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The Effect of Family-Based education on the Implementation of Early Breastfeeding Initiation

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Abstract,-breast milk is the best food in early life. The success of Exclusive breasfeeding starts from the implementation of the early breast initiation process. The length of time that breast milk comes out the first time is the biggest cause of failure. To make matters worse, the family's perception that the cause of the baby crying is because the milk is not coming out / not enough so formula milk needs to be given. This study aims to identify the effect of family- based education on the implementation of early breastfeeding initiation. The research design uses quasi experiment, pre test and post test with control group design. Beginning with a pre- test for the two groups of respondents, then in the intervention group a family-based education (involving husband/1 other family member) about initiation of breastfeeding is done 3 times. The third stage is to do a post test on both groups. The number of respondents was 40 people in each group of 20 pregnant women. Data analysis using Wilcoxon test and Mann Whitney test. The results showed that there was a significant influence between family-based education on the implementation of early breast initiation (p value = 0.004). Naturally a healthy newborn can do the early breast initiation process, knowledge and attitudes of the mother and family need to be improved. It is recommended that the application of family- based education to the implementation of early breast initiation to increase the achievement of exclusive breastfeeding

Keywords: family-based education, breastfeeding, early breast initiation

I. INTRODUCTION

The golden period of child development lasts from the child in the womb until the age of two years. During this period, it was very urgent and effective to optimize various aspects of growth and development in order to establish quality human resources (Faculty of Medicine, Hasanuddin University, 2014). In this period the brain experiences the fastest development in its life history, which is up to 80%. Post-birth brain nerve cells (numbering billions) do not increase anymore, but the number of connections between brain nerve cells continues. One brain nerve cell can connect with 20,000 other brain nerve cells. The more the number of nerve cell connections the more intelligent the brain (Soetjiningsih, 2013). Large number of connections between brain nerve cells is determined by nutrition and stimulation. Failure of nutrient intake during this period has long-term effects that are difficult even those that cannot be changed anymore (Arief, 2011). Problems of nutritional intake of infants in North Sumatra: thin babies who get extra food (36.7%). Exclusive breastfeeding coverage (33.0%), early breast initiation, 1 hour (30.3%), breastfeeding for up to 5 months (48.6%). The prevalence of malnutrition and malnutrition is above the national prevalence. Infants and toddlers aged 0-23 months have malnutrition (2.8%), malnutrition (8.6%), age 0-59 months, malnutrition (3.1%), malnutrition (10.1%) (BB / U indicator). Nutritional status with TB / U index shows the incidence of stunting, at: age 0-23 months, very short (8.0%), short (11.1%), age 0-59 months, very short (9.3%), short (15.1%). Nutritional status with BB / TB index aged 0-23 months very thin (5.2%), thin (9.3%), age 0-59 months very thin (4.3%), thin (7.7%) . Stunting early in life will have a negative impact on health, cognitive, and functional as an adult (Provincial Health Office, 2017).

Breast milk is the best food in early life (0-6 months), then breast milk is added with complementary foods until the age of two years. The success of Exclusive ASI starts from the implementation of the early breast initiation process (Juwono, 2016). Infants who breastfeed early will succeed exclusively breastfeed eight times greater than infants who do not breastfeed early (Dinkes Prov SU,

2017).

Exclusive ASI Puskesmas Namo Rambe Coverage (40%). The length of time the milk comes out the first time is the biggest cause (> 50%) of failure to initiate breastfeeding. It is worsened by the perception of family / community that the cause of babies crying after breastfeeding is because breast milk is not enough so formula milk needs to be given (Namo Rambe Health Center Profile, 2017). The healthy Indonesia program with the family approach states that the family approach is the key to the success of the program. Family-based education can increase the intention to change health behaviors

(Kemenkes, RI, 2016). Family-based educational interventions on early breast initiation to achieve exclusive breastfeeding to optimize child growth and development in the golden period need to be done.

II. RESEARCH METHODOLOGY

This research is a quantitative study using a quasi experiment pre-test and post- test with control group design, to analyze the effect of family chassis education on the implementation of early breast initiation. The intervention group will receive family-based education related to lactation management and the control group will receive education from health workers when conducting Antenatal Care examinations at the Puskesmas. Before the intervention, the pre-intervention and control groups were pre-tested, then family-based education was carried out. After 3 months of family-based education activities carried out, then post tests were carried out on both groups with the same questionnaire instrument as the pre test.

