



# JNK

JURNAL NERS DAN KEBIDANAN  
(JOURNAL OF NERS AND MIDWIFERY)

<http://jnk.phb.ac.id/index.php/jnk>



## The Frequency of Antenatal Care with The Risk of Failure to Breastfeeding for Infants Aged 3-6 Months



Indah Yun Diniaty Rosidi<sup>1</sup>, Arisna Kadir<sup>2</sup>

<sup>1,2</sup>Midwifery Department, STIKes Nani Hasanuddin Makassar, Indonesia

### Article Information

#### History Article:

Received, 04/05/2021

Accepted, 07/07/2021

Published, 05/08/2021

#### Keywords:

ANC, breastfeeding, risk, failure

### Abstract

Antenatal care during pregnancy has an influence on fetal growth and a mother's readiness to prepare for labor and breastfeeding. Failure to provide exclusive breastfeeding can have a potential death impact on children, because exclusive breastfeeding is the basis for children's survival and children's health because of the irreplaceable nutritional content of breast milk for children's growth and development. This study aimed to determine the correlation between ANC frequency and the risk of breastfeeding failure to infants aged 3-6 months. The study method used Analytical Study with the Case Control approach. The sample in this study was 20 mothers who had babies aged 3 months and were divided into 2 groups, namely the case group and the control group with purposive sampling technique. In this study, cases and controls were not matched. The data analysis used the Fisher Exact test and the odds ratio of case exposure was indicated by a value of  $p < 0.05$  and an OR value  $> 1$  to determine the amount of risk that occurred in the variable. The results showed that there was no correlation between ANC frequency and failure to administer breast milk for infants aged 3-6 months. The frequency of ANC that was incomplete could have a risk of failure of breastfeeding in infants aged 3-6 months by 2.333 times compared to mothers with the frequency of complete ANC. It is hoped that this study can be continued by paying attention to confounding factors and seeing the correlation between variables.

© 2021 Journal of Ners and Midwifery

✉ Correspondence Address:

STIKes Patria Husada Blitar – East Java, Indonesia

Email: [tinasari.levi@gmail.com](mailto:tinasari.levi@gmail.com)

DOI: 10.26699/jnk.v8i2.ART.p196-200

This is an Open Access article under the CC BY-SA license (<http://creativecommons.org/licenses/by-sa/4.0/>)

P-ISSN : 2355-052X

E-ISSN : 2548-3811

## INTRODUCTION

Breast milk is the first immunization for infants that provides protection from respiratory infections, diarrhea and others, breast milk also has a protective effect against obesity and non-communicable diseases in the future (Horta, Benardo L; Victora, 2013; Ramadhani, Eka Putri; Lubis, 2013). A mother has an important role in the process of child development from infancy to adulthood, namely providing good, adequate and balanced nutrition, among others, by providing exclusive breastfeeding for 6 months without any additional food (Jauhari, Imam; Fitriani, 2018).

Globally, the coverage of exclusive breastfeeding for infants 0-6 months is only 38%, this causes the Infant Mortality Rate to reach 11.6%, which is equivalent to around 804,000 child deaths in 2018 (WHO / UNICEF, 2012). Failure to provide exclusive breastfeeding can have a potential death impact on children, because exclusive breastfeeding is the foundation for children's survival and children's health because of the irreplaceable nutritional content of breast milk for children's growth and development (Horta, Benardo L; Victora, 2013).

The low coverage of exclusive breastfeeding is caused by several factors, including poor knowledge about breastfeeding (WHO/UNICEF, 2012). Maternal knowledge about breastfeeding can be obtained by medical personnel or midwives during ANC visits during pregnancy. Mother awareness in breastfeeding is still low due to low knowledge about the benefits of breastfeeding, influenced by customs and a lot of misinformation about formula milk, which in its promotion contains a lot of vitamins that are needed by children, so that mothers leave breast milk and prefer formula milk (Jauhari, Imam; Fitriani, 2018).

