

THE EFFECT OF KNOWLEDGE AND ANXIETY ON BREASTFEEDING DURING THE CORONA PANDEMIC

Wijdaningrum Syakira¹, Rini Kristiyanti² & Nur Chabibah^{3*)}

^{1,2,3} Bachelor of Midwifery, University of Muhammadiyah Pekaja Pekalongan, Indonesia,
Jl. Ambokembang No. 8 Kedungwuni. Pekalongan, Central Java

Abstract

The risk of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) to maternal and newborn health has yet to be determined. Several studies on influenza have shown an increased risk of maternal morbidity and mortality, especially during pregnancy and lactation, including those infected with SARS-CoV-2. This has the risk of increasing maternal anxiety during the pandemic. Psychological effects, severe stressors for breastfeeding mothers can cause disruptions to the lactation process as well as to baby care. This study aims to examine the effect of the level of knowledge and anxiety of breastfeeding mothers on the lactation process during the COVID-19 pandemic. The method used is quantitative with a retrospective analytic approach. The populations in this study were mothers who had children aged 0 to 2 years. The sampling technique was done by purposive sampling and obtained a large sample of 46 mothers. The instruments used in this study were a questionnaire on maternal knowledge about the corona virus and its prevention efforts which have been tested for validity by researchers, an anxiety questionnaire modifying the HARS (Hamilton Anxiety Rating Scale) and a check list for the implementation of the lactation process. Data collection was carried out by distributing Google forms via WhatsApp groups to eight-village toddler classes in the Pekalongan Regency area. Result: The study showed that mothers who had less education had a 1.89 times higher risk of obstacles in the breastfeeding process (p-value: 0.458; CI: 0.294-21.034) while mothers who had severe anxiety had 3.34 times the risk of inhibition in the breastfeeding process (p-value: 0.0677; CI: 0.054-0.333). Conclusion is knowledge and anxiety of breastfeeding mothers affect the lactation process. The role of health workers in providing accurate and fast information during a pandemic is very significant in reducing anxiety levels and increasing maternal knowledge.

Keywords: Anxiety; Breastfeeding; Corona Pandemi; Knowledge

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*) Corresponding author

Email: nchabibah@gmail.com

1. Introduction

Corona virus Disease 2019 (COVID-19) is an infectious disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). These pandemic, set by WHO on March 11 2020, still ongoing and currently more of 27 million confirmed cases spread across the whole world. (World Health Organization (WHO), n.d.). The COVID-19 case was reported to have entered Indonesia on March 2, 2020 with the first number of cases being 2 people. The COVID-19 pandemic in Indonesia continues to increase every month in every province, even reaching 257,388 confirmed cases as of September 23, 2020. This number will certainly increase continuously if

people ignore the applicable health protocols. (Luthfia, 2021)

Severe acute respiratory infection syndrome-coronavirus-2 (SARS-CoV-2) can affect all age groups including pregnant women and neonates. (Williams J, Namazova-Baranova L, Weber M, Vural M, Mestrovic J, 2020). The initial clinical sign of the SARS-CoV-2-related disease COVID-19 which allowed case detection was pneumonia (Velavan, T. P., & Meyer, 2020). Severe COVID-19 in children is rare. To date, the largest review of children with COVID-19 included 2143 children in China. Only 112 (5.6%) of 2143 children had severe disease (defined as hypoxia) and 13 (0.6%) children developed respiratory or multiorgan failure or

acute respiratory distress syndrome (ARDS). (Sinha, I. P., Harwood, R., Semple, M. G., Hawcutt, D. B., Thursfield, R., Narayan, O., ... & Southern, 2020).

Various conditions that occurred during the COVID-19 pandemic had a psychological effect on society. This is because the COVID-19 pandemic has become a heavy stressor. Anxiety is a common response that occurs during times of crisis. Anxiety is a common condition of fear or feeling uncomfortable. (Irvan Nova Diansyah, 2021) Lack of knowledge about fever can lead to excessive anxiety in parents and will cause a fever phobia. This will encourage parents to give antipyretic drugs even if the child has a low fever or no fever. (Andriyani, A., & Agustina, 2021) Anxiety that occurs in mothers who have children while breastfeeding has the potential to affect many things such as milk productivity, breastfeeding patterns, and other lactation processes. However, knowledge may reduce the impact of maternal behavior and anxiety. Therefore, researchers will examine whether there is a relationship between maternal knowledge and maternal anxiety during breastfeeding.

