

Breastfeeding Education: Its Effect on Cadres Knowledge and Attitudes of Exclusive Breastfeeding

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Abstract---Posyandu cadre is an extension of health workers in educating mothers regarding breastfeeding. However, there are still many cadres who do not yet have good knowledge related to exclusive breastfeeding. This study aims to analyze the effect of breastfeeding education on the knowledge and attitudes of posyandu cadres related to exclusive breastfeeding. This study uses a quasi experimental research design with one group pretest-posttest design technique. The total sample of 30 posyandu cadres in the working area of Puskesmas Sako were taken by purposive sampling method. Data analysis using marginal homogeneity test obtained p value for knowledge of 0,000 and attitudes of 0.039. Breastfeeding education has a significant effect on increasing the cadres' knowledge and attitudes related to exclusive breastfeeding. Breastfeeding education can be recommended as an intervention strategy to increase the capacity of cadres in providing support to nursing mothers.

Keywords: breastfeeding education, cadres

I. INTRODUCTION

Breastfeeding is very important in achieving optimal growth, health, and development of children. Breastfeeding is recommended by the World Health Organization (WHO) in the Global Strategy for Infant and Young Child Feeding by initiating early breastfeeding (IMD), exclusive breastfeeding, and continuing breastfeeding for up to two years [1]. The Government of Indonesia has established an exclusive breastfeeding policy for infants in Indonesia through the Decree of the Minister of Health of the Republic of Indonesia Number 450 / Menkes / SK / IV / 2004 [2]. Exclusive breastfeeding can suffice all the nutritional needs of infants. Besides, exclusive breastfeeding can protect against infection because breast milk

contains bioactive factors that can strengthen the immune system of immature infants [3].

Children who were not exclusively breastfed are at risk of developing gastroenteritis, respiratory infections, obesity, and behavioral problems due to neurological development [3- 4]. Mothers who didn't breastfeed exclusively also have an increased risk of breast and ovarian cancer, obesity, type II diabetes and postpartum depression [5-6]. Several studies have shown that children who were not exclusively breastfed are at risk of stunting [7-9].

The target of achieving exclusive breastfeeding coverage in Indonesia is 80% based on the Decree of the Minister of Health of the Republic of Indonesia Number 747 / Menkes / SK / VI / 2007 [10], but in reality, the coverage of exclusive breastfeeding in Indonesia has still not reached the target. Coverage of exclusive breastfeeding for infants up to six months of age in Indonesia in 2016 was 29.5%, while in 2017 it was 35.73%. Coverage of exclusive breastfeeding in South Sumatra in 2016 was 45.3%, while in 2017 it was 48.08% [11-12]. Coverage of exclusive breastfeeding in Palembang in 2015 was 72.91%, in 2016 it was 68.5%, and in 2017 it was 72.76% [13-15].

Health workers play a role in the practice of exclusive breastfeeding. Studies on decision making about baby care found that mothers consistently referred to the advice received from health workers [16]. The advice of the health workers, if consistent, can help the mother survive against community norms or family pressure to provide another food before 6 months. Likewise, inconsistent or misdirected breastfeeding suggestions can confuse mothers and contribute to the practice of breastfeeding errors [17].

Health workers in health facilities and the community are responsible for supporting mothers in providing exclusive breastfeeding [18]. All health care providers, namely health workers in hospitals, clinics, and health centers, can advise mothers to practice breastfeeding correctly. This causes health workers are required to have quality information to be given to

mothers [19]. Therefore, there is a need to explore the knowledge of health care providers in health care facilities for exclusive breastfeeding [20].

Posyandu cadres or community health workers (CHWs) play a role in bridging health workers and the community. Posyandu cadres have been given prior education from the Puskesmas [21]. The posyandu cadre is an extension of the health worker in educating the mother community regarding breastfeeding. However, in reality, a preliminary study in the working area of Puskesmas Sako found that the Posyandu cadres didn't have good knowledge about breastfeeding. This study aims to determine the effect of breastfeeding education on the knowledge and attitudes of Posyandu cadres in the Puskesmas Sako.

