



The Influence of Health Education on Mother's Knowledge About Bonding Attachment in the Third Trimester of Pregnancy

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ABSTRACT

Background: Normal infant development is highly dependent on the affectionate response between mother and baby. This response can be formed through the bonding attachment process. Lack of affectionate response between mother and baby in the form of bounding attachment will affect the infant's growth and development process such as stereotypical behavior, abnormal social behavior, decreased motoric, cognitive and verbal skills and can even increase infant mortality rates (IMR).

Objectives: This study aims to determine the effect of health education about bonding attachment using leaflet media on the knowledge of pregnant women in the third trimester.

Methods: The type of research used is Pre Experimental with a one group pre test-post test design, the population in this study were all pregnant women in the third trimester in the Betungan Health Center work area, with a sample of 35 primigravida pregnant women in the third trimester using purposive sampling techniques. Using primary data, processed univariately and bivariately. This study was conducted from December 2023 to January 2024 in the Betungan Health Center work area.

Results: The results of univariate analysis of 35 pregnant women in the pre-test, the majority of 26 (74.3%) respondents had poor knowledge, in the post-test the majority of 21 (60%) respondents had good knowledge. The results of bivariate analysis using one samples t-test showed a p-value of 0.021, because the p-value <0.05 means that there was an increase in pregnant women's knowledge about bonding attachment after the intervention.

Conclusion: It is expected that health workers, especially midwives, will use this research as input in efforts to improve the quality of services related to the provision of health education about bonding attachment using leaflet media to improve the knowledge of pregnant women in the third trimester.

Keywords: *Bonding attachment, Knowledge, leaflet.*

INTRODUCTION

The interaction between mother and fetus during pregnancy plays an important role in building a strong emotional bond, which is often referred to as bonding attachment. This process involves non-verbal communication, such as talking, touching the stomach, or feeling fetal movements, which helps the mother and fetus recognize and respond to each other.¹

Early initiation of breastfeeding (IMD), exclusive breastfeeding, and increasing maternal knowledge about bonding attachment are some ways that can help increase bonding attachment between mother and child.²

Obstacles in bonding attachment (emotional bond) between parents and babies can have serious impacts on the child's development. If this bond is disturbed or not formed properly, the child may experience various problems in the development of his behavior. Some symptoms that can arise due to the inhibition of this development include stereotyped behavior, abnormal social, motor, cognitive, verbal decline, and the child being apathetic³

In 2019, the coverage of newborns who received Early Breastfeeding Initiation (IMD) in Indonesia rationally reached 75.58%. This figure shows a significant achievement, because it has exceeded the target set in the 2019 Strategic Plan (Renstra) of 50%. The province with the highest percentage of newborns who received IMD was Southeast Sulawesi, with coverage reaching 94.92%. This shows a strong commitment in the province in promoting and implementing IMD, which plays an important role in the early health of babies, such as strengthening the immune system and supporting emotional attachment between mother and baby.⁴

The 2022 Bengkulu Province Maternal and Child Health Profile Data shows that the implementation of early

breastfeeding initiation (IMD) is relatively higher in rural areas compared to urban areas (65.09 percent compared to 62.52%). Spatially, this area is an area with a percentage of mothers who give birth to live babies whose last IMD was carried out less than one hour after birth.⁵

One of the principles in increasing bonding attachment is to provide information gradually to the mother about the importance of emotional bonding with the fetus during pregnancy. The role of midwives is very important in this process, especially during Antenatal Care (ANC) examinations.²

One of the initial steps that can be taken to overcome health problems is to conduct health education, namely by providing health information or messages. To help health education achieve its goals, various types of supporting media can be used. These supporting media include print media, electronics, and whiteboards.⁶ Many studies have been conducted so far which show that various health education media can increase knowledge.

Leaflets are one of the most frequently used media by health workers to promote health. Health workers and educational institutions also use Leaflets as the main media in promoting health in the community. This is in line with the results of Putri's research (2019) which shows that mothers' readiness to breastfeed increases significantly between before and after receiving Exclusive Breastfeeding. instructions on attachment bonding and early initiation of breastfeeding²In addition, the results of Ana and Eti's (2018) research show that mothers' knowledge about bonding attachment between mother and child is better.⁷

The initial survey conducted by researchers based on data from the Ante Natal Care (ANC) visit register book at BPM H, Bengkulu City from September to November 2023 showed that as many

as 35 primigravida pregnant women in their third trimester had made ANC visits.

After conducting brief interviews with ten pregnant women, it was found that 3 (30%) of them had a good understanding of boundary bonds, while 7 (70%) of them had a poor understanding. In addition, all of these pregnant women had never received a leaflet about boundary bonds.

Based on this background, the researcher is interested in conducting research on "The effect of bonding attachment education in increasing the knowledge of pregnant women in the third trimester".

METHOD

This study was conducted at BPM "H" Bengkulu City from December 2023 to January 2024. The study population was all pregnant women in the Betungan Health Center working area of Bengkulu City and the research design used was a pre-experimental design using one pre-test post-test group. In this study, a purposive sampling technique was used to take a sample of 32 people. The research instrument used in this study was a questionnaire to obtain data on the effect of health education on bonding attachment using leaflet media on the knowledge of pregnant women in the third trimester. The researcher used a self-made questionnaire that had gone through validity and reliability tests with a reliability value of 0.754. This study uses primary data, namely data obtained directly from the subjects studied. Data collection using a questionnaire, where respondents' knowledge was measured before being given material through leaflet media (pre-test) then after being given health education through leaflet media, the researcher re-measured respondents' knowledge using the same questionnaire (post-test). Data were analyzed using a paired t-test because the

scale of the knowledge variable data is ordinal, where if the p-value <0.05 is considered significant. This study has received ethical approval from the Health Research Committee (KEPK) of STIKes Sapta Bakti Bengkulu with reference number 144/FB/KEPKSSTIKesSaptaBakti/2023.

