



The implementation of early initiation of breastfeeding at the Mamboro public health center, in North Palu, Central Sulawesi Province

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Abstract:

Early initiation of breastfeeding is one of the health department programs in Indonesia intended to provide early stimulation of the beginning of breastfeeding provision hoping to be sustainable for the first six months (exclusive breastfeeding) due to the failure of early initiation of breastfeeding and exclusive breastfeeding provision at that period. This is potential to cause nutrient deficiency at infant and may cause malnutrition status resulting in the decrease of infant IQ and becomes a threat to Indonesian human resource in the future. The study aimed at determining the influence of factors such as education, knowledge, mother's attitude, midwife action and family support. The study was cross sectional. The samples were mothers who gave births at the Mamboro public health center in North Palu. The number of samples was 200 people selected by simple random sampling. The data were analyzed by univariate, bivariate with chi square test and multivariate analysis using multiple logistic regression. The results of the study reveal that the five variables analyzed with bivariate have a correlation with the implementation of the early initiation of breastfeeding. The multivariate analysis reveals that there are two variables contributing to the implementation of the early initiation of breastfeeding: midwife action in which $p=0.006$ and family support. It can be concluded that midwife action and family support are important determining factors to the implementation of the early initiation of breastfeeding. The main determining factors to the implementation of the early initiation of breastfeeding in Mamboro public health center are midwife action and family support.

Key words: implementation of early initiation of breastfeeding, midwife action, family support.

Introduction

Early initiation of breastfeeding is an effort to the privilege of infant to her mother which has been taken away by practitioners of birth helping the delivery process in which the infant is separated from her mother as soon as she was born. This does not make the infant better but it will decrease the condition of the infant up to 25%. At a more severe case, the infant can suffer from psychological breakdown or become desperate due to the lost of protection she needs from her mother. This will cause a bad effect on her development especially physical quality, psychological condition, and intelligence of the infant so that she is potentially to have cognitive backwardness evaluated by intelligence quotient (IQ) point. The lowering of IQ as much as 15% will be a threat to the quality of human resource in the future. Mother's good understanding and implementation to the early initiation of breastfeeding is a basis for the infant growth. The fulfillment of breastfeeding since the baby was born until she was six months old showing the IQ is higher 12.9 point at the age of nine [1].

The early initiation of breastfeeding does not only succeed the provision of exclusive breastfeeding but more than that: saving the life of the baby. If all babies in the world are provided with breastfeeding then within a year, one million lives can be saved neonatal [1].

The results of the study reveal that the early initiation of breastfeeding can decrease the mortality rate of neonatal as much as 22%. In developing countries this can save 1.45 million lives annually. The study conducted in Bolivia and Madagascar by Baker et al. (2009) shows that one fourth up to one half of the infant mortality rate in developing countries occurred at the first week of the infant life [2].

According to Dashtidia et al. (2010) only 6% of mothers who gave births provide breastfeeding at the first five hours after delivery, 76.1% after 36 hours and 90% after two days of delivery [3]. The high delay of early initiation of breastfeeding is fully affected by knowledge and culture. The UNICEF (2009) data show that the early initiation of breastfeeding in Indonesia from 2003 to 2008 was 39% and exclusive breastfeeding for six months was

40% [4]. According to Riskesdas (2010) the percentage of the early initiation breastfeeding was 9.3% lower than in 2008 [5].

There are many factors causing the low practice of the early initiation of breastfeeding in Indonesia: education, attitude and less motivation of mothers, midwife action, and family support [6]. This study aimed at finding out the correlation of factors determining the implementation of the early initiation of breastfeeding at the Mamboro public health center in North Palu.

Materials and Methods:

Location and Research Design

The study was conducted at the Mamboro public health center in North Palu, Central Sulawesi province. The location is connected with smooth land transportation. The study was observational analytic using a cross sectional study.

Population and Sample

The population of the study was mothers who gave births at the Mamboro public health center. The study was conducted from January to December 2012. The number of samples was 200 people selected by simple random sampling.

