



## Measuring The Role Of External Factors On Mother's Decision To Conduct Early Initiation Of Breastfeeding In The Work Area Of Toddopuli Health Center, Makassar City, Indonesia

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### Abstract

Early breastfeeding initiation is breastfeeding immediately after the baby is born by making skin contact within 1 hour. This study aims to analyze the determinants of maternal behaviour towards the decision to initiate early breastfeeding in the working area of Toddopuli Health Center, Makassar City. This type of research is a quantitative study with cross-sectional study design. The study population was 315 mothers giving birth in the toddopuli health centre work area in 2019. The sample of this study was 75 mothers giving birth, taken by simple random sampling. Data were analyzed using chi-square and logistic regression. The results showed that 57.3% of mothers gave birth to initiate early breastfeeding. Results of Chi-square test showed that access to information ( $p = 0.036$ ), family support ( $p < 0.001$ ), and support from health workers ( $p < 0.001$ ) were associated with the decision to initiate early breastfeeding ( $p < 0.05$ ). The results of the logistic regression test showed that there was a significant effect on access to information ( $p = 0.018$ ), family support ( $p = 0.004$ ) and support from health workers ( $p < 0.001$ ) affected the decision to initiate early breastfeeding ( $p < 0.05$ ). The variable with the greatest influence on the mother's decision to initiate early breastfeeding was the support of health workers with an OR = 27.65. Health workers are advised to increase programs related to providing support and education related to early initiation of breastfeeding to pregnant women who are about to give birth.

**Keywords:** Access to information; Family support; Health Officer Support; Early Initiation of Breastfeeding.

### Introduction

Neonatal mortality is still a world health problem. Globally, in 2018 around 2.5 million children died in the first month of life [1]. 71% of neonatal deaths can be prevented, one of which is by initiating early breastfeeding, which is the main intervention for the survival of newborns [2]. Globally, the prevalence of newborns who initiate early breastfeeding within the first hour of birth is 42% [3].

Early initiation of breastfeeding is an opportunity that a person instinctively has newborns to breastfeed immediately after birth by making skin contact between mother and baby within the first hour of birth [4]. By giving breast milk immediately provides many benefits to newborns, because it plays an important role as natural antibodies to create healthy babies by increasing immunity and protecting babies from various infectious diseases [5] [6] [7].

Based on data from Riskesdas Indonesia in 2018, the percentage of newborns who received early

initiation of breastfeeding was 71.7% and this still has not reached the national target of 80%. This figure has decreased from the previous year, namely the percentage of newborns who received early breastfeeding initiation of 73.06% in 2017 [8].

Early initiation of breastfeeding is rarely done at the health service level. In the province of South Sulawesi, especially in Makassar City, the percentage of newborns who received early initiation of breastfeeding was 65.9%. Data from the Makassar City Health Office 2018 regarding the achievements of early breastfeeding initiation based on data from the Makassar City Health Center show that the working area of the Toddopuli Health Center is the lowest, reaching only 24.6% of newborns who get early initiation of

breastfeeding (Makassar City Health Office, 2018).

The lack of achievement of early initiation of breastfeeding is closely related to several factors that determine mother's behaviour when initiating early breastfeeding, namely external factors consisting of access to information from mothers regarding early breastfeeding initiation, the role of families and health workers who are conceptually known to help determine mothers initiating early breastfeeding. Based on the above problems, the purpose of this study is to analyze access to information, family support and support from health workers for the decision of mothers to initiate early breastfeeding in the working area of the Toddopuli Health Center in Makassar City.

### Methods

This type of research is a quantitative study with a cross-sectional study approach. This research was

conducted in the working area of Toddopuli Health Center in Makassar City. The population in this study were 315 mothers giving birth in the Toddopuli Health Center area in 2019. The sampling technique in this study was simple random sampling. The sample in this study was determined using the formula cross-sectional obtained as many as 75 samples. Collecting data using a questionnaire that has been tested for validity and reliability.