II. METHODS

This study used a quasi-experimental research design with one group pretest-posttest design technique. The population in this study were all Posyandu cadres in the working area of Puskesmas Sako. The sample in this study was selected using a purposive sampling method based on the criteria: Posyandu cadres live in the working area of the Sako Puskesmas and are willing to become respondents. The number of research samples is 30 people.

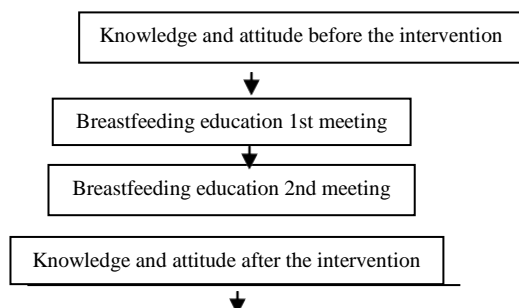


Figure 1. Experiment Design Scheme

The location of the research is in the working area of Puskesmas Sako. The study was conducted in August – October 2019. Respondent's knowledge and attitudes were measured using a questionnaire that was modified by the researcher. Data analysis was performed by Marginal Homogeneity statistic test to measure differences in knowledge before and after the intervention was given, while to analyze the differences in attitude before and after intervention was performed by MC Nemar statistic test.

III. RESULTS

TABLE I DISTRIBUTION OF CHARACTERISTIC FREQUENCY OF POSYANDU CADRES (N=30)

Category	Frequency	Percentage (%)
Age		
30-40 years old	9	30
>40-50 years old	11	36,7
>50-60 years old	8	26,7
>60-70 years old	2	6,7
Total	30	100
Long time being a cadre		
1-10 years old	16	53,3
>10-20 years old	12	40,0
>20-30 years old	1	3,3
>30-40 years old	1	3,3
Total	30	100
Education		
Elementary school	3	10,0
Junior high school	21	70,0
Senior high school	5	16,7
Diploma degree	1	3,3
Total	30	100

Table I showed that based on age characteristics, most respondents aged > 40-50 years old, were being cadres for 1-10 years, and had a junior high school education.

TABLE II DISTRIBUTION OF THE FREQUENCY OF CADRES' KNOWLEDGE AND ATTITUDE BEFORE AND AFTER THE IMPLEMENTATION OF INTERVENTION (N=30)

Variables	Pre Test		Post Test	
	N	%	n	%
Knowledge				
Good	0	0	12	40
Enough	17	56,7	18	60
Less	13	43,3	0	0
Total	30	100	30	100
Attitude				
Positive	15	50	23	76,7
Negative	15	50	7	23,3
Total	30	100	30	100

Table II showed that most of the respondent's knowledge before and after the

implementation of the intervention was in enough category, while the respondent's attitude is proportional between the positive and negative categories before the intervention and increases in the positive category after the intervention is given.

TABLE III ANALYSIS OF THE DIFFERENCES OF CADRES' KNOWLEDGE BEFORE AND AFTER THE IMPELEMNTATION OF INTERVENTION (N=30)

		Posttest Knowledge						Total	P value
		Good		Enough		Less			
		n	%	n	%	n	%		
Pretest Knowledge	Good	0	0	0	0	0	0	0	0,000
	Enough	7	23,3	10	33,3	0	0	17	
	Less	5	16,7	8	26,7	0	0	13	
Total		12	40	18	60	0	0	30	

Table III showed that differences in cadres' knowledge before and after the implementation of the intervention are: p value 0,000, p value < 0.05, it means there after implementation of the intervention.

TABLE IV ANALYSIS OF THE DIFFERENT OF CADRES' ATTITUDE BEFORE AND AFTER THE IMPLEMENTATION OF INTERVENTION (N=30)

Pretest Attitude	Posttest Attitude				Total		<i>P</i> <i>value</i>
	Positive		Negative				
	n	%	n	%	n	%	
Positive	13	43,3	2	6,7	15	50	0,039
Negative	10	33,3	5	16,67	15	50	
Total	23	76.6	7	23.4	30	100	

Table IV showed that differences in cadres' attitudes before and after the implementation of the intervention are: p value 0.039, p value < 0.05, it means that there were significant differences in cadres' attitude before and after the implementation of the intervention.

