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# Inhibitor Factors of Early Initiation of Breastfeeding among Mothers in Rural District Bone, South Sulawesi, Indonesia

[1]Azniah Syam and [2]Ridwan Amiruddin
[1]Midwifery Academy of Batari Toja Bone, South Sulawesi, Indonesia
[2]Department of Epidemiology, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia

*Corresponding Author: Azniah Syam, Midwifery Academy of Batari Toja Bone, South Sulawesi, Indonesia*

## ABSTRACT

Early initial breastfeeding is a new method of breastfeeding by letting babies find their mother's breast by themselves soon after delivery. Early initial breastfeeding at the first hour is believed to increase the success of exclusive breastfeeding. But the practice of this method in Indonesia is still low, even after having support by policy. This research is trying to find out the potential factor obstructed the implementation of early initial breastfeeding. Cross sectional study was done in local government clinic located in South Sulawesi during February to August 2008 which consists of 248 mothers and 5 informants by combining quantitative and qualitative method. Lacking of knowledge, education level and support from their family and midwife but mother's knowledge is the most influenced factor obstructed the implementation of early initial breastfeeding. Some specific factors also found in study mentioned that mothers are tired, shy, has lack of knowledge and midwife less professionalism skill, communication strategy, individual motivation, self confidence and no policy about this from local government clinic. The promotion of early initial breastfeeding need to be improved for midwives so that they can understand the benefits of early initial breastfeeding and implement this for every delivery.

**Key words:** Inhibitor, early initial breastfeeding

## INTRODUCTION

First one hour breastfeeding or early initial breastfeeding is a process where the baby who was born normally are laid on mother's stomach by crouching soon after the first moan and baby will breath well while the skin of baby still attach on mother's skin for one hour, In 20 min, the baby will crawl to mother's breast and generally in 50 min, the baby will have breastfeeding independently (Gupta, 2007; Gangal, 2007; Utami, 2008; Klaus, 1998). A research to 10,947 babies in Ghana-Africa shown that ten percent of babies death was prevented by first one day breastfeeding, twenty two percent of babies death was prevented by first one hour breastfeeding. This research also found that the longer they postpone giving breastfeeding to a baby, the more number of babies will die (Edmond *et al*., 2006).

Early initial breastfeeding at the first one hour was believed can increase the possibility of successful breastfeeding exclusively in six months and will be continued by consuming additional food of breast milk until the baby reach two years (Scott *et al*., 2006; Khanna, 2007; GIFA., 2008). In Indonesia, the application of early initial breastfeeding after delivery and exclusive breastfeeding are still low. The proportion of initial breastfeeding practice in 30 min after

delivery is 8.3% and there were 4-36% in 1 h and there were 27% in one day (CBS. and ORC., 2003). That proportion to practice giving exclusive breast milk till 4-6 months of age is 8.5% and 6 months is 7.8%, this information shows that to practice giving breast milk based on advise, as soon as after delivering until first 6 months period, breastfeeding mother faces many challenges that related to service in childbirth (CBS. and ORC., 2003; Taveras *et al*., 2003, 2004) and support that is given by family members (Bar-Yam and Darby, 1997; Green, 1999; Lawrence and Lawrence, 2005). This stunt is because of many mothers breastfeed without enough knowledge about technical way to breastfeed well and manage the lactation problem (Arora *et al*., 2000; Giugliani, 2004) including the challenge that mothers face (Dearden *et al*., 2002; Ong *et al*., 2005). In local government clinic in South Sulawesi Indonesia during October 2008, getting the total number of childbirth during 2008 as many 680 childbirth that was handled by midwife in clinic centre with the average 57 childbirths every month. Only less than 50% given early initial breastfeeding while, all the midwives in this clinic had trained about the mechanism of conducting early initial breastfeeding. This study aimed to find out the potential factors obstructed implementation of early initial breastfeeding.