Method of Data Collection

The data were collected through interview using questionnaire. The interview was conducted during the activity at the integrated health service post and from door to door for those who were not present at the location.

Analysis of Data

The data were processed by using SPSS program. The univariate analysis was done to all research variables. Chi square was used to find the correlation between independent and dependent variables. And the multiple logistic regression was used to find out the most influential independent variables.

Results

Of the total 200 respondents, the youngest was 19 years old and the oldest was 40 years old. Most of them (55.0%) had elementary education and 96.0% were unemployed or as housewives (See Table 1).

Table 1: Distribution of Respondents' Characteristics at the Mamboro Public Health Center, North Palu, Central Sulawesi Province in 2012

Characteristics	Number	Percentage (%)
Age group		
≤ 19	12	6.0
20-24	56	28.0
25-29	73	36.5
30-34	51	25.5
35-39	7	3.5
≥40	1	0.5
Education		
<- Elementary School	110	55.0
Junior High School	57	28.5
Senior High School	28	14.0
Diploma III	1	0.5
University	4	2.0
Types of Work		
House Wife	192	96.0
Private	1	0.5
Public Servant	7	3.5
Total	200	100.0

The results of the study reveal that 83.5% of them had enough education, 16.5% had less education, 27% had less knowledge, and 73% had enough knowledge, 18.5% had negative attitude, 81.5% had

positive attitude, 36.5% was not implemented by the midwife and 63.5% was implemented by the midwife. 39.0% had no family support and 61% had family support (See Table 2).

Table 2: Distribution of Delivery Mothers by Factors Related to the Implementation of the Early Initiation of Breastfeeding at the Mamboro Public Health Center, North Palu, Central Sulawesi Province in 2012

No	Variable	Category	n	%
1	Education	Less	33	16.5
		Enough	167	83.0
2	Knowledge	Less	54	27.0
		Enough	146	73.0
3	Attitude	Not Supporting	37	18.5
		Supporting	163	81.5
4	Midwife Action	Not Done	73	36.5
		Done	127	63.5
5	Family Support	No Support	78	39.0
		With Support	122	61.0
Total			200	

The results also show that midwife action with $p=0.006$, $OR=3.783$, and family support with the value of $p = 0.043$, $OR = 2.635$. (See Table 3).

Table 3: Multivariate Analysis of Factors Determining the Implementation of the Early Initiation of Breastfeeding at the Mamboro Public Health Center, North Palu, Central Sulawesi Province in 2012

Variable	B	Wald	Df	P	OR	95% CI for Exp (B)	
						Min.	Max.
Education	-0.352	0.519	1	0.471	0.703	0.270	1.832
Knowledge	-0.208	0.200	1	0.655	0.813	0.327	2.019
Attitude	-0.020	0.002	1	0.967	0.980	0.373	2.573
Midwife action	1.331	7.517	1	0.006	3.783	1.461	9.793
Family support	0.969	4.090	1	0.043	2.635	1.030	6.740

Discussion

The study was focused on the factors affecting the implementation of early initiation breastfeeding: education, knowledge, mother's attitude, midwife action, and family support. Theoretically these five variables had a significant contribution to the implementation of the early initiation of breastfeeding, but the study reveals only two variables had a correlation with the implementation of the early initiation of breastfeeding: midwife action and family support. Mothers who had enough knowledge had a great opportunity to do a work, but this is not a guarantee to make a decision. One of the reasons for them not to implement the early initiation of breastfeeding was the influence of situation and mother's weak condition in the process of delivery. Mother's motivation was low because she was not accompanied by her family and ignorance of the benefit of the early initiation of breastfeeding.

The contribution of the family support evaluated by Phi test = 0.550 or 55.0%. The multivariate test using logistic regression in which $p = 0.000$, $OR = 6.783$ means that family support was 6.8 times greater than mothers who did not have family support.

