

Original Research Article

The factors which influence exclusive breastfeeding on toddlers in North Minahasa regency, North Sulawesi

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ABSTRACT

Background: Exclusive breastfeeding is the process of giving breast milk to babies without any additional food from birth until they are six months old. It takes the role of mothers, health workers and families, especially husbands so that exclusive breastfeeding can be successful. The purpose of this study was to determine the factors associated with exclusive breastfeeding for children in North Minahasa regency

Methods: This study used a cross sectional design on 132 toddlers aged 7-12 months. The sampling in this study was carried out by using purposive sampling technique.

Results: The results of the study found that 44.7% of children under five received exclusive breastfeeding and 25.0% of children had early initiation of breastfeeding from their mother. From this study it is also known that 55.3% of mothers' knowledge level about exclusive breastfeeding is in the sufficient category, 52.3% of health workers have a good role and as many as 54.5% of husbands play a good role in exclusive breastfeeding.

Conclusions: The results obtained based on statistical tests using chi square were there is association of early initiation of breastfeeding ($p=0.018$), knowledge about exclusive breastfeeding ($p=0.045$), the role of health workers ($p=0.030$), and the role of husband on the exclusive breastfeeding for children in North Minahasa regency. However, maternal knowledge and supervision regarding the early initiation of breastfeeding and health workers needs to be more improved.

Keywords: Exclusive breastfeeding, Early initiation of breastfeeding, Knowledge, Role of health workers, Role of husband

INTRODUCTION

Exclusive breastfeeding is breast milk given to babies from birth for six months, without adding and/or replacing with other foods or drinks other than breast milk. Exclusive breastfeeding is also regulated in the government regulation of the republic of Indonesia number 33 of 2012 as a guarantee related to the fulfillment of the baby's right to receive exclusive breastfeeding from birth until the age of six months by

paying attention to their growth and development, providing protection to mothers in giving exclusive breastfeeding to their babies and increasing the role and support of families, communities, local governments, and the Government itself.¹

Babies who are exclusively breastfed for 6 months have a lower risk of developing infectious diseases.² Breast milk plays a role in the growth and development of babies by containing important nutrients it contains, such as carbohydrates, protein, fat, vitamins and minerals, all of

which are sufficient to meet the baby's needs up to 6 months of age. Babies can be given complementary foods when they are exactly 6 months old.³

Based on data from the Indonesian health profile in 2018, it was found that the highest percentage of infants who received exclusive breastfeeding was in the West Sulawesi province with a percentage of 80.2%. On the other hand, West Papua province is the province with the lowest percentage, namely 20.4%. Meanwhile, North Sulawesi province has a percentage of 38.6% related to children under five with exclusive breastfeeding. This percentage makes North Sulawesi province the province with the second lowest percentage after West Papua province.⁴

Factors that may influence the exclusive breastfeeding are mother parity, number of live births owned by a mother, mother's occupation, mother's knowledge, mother's attitude, mother's actions, family or husband support, education level, early initiation of breastfeeding, mother's age, support from health workers, availability of lactation space in the workplace, exposure to information, family income, environment, formula milk, and the psychological condition of the mother.⁵ Based on the explanation that has been described, this study aims to determine the factors associated with exclusive breastfeeding for children under five in North Minahasa regency.

METHODS

This research was quantitative research type with analytic survey method which used cross sectional design and implemented at work area of community health center (henceforth; Puskesmas) sub-district Kolongan and Kauditan North Minahasa regency. This research was conducted in July until October 2020. The samples of this research were 132 respondents obtained from the calculation using sample formula and fulfilled inclusion and exclusion criteria. The inclusion criteria in this research was the women who nurtured their child by themselves and willing to be the research subjects. The exclusion criteria in this research were the child born premature and the child who had parents (mother and father) but not living in one house or separated. The respondents were selected by employing purposive sampling data collection technique. Data were obtained through the visit to posyandu (integrated service post) and the visit to the house in cooperation with the nutrition officer of puskesmas. The data collection during Covid-19 pandemic required the researcher and the nutrition officer to apply health protocol such as wearing self protection equipment. Before conducting the interview towards the respondents, the researcher accompanied by the nutrition officer explained the intention and purpose of this research and in written asking for the participation willingness in the research (informed consent). The respondents willing to participate in the research then were interviewed by using questionnaire. Univariate

analysis was conducted to see the research respondents' characteristics such as age, education and occupation of the parents. Bivariate analysis was used to see the correlation among variables by using statistics chi square test.

