breast feeding is breast feeding given to children from birth for six months, without addition and/or replacement with other foods or drinks. The Indonesian government has been programming exclusive breastfeeding since 2004, as stated in the Decree of the Minister of Health of the Republic of Indonesia Number 450/MENKES/SK/IV/2004 concerning Providing breast feeding (Sari et al., 2022). Breastfeeding is an important intervention in the survival and development of children. Breastfeeding protects babies from various infectious diseases and improves their immune system (WHO, 2023). The Indonesian Ministry of Health targets the exclusive breastfeeding indicator in 2024 to be 80 percent.

Factors that influence mothers in the process of giving exclusive breast feeding to their babies are the mother's lack of knowledge about the importance of exclusive breast feeding for babies, lack of time for working mothers to provide breast feeding directly, the absence of supporting facilities and infrastructure in the place where mothers work to express breast feeding (Meindari, 2020).

To deal with these factors, it is necessary to carry out early lactation management for pregnant women. Providing lactation management efforts to pregnant women begins in the second trimester of pregnancy by providing comprehensive information and breastfeeding classes, then continues in the third trimester to overcome problems with post-natal breastfeeding, early initiation of breastfeeding, exclusive breastfeeding, and breastfeeding until the age of 2 years (Avisa, Setyaningsih, & Yulman, 2022). This is important to do because preparation for breastfeeding during pregnancy supports the success of exclusive breastfeeding (Nuraini, 2021).

OBJECTIVE

This research was conducted to determine the effect of lactation management efforts on behavior in preparation exclusive breastfeeding for pregnant women.

METHODS

This research used a *quasi-experimental research design with pre-test and post-test with control group*. This research was conducted at the Kedungmundu Community Health Center and was carried out in January-February 2024. The sample used in this study was all primigravid pregnant women in the second and third trimesters at the Kedungmundu Community Health Center, totaling 56 people who were divided into 2 groups, namely 28 people in the intervention group and 28 people in the control group. The sampling technique used in this research was *total sampling*. The inclusion criteria for this study include; 1) Primigravid pregnant women in the second and third trimesters who undergo examinations at the Kedungmundu Community Health Center, 2) Willing to be research respondents until the end of the research, 3) Respondents are able to read, write and communicate well, 4) Respondents have an Android cellphone. The exclusion criteria for this study are; 1) Pregnant women with serious complications, 2) Pregnant women who refuse to be research respondents. The number of samples in this study was all primigravida pregnant women in the second and third trimesters, totaling 56 people. Sampling used total sampling technique. Data analysis used the Man-Whitney test.

RESULTS

The results of the analysis of respondent characteristics based on age show that in the intervention group, the youngest age was 18 years and the oldest was 37 years, each with 1 pregnant woman (3.6%), while in the control group the youngest age was 16 years and the oldest 32 years old, with 1 (3.6%) and 3 pregnant women (10.7%) respectively. Based on gestational age, the intervention group had the youngest gestational age of 16 weeks (II trimester) and the oldest 37 weeks (III trimester), each with 1 pregnant woman (3.6%). The control group had the youngest gestational age of 14 weeks (II trimester) and the oldest 39 weeks (III trimester), each with 1 pregnant woman (3.6%) (Table 1).

Table 1. Characteristics Based on Age and Gestational Age

Group	n	Mean	Median	Min	Max
Intervention					
Age	28	28.71	28.00	18	37
Gestational Age	28	29.96	32.00	16	38
Control					
Age	28	24.54	25.00	16	32
Gestational Age	28	26.64	26.00	14	39

Table 2. Behavior of Pregnant Women Regarding Lactation Management Before and After Treatment in the Intervention Group

Intervention	Central Tendency				
Group	Mean	Median	Min	Max	St. Deviation
(n = 28)					
<i>Pre-test</i>	11.71	12.00	9	15	1,630
<i>Post-test</i>	13.61	14.00	11	15	1,166

Based on this research, there are differences in the average value of pregnant women's behavior in lactation management efforts in the intervention group. The average value of pregnant women's behavior before being given counseling and demonstrations using *E-Booklet media* was 11.71. These results show that the average behavior of pregnant women before being given treatment was good. Meanwhile, after being given counseling and demonstrations using *E-Booklet media*, the average value of behavior for pregnant women increased to 13.61. These results show that all 28 pregnant women respondents had good behavior, with the average difference obtained being 1.9.