## MATERIALS AND METHOD

This research was held at one of local government clinic in South Sulawesi Indonesia during February to August 2009. Combine between quantitative and qualitative method with cross sectional design. The research was divided in collecting data step from 248 mothers and infant which 125 mothers who didn't conduct early initial breastfeeding and 123 mothers who conducted early initial breastfeeding. The first step was all the subjects fill questionnaire about early initial breastfeeding, the benefit and their knowledge and support from their family and midwife. The data that we get from first step collecting, was analyzed by using chi square and multiple logistic regression to determine the model in conducting early initial breastfeeding. The second step, several informants were chosen from two groups of research and from midwives of local government clinic as key informant to explore variety factors that has potential to district early initial breastfeeding from two different point of view, midwives were as health officers and mothers were as patients.

**Statistical analysis:** Results in this part analyzed through qualitative analysis referred to as compliment that would strengthen some factors possibility, predicted in first step.

## RESULTS

The characteristic of respondents age were vary (Table 1), percentage of mothers in 20-29 years old did early initial breastfeeding about 42%. Based on statistic result ($p = 0.01$) show the meaningful relationship between the does of early initial breastfeeding with the group of age. Parity related to breast experience in caring baby. The statistic result shown none of significant relationship between parity and early initial breastfeeding ($p = 0.376$).

Income level in this research is categorized based on regional minimum wage criteria of South Sulawesi in Indonesian's Rupiah (IDR) 740.520,00 per month. Most of subjects have income level above regional minimum wage. It means that the people in this area can be categorized as prosperous family. But, the income category per month didn't give significant influence to early initial breastfeeding ($p = 0.690$). Income related to fulfill economy problem which can be related to ability of family in providing facility to fulfill need about early initial breastfeeding information.

Table 1: Description of implementation early initial breastfeeding based on age, parity, income, work status, knowledge, mother's attitude, family and local midwife support

| | IMD | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| Independent variable | (+) F | % | (-) F | % | F | % | $P^2$ | p-value |
| **Mothers age** | | | | | | | | |
| <20th | 6 | 35.3 | 11 | 64.5 | 17 | 100.0 | 17.79 | 0.001 |
| 20-29th | 72 | 42.6 | 97 | 57.4 | 169 | 100.0 | | |
| $30th | 45 | 72.6 | 17 | 27.4 | 62 | 100.0 | | |
| **Parity** | | | | | | | | |
| Primiparous | 63 | 52.5 | 57 | 47.5 | 120 | 100.0 | 0.78 | 0.376 |
| Multiparous | 60 | 46.9 | 68 | 53.1 | 128 | 100.0 | | |
| **Family income** | | | | | | | | |
| #IDR 740,520 | 25 | 47.2 | 28 | 52.8 | 53 | 100.0 | 0.16 | 0.69 |
| >IDR 740,520 | 98 | 50.3 | 97 | 49.7 | 195 | 100.0 | | |
| **Works status** | | | | | | | | |
| Working mother | 69 | 53.5 | 60 | 46.5 | 129 | 100.0 | 1.63 | 0.202 |
| Housewife | 54 | 45.4 | 65 | 54.6 | 119 | 100.0 | | |
| **Educational background** | | | | | | | | |
| Elementary school | 0 | 0.0 | 14 | 100.0 | 14 | 100.0 | 48.56 | 0.001 |
| Middle school | 1 | 3.6 | 27 | 96.4 | 28 | 100.0 | | |
| High school | 52 | 52.5 | 47 | 47.5 | 99 | 100.0 | | |
| College | 70 | 65.4 | 37 | 36.4 | 107 | 100.0 | | |
| **Mother's knowledge** | | | | | | | | |
| High | 83 | 88.3 | 11 | 11.7 | 94 | 100.0 | 90.69 | 0.001 |
| Low | 40 | 26.0 | 114 | 74.0 | 154 | 100.0 | | |
| **Mother's attitude** | | | | | | | | |
| Positive | 2 | 40.0 | 3 | 60.0 | 5 | 100.0 | 0.18 | 0.665 |
| Negative | 121 | 49.8 | 122 | 50.2 | 243 | 100.0 | | |
| **Family support** | | | | | | | | |
| Enough | 63 | 77.8 | 18 | 22.2 | 81 | 100.0 | 38.21 | 0.001 |
| Less | 60 | 35.9 | 107 | 64.1 | 167 | 100.0 | | |
| **Midwife support** | | | | | | | | |
| Enough | 8 | 10.0 | 72 | 90.0 | 80 | 100.0 | 74.07 | 0.001 |
| Less | 115 | 68.5 | 53 | 31.5 | 168 | 100.0 | | |

p<0.05 is significant

The availability of information media in home like television, radio, health newspaper, can be access for mother to know early initial breastfeeding beside from midwives in local government clinic.

