

# Assistance for Pregnant Women Final Trimester and the Success of Early breastfeeding initiation in the City of Bengkulu

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Abstract— The behavior of giving Early breastfeeding initiation by mothers to infants is still very low, one of which is due to the lack of knowledge of mothers about breastfeeding. Mothers who do not do Early breastfeeding initiation are at risk of failing in giving exclusive breastfeeding. The study aimed to determine the effect of third-trimester pregnant women mentoring on the success of Early breastfeeding initiation. This study uses quasi-experimental with a two-group posttest only design. The intervention group was assisted from the final third trimester and observed by colostrum administration, while the control group was educated with leaflets. The number of samples of each group is 25 people with the Custer Sampling technique. The instrument used is in the form of a questionnaire. Data analysis used multivariate logistic regression. The results of the study found that there was an influence of mentoring on the administration of early breastfeeding initiation (p-value 0.029). Pregnant women who are not accompanied by a risk five times no early breastfeeding initiation compared with pregnant women who were accompanied. New breastfeeding initiation promotion needs to be improved and socialized by providing clear, complete and sustainable information. The goal of health promotion is not only pregnant women and nursing mothers but also must involve husbands.

# Keywords—Infant, Early breastfeeding initiation, Assistance Pregnancy

### I. INTRODUCTION

The government has made a policy to increase the coverage of exclusive breastfeeding in Indonesia as stipulated in Government Regulation No. 33 of 2012, by instructing regional and private governments to work together to support exclusive breastfeeding and early breastfeeding initiation. This union formalizes breastfeeding (including at work) and

prohibits the promotion of formula given in the health services. The provision of exclusive breastfeeding and early breastfeeding initiation aims to meet the nutritional needs of infants and prevent malnutrition in infants. Besides, the government has also ordered local governments to provide special facilities for breastfeeding mothers at work so that mothers can still breastfeed their babies [1]. However, the provision of exclusive early breastfeeding initiation and exclusive breastfeeding in Indonesia is still low. In the United States in the last decade, the rate of breastfeeding has increased to 77% because of the mother's early breastfeeding initiation [2].

Conditions in Indonesia based on IDHS data in 2012 only 27% of babies in Indonesia received exclusive breastfeeding until the age of 6 months, as well as the 2013 Riskesdas data for exclusive breastfeeding in Indonesia with only 42%. This figure has not reached 50% as the WHO target [3]. The Basic Health Research Report (Riskesdas) showed that there was an increase in initiation of early breastfeeding <1 hour from 29.3 percent (2010) to 34.5 percent (2013), and breastfeeding behavior was only breastfed in the last 24 hours in infants aged 6 months increased from 15.3 percent (2010) to 30.2 percent (2013). It shows that the success of breastfeeding depends on early breastfeeding initiation. Two hours after giving birth is called a "sensitive period" is the optimal time for early breastfeeding initiation in newborn babies. It can show the baby's mechanical abilities such as rooting reflexes, sucking reflexes, swallowing reflexes, and others [4].

Giving early breastfeeding initiation will stimulate breast milk production early and accelerate the release of breast milk. Early breastfeeding initiation will also accelerate the release of the placenta [5]. Early breastfeeding initiation, exclusive breastfeeding, and complementary feeding if done correctly can reduce infant mortality to 27.6% [6]. Early breastfeeding initiation can also reduce the burden of infectious diseases because immediately after birth a baby has received colostrum which is proven to be able to improve the immunity of newborn babies. Early breastfeeding initiation can prevent the risk of infant mortality aged 2-28 days because of acute respiratory tract infections and diarrhea [7]. Maternal skin



contact with baby's skin and administration of colostrum can stimulate the baby's immune system [8]. ASI contains nutrients and protective substances that are beneficial for the baby's immune system so that it rarely gets sick [7]. Research on babies in Ghana by breastfeeding can immediately prevent 22% of newborn deaths [8]. Through increasing the coverage of early breastfeeding initiation will be able to reduce the neonatal mortality rate 12 per 1000 births and the child mortality rate below five years 25 per 1000 births which is the third goal of the SDGs by the end of 2030 [9].