2. Method

The method used is quantitative with a cross-sectional retrospective approach. The sample size in this study was 46 mothers who had children from 6 months to 2 years of age. Inclusion criteria were mothers who have children aged 6 months to 2 years and are still breastfeeding their children, can operate and fill out google forms, do not have physical disabilities, and agree to participate in this study.

The data collection instrument was divided into three parts, the first part consisted of 10 items of questions about the characteristics of mothers and children, the second part had questions related to extracting maternal anxiety felt during the pandemic and its effect on the mother's lactation process, the third part of the questionnaire exploring mother's knowledge about COVID-19 and the preventive measures taken. This anxiety questionnaire was prepared by modifying the HARS (Hamilton Anxiety Rating Scale). Data collection was carried out by distributing google forms via WhatsApp groups to eight-village toddler classes in the Pekalongan Regency area. If the respondent has difficulty filling out the questionnaire, the researcher will help in the form of questions and answers through the group or provide assistance in filling out the questionnaire by telephone. Data collection was carried out in October– December 2021. Penelitian telah mendapatkan ijin etik dari komite..... dengan nomor etik 584/KEPK-FKM/UNIMUS/2021.

The data tabulation process is carried out by labeling each variable. The criteria for anxiety variables are not anxiety (0), mild anxiety (1), moderate anxiety (2) severe anxiety (3) and very severe anxiety (4). The data were tabulated and then analyzed using descriptive-analytic for univariate analysis and by using chi-square for bivariate data. The degree of significance in this study is 95%. The data were analyzed using stata 14.2.

3. Results and Discussion

This study obtained data on characteristics, age, education, employment status, number of children, level of anxiety, mother's level of knowledge about COVID-19 and its handling efforts as well as on mother's perception of the impact of the pandemic on her breastfeeding process. The results can be seen in the table 1

Table 1 shows that the average breastfeeding mother in this study is of a productive age which allows access to information about COVID-19 to be more open, especially through social media. More than half of the mothers who breastfeed have high school education. This allows a better understanding of Covid -19 due to higher education. More than half of the breastfeeding mothers who took part in this study had more than one child, this allowed the mother's level of concern to be higher because the level of Covid vigilance was not only for one child, coupled with the condition of the status of working mothers who were unable to provide intensive care during the mother's working hours.

In addition, table 1 shows that the anxiety level of mothers who breastfeed during the Covid-19 period is highest in the classification of moderate anxiety, which means that there is anxiety in mothers who breastfeed their children during the pandemic. This allows the influence on the lactation process that is being carried out by the mother, so that at this time the role of health workers is very important to provide education and assistance to breastfeeding mothers.

Table 2 shows that knowledge does not significantly affect the mother's breastfeeding pattern during the COVID-19 pandemic, although statistically it does not significantly affect but statistically shows a difference between well-educated mothers who will have a breastfeeding pattern that is not disturbed by the Covid-19 pandemic 1, 89 times compared to mothers who have less education.

This is confirmed by the research of Kusumaningrum (2021) which states that the knowledge factor has a significant influence on breastfeeding behavior patterns during the

COVID-19 pandemic. This shows that knowledge is a factor that supports breastfeeding mothers in changing breastfeeding behavior patterns during the COVID-19 pandemic. Knowledge about breastfeeding patterns during the COVID-19 pandemic are matters related to breastfeeding motivation and controlling and preventing the risk of Covid-19 transmission during the breastfeeding process. (Kusumaningrum, A. T., & Sari, 2021)

In addition to the knowledge factor, education is also collaborated with knowledge factor, education can increase knowledge, foster positive attitudes and provide or improve community or individual skills about the aspects concerned, so as to achieve a thriving society with intelligent future generations. A good generation of someone will be easier to receive all information from outside. (Marsiana Wibowo, 2016)