The data in this study used univariate analysis to get an overview by describing each variable used in the study. Bivariate analysis was performed to see the relationship between two variables, namely between the independent variable and the dependent variable using the test chi-square. Multivariate analysis was conducted to determine which independent variables tended to have more influence on the dependent variable by using the test binary logistic.

### Results and Discussions

**Table 1.** Characteristics of Respondents in the Work Area of the Toddopuli Health Center in Makassar City in 2020

Characteristics of Respondents	n	%
<b>1. Age (years)</b>		
20-29	42	56
30-39	29	38.7
40-49	4	5.3
<b>2. Last Education</b>		
Elementary School	2	2.7
Junior High School	15	20
Senior High School	45	60
University	13	17.3
<b>3. Job</b>		
Civil Servants	7	9.3
Private Employees	5	6.7
Entrepreneurs	2	2.7
Housewife	61	81.3
<b>4. Parity</b>		
Primipara	30	40
Multipara	45	60
<b>5. How to give birth</b>		
Normal	47	62.7
Caesarean	28	37.3
<b>6. Early Initiation of Breastfeeding</b>		
Yes	43	57.3
No	32	42.7
<b>Total</b>	<b>75</b>	<b>100</b>

Table 1 shows that most respondents are in the 20-29 year age group (56%). Then the most recent education is SMA / SMK graduates (60%). For the respondent's occupation, most of the respondents worked as an IRT (81.3%). And for parity, most

respondents were in the multiparous group (60%). Most respondents gave birth normally (62.7%), and most respondents did early initiation of breastfeeding (57.3%).

**Table 2.** The relationship between access to information, family support, and health workers with decision-support mothers initiate breastfeeding in Toddopuli Health Centre Makassar City 2020

Variable	Decision Doing IMD						Amount p *	Value p**	OR
	Yes		No		n	%			
	n	%	n	%					
<b>1. Access to Information</b>							<b>0.036</b>	<b>0.018</b>	<b>6.74</b>
Good	35	64.8	19	35.2	54	100			
Less	8	38.1	13	61.9	21	100			
<b>2. Family Support</b>							<b>&lt;0.001</b>	<b>0.002</b>	<b>15.21</b>
Good	40	74.1	14	25.9	54	100			
Less	3	14.3	18	85.7	21	100			
<b>3. Support Health Officer</b>							<b>&lt;0.001</b>	<b>&lt;0.001</b>	<b>27.65</b>
Good	40	80	10	20	50	100			
Less	3	12	22	8	25	100			

\*chi-square \*\*binary logistic

The analysis results in Table 2 show that respondents who have good access to information (72%) are more than those who are less (28%) and from the analysis of the relationship, the chi-square test results found a value of  $p = 0.036$  ( $p < 0.05$ ). This means that there is a significant relationship between access to information and the practice of Early Breastfeeding Initiation (IMD). Furthermore, more respondents who had good family support (72%) were more than those who had less family support (28%), and the relationship value obtained  $p = 0.001$  ( $p < 0.05$ ). This means that there is a significant relationship between family support for the practice of IMD. The next factor is the support of good health workers (66.7%) more than respondents who have less support from health workers (33.3%), and the correlation value obtained is  $p = 0.001$  ( $p < 0.05$ ). This means that there is a significant relationship between family support for the practice of IMD.

The next test is the statistical test binary logistic to determine the relationship of all independent variables to the IMD practice. Test results show that all independent variables are proven to have a significant effect on p-value  $< 0.05$ , where the information access factor is significant at  $p = 0.018$ , with an OR value of 6.74. The next factor is family support where the significance value is  $p = 0.02$  with OR = 15.21. The last one is the factor of support from health workers for the practice of maternal IMD as the variable with the greatest influence on the decision to initiate early breastfeeding where the significance value is  $p = 0.001$  with an OR = 27.65, which means that the support of health workers is 27 times greater in influencing the mother's decision. initiating early breastfeeding, compared with access to information and family support.