Antenatal care during pregnancy has an influence on fetal growth and a mother's readiness to prepare for labor and breastfeeding. In antenatal care, mothers will receive various education about pregnancy and breastfeeding preparation. Thus, antenatal care both in terms of quantity, namely the number of antenatal visits made by the mother and in terms of quality, namely antenatal services provided by health workers (midwives) will determine the quality of pregnancy, which in turn will affect the process of delivery to breastfeeding (Ahmalia & Parmisze, 2018).

Based on the above background, the study is interested in conducting study on "Frequency of Antenatal Care with the Risk of Failure of Breastfeeding for Infants aged 3-6 Months".

## METHOD

The type of the study used Analytical research design with a Case Control approach (Case Study) namely observational analytical epidemiological study that can be used to examine the correlation between effects (diseases/health problems) and certain risk factors and can be used to assess how big the risk factors are for a disease to occur. The design of this study was carried out with the aim of analyzing the frequency of ANC at risk for breastfeeding failure in infants aged 3-6 months. In cases and controls, the respondent's ANC frequency was traced. In this study, cases and controls were not matched (Ardiana, *et al*, 2021; Hasmi, 2016)

This study was conducted for 3 months from February to August 2020 in the Taraweang Pangkep Health Center Work Area. The population in this study were mothers who had babies 0-3 months as many as 46 respondents. The sample size used is 20 mothers who have babies aged 3 months and will be divided into 2 groups, namely the case group and the control group.

The sampling technique used purposive sampling, which was a sampling technique for specific purposes and certain considerations made by study based on previously known characteristics or characteristics of the population (Hasmi, 2016). As for determining the sample will be taken based on the following criteria:

1. Inclusion Criteria
  - a. Case group: mothers who fail to breastfeed their babies for a maximum of 90 days (3 months) after delivery and a history of childbirth from the health facility such as Hospital / Public Health Center / Delivery Room
  - b. Control group: mothers who successfully breastfeed their babies for a maximum of 90 days (3 months) after delivery and a history of childbirth from the health facility such as Hospital / Public Health Center / Delivery Room

- c. Mothers who have babies aged 3-6 months
2. Exclusion Criteria
  - a. Mothers with breastfeeding contraindications
  - b. Mothers with a history of LBW > 2500 gram
  - c. Mothers with a history of problematic BBL

A questionnaire with open interview for each respondents were used as the instrument for this study. Data analysis is in the form of univariate analysis, where the data obtained from each variable is entered into the frequency variable. Furthermore, bivariate analysis is carried out, namely to determine or test the correlation between the independent variable and the dependent variable using the fisher exact test ( $\tilde{n}$ -value) and the odds ratio of case exposure (OR).

## RESULT

### 1. Univariate Data

The results of the univariate analysis of Respondent Characteristics are in the Table below:

From table 1, it is explained that most of the respondents have a non-risk age between 20-35 years as many as 12 respondents (60%), most of the mothers have low education in SMP-SD, namely 14 respondents (70%) and the average working mother and mother households each as many as 10 respondents (50%), as well as maternal parity, namely primiparous and multiparous respectively as many as 10 respondents (50%).

**Table 1. Respondent Characteristics Frequency Distribution in The Taraweang Pangkep Health Center Work Area from February to August 2020**

No.	Variable	Frequency	%
1.	Mother's age		
	No risk	12	60
	It's risky	8	40
2.	Education		
	High	6	30
	Low	14	70
3.	Profession		
	Does not work	10	50
	Work	10	50
4.	Parity		
	Primipara	10	10
	Multiparous	10	10

Source: Primary Data, 2020

### 2. Bivariate Data

Bivariate analysis aims to determine the correlation between the independent variables and the dependent variable, using the fisher exact test. The analysis aims to see the correlation between the frequency of antenatal care and the failure of breastfeeding to infants 3-6 months, indicated by a value of  $\rho$ -value <0.05 and the value of OR (Odds ratio) > 1 to determine the risk that occurs in the variable.