The results of Sirajuddin's study (2013) found that maternal education, family support, and midwife's actions were the main variables affecting the low early breastfeeding initiation practice [10]. Education plays a role in changing knowledge and attitudes. In a study in South Sulawesi, only 30.1% of mothers had an early breastfeeding initiation of less than 1 hour. Some people consider baby breastfeeding behavior as traditional behavior [11]. Low understanding of mothers about the benefits of early breastfeeding initiation has an impact on the low motivation of mothers to do Early breastfeeding initiation. The results of 2010 Indonesian Demographic and Health Survey (IDHS) show that the failure of Early breastfeeding initiation is a lack of knowledge of mothers about breastfeeding (74.0%) so educating the public about breastfeeding is the most effective intervention to increase breastfeeding success and the implementation of early breastfeeding initiation as well as the attention of prospective parents. Maternal and child health in Indonesia can be improved [12].

A preliminary study conducted on postpartum mothers in the work area of Fish Market Health Center in Bengkulu City in 2017, conducted interviews on ten pregnant women postpartum mothers. It obtained 40% of mothers who did early breastfeeding initiation and 60% who did not do early breastfeeding initiation. It is due to a lack of knowledge about early breastfeeding initiation, and the mother said when giving birth health workers did not tell about the importance of early breastfeeding initiation. The results of the qualitative study found that predisposing factors for failure of breastfeeding mothers were exclusively due to lack of knowledge and lack of mother's experience and enabling factors because mothers were not facilitated in carrying out early breastfeeding initiation

[13]. It shows the importance of delivering health information to mothers can be provided through mentoring programs. Assistance to the late third trimester pregnant women are expected to be able to foster trust and motivation to do early breastfeeding initiation, but the effectiveness of pregnant women assistance in the provision of early breastfeeding initiation has not been proven. The purpose of this study was to determine the effect of assistance in late third-trimester pregnant women on the success of the administration of early breastfeeding initiation.

## II. METHODS

The study used a quasi-experimental design with a two-group post-test only design. The intervention group was observed to be assisted from the final third trimester until the early

Breastfeeding initiation was carried out, and colostrum was given, while the control group was only given leaflets. The form of mentoring in the form of counseling, counseling is carried out more or less twice for 30 minutes. At the next meeting, researchers conducted assistance to pregnant women for the intervention group until the mother gave birth and did early breastfeeding initiation and administered colostrum. Measurement of maternal knowledge about early breastfeeding initiation and colostrum administration is done after postpartum mothers using a questionnaire. The population in this study was only the third-trimester mothers who were recorded in the practice midwife in Bengkulu City. Sampling using Cluster Sampling technique with 25 people in the intervention group and 25 people in the control group, so the total sample in this study was 50 people. Sample inclusion criteria were late third-trimester pregnant women, healthy mothers, normal birth, normal baby weight, mothers with no pregnancy complications, willing to become pregnant mothers by signing informed consent, mothers who could communicate with good and can read and write. While for exclusion criteria are: sick baby, sore breast, breast milk not coming out, Apgar Score. The instrument used for both variables, developed by researchers through the criteria of each variable, then based on these criteria made a short question in the form of research instruments early breastfeeding initiation variables, early breastfeeding initiation criteria based on research and theory

[14]. Univariate analysis was conducted to describe the characteristics of pregnant women using frequency distribution and percentage. The bivariate analysis determines the effect of mentoring on the success of early breastfeeding initiation using multivariate logistic regression.