Statistical result showed significant relationship among the implementer of early initial breastfeeding and mother education level (p = 0.001). Most of respondent who applied early initial breastfeeding had equivalent education to undergraduate. It means that the higher education level the better opportunity to reach the implementation of early initial breastfeeding. Based on multiple logistic regression multivariable experiment result (Table 2), it showed score p = 0.003 and OR = 2.76, it means that failure potential of early initial breastfeeding for the mothers who have low educational background is bigger than 2.76 times in comparison with mothers who have higher education background.

Mother knowledge proportion which is low about early initial breastfeeding is higher enough (62.1%), building on statistic experiment result shows that respondent knowledge level extremely

Table 2: Multiple logistic regression analysis results

| Variables | B | SE | Wald | p-value | OR (95% CI) |
|---|---|---|---|---|---|
| Work status | -0.973 | 0.501 | 3.763 | 0.052 | 0.38 (0.14-1.01) |
| Educational's background | 1.018 | 0.339 | 9.019 | 0.003 | 2.76 (1.42-5.37) |
| Mother's knowledge | 3.077 | 0.506 | 36.908 | 0.001 | 21.68 (8.04-58.5) |
| Family support | 2.084 | 0.456 | 20.921 | 0.001 | 8.03 (3.29-19.6) |
| Midwife support | 2.866 | 0.564 | 30.719 | 0.001 | 17.57 (5.81-53.1) |

p<0.05 is significant

influence early initial breastfeeding's implementation (p = 0.001). Respondents generally knew about early initial breastfeeding from midwifes when they attend regular antenatal care visit in clinic, even though it's still very simple. Willingness to find information is higher for the mother who has just had the first children (primipara) because they had big enthusiasm as a new mother. Mother knowledge about early initial breastfeeding base on multivariate analysis result (Table 2) as a predictor factor which is most influence inhibitor implementation of early initial breastfeeding in local government clinic. A mother who didn't have enough knowledge about early initial breastfeeding potentially failure in implementing it 18 times higher than mothers who had enough knowledge about it.

## DISCUSSION

Study shows no significant relationship between parity to early initial breastfeeding, it's contradictive with the research in Japan (Nakao *et al*., 2008; Kaneko *et al*., 2006) that number of children influence breast breastfeeding duration and include the first time baby suckle after delivering. It is supposed as an impact of respondents spreading that almost equal in each observation group, while the way of early initial breastfeeding in this research is temporary (one spot action) which didn't spend days even months like in breastfeeding duration. Early initial breastfeeding was important pre-disposition factor to continue exclusive breast milk.

Working status also didn't show significant relationship to early initial breastfeeding. Some national studies about breast working status show positive relationship to breastfeeding manner especially in reaching exclusive breast milk duration until six months (Flacking *et al*., 2007; Scott *et al*., 2006; Sullivan *et al*., 2004; Februhartanty *et al*., 2006; Ong *et al*., 2005) but no study has been found that explain the correlative relation between early initial breastfeeding to the mother status who worked or not. This because of the process of early initial breastfeeding only need less than 2 h postpartum and this is short term activity and once in a baby birth cycle, no need a longer sequential time as breastfeeding cycle.