RESULTS

A. Univariate Analysis

Table 4.1 Characteristics of Respondents

No	Characteristics	Frequency	%
1	Age		
	<25 years old	27	77
	>25 years old	8	23
2	Parity		
	Primipara	35	100
	Multipara	0	0
3	Education		
	Low	1	2,9
	Middle	19	54,3
	High	15	42,8
4	Employment		
	Employed	13	37,2
	Unemployed	22	67,8
5	Information Source		
	No information	21	60
	Family/Friends	3	8,6
	Mass Media	6	17,2
	Health Professionals	5	14,2

Based on table 4.1, the results show that the majority of respondents are aged <25 years, as many as 27 people (77%), all primiparous respondents 35 (100%), the majority of respondents 19 people (54.3%) have secondary education, the majority of respondents are unemployed 22 people (62.8%) and the majority of respondents have never received information 21 people (60.0%)

Table 4.2 Frequency Distribution of Knowledge Before and After Bonding Attachment

No	Category	Pre Test		Post test	
		Frequency	(%)	Frequency	(%)
1	Good	0	0	21	60
2	Enough	9	25.7	14	40
3	Not enough	26	74.3	0	0
	Total	35	100	35	100

Based on table 4.2, the results of the pretest (before) the intervention were given showed that the majority of respondents had poor knowledge, namely 26 people (74.3%) and after the intervention (posttest) the majority of respondents had good knowledge, namely 21 people (60%).

B. Bivariate Analysis

1. Data normality test

Table 4.3 Data Normality Test

Variables	Shapiro Wilk		
	Statistic	Df	Sig.
Knowledge_pre	.957	35	.188
Knowledge_post	.970	35	.441

Based on table 4.3, the significant value of pre-test knowledge is 0.188 and post-test 0.441. Because the significance value is >0.05 , the data is stated to be normally distributed so that the next analysis is to use the paired sample t-test.

2. Paired sample t test

Table 4.4 The effect of bounding attachment education on the knowledge of pregnant women in the third trimester

		Post Test-Pre Test	
Paired Differences	Mean		5,914
	Std. Deviation		3.248
	Std. Error Mean		.549
	95% Confidence Interval of the Difference	Lower	7,030
		Upper	4.798
	T		15.188
Df			34
Sig. (2-tailed)			.021

Based on table 4.4 from the results of the paired sample t-test, a significance value of 0.021 or ($p < 0.05$) was obtained, meaning that statistically it showed significant results. Thus, it was concluded that there was an increase in knowledge before and after intervention was given regarding bonding attachment in pregnant women in TM III using leaflet media.

DISCUSSION

According to information sources, most respondents, namely 21 people, have never received information about bonding attachment. Both the mass media and health workers must currently provide pregnant women with the opportunity to get information about bonding attachment. It is hoped that this very important opportunity can help the community to better understand the barrier bonding that is very important for babies.

Information is one of the components that influences knowledge, so that the more often someone is exposed to information, the more their knowledge and insight will increase. According to Budiman and Riyanto (2013), learning media and formal education are two ways that can be used to obtain information.⁸

Health education is a form of non-formal education that is carried out by spreading health messages and beliefs so that the community is aware, knows and understands, is willing and can carry out recommendations related to healthy behavior.⁹

The media used is one of the many elements of education and counseling that must be considered carefully. By using the right media or props that are appropriate to the target, the material or message delivered in health education and counseling will be easily accepted, digested, and absorbed by the target. This helps increase public awareness of health. In the health sector, knowledge is the key to positive action. Effective health education is supported by the use of appropriate, attractive, and more easily accepted media by the target. One of the

media that can be used and is often used by health workers is leaflets.⁹

Leaflets are one of the most common types of printed media used in health promotion. Educational institutions and health workers still use leaflets as the main media in providing education to the public. For the purposes of this study, we used leaflets which are usually folded sheets of paper filled with writing and images with an attractive appearance while still prioritizing the content and material delivered. Leaflet media was used in this study because it has the advantage of being easy to carry and effective in conveying short and concise messages. The results of this study are in line with the research of Prize, Mindarsih, and Lestariningsih (2020) which found that counseling using worksheet media had an effect on pregnant women's knowledge of boundary bonds. Based on data analysis, the Wilcoxon statistical test on knowledge produced a calculated Z value that was greater than the Z table (1.960) and a significance value of 0.000 ($P\text{-value} < 0.05$)¹⁰.

In addition to media, information in brochures can increase respondents' knowledge. This is because the respondents' age is still productive and their high curiosity makes it easier for them to absorb information.

CONCLUSION

There is a positive influence of using leaflets as an educational and counseling medium in increasing the knowledge of pregnant women in the third trimester about bonding attachment in PMB H Bengkulu City. In this study, leaflet media was statistically effective in increasing the knowledge of pregnant women in TM III

about bounding attachment in PMB H Bengkulu City.

The limitations in this study are other factors that influence the increase in knowledge other than the use of leaflet media that cannot be controlled by the researcher, such as the respondents' experience obtained before the study was conducted and the absence of feedback to determine the frequency of how often or how many times respondents reread the leaflets that had been given by the researcher until the study was completed.

For further researchers to be able to create and develop other educational media as health education media with different themes and targets from this research.

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