



The Effect of the Baby's Mother Information in Providing Complementary Breastfeeding on the Prevention of Potential Stunting in Kendari

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Abstract

The poor complementary breastfeeding is a risk factor directly related to the stunting. This study was aimed to know the effect of providing information to the baby's mother on the knowledge, attitudes, norms/culture, beliefs, and the actions in giving the complementary breastfeeding in preventing the potential stunting in Kendari. This study used quasy experiment, ie the pre-test and post-test with control group design. The samples were 80 mothers divided into four groups such as ie classes with modules while the control class researchers with KIA book, a group of researchers only use the modules and control group with KIA book. Questionnaire data collection of interviews and anthropometric measurements. Data were analyzed with the Wilcoxon test. The results showed the effect of information on knowledge, attitudes, norms / culture, significant trust began a second measurement of the classes either the mother or the book module KIA, changes in feeding patterns solids in class + KIA book significantly in the third measurement. In the group of modules, changes in knowledge, norms / culture, and significant confidence in the measurement, while attitudes and solids feeding patterns significantly in the third measurement.

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At KIA book group, a significant increase in knowledge begin in the second measurement, norms / culture and significant confidence in the third measurement, whereas his own attitude changes are significant in the fourth measurement.

Keywords: Information; Knowledge; Attitudes; Culture; Beliefs; Complementary; Breastfeeding; Stunting.

1. Introduction

Stunting is one of the indicators of the chronic malnutrition that can give a description about the overall disruption of socio-economic situation in the past. Stunting can be known by measuring the indicators of the body height/age [1]. Stunting often begins in the very beginning of life, usually in the uterus, and generally keeps continuing for two years after the first birth. Most of the decline in the height is based on the age (height/age) occurred during the period of consuming the complementary breastfeeding between the ages of 6 and 24 months [2,3]. The poor complementary breastfeeding has been identified as a risk factor that is directly related to stunting [4].

According to the [5], the prevalence of stunting in Indonesia was 35,6% in 2010 and increased to 37,2% in 2013. The prevalence of stunting in Southeast Sulawesi in 2010 was amounted to 37,8% and in 2013 amounted to 42,0% [6]. Stunting problem in Southeast Sulawesi with a short prevalence $\geq 40\%$ is a serious public health problem [6].

The interventions to reduce the stunting child should start appropriately before the birth with the prenatal care and the mother's nutrition so it can continue until the age of two years. The growth failure process begins in the womb until the age of two years. By the time a child past the age of two years, it was too late to repair the damage in the early years. Most of the decline in height is based on the age (height/age) occurred during the period of consuming the complementary breastfeeding between the ages of 6 and 24 months [2,3].

The research suggests that providing exclusive breastfeeding affect the body length [7] and the body weight of the baby [8]. Providing food pattern supports the optimal growth of the baby. At the age of 0-6 years, a brain growth occurs up to about 75%. Improper feeding causes a child to suffer the malnutrition [9]. The provision of appropriate complementary breastfeeding can improve the nutritional status of the baby [10]. The success of the provision of complementary breastfeeding cannot be separated from the ethnicity. The study concluded that the mother's behavior ethnic coming from Bugis in Pekkae starting from the pregnancy to the child birth and breastfeeding, it is not apart from *innawa madereng* (good wishes) to the child. So, to change the behaviors that endanger the health of the babies (prelacteal feeding), it is not easy [11].

Nutritional education through the class of the baby's mother is one approach that can be done to improve the knowledge, attitudes, and beliefs of the mother in resulting the better changes in behavior through the method of learning together in the classroom activities facilitated by the health workers to improve the knowledge of the mothers on how to breastfeed, how to make complementary breastfeeding, and how to feed the baby with the complementary breastfeeding in accordance with the age of the baby and prevent the infectious diseases to the baby [12]. Through nutritional education, the mothers who have the babies are expected to know and understand

and are willing and able to carry out what they are advised so they can nurture and care the malnutrition/stunting become the better nutrition [13]. This study was aimed to know the effect of providing information to the baby's mother on the knowledge, attitudes, norms/culture, beliefs, and the actions in giving complementary breastfeeding in preventing the potential stunting in Kendari.

2. Materials and Methods

The design of this study used quasi experiment, ie the pre-test and post-test with control group design. The treatment group was given health educational intervention for 6 months. This study has been conducted in four public health centers in Kendari Regency consisting of Mata PHC, Perumnas PHC, Mekar PHC, and Puuwatu PHC. The population were all the mothers with the babies aged 6 months in Kendari. Samples were divided into four groups with each group of samples as many as 20 mothers. Group I was the baby's mother class using research module, control group II, class mothers with infants using MOH MCH book, group III use module and the control group IV researchers who use KIA book MOH. Samples were obtained by purposive sampling method. Data collection was done by measuring the length and the weight of the baby, as well as filling out the questionnaire. Paired sample t test and Wilcoxon were used to analyze the data.