From Table 2 it can be explained that there is no correlation between the frequency of ANC and

**Table 2. Correlation of Frequency of ANC Visits with the Risk of Failure of Breastfeeding in Infants aged 3-6 Months in The Taraweang Pangkep Health Center Work Area from February to August 2020**

ANC frequency	Control n (%)	Case n (%)	Total N (%)	$\rho$	OR
Complete	7 (58.3)	5 (41.7)	12 (100)	0.650	2,333
Incomplete	3 (37.5)	5 (62.5)	8 (100)		
Total 10(50)	10(50)	20(100)			

Source: Primary Data, 2020

the failure of breastfeeding in infants aged 3-6 months, but the frequency of incomplete ANCs has a greater risk of failing to provide exclusive breastfeeding by 2.333 times compared to mothers with the frequency of complete ANC.

## DISCUSSION

Antenatal Care (ANC) is an examination to optimize the mental and physical health of pregnant women, so that they are able to deal with childbirth,

postpartum, breastfeeding preparation and the return to normal reproductive health. ANC visit is a visit made by pregnant women to get antenatal care / pregnancy. ANC services are preventive services to monitor maternal health and prevent complications for mothers and fetuses (Bartini, 2012; Mappaware, Nasrudin Andi; Muchlis, 2020).

The frequency of ANC that must be done is at least 4 times during pregnancy, namely 1 time in the first trimester, 1 time in the second trimester and 2 times in the third trimester. ANC services performed by midwives must comply with comprehensive and quality standards stipulated in the Minister of Health Decree No. 97 of 2012, one of which is providing health counseling services. The counseling services provided by midwives can increase the mother's knowledge both about pregnancy, childbirth and preparation for breastfeeding, with the hope that it can have an impact on shaping positive behavior in improving maternal and child health (Menteri Kesehatan RI, 2014).

In table 2, it can be seen that as many as 12 respondents conducted a complete ANC examination at the health center, 58.3% of them gave exclusive breastfeeding to their babies, while 41.7% of mothers who did a complete ANC examination failed to provide exclusive breastfeeding to their babies. This is due to the work done by the mother. In Table 1, it can be seen that 50% of mothers work outside the home, with limited time and busyness of mothers prefer to provide formula milk or breastfeeding substitute foods (MP-ASI) to their babies.

According to the Depkes (2012), work is one of the obstacles for mothers to give exclusive breastfeeding to their babies. Meanwhile, according to Soetjningsih (2012) employment status is suspected to be related to breastfeeding patterns. Work is always used as an excuse for not giving exclusive breastfeeding to babies because mothers leave the house so that breastfeeding time is reduced.

In addition, the parity factor also affects breastfeeding for babies, multiparous mothers (having more than 2 children) make mothers feel overwhelmed to take care of so many children and have a job outside the home. This is in line with Ervina's study (2018) that there is a parity correlation with exclusive breastfeeding for infants 7-12 months.

Mothers who did not complete the ANC examination were 8 respondents. As many as 62.5%

of mothers failed to breastfeed their babies, this was due to the lack of knowledge of mothers about breastfeeding, while 37.5% of mothers were able to breastfeed their babies. The success of mothers in breastfeeding even though they did not perform regular ANC examinations was motivated by parity or previous experience of caring for children. Proverawati (2010), said that in mothers who gave birth more than once, breast milk production was much higher than mothers who gave birth for the first time. The number of deliveries that the mother has experienced provides experience in giving breast milk to the baby.

The results showed that there was no significant correlation between the frequency of ANC and the failure of breastfeeding in infants aged 3-6 months (value  $\rho = 0.650 > \alpha = 0.05$ ). This is not in line with study conducted by Isna Hikmawati (2008) which states that there is a significant correlation between the number of ANCs performed by mothers and the failure of breastfeeding. However, the results showed that the frequency of incomplete ANCs could have a risk of failure of breastfeeding to infants aged 3-6 months by 2.333 times compared to mothers with complete ANC frequencies

Based on the results of study conducted by studyers, there are predisposing factors that influence the results of this study, namely employment, parity and mother's knowledge., Therefore, more in-depth study is needed regarding these factors.