Table 3. Behavior of Pregnant Women Regarding Lactation Management After carrying out *the pretest* and *posttest* in the control group

Group Control (n = 28)	Central Tendency				St. Deviation
	Mean	Median	Min	Max	
<i>Pre-test</i>	12.11	12.00	9	15	1,663
<i>Post-test</i>	12.29	12.00	9	15	1,803

Based on this research, there is a difference in the average value of pregnant women's behavior in lactation management efforts in the control group. The average value of pregnant women's behavior from the *pre-test results* is 12.11. These results show that the average behavior of pregnant women before being given treatment was good. Meanwhile, after *the post-test*, the average value of pregnant women's behavior increased to 12.29. These results show that the average behavior of pregnant women in the control group is good, with the average difference obtained being 0.18.

Table 4. Results of Behavioral Analysis of Pregnant Women Regarding Lactation Management Before and After Treatment in the Intervention Group

Behavior of Pregnant Women (n = 28)	Mean	<i>p value</i>
<i>Pre-test</i>	11.71	0,000
<i>Post-test</i>	13.60	

**Wilcoxon Test*

Based on table 4. the *Wilcoxon test results* show a p-value of 0.000. These results indicate that there are significant differences in the pre-test and post-test regarding the behavior of pregnant women regarding lactation management in the intervention group.

Table 5. Results of Analysis of Pregnant Women's Behavior Regarding Lactation Management After carrying out *the pretest* and *posttest* in the control group

Behavior of Pregnant Women (n = 28)	Mean	<i>p value</i>
<i>Pre-test</i>	12.10	0.272
<i>Post-test</i>	12.28	

**Wilcoxon Test*

Based on table 5. Wilcoxon test results show a p-value of 0.272. These results indicate that there is no significant difference in the pre-test and post-test on the behavior of pregnant women regarding lactation management.

Table3. Results of Analysis of Differences in Pregnant Women's Behavior Regarding Lactation Management Between the Intervention Group and the Control Group

Behavior of Pregnant Women (N = 56)	<i>Pre-test</i>	<i>Post-test</i>	<i>p value</i>
	Mean	Mean	
Intervention Group	11.71	12.10	0.005
Control Group	13.60	12.28	

**Man Whitney Test*

Based on table 6. The results of the *Man Whitney test* show a significant difference in lactation management behavior between the intervention group and the control group, with a mean difference of 1.9 for the intervention group and 0.18 for the control group. The analysis shows a p-value of 0.005, which confirms that there is a significant difference in the average behavior of pregnant women between the two groups.

DISCUSSION

Providing education about lactation management can increase mothers' motivation to provide exclusive breastfeeding, especially primigravida mothers who need to be given education on lactation management so that they have strong motivation and make someone who does not give up easily and is easily discouraged in providing Exclusive breastfeeding. What pregnant women need to understand is that the motivation for providing exclusive breastfeeding is not only to be prepared during pregnancy, but before pregnancy the mother must also be able to prepare it, such as discussing it with her husband or family to get support for exclusive breastfeeding, besides that, the mother can also share with her friends. about problems related to breastfeeding and seeking information from various media such as print, electronic and social networks about matters related to the success of exclusive breastfeeding (Hasanah & Mariani, 2022) .

