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**Mother's Knowledge of Breastfeeding Guidelines During The Covid-19
Pandemic and Successful Breastfeeding**

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ABSTRACT

The rate of exclusive breastfeeding has decreased in most countries in the world, including in Indonesia since the start of the covid pandemic because mothers are worried about the transmission of covid through breast milk. In Indonesia, the government has issued guidelines for breastfeeding during the COVID-19 pandemic so that the breastfeeding process continues as usual by observing health protocols. This study aims to analyze the relationship between mother's knowledge about breastfeeding during the covid 19 pandemic and the success of breastfeeding in Palangkaraya City. This research is an analytic study with a cross sectional design. The research was conducted in Palangka Raya, Central Kalimantan in March-April 2021 . The sample of this study were mothers who had babies aged > 1 month who met the inclusion and exclusion criteria. Purposive *sampling technique used in this study* with a total sample of 97 mothers. Data was collected by using questionnaires and filling sheets. Data analysis was performed univariate and bivariate using *Chi Square test* . The results showed that most of the respondents were aged 20-35 years (93.8%), secondary education (70.1%), did not work outside the home (83.5%), multipara (77.3%) and did early initiation of breastfeeding (85.6%), some mothers only give breast milk partially (64,9%) and most of the mothers' knowledge is poor (38.1%). There is a relationship between mother's knowledge about breastfeeding guidelines during COVID-19 with the success of breastfeeding in first month after delivery ($p=0,00$). Socialization about breastfeeding during the COVID-19 period is needed by health workers, starting during pregnancy for mothers who are exposed to Covid 19 or not to increases breastfeeding practices.

Keywords: Breastfeeding, Covid-19, Mother's Knowledge

BACKGROUND

Exclusive breastfeeding for six months has been shown to have many benefits, both for the mother and the baby. Although the benefits of breastfeeding have been published, the coverage rate for exclusive breastfeeding is still far from being expected. *World Health Organization* (WHO) states that 3 out of 5 babies do not get breast milk in the first hour of life and only 41% of babies under 6 months are fully breastfed. (WHO, 2021) .The number of Breastfeeding rate is still far below the target that must be achieved in 2030 in accordance with the Sustainable Development Goals (SDGs) target of 70% (WHO & UNICEF, 2018) .

In Indonesia, the achievement rate of exclusive breastfeeding in 2020 is 66.1% (Kemenkes RI, 2021b) . In Central Kalimantan, the breastfeeding coverage rate in 2020 is still below the national rates of 59.3%. This rate decreased compared to the previous year, which was 78.79%. In Palangka Raya City as the capital of Central Kalimantan Province, the exclusive breastfeeding coverage rate in 2020 is 45.82%. This rate is still far below the

strategic plan target of 80%. In addition, this rate has also decreased compared to 2019 or before the covid pandemic which reached 49.25% (Palangkaraya City Health Office, 2021) .

Based on the SDKI (2017) report, the coverage of exclusive breastfeeding for infants aged 0-1 months was the highest at 66.5% and decreased with increasing age until only 38.2% of infants were exclusively breastfed at the age of 4-5 months (Bkkbn , BPS, Ministry of Health, 2017) . The failure of breastfeeding based on the results of previous research can be related to the early feeding (prelacteal) (Elviani et al., 2020)

Several factors have been proven to be factors that influence the success of breastfeeding such as maternal age, mother's occupation, income, place of residence, parity, marital status, early initiation of breastfeeding (IMD), maternal knowledge, birth attendants and family support (Arisani&Sukriani, 2020; Cohen et al., 2018; Santana et al., 2018)

Study by Piankusol et al in Thailand stated that there was a decrease in breastfeeding rates during the pandemic (Piankusol et al., 2021) . Other data indicate a high rate of cessation of breastfeeding during a worldwide pandemic (Milani et al., 2022) . This is partly because mothers are worried about the transmission of Covid through breast milk and the side effects of giving vaccines to breastfeeding mothers.

In Indonesia, according to government guidelines through the Ministry of Health, it is still recommended to provide exclusive breastfeeding even though the mother is exposed to the COVID-19 virus. Indonesian Pediatrician Association (IDAI) stated that breastfeeding mothers who are exposed to COVID-19 are recommended to continue breastfed for their babies because their breast milk contains immunoglobulins. A and G, lactalbumin, lactoferrin and others that can provide passive natural immunity from the covid 19 virus. (Kemenkes RI, 2021a) . This study aims to analyze the relationship between mother's knowledge about breastfeeding during the covid 19 pandemic with the success of breastfeeding in the first month during the covid 19 pandemic in Palangkaraya City.

RESEARCH METHODS

This study is an analytic study with a *cross sectional design*. The study was conducted in Palangka Raya City, Central Kalimantan Province in March-April 2021. The population of this study were all mothers who had babies aged > 1 month in Palangka Raya City. The sample of this study were mothers who had babies aged > 1 month who met the inclusion and exclusion criteria. Sampling using purposive *sampling technique* with the number of samples needed in this study based on a sample calculation of 97 mothers. The inclusion criteria in this study were mothers who did not have a history of diseases that hindered the breastfeeding process and the babies did not have any congenital abnormalities, while the exclusion criteria were mothers who were not willing to be respondents .Data was collected using a questionnaire containing 15 question items that had been tested for validity and reliability and a sheet containing the variables needed for this research data. Data analysis was carried out univariately and bivariately using the *Chi Square test* to determine the relationship between mother's knowledge about breastfeeding during the covid 19 pandemic with the success of breastfeeding in the first month during the covid 19 pandemic in Palangka Raya City.