IV. DISCUSSION

Characteristics of respondents based on age found that most respondents' aged were > 40-50 years. Research was conducted by Aprilina, Handayani, Etlidawati (2017) found that the majority of posyandu cadres were > 35 years old (78.1%) [22]. A qualitative study was conducted by Ocbrianto (2012) found that a 43-year-old posyandu cadre revealed that at this age, she was encouraged to participate in society as a form of

efforts to seek reward [23].

Age affects people's mindset and catching ability. Increased age will increase the development of people's mindset and perception [24]. Piaget's theory explained that the stages of individual intellectual development and changes of age greatly affect the individuals ability to observe science [25]. However, human intellectual ability will experience a decrease due to changes in the nervous system and decreased cognitive function in the elderly. The elderly will experience a decline in function in memory and thought processes [26].

The results showed that most respondents had been a Posyandu cadre for 1-10 years. The length of time the respondent became a cadre was associated with the experience gained during the period of serving as a posyandu cadre. The development continuously of experience through interaction with the environment will affect one's cognitive structure to enable intellectual growth [25]. Knowledge can be obtained from experience, both from personal experience and the experience of others [24]. Individuals generally tend to determine attitudes based on experience [27].

Based on the characteristics of education, the majority of respondents had a junior high school education. Different results were obtained in the Aprilina, Handayani, & Etlidawati (2017) study where the majority of respondents had a high level of education [22]. Education is very closely related to the learning process. The higher the education, the more information is obtained, so that the knowledge will be higher [24]. Not only influences knowledge, moral values, and teachings obtained from educational institutions will greatly determine individual attitudes [27].

There were no respondents who had good knowledge before the implementation of the intervention and no respondents who had less knowledge after being given the intervention. Statistical results showed that there were significant differences in knowledge among respondents before and after they are given. The results of this study were in line with Aprilina, Handayani, Etlidawati (2017) who found a meaningful difference in knowledge between before being given an exclusive breastfeeding workshop and after an ASI exclusive workshop for toddlers posyandu cadres [22]. A similar study was conducted by Amani (2016) who explained that breastfeeding training provided a significant increase in the knowledge, attitudes, and skills of health care providers in providing breastfeeding support. This is reflected positively in the trend of exclusive breastfeeding [20].

Most respondents were able to answer correctly 13 of the 20 questions on the pretest knowledge questionnaire. The results of the analysis of respondents' answers found that the majority of respondents already knew the

definition of colostrum, the definition of exclusive breastfeeding, the content of breast milk, breastfeeding problems related to shape, size, and nipples didn't affect the process of breastfeeding, the benefits of breastfeeding related to low cholesterol and reduced risk of heart disease in adults, goals of effective baby attachment, signs of adequate milk, and lactation management related to breastfeeding continuously will launch milk production well, stress and the hormone oxytocin in the breastfeeding process, and the prolactin hormone in the breast emptying process. In addition, some respondents didn't know yet the proper implementation of early initiation of breastfeeding (IMD), the main purpose of IMD, baby attachment, breastfeeding problems related to swollen breasts and baby nipple confusion, lactation management related to food and drink for nursing mothers, and the benefits of breastfeeding related to the adequacy of children's growth and development needs.

Based on the results of the posttest questionnaire analysis, it was found that the majority of respondents were able to correctly answer 17 of the 20 questions. Most respondents are known to still not know the main purpose of IMD, correct attachment of babies, and food or drink for nursing mothers. However, there was a decrease in the number of respondents who answered incorrectly on the three questions compared with the answers at the time of the pretest. This showed an increase in knowledge of the respondents after being given breastfeeding education.

Knowledge is the result of knowing that occurs after someone senses a certain object. Knowledge generated from sensing is very subjective because it is influenced by individual perceptions and the intensity of attention to an object. Sensing occurs through the five human senses, namely the sense of sight, hearing, smell, taste, and touch. Most of human knowledge is obtained through the eyes and ears [24]. The different of increased knowledge in each respondent after the intervention can be influenced by individual perceptions and the intensity of the respondent's attention when given the intervention.