RESULTS

The variables presented in this study were exclusive breastfeeding, early initiation of breastfeeding, knowledge of mothers about exclusive breastfeeding, the role of health workers and the role of husbands related to exclusive breastfeeding. The results of the study found that the number of respondents who gave exclusive breastfeeding was 59 people (44.7%) and 73 people (55.3%) did not exclusively breastfeed. Most of the children under five or 99 are known to have not passed the early initiation of breastfeed process, which was shown by the percentage of 75.0%, while the children with early initiation of breastfeed were 33 (25.0%). The number of mothers with knowledge in the good category was 73 people (55.3%) and 59 people (44.7%) had poor knowledge. The results obtained on the variable of the role of health workers showed that there were 69 health workers (52.3%) have a good role, while the remaining 63 respondents (47.7%) had less roles. On the other hand, regarding the husband's role variable in exclusive breastfeeding, there were 72 respondents (54.5%) who had a good role category and 60 respondents (45.5%) were in the poor category (Figure 1).

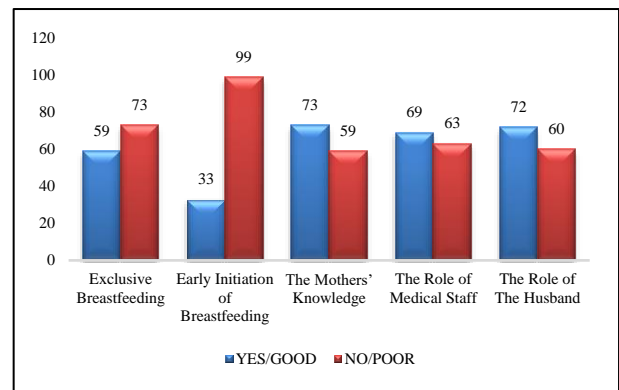


Figure 1. Distributions of variables.

Data related to research subjects, it is known that there are as many as 7 (21.2%) toddlers who go through the early initiation of breastfeeding process, while underfives who do not go through early initiation of breastfeeding and do not get exclusive breastfeeding are 47 (47.5%) under five. Furthermore, the number of respondents who have good knowledge regarding exclusive breastfeeding for babies is 50 (68.5%). As many as 50 (84.7%) respondents known to have good knowledge related to exclusive breastfeeding. Analysis on the role of officers related to exclusive breastfeeding shows that there are as many as 39 (56.5%) officers who play a good role in helping mothers provide exclusive breastfeeding. On the

other hand, there are 43 (68.3%) officers who do not play a role in accompanying them. The next variable is the husband's role in exclusive breastfeeding. Based on the results of the analysis, it was found that there were 43 (59.7%) children under five who received exclusive

breastfeeding because of the role of a good husband and in the category of husbands who did not play a role, there were 44 (73.3%) children under five who did not receive exclusive breastfeeding (Table 1).

Table 1: The factors correlating to exclusive breastfeeding on toddlers.

Variables	Exclusive breastfeeding, N (%)		P value
	Yes	No	
Early initiation of breastfeeding	7 (21.2)	26 (78.8)	0.002
Delayed initiation of breastfeeding	52 (52.5)	47 (47.5)	
The mother's knowledge			
Sufficient	50 (68.5)	23 (31.5)	0.000
Less	9 (15.3)	50 (84.7)	
The role of medical staff			
Sufficient	39 (56.5)	30 (43.5)	0.004
Less	20 (31.7)	43 (68.3)	
The husband's role			
Sufficient	43 (59.7)	29 (40.3)	0.000
Less	16 (26.7)	44 (73.3)	

DISCUSSION

Based on the data analysis conducted, it was found that 44.7% of children under five received exclusive breastfeeding and 55.3% did not receive exclusive breastfeeding. This data is known to have not reached the national target regarding the coverage of exclusive breastfeeding in Indonesia, which must reach at least 80%. Research in North Tomohon subdistrict found that toddlers who do not receive exclusive breastfeeding have a greater percentage of children who receive exclusive breastfeeding. His research shows that children under five in North Tomohon Subdistrict who receive exclusive breastfeeding are 45.4% and those who do not receive exclusive breastfeeding are 54.5%.⁶