Table. 1 Characteristics of mothers who breastfeed during the Covid-19 pandemic

Variable	Amount (n)	Percentage (%)
Mother's Age	(28.64±6.38)	(17-46 Years Old)
Education		
Lower secondary education	21	45.65
Upper secondary education	25	54.35
Working Status		
No	31	67.39
Yes	15	32.61
Amount o Children		
1	21	45.65
2-3	21	45.65
>3	4	8.68
Family History Affected by Covid-19		
Yes	5	10.87
No	41	89.13
Mother's Knowledge Level About Covid-19 and Prevention Efforts		
Poor	11	23.91
Good	35	76.09
Mother's Anxiety Level		
No anxiety	6	13.04
Mild anxiety	7	15.22
Moderate anxiety	27	56.70
High anxiety	6	13.04
Very High Anxiety	0	0
Breastfeeding pattern		
Having Effect	15	32.61
No Effect	31	67.39

Table 2. Analysis of Knowledge and Anxiety on Breastfeeding Patterns of Mothers who have children aged 6 months -2 years

Variable	Odds Ratio	p-value	CI
Knowledge	1.89	0.458	0.294-21.034
Anxiety	3.34	0.0677	0.054-0.333

The effect of the level of anxiety on the mother's breastfeeding pattern is illustrated in the statistical test results in table 2. That the level of anxiety has an effect on the mother's breastfeeding pattern during the pandemic. These results show that mothers who are not anxious will have an uninterrupted breastfeeding pattern during the covid-19 pandemic 3.34 times better than mothers who have anxiety. This shows that the mother's level of anxiety is very influential on the lactation process carried out by a mother.

The problem that arises in most breastfeeding mothers is reduced milk syndrome. This condition is caused by the psychological condition of the mother who is less confident in her ability to breastfeed so that she thinks that milk production is reduced. During the COVID-19 pandemic, the level of maternal worry and anxiety increases, this can reduce the hormone oxytocin which is the hormone for releasing breast milk.(Widaryanti, 2019)
During the COVID-19 pandemic, the government sought various ways to break the chain of

transmission of transmission and protect the public from the risk of infection with this virus. Breaking the chain of transmission can be done individually by increasing clean and healthy living behaviors such as washing hands frequently, using masks, and practicing social distancing. The government also calls for large-scale social restrictions (PSBB) as an effort to social distancing. With the regulation on PSBB, breastfeeding mothers can no longer directly access support groups for breastfeeding mothers. Breastfeeding mothers also feel worried if they have to visit health services to consult about breastfeeding problems. Therefore, online assistance to breastfeeding mothers can be an effective solution to provide services regarding lactation management during the COVID-19 pandemic. Breastfeeding mothers do not need to leave the house to get consulting services regarding breastfeeding issues, besides this assistance is made a group on the WhatsApp social media application so that mothers can still share breastfeeding experiences with group members. (Pradana, A., 2020).

Several factors that influence anxiety in this study are the mother's education, the mother's working status, the number of children she has and the age of the youngest child. The results of the study by Haqiqi, et al (2022) show that the anxiety that occurs in mothers who have toddlers is related to the working status of the mother (p-value: -0.0153). This shows that the condition of not being able to accompany their toddlers makes mothers who have toddlers feel uncomfortable. The longer the duration of work or the longer time apart from the child will increase the feeling of discomfort that increases the level of anxiety of working mothers. The age of the child who is still too small also increases the mother's anxiety about the risk of getting infected with COVID-19. (Kharisma haqiqi, Nur chabibah, 2022) Intensive and frequent assistance from health workers and health cadres is needed to support the continuous process of lactation in breastfeeding mothers. Providing education will provide support in the form of increasing mother's perception and self-confidence so that it supports the knowledge possessed into attitudes and behavior in daily life with their children. This study has several limitations, including: 1) The study used a retrospective approach so that the recall process often has obstacles in the memory limitations of the respondents. 2) The sample size in this study was only 46 respondents, because it was only carried out in one regency area. 3) There is no control group.

4. Conclusions and suggestions

This study concludes that anxiety in breastfeeding mothers can affect breastfeeding patterns both in quality and quantity. Therefore, the role of health workers in assisting breastfeeding mothers during the pandemic is very significant in reducing the level of maternal anxiety and making the lactation process a success until the child is 2 years old.

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