

The Correlation of Anxiety in Postpartum Mothers During Covid-19 Pandemic With Breast Milk Expression

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ABSTRACT

Background: The COVID-19 pandemic has had a negative impact on people's psychology, such as panic disorder, stress, anxiety, and depression. Anxiety can affect the production of breast milk produced by the mother. The concentration of inhibiting and stimulating factors in the lactation process is influenced by various external stimuli such as baby sucking, the sound of a baby crying, and stress which is the impact of anxiety. The purpose of this study was to study and determine the relationship of anxiety in postpartum mothers during the COVID-19 pandemic with breastfeeding in Sekaran Lamongan Public Health Center

Methods: This type of research is analytic observational with a cross-sectional research design. The samples in this study were all populations that met all inclusion and exclusion criteria with a sampling technique using a non-probability sampling method with a purposive sampling technique. The independent variable of this study is anxiety and the dependent variable studied in this study is breast milk release.

Results: Based on the results of this study, it was found that anxiety during the COVID-19 pandemic in 31 postpartum mothers in the working area of the Sekaran Lamongan Health Center, most of them did not experience anxiety as many as 23 people (74.2%) and most of them experienced smooth breastfeeding as many as 21 people (67.7%). The results of the bivariate analysis obtained a significance value of $(p) = 0.000$ which means the value is <0.05 , so there is a relationship between anxiety in postpartum mothers during the COVID-19 pandemic and breastfeeding. The correlation value between the two variables obtained a value of $(r) = -0.697$ which indicates that the anxiety variable in postpartum mothers during the COVID-19 pandemic with breastfeeding has a strong relationship.

Conclusion: The majority of respondents who do not experience anxiety during the COVID-19 pandemic will experience smooth breastfeeding, and there is a relationship between anxiety in postpartum mothers during the COVID-19 pandemic and breastfeeding at the Sekaran Lamongan Health Center.

Keywords: *Anxiety, Breastfeeding, COVID-19*

INTRODUCTION

The COVID-19 pandemic that has occurred since late December 2019 triggered by SARS-CoV-2 continues to spread globally after the outbreak in Wuhan, Hubei province, China¹. COVID-19 has unpredictable characteristics and occurs suddenly, and infectious. This harms community psychology, such as panic disorders, stress, anxiety, and depression². Pregnant and postpartum women as a vulnerable group will tend to experience more psychological problems and will increase the risk of anxiety and even mental illness³. Other literature shows that anxiety perinatal and depression were more common in women from low- and middle-income countries, being 15.6% during the prenatal period and 19.8% during the postnatal period⁴.

Women with symptoms of *Postpartum* Anxiety (PPA) are less likely to exclusively breastfeed and are more likely to end breastfeeding early, benefits in the nutritional status of infants, benefits in intellectual and motor development, and also benefits for maternal health.

Anxiety can affect the production of breast milk produced by the mother. The concentration of inhibiting and stimulating factors in the lactation process is influenced by various external stimuli such as baby sucking, the sound of a baby crying, and stress which is the impact of anxiety. There is also a letdown reflex which is a response to the baby's sucking. This reflex will not arise when the mother is in a state of stress, anxiety, and tension. If this is allowed to continue, it will have an adverse impact, therefore researchers are interested in researching the relationship between anxiety in *postpartum* mothers during the COVID-19 pandemic with breastfeeding as the title for research⁶.

This study hypothesizes that there is a relationship between anxiety in postpartum mothers during the COVID-19 pandemic with breastfeeding and the purpose of this research is to study and

determine the relationship between anxiety in postpartum mothers during the COVID-19 pandemic and breastfeeding.

METHODS

This study uses a quantitative research method with a cross sectional approach. The population of this study were normal postpartum mothers at the Sekaran Health Center, Lamongan Regency from October to December 2021.

The sampling technique in this study is a non-probability sampling method with purposive sampling technique, which is a sampling technique that will be used by selecting a sample among the population following what the researcher wants, so that the sample used can represent the characteristics of the previously known population.