Furthermore, in the work area of the Pineleng community health center, Minahasa regency, shows that 57.1% of respondents in their research provide exclusive breastfeeding and 42.9% of respondents do not exclusively breastfeed.⁷ Nationally, based on Indonesian health profile data in 2018, the coverage of infants with exclusive breastfeeding at that year was 68.74%. This has exceeded the 2018 strategic plan target, namely 47%. In his research, the highest percentage of exclusive breastfeeding coverage was in West Java province (90.79%), while the lowest was in Gorontalo province (30.71%). As many as six provinces have not reached the target of the 2018 strategic plan, one of which is North Sulawesi, which covers only 38.69% of exclusive breastfeeding.⁴

The ministry of health in the 2018 Indonesian health profile book explained that the number of early initiation of breastfeeding in 2018 Nationally is 71.17%, which has exceeded the 2018 strategic plan target, which is 47.0%.

The province with the highest percentage of newborns and receiving early initiation of breastfeeding was West Sulawesi (88.49%) while the lowest was Maluku province (23.18%). Ministry of health's data shows that there are three provinces that have not reached the 2018 strategic plan target, namely Maluku, Central Sulawesi and North Sulawesi.⁴

The percentage of children under five who did not get early initiation of breastfeeding based on the analysis in this study was very high, reaching 75%. Early initiation of breastfeeding is an early stage in successful infant feeding and is one step in implementing the ten steps for successful breastfeeding to ensure babies get exclusive breastfeeding. This is as stated in the regulation of the state minister for women's empowerment and child protection of the republic of Indonesia number 03 of 2010, which is about the application of ten steps to successful breastfeeding.⁸

The percentage of mother's knowledge about exclusive breastfeeding based on this study shows that most mothers have good knowledge about the importance of exclusive breastfeeding, represented by a percentage of 55.3%. Mother's knowledge regarding exclusive breastfeeding can be an asset so that mothers can successfully provide exclusive breastfeeding. Maternal knowledge about exclusive breastfeeding can be obtained through informal maternal education, including counseling, brochures and information provision from health workers during visits to posyandu or integrated health post.⁹

Absolutely, the decision to give breast milk exclusively belongs to the mother, but the process can be helped through the support of various parties. The role of health workers and husband's support are two factors that are

expected to be able to optimize the success of exclusive breastfeeding by mothers. The results of this study indicate that the percentage of the role of health workers which is in the good category is 52.3%, while the remaining 47.7% is in the poor category. The role of health workers in realizing the achievement of exclusive breastfeeding can be done through providing emotional support, giving appreciation to mothers of toddlers, as well as providing various information related to the importance of exclusive breastfeeding.¹⁰

The percentage of the husband's role in supporting exclusive breastfeeding for children under five in this study was 54.5% of husbands had a good role and 45.5% of husbands were still in the poor role category. Family support, especially from husbands, is likely to increase the success of exclusive breastfeeding for children under five. The role of the husband in the success of breastfeeding is often referred to as the breastfeeding father. The father's breastfeeding is the husband's way of providing support to the mother so that the mother can only provide breast milk until the baby is six months old.¹¹ The husband's role is very important and necessary to achieve the target of exclusive breastfeeding.¹²

Toddlers who received exclusive breastfeeding and got early initiation of breastfeeding based on this study were 21.2%, while 47.5% did not get exclusive breastfeeding and did not pass the early initiation of breastfeeding stage at birth. The results of statistical tests showed that there was an association between early initiation of breastfeeding and exclusive breastfeeding for children under five in North Minahasa regency as indicated by the value of $p=0.002$. The same results and concludes in Ketingan health care Yogyakarta province, that respondents who were not given early initiation of breastfeeding had a 9.17 times more risk of not getting exclusive breastfeeding compared to respondents who passed the early stages of breastfeeding.¹³ Research Riau province also obtained a similar result that there was a significant relationship between early initiation of breastfeeding and exclusive breastfeeding where $p=0.000$.¹⁴