III. RESULT AND DISCUSSION

Characteristics of respondents

The sample in this study as many as 40 people consisted of 2 groups: 20 pregnant women 24-24 weeks gestational age who were given family-based education about early breastfeeding initiation which is an intervention group and 20 pregnant women with a range of gestational age the same is not given family-based education about early breast initiation which is the control group.

Table 1. Frequency Distribution of Respondents

No	Characteristics	Group (n=40)				Total	
		Intervention		Control			
		n	%	n	%	n	%
1	Age:						
	- <20 years	1	5	-	-	1	2.5
	- 20-35years	17	85	18	90	35	87.5
	- >35 years	2	10	2	10	4	10
	Total	20	100	20	100	40	100
2	Education:						
	- Elementary	2	10	-	-	2	5
	- Junior High	5	25	3	15	8	20
	- Senior High	7	35	10	50	17	42.5
	- Bachelor	6	30	7	35	13	32.5
	- Total	20	100	20	100	40	100
3	Occupation:						
	- Housewife	16	80	12	60	28	70
	- Civil Servant	1	5	1	5	2	5
	- Private employees	3	15	4	20	7	17.5
	- Entrepriser	-	-	3	15	3	7.5
	Total	20	100	20	100	40	100
4	Parity:						
	- 1	6	30	8	40	14	35
	- 2	10	50	6	30	16	40
	- 3	4	20	4	20	8	20
	- 4	-	-	2	10	2	5
	Total	20	100	20	100	40	100

The age characteristics in the two groups were dominated by ages 20-35 years, amounting to 85% in the intervention group and 90% in the control group. Likewise in the characteristics of education, both groups were dominated by high school education at 35% in the intervention group and 50% in the control group. On the same job characteristics, this characteristic is dominated by IRT by 80% in the intervention group and by 60% in the control group. On the characteristics of parity there are differences, in the intervention group is dominated by parity 2 by 50%, in the control group is dominated by parity 1 by 40%.

A. Pre Test Results of Knowledge and Attitudes Respondents

Table 2. Distribution of Frequency Pre Test Knowledge and Attitudes in Groups Intervention and Control Groups

	Control	Group (n=40)				Total No Variable Intervention	
		n	%	n	%	n	%
1	Knowledge:						
	- Good	8	40	6	30	14	35
	- Not Good	12	60	14	70	26	65
	Total	20	100	20	100	40	100
2	Attitude:						
	- Positive	8	40	6	30	14	35
	- Negative	12	60	14	70	26	65
	Total	20	100	20	100	40	100

The percentage of good knowledge categories and positive attitudes in the intervention group was greater than the control group. The percentage of good knowledge categories and positive attitudes in the intervention group was as large as 40%, the percentage of categories of good knowledge and positive attitudes in the control group was also as large as 30%.

B. Post Test Results of Knowledge and Attitudes Respondents

Table 3. Distribution of Post Test Frequency Knowledge and Attitudes in Intervention and Control Groups

	Control	Group (n=40)				Total No Variable Intervention	
		n	%	n	%	n	%
1	Knowledge:						
	- Good	17	85	4	20	21	52.5
	- Not good	3	5	16	80	19	47.5
	Total	20	100	20	100	40	100
2	Attitude:						
	- Positive	18	90	5	25	23	57.5
	- Negative	2	10	15	75	17	42.5
	Total	20	100	20	100	40	100

The post-test results showed a significant increase in knowledge and attitudes in the intervention group, whereas in the control group there was no increase in knowledge and a positive attitude towards the implementation of early breast initiation The post-test results showed a significant increase in knowledge and attitudes in the intervention group, whereas in the control group there was no increase in knowledge and a positive attitude towards the implementation of early breast initiation.

C. Implementation of early breast initiation in the Intervention and Control Groups

Table 4. Implementation of Early Breastfeeding Initiation in the Intervention and Control Groups.

No	Early Breast Initia tion.	Intervent ion group		Control n Group	
		n	%		%
1	Yes	12	60	3	15
2	No	8	40	17	85
	Total	20	100	20	100

The percentage of the intervention group that did the early breast initiation was up to four times compared to the control group.

Bivariate Analysis

A. Differences in Knowledge and Attitudes of Pre Test and Post Test in the Control Group

Table 5. Test Results for Differences in Knowledge and Attitudes of Pre-test and Post- test in The Control Group Using The Wilcoxon Test.

