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# Health Education (He) Effectiveness Towards Knowledge And Behavior Of The Treatment Of Kanguru Method (Pmk) In Public Women In Perinatology Room Luwuk Hospital, Banggai District, Central Sulawesi Province

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#### **ABSTRACT**

Up to now, the number of preterm births in Indonesia has reached 10-15% of total births each year. The results of a preliminary study conducted by researchers on November 11-16 2019 in the Perinatology Room at Luwuk Regional Hospital, Banggai District, Central Sulawesi Province, with interviews with 10 infant mothers, it was found that 5 babies said they did not know about treatment using the kangaroo method.

The research objective was to determine the effectiveness of Health Education (HE) on knowledge about Kangaroo (PMK) treatment of postpartum mothers in the perinatology room of Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province.

This study used one group pre-test-post-test design. The number of samples is 35 respondents. Sampling using Accidental Sampling technique. Statistical test using Paired Samples T-Test.

The results showed that the pre-test score of knowledge obtained an average of 45.57 and the post-test score of knowledge obtained an average of 74.43. Meanwhile, the pre-test behavior score obtained an average of 43.10 and the post-test behavior score obtained an average of 67.62. The results of the Paired Samples T-Test for knowledge showed a significance value of 0.000 < 0.05 and behavior known a significance value of 0.000 < 0.05.

There is an average difference between the Pre Test and Post Test values, which means that Health Education (HE) can be said to be effective in increasing knowledge and behavior about Kangaroo Method Care (PMK) for postpartum mothers in the Perinatology Room of Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province.

**Keywords:** health education, kangaroo method, knowledge

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# INTRODUCTION

The infant mortality rate in Indonesia reached 32 per 1000 live births in 2014 and is targeted to decrease to 14 per 1000 live births in 2018. In Indonesia until now the number of preterm births has reached 10-15% of total births each year.

The results of a preliminary study conducted by researchers on November 11-16 2019 in the Perinatology Room at Luwuk Regional Hospital, Banggai District, Central Sulawesi Province, with interviews with 10 infant mothers, it was found that 5 babies said they did not know about treatment using the kangaroo method. The statement of one baby mother said that the mother's knowledge was still low about FMD because the kangaroo method was still considered by the mothers. They have never received information related to kangaroo care. 3 baby mothers said that they did not know about

the meaning of kangaroo care, the benefits of kangaroo care for babies with LBW, how to do kangaroo care and the criteria for successful kangaroo care. Meanwhile, 2 mothers said that the kangaroo method of care was obtained from information provided by midwives through counseling during the posyandu activities.

The factors that influence the care of the kangaroo method include the lack of knowledge and behavior of mothers in caring for newborns. Notoatmodjo (2017), explains that knowledge is the appearance of knowing and occurs after someone senses a certain object. If the postpartum mother has good knowledge about kangaroo treatment, her behavior will be better in carrying out kangaroo treatment for stone babies, and vice versa, if the postpartum mother does not have adequate knowledge, the postpartum behavior does not understand the benefits and goals of kangaroo treatment. in newborns (Notoatmodjo, 2017).

Based on the above phenomena, the problem that can be formulated is whether there is an effect of "Health Education (HE) on Knowledge and Behavior About Kangaroo Treatment (PMK) Methods for Post-partum Women in the Perinatology Room of Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province?".

The purpose of this study was to determine the effectiveness of Health Education (HE) on knowledge and behavior about Kangaroo Method Care (PMK) for postpartum mothers in the Perinatology Room at Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province.

#### MATERIALS AND METHODS

This study used a pre-experimental one group pre-test-post test design with a cross sectional approach. The study was conducted in January - March 2020. The population of the study were all postpartum mothers in the Perinatology Room at Luwuk Hospital, Banggai Regency, Central Sulawesi Province. The research sample was part of the postpartum mothers in the Perinatology Room at Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province, totaling 35 respondents. The sampling technique used accidental sampling. There are two research variables, namely independent variables, in the form of treatment, namely Health Education (HE) about Kangaroo Method Care (PMK) and dependent variables namely Knowledge and Behavior About Kangaroo Method Care (PMK). Analysis of research data using the Paired Samples T-Test statistical test ( $\alpha = 0.05$ ).

## **RESULTS**

Based on the collection of information and data processing of research conducted in the Perinatology Room of the Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province in 2020, the characteristics of respondents and research variables were known.