RESULTS AND DISCUSSION

The results of the study can be seen in the table below:

Table 1. Frequency Distribution of Respondents Characteristics (n = 97)

Characteristics of Respondents	n	%
Age		
< 20 Years	2	2.1
20 – 35 Years	91	93.8
>35 Years	4	4.1
Education		
Low	17	17.5
Intermediate	68	70.1
High	12	12.4
Work		
Working	16	16.5
Doesn't work	81	83.5
parity		
Primipara	22	22.7
Multipara	75	77.3
IMD Status		
IMD	83	85.6
No IMD	14	14.4

Based on table 1, it is known that most of the respondents are in healthy reproductive age (20-35 years) as many as 91 people (93.8%), intermediate education as many as 68 people (70.1%), not working outside the home 81 people (83.5 %), multiparous as many as 75 people (77.3%) and most of the mothers had IMD at birth, namely 83 people (85.6%).

Table 2. Distribution of Breastfeeding Frequency in the First Month

Breastfeeding	n	%
Fully Breastfeeding	34	35.1%
Partial Breastfeeding	63	64.9 %
Total	97	100%

Based on the table above, it is known that some mothers only give breast milk partially or mix breast milk with other foods or drinks such as formula milk, as many as 64,9% of mothers. This means that as many as 64,9% of mothers have failed to give exclusive breastfeeding in first month.

Table 2. Frequency Distribution of Mother's Knowledge About Breastfeeding during Covid

Knowledge	n	Percentage
Good	30	30.9
moderate	30	30.9
Poor	37	38.1
Total	97	100%

Based on the table above, it is known that the largest percentage is mother's who have poor knowledge about breastfeeding during the pandemic

Table 4. Results of Bivariate Analysis of Factors Related to Breastfeeding in the First Month of the Covid 19 Pandemic Period in Palangka Raya City

Variable	Breastfeeding				Score <i>p</i>
	Full Breastmilk		Partial Breastfeeding		
	n	%	n	%	
Mother's Knowledge					
Good	24	24.7	6	6.2	0.000
moderate	7	7.2	23	23.7	
Poor	3	3.1	34	35.1	
Age					
< 20 Years	0	0.0	2	3.2	0.373
20–35 Years	33	97.1	58	92.1	
>35 Years	1	2.9	3	4.7	
Education					
Low	6	17.6	11	17.5	0.353
Intermediate	26	76.5	42	66.7	
High	2	5.9	10	15.8	
Work					
Working	4	11.8	12	19.1	0.267
Doesn't work	30	88.2	51	80.9	
parity					
Primipara	2	5.9	20	31.7	0.004
Multipara	32	94.1	43	68.3	
IMD Status					
IMD	29	85.3	54	85.7	0.589
No IMD	5	14.7	9	14.3	

Based on table 4, it is known that there is a relationship between knowledge about breastfeeding during a pandemic with breastfeeding success in the first month. In addition, parity also related to breastfeeding in the first month during the COVID-19 pandemic in Palangka Raya City ($p < 0.05$)

From the results of this study, it is known that mother's knowledge about Breastfeeding Guidelines during Covid is related to successful breastfeeding in the first month after birth. This is in line with previous study which stated that the success of exclusive breastfeeding depends on the mother's knowledge about breastfeeding (Santacruz-Salas et al., 2020) . Mothers who have poor knowledge about breastfeeding tend not to start breastfeeding in the first hour after giving birth (Hamze et al., 2019) In addition, mother's knowledge about breastfeeding is also related to maternal age, education level and mother's parity. Older Mothers tend to choose to breastfeed for a long time (Jasny et al., 2019) .

This study also found that there was a relationship between parity and breastfeeding in the first month with p value = 0.004. This result is supported by Lumbantoruan's study (2018) which also obtained the same results. Most of the primiparous mothers do not give exclusive breastfeeding because breastfeeding problems often arise such as sore nipples due to the mother's lack of experience so that the mother is not ready to exclusively breastfeed. And the lack of patience of mothers in giving breast milk to babies because breast milk productivity is not smooth (Lumbantoruan, 2018) .

During the COVID-19 pandemic, mothers' knowledge of breastfeeding guidelines needs to be improved. Study by Sultana and Yasin (2021) states that only 21% of women are aware of the fact that mothers infected with COVID-19 can feed their babies by maintaining

breathing and hand hygiene. Only 35% of study participants had the knowledge that if a mother is seriously ill with a COVID infection; Breast milk can be extracted while taking precautions. Similarly, 77.5% of mothers think that a mother infected with COVID-19 cannot take care of her baby by taking precautions not to breastfeed the baby. So that maternal knowledge is significantly related to awareness about breastfeeding practices (Sultana & Yasin, 2021)

Mother's knowledge needs to be supported by health workers. The results of the study stated that not all health workers care about breastfeeding guidelines during the pandemic, so that the provision of information about breastfeeding practices during the pandemic has not been maximized (Malik et al., 2021). In fact, breastfeeding mothers really need support by health workers, especially by providing information about breastfeeding starting from pregnancy. This support during the pandemic can be provided virtually if it is not possible to provide it in person. Research shows that virtual lactation support is quite effective compared to direct support during the pandemic, although it has many challenges such as limited internet access or cellular signal. The advantages of virtual services are the flexibility and convenience of home-based support, and security from exposure to viruses (Schindler-Ruwisch & Phillips, 2021)

CONCLUSION AND RECOMMENDATION

There is a relationship between mother's knowledge about breastfeeding guidelines during the COVID-19 pandemic with the success of breastfeeding in the first month after birth. More socialization of guidelines is needed by health workers, especially those starting during pregnancy and support during the breastfeeding process, both to mothers who are exposed to COVID or not, so the breastfeeding practices increases.

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