3. Findings and Discussion

3.1 Findings

The respondents in the class+ module group were mostly aged 20-35 years (80%) coming from the Muna Tribe (90%) with the parity less than four (85%), core family (85%) with low educational level (65 %). All of them were the housewives (100%) with the family income less than the standard minimum payment (75%), Table 1.

The respondents in the class+ Mother Children Health (MCH) handbook group were more at the age of 20-35 years (85%) coming from Tolaki Tribe (25%) with the parity less than four (80%), core family (80%) with low educational level (55%), working as the housewives (75%) with the family income less than the standard minimum payment (55%).

The respondents in the module group were dominated by the mothers aged 20-35 years old (70%) from Muna Ethnic Group (70.0%). The parity was less than four (75%), core family (65%), low educational level (60%), and working as the housewives (90%). Additionally, the family income was less than the standard minimum payment (80%).

The respondents in the Mother Children Health (MCH) handbook group were more at the age of 20-35 years (100%), from the Tolaki Ethnic Group (25%), with the parity less than four (80%), core family (75%), higher education (65%), the jobs as the housewives (75%), and the family income with more than the standard minimum payment (50%).

The findings of the statistical test by paired t-test showed that there was an influence of the provision of information on the knowledge, attitudes, norms/culture, beliefs, and giving the complementary breastfeeding of

the mothers at the second, third, and the fourth measurement. While the group without classes, the effect was seen only in the third measurement (attitude and practical provision of the complementary breastfeeding) even in the fourth measurements (beliefs).

Tabel 1: The Characteristics of the Respondents

Characteristics		Group							
		Class + Module		Class + MCH Book		Module		MCH Book	
		N	%	n	%	n	%	n	%
The Age Group of the Mother	< 20	2	10,0			2	10,0		
	20 - 35	16	80,0	17	85,0	14	70,0	20	100,0
	>35	2	10,0	3	15,0	4	20,0		
The Mother's Tribe	Muna	18	90,0	3	15,0	10	50,0	3	15,0
	Tolaki			5	25,0	2	10,0	5	25,0
	Buton	1	5,0	2	10,0	3	15,0	1	5,0
	Bugis	1	5,0	4	20,0	2	10,0	4	20,0
	Jawa			2	10,0	2	10,0	2	10,0
	Makassar			2	10,0			2	10,0
	Sunda			2	10,0	1	5,0	3	15,0
Parity	< 4	17	85,0	16	80,0	15	75,0	16	80,0
	>= 4	3	15,0	4	20,0	5	25,0	4	20,0
Family	Core Family	17	85,0	16	80,0	13	65,0	14	70,0
	Big Family	3	15,0	4	20,0	7	35,0	6	30,0
Mother's Education	High	7	35,0	9	45,0	8	40,0	13	65,0
	Low	13	65,0	11	55,0	12	60,0	7	35,0
Mother's Occupation	Civil Servant			4	20,0	1	5,0	3	15,0
	Businesswoman					1	5,0	1	5,0
	Housewife	20	100,0	15	75,0	18	90,0	15	75,0
	Honorary			1	5,0			1	5,0
Family Income	≥ Standard Minimum (1,652,000)	5	25,0	9	45,0	4	20,0	10	50,0
	< Standard Minimum(1,652,000)	15	75,0	11	55,0	16	80,0	10	50,0

3.2 Discussion

The finding showed that there was an effect of providing information on the knowledge, attitudes,

norms/culture, beliefs, and the complementary breastfeeding of the mothers in all classes of the group. Both the module and the MCH handbook have improved in the second measurement. Whereas in the group that did not receive the classes and modules, a significant change happened in the third measurement. While in the group of MCH handbook only, a significant change occurred in the fourth measurement.

Table 2: The Effect of Providing Information on the Knowledge, Attitudes, Norms Culture, Beliefs, and Complementary Breastfeeding

Knowledge	6	8	10	12
Class + Module				
Knowledge	5.10	8.00***	9.70***	9.85***
Attitudes	31.20	36.35***	42.35***	45.25***
Norms/Culture	5.50	7.90***	8.80***	9.45***
Beliefs	6.40	7.80***	8.95***	9.35***
Complementary-Breastfeeding		4**	5,5**	5,5**
Class + MCH Book				
Knowledge	4.65	6.50***	8.00***	8.35***
Attitudes	27.60	29.90*	33.25***	36.80***
Norms/Culture	4.45	6.30**	7.20***	7.80***
Beliefs	5.55	6.35***	7.20***	8.00***
Complementary-Breastfeeding		2	4**	6,5**
Module				
Knowledge	4.95	6.35***	7.60***	8.00***
Attitudes	31.30	31.65	33.30*	37.10**
Norms/Culture	5.85	6.90*	7.20*	8.50***
Beliefs	5.70	6.10*	6.75**	7.80**
Complementary-Breastfeeding		1,5	2,5*	3,5*
MCH Book				
Knowledge	4.70	6.50***	7.45***	8.15***
Attitudes	31.84	32.53	32.79	38.47***
Norms/Culture	5.40	5.50	5.90*	6.85**
Beliefs	5.70	5.80	6.15	7.75***
Complementary-Breastfeeding		1	2,5*	3*

* p<0,05 ** p<0,01 *** p<0,001

This finding supports the research that the intervention can improve the nutritional knowledge of the mothers [14]. There is an increased knowledge before and after the intervention [15]. There are differences in the nutritional status of children aged 6-24 months before and after nutritional counseling given by the method of feeding rules for 4 months in IHC [16].