**Tabel 1.** Respondents' Frequency Distribution by Age In the Perinatology Room at Luwuk Hospital, Banggai Regency Central Sulawesi Province in 2020

	Contrar Baran	CDI I 10 (IIICC III 2020			
No.	Characteristics of Respondents	Frequency	Percentage (%)		
1.	Age				
	17 - 25 tahun	10	28.6		
	26 - 35 tahun	14	40.0		
	> 35 tahun	11	31.4		
2.	Education				
	SD	5	14.3		
	SMP	7	20.0		
	SMA	15	42.9		
	Diploma/sarjana	8	22.9		
3.	Profession				
	PNS	2	5.7		
	Wiraswasta	6	17.1		

	Ibu Rumah Tangga	15	42.9
	Petani	10	28.6
	lain-lain	2	5.7
4.	Paritas	•	
	1 anak	8	22.9
	2 anak	12	34.3
	3 anak	10	28.6
	4 anak	5	14.3

The results of the identification of the characteristics of respondents based on age indicate that most respondents are between the ages of 26 - 35 years, as much as 40%. While the characteristics of respondents based on education indicate that most of the respondents have high school education, namely as much as 42.9%. The results of the identification of respondents based on work show that most of them are housewives, as much as 42.9%. The results of the identification of respondents based on parity showed that most of them were mothers who gave birth to their second child, namely 34.3%.

**Tabel 2**. Results Mean value of pre-test and post-test Knowledge in the Perinatology Room at Luwuk Hospital, Banggai Regency Central Sulawesi Province in 2020

Variabel	Mean N		Std. Deviation	Std. Error Mean	
Pengetahuan Pre-test	45.57	35	10.359	1.751	
Pengetahuan Post-test	74.43	35	10.628	1.796	

Based on the output above, it is known that the pre-test value of knowledge obtained an average (mean) of 45.57, while the post-test value of knowledge obtained an average (mean) of 74.43. These results indicate the average value on the Pre Test 45.57 <Post Test 74.43 so that descriptively there is a difference in the average value between the Pre Test and the Post Test results.

**Tabel 3**. Results Mean value of pre-test and post-test Behavior in the Perinatology Room at Luwuk Hospital, Banggai Regency Central Sulawesi Province in 2020

Variabel	Mean	N	Std. Deviation	Std. Error Mean	
Perilaku Pre-test	43.10	35	13.928	2.354	
Perilaku Post-test	67.62	35	12.422	2.100	

Based on the output above, it is known that the pre-test value for behavior obtained an average (mean) of 43.10, while the post-test value of behavior obtained an average (mean) of 67.62. These results indicate the mean value of the Pre Test 43.10 <Post Test 67.62 so that descriptively there is a difference in the average value between the Pre Test and the Post Test results.

Tabel 4. Paired Samples T-Test results
The Effect of Health Education (HE) on Knowledge
In the Perinatology Room at Luwuk Hospital, Banggai Regency
Central Sulawesi Province in 2020

Variabel	Mean	N	Std. Deviation	Std. Error Mean	t	df	P-Value
Pengetahuan Pretest	-28.857	35	3.164	.535	_	34	.000
- Pengetahuan post-					53.964		
test							

Based on the "Paired Samples Test" output table above, it is known that the Sig. (2-tailed) is 0.000 <0.05, then H0 is rejected and Ha is accepted. So it can be stated that there is an average difference between the Pre Test and Post Test values, which means that Health Education (HE) can be

said to be effective in increasing knowledge about Kangaroo Method Care (PMK) in postpartum mothers in the Perinatology Room of Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province.

**Tabel 5**. Paired Samples T-Test results
Effect of Health Education (HE) on Behavior
In the Perinatology Room at Luwuk Hospital, Banggai Regency

Central Sulawesi Province in 2020

Variabel	Mean	N	Std. Deviation	Std. Error Mean	t	df	P-Value
Perilaku Pre test –	-24.524	35	5.696	.963	-25.469	34	.000
Perilaku Post-test							

Based on the "Paired Samples Test" output table above, it is known that the Sig. (2-tailed) is 0.000 < 0.05, then H0 is rejected and Ha is accepted. So it can be concluded that there is an average difference between the Pre Test and Post Test values, which means that Health Education (HE) can be said to be effective in changing the behavior of Kangaroo Treatment (PMK) Methods for Post-partum mothers in the Perinatology Room of Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province.

#### **DISCUSSION**

Effectiveness of Health Education (HE) on Knowledge About Kangaroo Treatment (PMK) Methods for Post-partum mothers in the Perinatology Room at Luwuk Regional Hospital, Banggai District, Central Sulawesi Province.

Based on the results of data analysis, it is known that the average value of maternal knowledge before giving Health Education (HE) is 45.57 and the average maternal knowledge after giving Health Education (HE) is 74.43. These results indicate the average value of 45.57 Pre Test <Post Test. 74.43 so that descriptively there is a difference in the average value between the Pre Test and the results of the Post Test. Then the results of the analysis using the paired t-test obtained a significance value of 0.000 <0.05, which means that there is a significant difference before and after giving Health Education (HE) to an increase in knowledge about Kangaroo Method Care (PMK) for post-partum mothers in the Perinatology Room of Luwuk District Hospital. Banggai Central Sulawesi Province.