Variable	Pre Test	Post Test	Z-Test	*p value*
	Mean Runk	Mean Runk		
Knowledge	2.00	2.00	-0.577	0.564
Attitude	2.00	2.00	-0.577	0.564

The data table above illustrates the differences in knowledge and attitudes of the pre- test and post-test in the control group using the Wilcoxon test. Known p value for knowledge and attitude variables 0.564 (>0.05) means that there is no significant difference in the knowledge variable and attitude variable in the pre test and post test in the control group.

B. Differences in Knowledge and Attitudes of Pre Test and Post Test in the Intervention Group

Table 6. Test Results for Differences in Knowledge and Attitudes of Pre-test and Post-test in The Intervention Group Using The Wilcoxon Test.

Variable	Pre Test	Post Test	Z test	p value
	mean runk	mean runk		
Knowledge	0,00	5,00	3,00	0,003
Attitude	0,00	5,50	3,16	0,002

The table data above illustrates the differences in knowledge and attitudes of the pre-test and post-test in the intervention group using the Wilcoxon test. It is known that the p value in the knowledge variable 0.003 and attitude 0, 002 (<0.05) means that there are significant differences in the knowledge variable and the attitude variable in the pre-test and post-test in the intervention group before and after family-based education about early breastfeeding initiation

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C. Differences in Implementation of Early Breastfeeding Initiation in Control and Intervention Groups

Table 7. Results of differences in the implementation of early breast initiation in the control and intervention groups using the Mann Whitney Test.

Variable	Control	Intervention	Z test	p Value
	Mean runk	Mean runk		
doing early breast initiation	16.00	25.00	-2,902	0,004

The data table above illustrates the differences in the implementation of early breastfeeding initiation in the control and intervention groups using the Mann Whitney Test. Known p value 0.004 differences in the implementation of early breast initiation in the control and intervention groups. Thus, it can be concluded that there is an influence of family-based education about early breast initiation to implement early breast initiation for achieving exclusive breastfeeding for the optimization of child development in the golden period. The results of the study provide results that family-based education can increase the knowledge of pregnant women early breast initiation from 8 people (40%) with a good level of knowledge to 17 people (85%), an increase of 45%. Likewise, the change in negative attitude to positive increased from 8 people (40%) to 18 (90%), an increase of 50%. In contrast to the group of pregnant women who did not receive family-based education about early breast initiation, which did not experience an increase in knowledge and changes in attitude, instead experienced a decline. Knowledge aspects of 6 people (30%) people with a good level of knowledge in the pre-test to 4 people (20%), decreased by 10%. Attitudes aspects that were originally 6 people (30%) decreased by 5% to 5 people (25%). Knowledge is the result of knowing, which will occur after someone senses a certain object, such as seeing, hearing, smelling, feeling and feeling. Most of that knowledge is obtained through the results of seeing and hearing. One strategy for changing knowledge and attitudes is providing information in order to increase knowledge so that awareness arises and eventually people will behave in accordance with that knowledge. Changes in attitude are basically influenced by factors of knowledge and belief / trust that are obtained from the learning process. After the mother and family get an education, reading information about early breast initiation, this knowledge will bring mothers to think, desire and try so that their baby at birth will experience the process of early breast initiation. After the mother knows the stimulus, the next process is to behave towards the stimulus. Aspects that have an important role in the manifestation of attitudes as a whole are knowledge, thoughts, beliefs and emotions (Notoatmodjo, 2007). The implementation of early breastfeeding initiation when newborns are not only influenced by maternal behavior, the role of the husband and / or family members as well as health workers involved in assisting the maternal birth process is crucial. From the results of observation there are still many health workers who have not yet carried out early breastfeeding initiation. After the baby is born dried, weighed, swaddled and given to the mother or transferred to the baby's room. Mothers and husbands or other family members who have received education about early breast initiation ask for information and ask for the availability of health workers who will help respondent's childbirth to initiate early breast initiation. This is in line with research conducted by (Naim, 2017) which states that there is a significant influence between family-based education on the intention of pregnant women to optimize nutrition in the first 1000 days of life. Babies born healthy do not need to get help to carry out the process of initiating breastfeeding. Naturally newborn babies have olfactory reflexes (olfaction) and visual that is the baby is able to recognize the areola and the characteristic odor of the breast of the mother. In addition, other factors that facilitate the process of initiating early breastfeeding are that newborn babies have the reflex of seeking and sucking the nipples of mother's milk. This fact increases the optimism of mothers and / or family members to carry out the process of breastfeeding early during labor.

IV. CONCLUSION

A healthy newborn can do the early breast initiation process, knowledge and attitudes of the mother and family need to be improved.

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