The variables in this study consisted of the independent variable, namely anxiety during the COVID-19 pandemic and the dependent variable of this study was the expenditure of breast milk in postpartum mothers at the Sekaran Lamongan Health Center.

Furthermore, the results of the questionnaire were processed by editing, scoring, coding, data entry, and tabulating. Data analysis used in this research is univariate analysis using frequency distribution and bivariate analysis using Spearman Rank test.

RESULT

Demographic Characteristics of Respondents

Table 1. Frequency Distribution of Respondents Based on Demographic Characteristics of Respondents at Mojo-Surabaya Health Center.

Characteristics	Frequency	Percentage (%)
Age		
< 20 tahun	9	29,0
20-35 tahun	16	51,6
> 35 tahun	6	19,4
Education		
Primary school	3	9,7
junior high school	5	16,1
senior High School	16	51,6
Diploma/Bachelor	7	22,6
Occupation		
Housewife	16	51,6
government employees	2	6,5
employee	3	9,7
entrepreneur	10	32,3
Education		
Primary school	0	0
junior high school	1	2,2
senior High School	22	48,9
D3/D4/S1	19	42,2
S2	3	6,7
Early Initiation of Breastfeeding		
Yes	31	1000
No	0	0
Parity		
1 st child	10	32,3
2 nd child	8	25,8
3 rd child	8	25,8
4 th child	4	12,9
5 th child	1	3,2

Based on Table 1, it is known that from 31 respondents, most of the respondents were aged 20-35 years, as many as 16 people (51.6%). Most of the respondents' last education was high school graduates, as many as 16 people (51.6%). The majority of respondents are housewives as many as 16 people (51.6%). All mothers carried out Early Initiation of Breastfeeding (IMD) on their babies after birth as many as 31 people (100%), and most of the

respondents had only their first child as many as 10th people (32.3%).

Univariate Analysis

Table 2. Frequency Distribution of Respondents Based on Anxiety during the COVID-19 pandemic in postpartum mothers in the working area of the Sekaran Lamongan Health Center

Anxiety Variables	Frequency	Percentage (%)
Anxious	8	25,8
Non- anxious	23	74,2
Total	31	100

Based on Table 2, it's known that most of the respondents, 23 (74.2%) of respondents did not experience anxiety during the COVID-19 pandemic and as many as 8 respondents (25.8) experienced anxiety during the COVID-19 pandemic.

Table 3. Frequency Distribution of Respondents Based on Breastmilk Expression on postpartum mothers during the COVID-19 pandemic in the working area of the Sekaran Lamongan Health Center

Breastmilk Expression	Frequency	Percentage (%)
smooth	21	67,7
non-smooth	10	32,3
Total	31	100

Based on Table 3, it's known that most of the current breastfeeding expenditures were 21 people (67.7%), and the non-smooth breastfeeding was 10 people (32.3%).

Bivariate Analysis

Table 4. Anxiety in postpartum mothers during the COVID-19 pandemic with breastfeeding in Sekaran Lamongan Health Center.

BreastmilkPr oduction	Anxiety during the COVID-19 Pandemic				Total		P value
	anxious		Non- anxious		f	%	
	f	%	f	%			
smooth	1	3,2	20	64,5	21	67,7	0,000
Less/ non- smooth	7	22,6	3	9,7	10	32,3	
Total	8	25,8	23	74,2	31	100	

Based on Table 4, shows that respondents who experienced less/non-fluent breastfeeding and experienced anxiety during the COVID-19 pandemic were 7 respondents (22.6%), while respondents who experienced less/non-fluent breastfeeding and did not experience anxiety during the COVID-19 pandemic. 19 only 3 respondents (9.7%). The results of the Spearman Rho statistical test obtained a significance value of (p) = 0.000 which means the value is <0.05, indicating that H0 is rejected and H1 is accepted so that there is a relationship between anxiety in postpartum mothers during the COVID-19 pandemic and breastfeeding expenditure. The correlation value between the two variables obtained a value of (r) = -0.697 which indicates that the anxiety variable in postpartum mothers during the COVID-19 pandemic with breastfeeding has a strong relationship.