Knowledge is the result of the idea that occurs through the sensory process, especially the eyes and ears on the particular objects. In this study, an increase of knowledge, attitudes, norms, and trust of the mother occurred due to the provision of nutritional education through the demonstration method and question and answer method regularly. Interviewing and monitoring the baby's nutrition have also already done. The existence of nutritional education was to make the knowledge and the skills of the mothers who have poor nutrition became more increased so that the mother can know what kind of food and nutrition needed by the baby and the mother finally was able to provide the balanced nutrition for her baby [16].

This is consistent with the knowledge statement that is the very important domain to form the overt behavior [12]. The factors that affect a person's knowledge are the information and experience, in which the mother obtaining the information from the educational manufacture of complementary foods provided through the demonstration method. So, the mother acquires the new knowledge about the nutrition. In terms of experience, after following the education of making complementary breastfeeding, the mother can gain the new experiences that can be applied in everyday life, especially in the provision of complementary breastfeeding to the baby.

Family nutrition improvement is the gate of the family and the society to get the nutritional improvement. Then, the education of the complementary breastfeeding manufacture is the key to open the gate. In the family, the mothers' role is to manage the food. Therefore, the mothers are the main target of making complementary breastfeeding education, in particular the nutritional education to increase the knowledge of the mothers that aim to change the misconduct resulting in the danger of the malnutrition [17]. A mother as a manager or as an organizer of the food in the family has a major role in improving the nutritional status of the family members. The nutritional disorders often occur due to the lack of knowledge about the needs of the baby and the nutritious supplementary foods, and the ignorance in preparing the extra food from the nutritious local ingredients. Then, the poverty is the cause to less able to provide the nutritious foods [18].

The mother's knowledge about the complementary breastfeeding is very important since the role of the mother in the family is as the manager of the food. The mother, who does not know about the nutritional food, will serve the unbalanced nutritional food. A mother, who has poor nutritional knowledge, will greatly affect the nutritional status of the babies and the babies will be difficult to choose the nutritious foods for their children and their families. Good nutrition is a balanced nutrition, meaning that nutrient intake should match the needs of the body. Infant malnutrition in children impacts the brain development, and intelligence level will be disturbed. This is due to the lack of the protein production and the lack of the energy obtained from the food and the knowledge. The mother's attitude is also very important to prevent the malnutrition to the children [14].

Mother, who is the closest person to the baby, plays an important role in creating a good nutritional status of the children because the children cannot take care of themselves. The mother's behavior in terms of nutrition determines the nutritional status of the children whether it is good or bad. This behavior is influenced by the mother's level of knowledge about the nutrition [19]. These findings are consistent with the studies that show a relationship between the mother's knowledge of the nutrition and the food consumption patterns of baby [20].

The provision of the complementary breastfeeding foods was still influenced by the culture. This can be seen

from the menu of the complementary breastfeeding given to the babies. In Muna Tribe, the complementary breastfeeding was given a lot of by using Moringa leaves whereas in Tolaki Tribe, the consumption of sago was more with the processed foods named Sinonggi. However, the provision of complementary breastfeeding now is not too affected by culture. This is due to the mother's living environment in urban areas so that the mother has to adapt to the customs and the practices in the new environment and leave the customs and the practices brought from their respective regions. This is in line with the findings from Setijowati N *et al* (2010) that shows that socio-cultural factors do not affect the provision of the complementary breastfeeding because either the socio-cultural factors are there or are not there, they still provide food that exist at that time only [20].

In the process of providing information, there are some things that can block that process. They are interest, prejudice, stereotypes, and motivation [21]. The mother's interest, who wants the baby to be healthy and to have the good nutritional status, would pay more attention to the material in the class. The interest is supported by the perception of the importance of the baby's mother classto improve the knowledge and skills to process the complementary breastfeeding. At the end, the mother is motivated to actively ask in the baby's mother classroom activities.

4. Conclusion

The effect of the baby's mother information in providing the supplementary breastfeeding on the knowledge, attitudes, norms/culture, beliefs, and actions in giving complementary breastfeeding of the mother in all groups, both he module class and the MCH handbook class have improved in the second measurement. Whereas in the group that did not receive the classand module, there are significant changes in the third measurement.

In the group of modules, changes in knowledge, norms / culture, and significant confidence in the measurement, while attitudes and solids feeding patterns significantly in the third measurement. At KIA book group, a significant increase in knowledge begin in the second measurement, norms / culture and significant confidence in the third measurement, whereas his own attitude changes are significant in the fourth measurement.

5. Recommendations

Mother should increase knowledge about the nutritional status of infants with follow educational activities manufacture of weaning or obtain information from print and electronic media so as to provide proper nutrition for her baby boy.

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