Implementation of lactation management efforts in the control group to improve the behavior of pregnant women through SOPs from the Community Health Center, such as reading MCH books. Reading MCH books is one of the lactation management efforts to increase knowledge and behavior in preparation for exclusive breastfeeding. One of the benefits of the MCH book is as a communication and counseling tool which is equipped with important information for mothers, families and the community about MCH service packages (standards). The KIA book in the section for pregnant women contains records of health services for pregnant women, information about regular pregnancy checks, information about daily pregnancy care and food for pregnant women, danger signs for pregnant women, preparation for giving birth, signs of birth of the baby and the birthing process, how to breastfeed. and care for postpartum mothers (Prasetyawati, 2023).

Lactation management is an effort made to achieve successful breastfeeding. Before the outreach and demonstration activities in the intervention group began, respondents were asked to fill in pre-test questions. Based on the pre-test results of the intervention group, some respondents had lactation management behavior in the good category, but these results indicate that exclusive breastfeeding preparation is still less than optimal. After the outreach and demonstration activities, the post-test results of the intervention group showed a significant increase, where all respondents had good behavior in preparing for exclusive breastfeeding. This confirms the effectiveness of counseling and demonstrations on the behavior of pregnant women in preparation for exclusive breastfeeding. Research by Apriyanto & Juliana, (2023) also shows that lactation education during pregnancy is

effective in increasing knowledge and behavior about lactation. Research by Himalaya & Maryani, (2021) explains that education on lactation management from the third trimester can improve mothers' knowledge and behavior, as well as provide strong confidence in providing exclusive breastfeeding to their babies.

Implementing SOPs from the Community Health Center, such as reading MCH books, should have a positive influence on pregnant women's knowledge and behavior in lactation management. The KIA book contains complete information about lactation management from pregnancy to breastfeeding (Prasetyawati, 2023) . However, the results of the study showed that there was no significant increase in the behavior of pregnant women, so that the implementation of SOPs from the Community Health Center did not affect the lactation management behavior in the control group. One of the factors causing the absence of a significant effect is the lack of interest of pregnant women in seeking information about lactation management. Pregnant women can get this information through pregnancy classes, reading MCH books, or searching for information on the internet. Annisa's research (2019) explains that pregnant women with a high interest in reading MCH books will have good knowledge and behavior in lactation management. Meanwhile, research by Quratulayun (2019) states that low interest in reading is caused by internal factors such as laziness and external factors such as environmental influences and technology, which make people reluctant to seek information about lactation management.

The results of this research prove that lactation management counseling has proven to be an effective method for increasing the knowledge and behavior of pregnant women, through learning that provides knowledge and improves behavior to the maximum. Counseling also plays an important role in supporting the success of exclusive breastfeeding, overcoming failures that often occur because mothers do not understand how to breastfeed correctly (Istighfarraniyah & Soeyono, 2023) . Counseling and demonstrations about lactation management are more effective than SOPs from Community Health Centers such as reading MCH books. In this research, the intervention group received counseling and demonstrations equipped with visual media such as the E-Booklet "Secrets of Sulak" so that it was more attractive to respondents. Messages conveyed through counseling and demonstrations are easier to remember and understand, because respondents can see pictures and practice directly what is conveyed. Research by Sahrir et al, (2023) and Suhardi, (2023) also shows that counseling, especially with media such as booklets, is more effective in improving lactation management compared to other methods such as lectures without media.

CONCLUSION

This research shows that there are differences in lactation management efforts between the intervention group and the control group regarding the behavior of pregnant women in preparation for exclusive breastfeeding with a *p-value* of 0.005. The results of this research prove that education and demonstration of lactation management using booklet media is more effective than implementation through Community Health Center SOPs. Pregnant women are expected to actively visit classes for pregnant women in order to increase knowledge and improve behavior regarding lactation management, especially regarding how to care for breasts and correct breastfeeding techniques so that they can support mothers' success in preparing for exclusive breastfeeding. Lactation management must be carried out by pregnant women from the beginning of pregnancy until the breastfeeding period.

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