The attitude of the respondents was proportional between the positive and negative categories at the time before the intervention and increased in the positive category after the intervention was given. Statistical results showed that there were significant differences in the cadres' attitude before and after the implementation of the intervention. The results of this study were in line with Amani (2016) that breastfeeding training significantly influenced the respondents' attitude, even though the significance level (*p* value) is only 0.049. This can be attributed to the fact that attitude took more time and more

effort to show a more statistically significant difference [20].

Most respondents had positive attitude towards 9 out of 10 statements on the pretest questionnaire. The pretest questionnaire analysis found that the majority of respondents already had a positive attitude in all statements regarding the role of cadres in successful breastfeeding. In addition, from the 4 statements related to lactation management, most respondents only had positive attitude towards 3 statements. Regarding lactation management, most respondents had negative attitude towards food and drinks for nursing mothers. This can be known based on the agreement of the majority of respondents on negative statements, namely advising mothers to consume certain foods or drinks to increase milk production when milk production decreases.

Based on respondents' answers on the pretest questionnaire, it can be seen that the majority of respondents agreed on positive statements related to the role of cadres in successful breastfeeding, which are to play a role in helping mothers to breastfeed, assess problems experienced in nursing mothers, must have knowledge about lactation, build self-confidence in nursing mothers, assessing the adequacy of breast milk based on the number of urinating and defecating babies per day. On the contrary, most respondents rejected of negative statements related to the role of cadres in successful breastfeeding, which is to educate about exclusive breastfeeding only when the cadre had time. Besides, most respondents also rejected of negative statements related to lactation management, namely IMD doesn't affect the successful breastfeeding, the using of pacifiers is a natural thing, and giving formula milk when milk production is low.

Posttest questionnaire analysis obtained the same results like the pretest, where most respondents had positive attitude towards 9 out of 10 statements. Most respondents had positive attitude in all statements about the role of cadres in successful breastfeeding. Most respondents also had the same negative attitude like the pretest, namely the management of lactation related to food or drink nursing mothers. However, there was an increase in the number of respondents who had positive attitude in each statement, especially in the two statements regarding the role of cadres in successful breastfeeding, namely all respondents agreed to play a role in helping mothers to breastfeed and examine the problems experienced by nursing mothers. This showed that there were a change in the attitude of the respondents at the time of the posttest compared to the pretest.

Attitude is a response to an object that involves views, concerns, thoughts, feelings, opinions, and emotions that are closed or not yet an action, only in the form of readiness to act. A

positive attitude will form good behavior. Positive attitude changes can be influenced by increased knowledge [24]. It can be seen that respondents have increased knowledge. This increasing knowledge can be one of the factors which could change the respondents' attitude regarding exclusive breastfeeding.

Knowledge is one of the factors forming an attitude. The formation of attitudes occurs through the relationship between knowledge, beliefs, thoughts, judgments, and emotions [24]. This showed that increasing knowledge can not affect directly in a person's attitude changes, but it was also influenced by one's beliefs, thoughts, judgments, and emotions. Therefore, many factors could influence respondents to remain negative attitude in lactation management related to food and drink for nursing mothers.

The intervention applied was breastfeeding education. Breastfeeding education is a health education intervention which were delivered to the posyandu cadres. It adjusted to the results of the researchers' identification of the knowledge and problems in nursing mothers. Health education is delivered by using lecture and demonstration methods. Breastfeeding education giving in 2 meetings with the duration of each meeting for 2 hours. This study is in line with Astuti (2017) which explained that there was an increasing in the cadres' knowledge in lactation management through lecture and demonstration methods [28].

One of the techniques and methods of health promotion in large groups (15-50 people) that is effective is the lecture method followed by or without followed by question and answer [28]. The lecture and demonstration methods used in this study were aimed to increase the posyandu cadres' knowledge so that posyandu cadres were expected to be able to carry out their roles as educators in providing quality information well when they provided health services to pregnant and breastfeeding women.

VI. CONCLUSION

Breastfeeding education has a significant effect on increasing the cadres' knowledge and attitudes related to exclusive breastfeeding. Breastfeeding education can be recommended as an intervention strategy to increase the capacity of cadres in providing support to nursing mothers.

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