The variable of nutritional knowledge shows that the number of respondents who have sufficient knowledge about exclusive breastfeeding and giving exclusive breastfeeding to toddlers is 68.5%, while respondents who have knowledge in the category of insufficient and do not provide exclusive breastfeeding are 84.7%. This percentage indicates that with less knowledge, mothers are less likely to provide exclusive breastfeeding compared to mothers or respondents who have sufficient knowledge. The results of statistical analysis showed a relationship between maternal knowledge and exclusive breastfeeding for children under five with a value of $p=0.000$. The results of this study are in line with research in Surakarta which concluded that maternal knowledge and exclusive breastfeeding for toddlers have a significant effect.¹⁵ However, research in Manado city shows

different results where There was no relationship between maternal knowledge and exclusive breastfeeding for children under five in the working area of Bailang community health center.¹⁶

A health worker is any person who is devoted to the health sector, has knowledge and skills obtained through formal education in the health sector, in which there are certain competencies that require the authority to make health efforts, both in actions related to prevention and treatment.³ Health workers in the good category associated with exclusive breastfeeding for children under five were 56.5%, while in the category the role of health workers was less so that the effect on mothers who did not provide exclusive breastfeeding was 68.3%. The results of the statistical analysis carried out proved that there was a relationship between the role of health workers and exclusive breastfeeding for toddlers in North Minahasa regency, which was indicated by a value of $p=0.004$.

Research in the work area of the Sisir community Helath center, Batu city found that mothers who did not receive the support of health workers had a 10.5 times greater risk of not giving exclusive breastfeeding than mothers who received support from health workers. In their research it can be concluded that there is a correlation between the support of health workers and exclusive breastfeeding in the working area of the Sisir community health center in Batu city.¹⁷

A qualitative study on the role of health workers on the success of exclusive breastfeeding stated that health workers have a positive influence on breastfeeding mothers who breastfeed exclusively. In this case, health workers not only provide counseling related to exclusive breastfeeding, but also related to early initiation of breastfeeding and family planning counseling.¹⁸

Husband plays the role of the mother's main support in exclusive breastfeeding. Support can be in the form of informational support, assessment support, instrumental support, and emotional support. Informational support is that the husband is expected to be a recipient and disseminator of information from health workers and maternal activities related to exclusive breastfeeding. Husbands can get this kind of information through social media, printed electronic media or not or from health workers in their respective areas. The next husband's support is support in the form of an assessment where the husband becomes a source of validators who guide and provide feedback in solving problems.¹⁹

Based on the research that has been done, it is known that the husband who plays a role in exclusive breastfeeding in the good category so that the toddler gets exclusive breastfeeding is 59.7%. Meanwhile, husbands who have a less role in this category have an effect on children under five who do not get exclusive breastfeeding by 73.3%. This percentage shows that the role of the husband is very

important and needed in achieving the success of exclusive breastfeeding for children under five. The results of statistical analysis show that there is a correlation between the husband's role and exclusive breastfeeding for children under five in North Minahasa regency as indicated by the value of $p=0.000$. The results of this study are in line with the research in the work area of the Pineleng community health center which obtained similar results.⁴

In the rural areas of Blitar regency, was conducted which concluded that husband support was found to be more likely (27.1%) to succeed in exclusive breastfeeding compared to unsupportive husbands (5.6%). On the other hand, the Spearman correlation test showed no significant relationship between husband's support and exclusive breastfeeding. However, mothers who received support from their husbands had a greater proportion of success in giving exclusive breastfeeding compared to those who did not get support from their husbands, although statistically, the relationship found was not significant.²⁰ Research at Tuminting community health center, Manado City also concluded that the better the role of the husband in assisting and supporting mothers who breastfeed, will make the success of exclusive breastfeeding higher.²¹

CONCLUSION

The results obtained based on statistical tests using chi square were there is association of early initiation of breastfeeding ($p=0.002$), maternal knowledge about exclusive breastfeeding ($p=0.000$), the role of health workers ($p=0.004$), and the role of husband ($p=0.000$) on the exclusive breastfeeding for children under five in North Minahasa regency. However, maternal knowledge and supervision regarding the early initiation of breastfeeding and health workers in North Minahasa regency needs to be more improved.

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