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## Analysis Relationship of Early Breastfeeding Initiation and Exclusive Breastfeeding Towards Nutrition Status of Toddler at Puskesmas Wonokromo Surabaya

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### ABSTRACT

Early Initiation of Breastfeeding is an important step to make it easier for babies to start the breastfeeding process and exclusive breastfeeding can improve infant survival and reduce the risk of disease. This study aims to determine the effect of early breastfeeding and exclusive breastfeeding on toddler nutrition. The research method is analytical survey with cross sectional method. This research was conducted at Puskesmas Wonokromo Surabaya using primary data with sample namely 290 toddlers. The independent variable in this study was the nutritional status of toddler. The dependent variable was the implementation of Early Initiation of Breastfeeding and exclusive breastfeeding. Univariate data analysis was performed by distributing the frequency of the independent and dependent variables. Bivariate analysis used the Chi-square statistical test using the SPSS program with a significance level of  $\alpha < 0.05$ . The results showed that there was an effect between the implementation of Early Initiation of Breastfeeding on the nutritional status at toddler with a value of  $p = 0.0001$  and there was also a relationship between exclusive breastfeeding and the nutritional status of toddler with a value of  $p = 0.0001$ . This study concluded that the implementation of Early Initiation of Breastfeeding and exclusive breastfeeding have a close relationship with the nutritional status of toddler.

Keywords: Early initiation of breastfeeding; exclusive breastfeeding; toddler; nutritional status

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## INTRODUCTION

The malnutrition in children is an important contributor to the death of 10.5 million children worldwide each year. Providing an essential nutrition for the health and nutrition of newborns include Early Initiation of Breastfeeding and exclusive breastfeeding for the first six months of life. The practice of breastfeeding in Indonesia is still very poor, to get to exclusive breastfeeding, this is influenced by several aspects, among others, sociocultural aspects, prescription milk, support from health workers, the health of mothers and toddlers, as well as one of the government's efforts to increase exclusive breastfeeding. with Early Initiation of Breastfeeding <sup>1</sup>

Health Research data in 2018 shows that the prevalence of malnourished and under-five children under five is 17.7%, while the 2019 National Medium-Term Development Plan (RPJMN) a target is 17%, the nutritional status of very short and short malnutrition is 29.9% and RPJMN 28 %, while the nutritional status is very thin and thin 12.1% and RPJMN 10.2%. From this data, it can be seen that the prevalence of nutritional status in 2018 is still below the RPJMN, especially the incidence of stunting under five, so it is a major nutritional problem and is included in the category of serious public health problems because of the prevalence of stunting is 30-39 percent, above the prevalence set by WHO which only 20%<sup>2</sup>

There are several factors that affected the nutritional status of children, namely direct, indirect, and basic causes as in 1990 UNICEF framework <sup>3</sup>. The direct causes are lack of food intake, and the presence of infectious diseases suffered by children, (4-5) while the indirect factor is the knowledge of the mother who is inadequate, quality of care such as poor feeding practices, sanitation and hygiene and socio-economic factors, namely maternal education, (6-7) Several studies from developing countries reveal that the main causes of malnutrition and growth restriction in children under five is associated with low breastfeeding. The development and growth of toddlers and babies are mostly influenced by the amount of breast milk they receive, energy, and other nutrients listed in the breast milk. Breast milk without other food ingredients can meet the development needs of the age up to close to 6 months. Each of these factors is related to one another so that it can affect the intake of nutrients, and the incidence of infection in children, so that, in the end the availability of nutrients at the cellular level is low which being resulted in a controlled growth.

Based on the results of the 2018 Riskesdas, the proportion of BMI in children aged 0-23 months was 58.2%. Of this proportion, only 15.9% had an Early Initiation of Breastfeeding  $\geq$  1 hour. Whereas in 2013 the highest percentage of the process of starting breastfeeding for children aged 0-23 months was 1-6 hours (35.2%). The process of starting breastfeeding in the first hour after birth / Early Initiation of Breastfeeding was only 34.5%. This has increased but the percentage is still small <sup>8</sup>. In contrast, the exclusive breastfeeding coverage for 0- 5 months is 74.5% (9-10) The proportion of breastfeeding patterns for children aged 0-5 months in Indonesia is 37.3% exclusive breastfeeding,<sup>9</sup> 3% breastfeeding

partially, and 3.3% breast milk predominant. Breastfeeding is predominantly a toddler's breastfeeding but sharing a little water or water-based drinks such as tea, is like a pre-breastfeeding meal / drink. On the other hand, partial breastfeeding is breastfeeding for toddlers and is given artificial food, not only breast milk, such as prescription milk, oatmeal or other foods before the toddler is 6 months old, whether it is given continuously or like a pretell meal<sup>8</sup>.

Based on the description of the data above, it can be seen that the target for achieving Early Initiation of Breastfeeding and Exclusive Breastfeeding has not decreased from year to year, although efforts to increase public awareness about early initiation of breastfeeding and exclusive breastfeeding already exist, namely the formation of the Association of Indonesian Breastfeeding Mothers and Asians, which is a community movement that cares and supports exclusive breastfeeding. This movement also encourages people not to give formula milk to babies, for several reasons, one of which is because there is no single food that is nutritionally balanced and better given to babies other than exclusive breastfeeding.

Therefore the purpose of this study was to determine the effect of early initiation of breastfeeding implementation and exclusive breastfeeding on the nutritional status of toddler in the area of Puskesmas Wonokromo, Surabaya City.