The results of this study indicate that less than half of the sample (42.7%) do not practice IMD. This

finding is similar to the findings [3] that globally, the prevalence of newborns initiating early breastfeeding immediately within the first hour of birth is 42% and the majority of babies born come from low and middle-income countries. This data also shows that the highest percentage based on the country territory is in the territory of East and South Africa with a percentage of 65%. These findings were published in the UNICEF\_WHO\_Capture\_the\_moment\_EIBF\_2018.pdf channel that of the 68 LMC (Lower Middle-Income Countries) only 49% of babies breastfed in the first hour and only one country got 80%, namely the Republic of Kyrgyzstan.

On the other hand, respondents who initiate early breastfeeding, some of them come from mothers who are young and have the status of being housewives, but if they can access sufficient and correct information, the possibility of behaving following health and nutrition requirements will be fulfilled. Even if it is continuously supported by the family as the closest people, the role of officers is continuously assisting. The role of the assistant role of officers is according to the guidelines that after giving birth when the baby is placed in the middle of the mother's two breasts it will automatically, a baby will instinctively look nipple for the mother to get initiation breastfeeding early. This fact supports the statement [9] that early breastfeeding initiation activities for infants and mothers make the skin to skin contact or commonly known as skin to skin contact between a newborn baby with his mother. Skin to skin contact between the baby and the mother immediately after delivery is very effective in starting lactation (breastfeeding), to regulate the baby's body temperature, protect the baby from infection, improve the baby's cardio-respiratory system, and reduce infant mortality.

Three external factors are used in The framework research conceptual to assess the role of external factors on the mother during pregnancy and childbirth, who decided to do IMD, namely access to information, family support, and support from health workers which proved to be significantly related and the results of the test binary logistic showed that the p-value <0.05 This means that these three factors influence the mother's decision to perform IMD.

Ease of access to information plays a role in determining optimal breastfeeding for her baby. Especially in this modern era, the convenience of information on social media such as the internet and sharing of information from family members and friends who of course already have experience helping mothers to get the information they need. The findings of the study there are with the conclusions of research by [10] who found that mothers who frequently undergo examinations during pregnancy and get information from counselling sessions regarding the importance of breastfeeding will have a positive impact so that it is more likely to encourage mothers to perform IMD. In line with the same research also obtained from [11] that access to media such as radio and television is 1.5 times the opportunity for mothers to do IMD.

The mother's decision to initiate early breastfeeding is also influenced by family support. Participation in decision making to initiate early breastfeeding in a household does not only involve husband and wife but also includes each extended family. Mother and mother-in-law have a share and influence in the family, including in the care of children from birth to adulthood, because both mother and mother-in-law have experience in breastfeeding and breastfeeding [12]. Also in a study conducted by [13] it was found that family support was associated with early initiation of breastfeeding in postpartum mothers. This is because mothers need support from their families which will increase their confidence in initiating early breastfeeding. This is also in line with research conducted by [14] that family support affects the emotional stability of mothers to be positive in deciding to initiate early breastfeeding. This emotional stability is obtained when the husband and family provide maximum support and motivation.

Another external factor that also plays an important role in a mother's decision to initiate early breastfeeding is the support of health workers. The support of professional and skilled health workers at delivery will influence mothers

to initiate early breastfeeding within one hour of birth. Health workers also play an important role in helping mothers determine to initiate early breastfeeding because health workers are the first service providers during pregnancy to delivery [15] [16] [17]. The results of the same study were found by [15] that the support of skilled health workers at delivery increases the likelihood of mothers breastfeeding early within one hour of birth. Also, a concluding statement about the importance of support from health workers in helping mothers from pregnancy to delivery greatly influences mothers to initiate early breastfeeding.

### Conclusion

Based on the results of the research conducted it can be concluded that there is a relationship between access to information and family support, and support from health workers for the decision of mothers to initiate early breastfeeding in the working area of the Toddopuli Health Center in Makassar City. The variable that had the greatest influence on a mother's decision to initiate early breastfeeding was support from health workers. It is recommended that health workers improve programs related to providing support and education related to early initiation of breastfeeding to pregnant women who are about to give birth.

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