DISCUSSION

The demographic characteristics of the respondents in this study sample were age, education, occupation, BMI and parity.

In this study, the most common age characteristics were the age of 20-35 years. Respondents aged 20-35 years have a more mature pattern, do not give up easily, and have a strong desire to make decisions to continue breastfeeding their

babies and the respondent's reproductive system is within normal limits so that organ and hormonal functions are expected to be able to produce breast milk properly 7.

The results of the research conducted showed the results that most of the respondents had the last education graduated from high school. Education can affect a person, including a person's behavior regarding lifestyle, especially in motivating to be encouraged to find out information that will later become additional knowledge and can be applied to his life. In general, the higher a person's education, the easier it is to receive information.

Based on the results of the study, it was found that most of the respondents were housewives. A mother who should work tends to have less time to care for and breastfeed her baby due to busy work, this situation causes the milk production to decrease and the mother stops breastfeeding her baby.

The results of the research conducted showed that all mothers did Early Initiation of Breastfeeding. IMD is a natural process for breastfeeding, namely by providing opportunities for babies to seek and suck their breast milk, in the first hour of early life by placing the baby as soon as possible on the mother's chest after birth and is also a form of support for the success of the breastfeeding program 10.

Based on the results of the study, it was found that most of the respondents had just had their first child. Parity was related to the mother's experience in breastfeeding and caring for the baby. Primiparous postpartum mothers with little experience can significantly increase stress and anxiety. This is because primiparous mothers do not have experience in childbirth and caring for babies.

Based on the results of this study, the results of statistical tests showed that there was a relationship between anxiety

in postpartum mothers during the COVID-19 pandemic and breastfeeding at the Sekaran Lamongan Health Center with a p-value of 0.000 (p-value <0.05). The correlation value between the two variables obtained a value of (r) = -0.697 which indicates that the anxiety variable in postpartum mothers during the COVID-19 pandemic with breastfeeding has a strong relationship.

The results of this study are by research conducted (Mardjun et al., 2019) it was found that there was a relationship between anxiety and the smooth discharge of breast milk in *postpartum* mothers while being treated at the Mother and Child Hospital Kasih Ibu Manado¹¹. The study (Rehklia, 2020) also shows that there is a relationship between the anxiety of the COVID-19 pandemic and the expenditure of *postpartum* mother's milk. (p value: 0.000 < a : 0.05)¹².

Anxiety is a condition in individuals who are feeling stressed, causing emotions marked by worry, feelings of tension, and physical responses such as rising blood pressure, heart palpitations, etc.¹³. These feelings arise because of the increasing number of information related to COVID-19 causing people to become psychosomatic due to the COVID-19 pandemic. Psychosomatics are feelings of excessive anxiety with the body's feeling of causing symptoms similar to COVID-19. The body is not infected with COVID-19. This happens because of the manifestation of excessive anxiety.

Based on the results of research and supporting theories, researchers assume that postpartum mothers who experience anxiety are characterized by feelings of restlessness, feeling afraid, feeling anxious, feeling uneasy, and always having a bad feeling about being afraid of contracting COVID-19 on themselves and their babies. *Postpartum* mothers have to prepare themselves to

breastfeed their babies, but some mothers experience anxiety so that which affects the production of breast milk. Breastfeeding mothers must think positively and relax so as not to experience anxiety and the mother's psychological condition becomes good, a good psychological condition can trigger the work of hormones that produce breast milk. *Postpartum* mothers should think positively, try to love their baby, and relax while breastfeeding. When mothers think positively and remain calm, it will trigger milk production so that milk can come out smoothly, on the other hand, mothers whose psychological conditions are disturbed such as feeling anxiety will affect milk production so that milk production can decrease and cause breast milk to not coming out.

CONCLUSION

There were 23 respondents (74.2%) who did not experience anxiety during the COVID-19 pandemic and most of them experienced smooth breastfeeding as many as 21 respondents (67.7%). And there is a relationship between anxiety in postpartum mothers during the COVID-19 pandemic and breastfeeding at the Sekaran Lamongan Health Center.

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