The results of this study are in accordance with the theory put forward by Notoatmodjo, (2012) that health education is an activity to provide or increase public knowledge in maintaining and improving health. The results of this study are also in line with the research of Nora F. and Ruri Y. (2015) which states that there is an effect of providing Health Education on increasing maternal knowledge in implementing Kangaroo Mother Care in the work area of the UPTD Jatiwangi Community Health Center, Majalengka Regency in 2015 (p value = 0, 0001).

Kangaroo Treatment Method (PMK) is an effective way to meet the most basic needs of babies, namely the contact of the baby's skin to the mother's skin, where the mother's body will become a thermoregulator for the baby, so that the baby gets warm (avoiding the baby from hypothermia). FMD facilitates delivery, protection from infection, stimulation, safety and affection. FMD can reduce the incidence of infections, serious illnesses, breastfeeding problems and maternal dissatisfaction as well as increase the relationship between mother and baby and promote infant growth and development. The benefits of this PMK need to be socialized to pregnant women or the community because it is important to be applied when the baby is born to improve the quality of life of the newborn and with this information it is hoped that the mother's knowledge will get better.

# Effectiveness of Health Education (HE) on the behavior of Kangaroo Care Method (PMK) for postpartum mothers in the Perinatology Room at Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province.

Based on the output above, it is known that the Pre-Test behavior score is obtained by an average (mean) of 43.10, while the post-test behavior score is obtained an average (mean) of 67.62. So that descriptively there is a difference in the average value between the Pre Test and the results of the Post Test. Based on the research results, it is known that there has been a change in respondent

behavior. The behavior of respondents before the existence of Health Education (HE) with an average value of 43.10 increased to 67.62.

The results of the analysis using the paired t-test obtained a significance value of 0.000 <0.05, which means that there is a significant difference before and after giving Health Education (HE) to changes in behavior about Kangaroo (PMK) Treatment in Post-partum mothers in the Perinatology Room at Luwuk Regional Hospital, Banggai Regency. Central Sulawesi Province. This condition shows that better knowledge can influence behavior for the better. This good behavior is then implemented in the respondent's behavior regarding Kangaroo Method Care (PMK) on postpartum mothers in the Perinatology Room at Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province. The behavior of these respondents strengthens the opinion of Notoatmodjo (2012) that behavior is a reflection of health which is the target of health promotion or education.

The results of this study are also in line with the research of Puji Hastuti (2018) which states that health education is effective in improving kangaroo method care practices with Asymp Sig 0.001 (P <0.05). The results of this study reaffirm that Health Education (HE) is effective in improving the behavior of Kangaroo Treatment (PMK) Methods for Post-partum mothers in the Perinatology Room at Luwuk Hospital, Banggai Regency, Central Sulawesi Province. The results showed that the majority of respondents had good knowledge (54.1%). In addition, the results of the study also showed that most of the respondents chose to be assisted by health workers in their delivery, namely 83.8%. It is known that the majority of respondents who have good knowledge choose to be assisted by health workers in carrying out their delivery, as much as 95%.

#### CONCLUSION

Based on the results of research on the Analysis of the Effectiveness of Health Education (HE) on Knowledge about Kangaroo Treatment (PMK) Methods in Post-partum Women in the Perinatology Room at Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province, it can be concluded that the Pre-Test value of knowledge obtained an average of 45.57, and the post-test score of knowledge obtained an average (mean) of 74.43. Meanwhile, the pre-test behavior score obtained an average (mean) of 43.10 and the post-test value of behavior obtained an average (mean) of 67.62. So that descriptively there is a difference in the average value between the Pre Test and the average results of the Post Test.

The results of the Paired Samples T-Test for the respondent's knowledge of Knowledge About Kangaroo Care Method (PMK) show a significance value of 0.000 <0.05. While the Paired Samples T-Test of the respondent's behavior on Kangaroo Care Method (PMK) showed a significance value of 0.000 <0.05. then H0 is rejected and Ha is accepted. So it can be concluded that there is an average difference between the Pre Test and Post Test values, which means that Health Education (HE) can be said to be effective in increasing Knowledge About Kangaroo Method Care (PMK) for postpartum mothers in the Perinatology Room of Luwuk Regional Hospital, Banggai Regency, Central Sulawesi Province.

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#### CONFLICTS OF INTEREST

The author declares that they have no conflict of interest

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