In several researches about breast feeding in several countries shows that most all sosidemografi predictors like mother educational background influence the way of early mother gives breast feeding (Lande *et al*., 2003; Nolan and Goel, 1995; Scott *et al*., 2006). For mothers who had low education equivalent with Elementary school, knew less about early initial breastfeeding, have less support from family and midwife, success opportunity only 1% in implementing early initial breastfeeding. On contrary mothers who had enough education equivalents with diploma or undergraduated and knew enough about early initial breastfeeding and also had enough support from family and midwife, it has success opportunity 99.5%. Thereby, combination factor in education level diploma or undergraduated, good understanding about early initial breastfeeding, enough family and midwife support is the best combination in implementing early initial breastfeeding.

Statistic experiment result (Table 1), shows there isn't any significant relationship between mother's attitude and early initial breastfeeding. It's influence by knowledge, perception and belief (Merten *et al*., 2005). Qualitative informant who didn't do early initial breastfeeding showed doubt toward this process. It happened because mothers don't know the benefit for her and the babies. Mothers will understand well the benefit after having explanation. The first experience about early initial breastfeeding for the first child will bring a great experience for the mother to always have the same experience in the next pregnancy consistently. In early initial breastfeeding promotion, build mother's attitude positively is very important through real experience.

Percentage of family support toward mother in her pregnancy, delivering a baby and taking care of her baby it's still less (67.3%). In several researches, family support is the main factor which is influence most and lengthen breast feeding duration (Mane *et al*., 2006; Omorodion, 1993; Agampodi *et al*., 2007; Baker *et al*., 2006; Engebretsen *et al*., 2007; Abada *et al*., 2001; Li *et al*., 2008; Nakao *et al*., 2008).

Mothers who did and didn't apply early initial breastfeeding said they had support from their husband in their pregnancy process, in delivering a baby and in taking care of their baby. Husbands always accompany their wife through antenatal care visit and help their wife to daily take care the baby too. But they obviously didn't have knowledge about breast milk and pregnancy. Generally husbands had perception that wife knows more about pregnancy so they didn't need to find more information about pregnancy and husbands' role only to earn money to fulfill family need. Husbands had the same perception with mother or mother in law, they fully trust their daughter/daughter in law to make decision whether she wanted to have early initial breastfeeding or not. Intervention of mother or mother in law it's only in culture ritual in process delivering and taking care the baby with buginese traditional ritual. It's proven by the existence of 'suppa' or safety charm which is roped in baby's waist to protect the baby from illness because they believe that the illness come from invisible or magical things. Babies here considered as weak human being who can't protect themselves. Another study found that husband' role to overcome mother difficulties during positive breastfeeding increase mother milk duration (Wolfberg *et al*., 2004) and father's role in finding information about breast milk proven as one of the most influence factor toward early initial breastfeeding (Schimdt and Sigmant-Grant, 1999).

Midwife support in implementing early initial breastfeeding was successful enough (67.7%). Statistic analysis (Table 1) shows significant relation between midwife support toward mothers in implanting early initial breastfeeding ($p = 0.001$), Odd ratio = 17.5, shows that mothers who had midwife support had a good opportunity for implementing early initial breastfeeding 17.5 times higher than mothers who didn't have enough support from midwife. It means that midwife support played an important part in implementing early initial breastfeeding. Even only one from seven midwifes use early initial in delivering baby routinely. Their ability to communicate and promote this method have done successfully, because the mother who has been handled understands the benefits, the standard procedure of early initial breastfeeding and other knowledge related to the benefits of giving breast milk for the baby at the first time. Based on our research, midwife who has not done the use of early initial breastfeeding admit their basic reason that impede are lack of braveness, have not understood clearly the benefits since this was a new routine and communication is not compose closer with the mothers, especially when they should inform about early initial breastfeeding clearly. The other complicated factor is the over work charge that they handled for giving service in two places without other helping and delegation from another assisted midwife.

## CONCLUSION

Poor early initial breastfeeding knowledge is the predictor factor dominantly and potentially obstructs the successful implementation. Promotion of early initial breastfeeding in every local government clinic needs to be increased troughs educational guide in local midwife, improvement of professional skill and how to manage a close communication with mothers. There should be an absolute written regulation in Local Government Clinic required by all midwife to implement early initial breastfeeding in every normal delivery.

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