## METHOD

This research is an observational study with a cross-sectional study design that examines the variables that are thought to have an effect at the same time. This research was conducted to measure the relationship between early initiation of breastfeeding and exclusive breastfeeding with the nutrition status of children aged 0 - 5 years in the area of Puskesmas Wonokromo, Wonokromo District, Surabaya. Before the data analysis was carried out, the Kolmogorof Smirnov test was conducted to determine the data normality distribution. The test results obtained the results of the BMI variable (p value = 8.96), exclusive breastfeeding variable (p value = 9.174) and nutritional status (p value = 6.35), so that the data were normally distributed. This research was conducted at the Wonokromo Health Center by involving 290 respondents under five in the working area of the Wonokromo Health Center, Wonokromo District, Surabaya. The sampling technique was carried out by using simple random sampling technique. Data obtained from data on early breastfeeding initiation, exclusive breastfeeding, and nutritional status. Furthermore, statistical tests were carried out using inferential analysis with the chi square test..

## RESULTS AND DISCUSSION

Based on the research, the results obtained :

Distribution of Research Results Frequency Table

No.	Variable	Total	
		n	%
1	<b>Gender</b>		
	Male	140	48.3
	Female	150	51.7
	Total	290	100
2	<b>Age</b>		
	0-20	5	1,7
	21-40	104	35,9
	41-60	181	62,4
	Total	290	100
3	<b>sequence of children</b>		
	1 <sup>st</sup>	277	95.5
	2 <sup>nd</sup>	7	2.4
	≥3 <sup>th</sup>	6	2.1
	Total	290	100
4	<b>Early Initiation Of Breastfeeding</b>		
	Yes	32	11,0
	No	258	89,0
	Total	290	100
5	<b>Exclusive breastfeeding</b>		
	Yes	19	6.6
	No	271	93.4
	Total	290	100
6	<b>Nutrition status</b>		
	Normal	174	60.0
	Short	73	25.2
	Very short	43	14.8
	Total	290	100

The table shows some of the variables studied. The results showed that the respondents consisted of 150 (51.7%) female children and 140 (48.3%) male children. There were 181 (62.4%) toddlers aged 41-60 months, 104 (35.9%) toddlers aged 21-40 months and 5 (1.7%) toddlers aged 0-20 months. The results also showed that out of 290 children under five, 277 (95.5%) were first children, 7 (2.4%) were 2nd children and 6 (2.1%) were 3rd children and so on.

The independent variables in this study were early initiation of breastfeeding and exclusive breastfeeding. in the early initiation of breastfeeding variable, there were 258 (89%) respondents who did not get early initiation of breastfeeding and 32 (11%) respondents who got early initiation of breastfeeding. In the exclusive breastfeeding variable, there were 271 (93.4%) respondents who did not receive exclusive breastfeeding and 19 (6.6%) respondents who received exclusive breastfeeding. As for the dependent variable, namely nutritional status, there were 174 (60%) respondents with normal nutritional status, 73 (25.2%) respondents with short nutritional status and 43 (14.8%) respondents with very short nutritional status.

### **Early Initiation of Breastfeeding with Nutrition Status of Toddlers**

The results of the chi square test showed that the  $p$  value = 0.0001, which means that early initiation of breastfeeding affects the nutritional status of toddler. Based on the research results, early initiation of breastfeeding implementation is still very low, namely 32 (11%) respondents. Early initiation of breastfeeding cannot be done immediately because the mother still feels tired after the delivery process. This fatigue condition can reduce the mother's motivation to give early initiation of breastfeeding. This is in line with research conducted by Aprillia in 2010 which stated that the factors that influence the early initiation of breastfeeding process are maternal knowledge, motivation and existing policies<sup>11</sup>

The results showed that out of 43 toddlers who experienced very short growth, all (100%) did not get early initiation of breastfeeding at birth. From 72 children under five with short status, there were 66 (91.7%) toddler who did not get early initiation of breastfeeding at birth. This shows how big the effect of early initiation of breastfeeding is on the nutritional status of toddler.

Early initiation of breastfeeding can also help calm the mother because of the effect of oxytocin release during skin contact between the mother and baby and give pleasure to the mother because the mother can hug her baby. Giving birth can immediately perform early initiation of breastfeeding on the baby. It is hoped that the happy condition experienced by the mother, when early initiation of breastfeeding can motivate exclusive breastfeeding, so that the baby does not experience interference with their nutritional status.

### **Exclusive breastfeeding with nutrition status of Toddler**

Chi square test results showed the value of  $p$  value = 0.0001, which means exclusive breastfeeding affects the nutritional status of toddler. Only 19 (6.6%) toddler were given exclusive breastfeeding. This is very different from toddlers who are not given exclusive breastfeeding, which is 271 (93.4%). As we all know that breastfeeding is the most ideal food for babies. Breastfeeding to babies can increase immunity so that babies are not susceptible to disease<sup>12</sup>

Breastfeeding contains colostrum, which is a thick yellow liquid that first comes out after childbirth. Colostrum contains immune substances against disease, especially IgA to protect babies from various infectious diseases. The results of the cross tabulation showed that out of 19 infants who were exclusively breastfed, 17 (89.5%) had normal nutritional status. This is in line with research conducted by Prasetyono (2009) which states that exclusive breastfeeding functions to support infant growth, especially height because calcium in breastfeeding is absorbed more efficiently than formula milk. Babies who are exclusively breastfed tend to be taller and fit the growth curve.

## **CONCLUSION AND SUGGESTION**

Based on the research conducted, it was found there was an effect of early breastfeeding on the nutritional status of toddler and there was an effect of exclusive breastfeeding on the nutritional status

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of toddler. One of the benefits of early initiation of breastfeeding is better in child development, especially concerning cognitive. Exclusive breastfeeding which has such great benefits is expected to prevent malnutrition in children under five. Health workers must be even more active in campaigning for early breastfeeding initiation programs to prevent malnutrition in toddler.

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