III. RESULT
TABLE 1. CHARACTERISTICS OF PREGNANT FINAL TRIMESTER

1	Variable	Interventi on (n-25)	Control (n=25)	P (Value)	
Age	< 20 Year 20-35 Year	8,0 72,0	8,0 76,0	0,922	
Parity	> 35 Year Primipara	20,0	16,0 56,0	0.027	
-	Multipara Grandemultipara	72,0 0,0	28,0 16,0	0,027	
Education	Primary Medium High	16,0 60,0 24,0	48,0 48,0 4,0	0,205	
Knowledge	Low Moderate High	0,0 12,0 88,0	52,0 48,0 0,0	0,029	

\*P VALUE CHI SQUARE

Table 1 shows the characteristics of responses based on age, parity, education, and knowledge. The highest age of pregnant women is in the range of 20-35 years, namely 72.0% in the intervention variable and 76.0% in the control variable, the highest parity in the 72.0% multiparous parity intervention variable and 56.0 in the primiparous parity control variable. The most education control variables in secondary education are intervention variables as much as 60.0% and control variables as much as 48.0%, and the most knowledge on



intervention variables are in high knowledge as much as 88.0% and in low education control variables as much as 52, 0%.

TABEL 2. EFFECT OF ASSISTANCE TO THE EARLY BREASTFEEDING INITIATION

Assistance	Early breastfeeding initiation			Total		P	OR	
Group	N	Vot	Do	one			Value*	(95% CI)
	D	one						
	n	%	n	%	N	%		
Control	11	44,0	14	56,0	25	100	0,029	5,222
Intervention	3	12,0	22	88,0	25	100		(1,18-23,11)
Total	14	28,0	34	72,0	50	100		

\* Multivariate Logistic Regression; Logit (Y) = -0,323 + 1,653\*ASSISTANCE

Table 2 shows that from 25 unaccompanied pregnant women (control group) as many as 11 people (44.0%) from 25 pregnant women who were accompanied (intervention group), as many as three people (12.0%) infants were not given Early Breastfeeding initiation. The modeling results with multivariate logistic regression showed that there was an influence between mentoring on the administration of early breastfeeding initiation (p-value 0.029) after being controlled by the variables of Age, Parity, Education, and Knowledge. Pregnant women who are not accompanied by a risk five times no early breastfeeding initiation compared with pregnant women who were accompanied.

## IV. DISCUSSION

The results showed that the average age of pregnant women ranged from 20-35 years. According to Hartanto (2012) at the age of 20-35 years is the best period for childbirth, because in this age range the woman's physical condition is in prime condition. The uterus has been able to provide maximum protection or conditions for pregnancy. Generally, mentally, it is also ready that has an impact on the behavior of caring for and maintaining pregnancy carefully. The total parity is between 2-4 children. Mothers with multiparous parity of mothers have had previous experience in dealing with labor and lactation so that mothers better understand the actions that must be performed on babies who are born. The most formal education of pregnant women is high school. Secondary education owned by a mother will increase knowledge about health because she has more access to information and makes it easier to understand the information she receives [15].

Early breastfeeding initiation is direct contact between the mother's skin and the baby's skin, the baby is prone immediately on the chest or in the mother's abdomen after the whole body is dried (not bathed), except in the palm of his hand. Both of the baby's palms are left to remain exposed to amniotic fluid because the smell and taste of amniotic fluid are the same as the odor released by the mother's breast which will guide the baby to find nipples [14]. Through the provision of early breastfeeding initiation, it will be beneficial for mothers and babies. For mothers, early breastfeeding initiation is useful for decreasing the height of the uterine fundus. The process of involution is the return of the uterus to the condition before pregnancy after childbirth begins as soon as the placenta is born due to contraction of the smooth muscles of the uterus. The whole process of uterine involution is accompanied by a decrease in the size of the Fundus Uteri Height [16]. The results of Rosyidah's study (2017) showed an effect of early breastfeeding initiation on uterine fundus height reduction, where mothers who did early breastfeeding Initiation experienced a faster decline in their uterine fundus compared to mothers who did not do early breastfeeding Initiation [17]. Mothers who were not early breastfeeding Initiation were likely to have slow uterine contractions or not as fast as the mother who had taken early breastfeeding Initiation. It can also affect Fundus Uteri Height decline. Infants, early breastfeeding Initiation will affect the success of exclusive breastfeeding [14,18]. The results of Rahayu's research (2012) prove that there is a relationship between the administration of early breastfeeding initiation and the duration of breastfeeding [19]. Early Breastfeeding Initiation can also prevent pain [7] and death [8], so that early breastfeeding initiation is so essential. However, the success of early breastfeeding initiation influenced by various factors, such as education, knowledge, family support, attitudes and behavioral assistance for delivery [10].