## CONCLUSION

The results showed that there was no correlation between ANC frequency and breastfeeding failure in infants aged 3-6 months. This is due to the presence of predisposing factors, namely parity, occupation and knowledge of the mother. The frequency of ANC that is incomplete can have a risk of failure of breastfeeding in infants aged 3-6 months by 2.333 times compared to mothers with the frequency of complete ANC.

## SUGGESTION

It is hoped that this study can be continued with broader variables and using a more in-depth test such as correlation between variables. This study still has shortcomings, namely the existence of confounding factors, it is hoped that further study can analyze confounding factors in study.

## REFERENCE

- Ahmalia, R., & Parmisze, A. (2018). Hubungan Pengetahuan, Pendidikan dan Dukungan Suami dengan Kunjungan Pemeriksaan Antenatal Care di Puskesmas Lubuk Alung Tahun 2017. *Human Care Journal*, 3(3), 1. <https://doi.org/http://dx.doi.org/10.32883/hcj.v3i1.145>
- Ardiana, Dewa Putu Yudhi; Mawati, Arin Tentrem; Supinganto, Agus; Simamarta, Janner; Yuniwati, Ika; Adipura, I Made Sudarma; Oktaviani, Ni Putu Wiwik; Trisnadewi, Ni Wayan, Purba, Bonaraja; Silitonga, Bertha Natalia; Purba, S. (2021). *Metodologi Penelitian Bidang Pendidikan* (Cetakan 1). Yayasan Kita Menulis.
- Bartini, I. (2012). *ANC/ : Asuhan Kebidanan pada Ibu Hamil Normal*. Nuha Medika.
- Depkes RI. (2012). *Manajemen Laktasi/ : Buku Panduan Bagi Bidan dan Petugas Kesehatan di Puskesmas*. Diit Gizi Masyarakat Depkes RI.
- Ervina, A., & Ismalita, W. (2018). Hubungan Paritas dengan ASI Eksklusif pada Bayi Usia 7-12 Bulan. *Jurnal Obstretika Scientia*, 6(1), 170–178. <https://ejurnal.latanamashiro.ac.id/index.php/OBS/article/view/354>.
- Hasmi. (2016). *Metode Penelitian Kesehatan*. IN Media.
- Horta, Benardo L; Vitoria, C. G (2013). Long-term health effects of breastfeeding (A Systematic review). In *World Health Organization* (Vol. 129, Issues 8–9). World Health Organization. <http://www.ncbi.nlm.nih.gov/pubmed/18198630>
- Jauhari, Imam; Fitriani, R. B. (2018). *Perlindungan Hak Anak Terhadap Pemberian Air Susu Ibu (ASI)* (Sulaiman (ed.); 1st ed.). Deepublish.
- Mappaware, Nasrudin Andi; Muchlis, N. S. (2020). *Kesehatan Ibu dan Anak (Dilengkapi Dengan Kasus dan Alat Ukur Pelayanan Kesehatan Ibu dan Anak)* (1st ed.). Deepublish.
- Menteri Kesehatan RI. (2014). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 97 Tahun 2014 Tentang Pelayanan Kesehatan Kehamilan*.
- Proverawati, Atikah; Rahmawati, E. (2010). *Kapita Selekta ASI & Menyusui* (1st ed.). Nuha Medika.
- Ramadhani, Eka Putri; Lubis, G. E. (2013). Hubungan Pemberian ASI Eksklusif dengan Angka Kejadian Diare Akut pada Bayi Usia 0-1 Tahun di Puskesmas Kuranji Kota Padang. *Jurnal Kesehatan Andalas*, 2(2), 62–66. <https://doi.org/https://doi.org/10.25077/jka.v2i2.120>
- Soetjiningsih. (2012). *Seri Gizi klinik ASI/ : Petunjuk Untuk Tenaga Kesehatan*. EGC.
- WHO/UNICEF. (2012). *Global Nutrition Target 2025. Breastfeeding Policy Brief*. WHO/MNH/NHD 14.7. 8. <https://www.who.int/publications/i/item/WHO-NMH-NHD-14.7>