The research conducted by Mularsih et al. (2011) indicates that 77.8% of the respondents was successful in the implementation of the early initiation of breastfeeding [7]. This illustrates that the

implementation of the early initiation of breastfeeding fully needs support from their husbands or families. A stable economic condition determines positive attitudes of mothers. The emotional stability can be done if husband or family gives maximum supports and motivation. The support is an impression of their love and attention as a respect to them. This will have an influence on their emotion in order to be calm, comfort, and confident in the process of the early initiation of breastfeeding to their babies.

The breastfeeding process involves three human relations. Mothers who provide breastfeeding make the relations in balance. But the fact is, many husbands and families tend to give all breastfeeding activity to the mothers without their interference. The involvement of husbands in the implementation of the early initiation of breastfeeding will motivate mothers to breastfeed their babies. If mothers have supports from families, they are optimistic to be able to breastfeed their babies and they will have a lot of breast milk [8]. 31.4% of mothers who get a support from their families have a positive attitude to the implementation of the early initiation of breastfeeding.

The results of the study also indicate that education has a correlation with the implementation of the early initiation of breastfeeding. This is apparent from the Phi test in which $\Phi = 29.514$ or 29.5%. The multivariate test using logistic regression

also indicates $p = 0.000$ and $OR = 5.932$. This means that education has an effect 5.9 times greater to the implementation of the early initiation of breastfeeding. The higher the mothers' education, the higher their reasoning to each information provided to ease them to act.

A lot of research such as conducted by Amalia indicates that the early breastfeeding frequency is higher among educated women [9]. Educated mothers are aware of the advantages of breastfeeding physiologically and psychologically. Educated mothers have more motivation and more opportunity to get information and have a better facility. Research in Ethiopia by Setegn et al. indicates that mothers who have formal education begin to breastfeed at the first hour 1 – 4 times than those who do not have formal education [10]. Nelvi states that there is a significant correlation between education and the provision of breastfeeding in which 74.7% of mothers who have high education implement the early initiation of breastfeeding than those who have low education [11].

This study also reveals that midwife action has a correlation with the implementation of the early initiation of breastfeeding. This is apparent from the result of Phi test = 0.462 or 46.2%. The logistic regression also indicates the p value = 0.020 and $OR = 2.573$. This means that midwife action has an effect 2.6 times greater than the midwife who does not implement the early initiation of breastfeeding.

Midwife is the first and the most important in the success of the implementation of the early initiation breastfeeding. Since the contact of midwife and mother is more frequent, the role of midwife in providing information, counseling, and real action is very important in the success of the early initiation of breastfeeding. This will give an impression that this activity is really beneficial for mothers and their babies.

This is in line with the research conducted by Anita at a hospital in Central Jakarta showing that there is a significant correlation between midwife action and the implementation of the early initiation of breastfeeding [12]. The action helps the implementation of the early initiation of breastfeeding and the staff will not provide milk in bottle to the baby.

The qualitative study done at one public health center in Solok regency, West Sumatra indicates that the midwives have lack of facility and less quality. The midwives acknowledged that there is no contact between mothers and their babies and they generally provide milk supplement to their

babies when in two hours there is no breast milk (afraid of having hypoglycemia). This is not compatible with the APN procedure. Midwives have a very important role in the implementation of the early initiation of breastfeeding because mothers cannot do it without the help and facility from the midwives.

Conclusion and Suggestion

Mothers who get family support has 6.8 times greater to implement the early initiation of breastfeeding than those who do not get supports from families. Mothers who have enough education has 5.9 times greater than those who have low education to implement the early initiation of breastfeeding. Mothers who have a real action from midwives have 2.6 times greater to implement the early initiation of breastfeeding than those who do not get a real action from midwives.

Based on the conclusion of the study results, it is suggested that each health staff especially midwives to be more intensively doing the counseling on the importance of the early initiation of breastfeeding for pregnant mothers and their families to act according to procedure of post delivery, improve family awareness, especially for husbands to give supports to mothers who gave births since they are pregnant and accompany them at the delivery process so that the implementation of the early initiation of breastfeeding can be done accordingly.

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