The results showed that the success of early breastfeeding initiation was related to the assistance of third-trimester pregnant women. The findings of this study indicate, of all mothers who were accompanied, 72% of mothers did early breastfeeding initiation. It shows the need for every pregnancy to be accompanied by health workers. This finding is in line with the results of research in the Province of Gorontalo that the success of early breastfeeding initiation is related to mentoring by midwives. The role of midwives contributed to the implementation of early breastfeeding initiation by 46.2%. Midwives play 2.6 times more on the implementation of early breastfeeding initiation compared to midwives who do not assist [10]. The results of this study can explain that the presence of health workers will determine the success of early breastfeeding initiation implementation. The frequency of mentoring health workers with pregnant women in terms of providing information, counseling, and concrete actions is very determining the success of the early breastfeeding initiation implementation. The presence of health workers during pregnancy will affect changes in knowledge, attitudes and decision making of mothers to carry out early breastfeeding initiation [20].

Mentoring pregnant women by health workers will contribute to the increase in maternal knowledge. Mothers who know are quite likely to have positive behavior, but a mother who is knowledgeable enough does not guarantee the mother's ability to make decisions, it takes family support and health workers. The condition of mothers who are tired of undergoing childbirth affects the low motivation of mothers to carry out early breastfeeding initiation [21]. Accompanying



pregnant women in giving birth will provide an improvement in the importance of early breastfeeding initiation giving. The results of hospital research in Central Jakarta found a significant relationship between midwife assistance and early breastfeeding initiation implementation, as well as the results of research at Margorejo Health Center Pati District, showed that the success of early breastfeeding initiation was related to birth attendants (midwives) and the promotion of formula milk. If all midwives carry out their duties properly, midwives will significantly determine the success of early breastfeeding initiation. Childbirth helpers have a significant contribution to the success of the early breastfeeding initiation practice because they are the closest person to the mother and first to help the mother giving birth to early breastfeeding initiation. The failure of giving early breastfeeding initiation from childbirth factors because midwives did not provide information/consultation and support breastfeeding, even childbirth helpers have become a promotional medium for formula milk producers [22].

The incessant promotion of formula milk in health services has shifted breastfeeding behavior to the use of formula milk. About 20-53% of babies have obtained formula milk from healthcare facilities after delivery [23]. It is expected that the midwife as a childbirth companion must play a role in increasing the success of early breastfeeding initiation; the midwife does not give bottle milk or formula milk to the baby. The results of the study in Ghana found that the attention given by health workers in assisting childbirth is crucial for the implementation of the early breastfeeding initiation and the policy of giving early breastfeeding initiation will increase public attention to early breastfeeding initiation [24]. Family assistance is also a very significant impact on the behavior of giving early breastfeeding initiation to babies after birth because the early breastfeeding initiation cannot be done alone by the mother. The findings in Kuwait show that family support is positively related to breastfeeding practice [25]. Emotional conditions of pregnant women who are stable because of family support and health workers will affect the attitude of the mother towards the positive. Mothers will feel loved, cared for, have self-esteem and valued so that the emotions of the mother become more calm, comfortable, and confident in carrying out early breastfeeding initiation [26].

# V. CONCLUSION

The accompaniment of final trimester III pregnant women is effectively implemented for the success of Early breastfeeding initiation in the City of Bengkulu after controlling the variables of Age, Parity, Education, and Knowledge. Suggested to the community, especially pregnant women, to further increase their knowledge and understanding of the importance of doing early breastfeeding initiation and giving colostrum by consulting directly with health workers or participating in counseling activities on the administration of early breastfeeding initiation and colostrum. Childbirth assistance practices need to be assisted by counseling members during pregnancy, especially at the time of pregnancy examination to increase knowledge of pregnant women,

especially regarding the administration of early breastfeeding initiation.

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