



## THE EFFECT OF STRESS AND BREAST CARE DURING THE COVID-19 PANDEMIC ON THE CURRENCY OF POST PARTUM MOM'S BREAST MILK (ASI) IN INDRAMAYU DISTRICT

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### ABSTRACTS

One of the psychological disorders that can occur in postpartum mothers is that mothers experience post-delivery stress, especially for primiparous mothers in other words, in normal situations postpartum mothers face various problems, plus during the COVID-19 pandemic, of course, it can cause stress so that it is feared to have an impact on the baby. because the milk is not smooth. The purpose of this study was to analyze the effect of stress and breast care during the COVID-19 pandemic on the smoothness of postpartum mother's milk in Indramayu Regency with the associative method using descriptive and inferential statistical analysis approaches. Based on the results of research conducted from April to July 2021 in Indramayu Regency, the following conclusions can be drawn: 36.7% postpartum mothers during the covid 19 pandemic experienced moderate stress, 55.1% postpartum mothers during the covid 19 pandemic included the category not good. and 57.1% of postpartum mothers during the covid 19 pandemic in Indramayu Regency, their breast milk is in the substandard category.

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### 1. INTRODUCTION

The COVID-19 pandemic, with its rapid spread, high morbidity and mortality rates, is currently affecting all groups, including postpartum mothers. The puerperium or postpartum period is the period in the first weeks after birth. The length of this period is uncertain, most consider it between 4 to 6 weeks. Complex changes in postpartum mothers or after the delivery process require adjustment to the lifestyle and conditions after the process. <sup>1</sup>Some of these changes may be of little concern to the “new mom” although

serious complications can also occur. In mothers who cannot adapt to the changes that occur, it can cause psychological disorders, both mild and severe psychological disorders. One of the psychological disorders that can occur in postpartum mothers is that mothers experience post-delivery stress, especially for primiparous mothers in other words, in normal situations postpartum mothers face various problems, plus during the COVID-19 pandemic, of course, it can cause stress so that it is feared to have an impact on the baby. because the milk is not smooth. This is in accordance with previous research that there is a relationship between stress and the smoothness of breastfeeding in breastfeeding mothers after childbirth at RSI A. Yani Surabaya. In addition, in order to smoothly during breastfeeding when pandemic, it takes care of the breast.

Breast care is an action to care for the breasts, especially during the puerperium to facilitate the release of breast milk. Breast care after delivery aims to keep the breasts clean and easy for the baby to suck. Many mothers complain that their babies don't want to breastfeed, this could be due to technical factors such as an inverted nipple or a wrong position. In addition to these technical factors, of course, breast milk is also influenced by nutritional intake and the mother's psychological condition.<sup>5</sup> Research on the effect of breast care on the smoothness of exclusive breastfeeding still needs to be researched, previous research has stated that there is a relationship between breast care and smooth breastfeeding in breastfeeding mothers.

The results of a preliminary study conducted by researchers at the Margadadi Health Center, Indramayu District on October 6, 2020, from 10 postpartum mothers who were still breastfeeding, 6 mothers said they were depressed by the current condition, 2 mothers said it was normal and 2 mothers said they were slightly affected. And of the 6 mothers who felt pressured by the pandemic conditions, 5 mothers said their breast milk was not smooth. For this reason, further research is needed.

## **2. METHODS**

### **Types of research**

This type of research is associative research. Associative research is research that aims to determine the effect or relationship between two or more variables.<sup>16</sup>

### **Research Time and Place**

The research was conducted from March to December 2021. While the research locations at the Puskesmas in the Kawedanan Indramayu area included the Margadadi Health Center,

Plumbon Health Center, Babadan Health Center. The plan is for all Community Health Centers in the Indramayu district, but due to the COVID-19 pandemic, which has not subsided, it is only carried out in the Kawedanan Indramayu area.

### **Population and Sample**

The study population was all postpartum mothers who came to use the services of the Margadadi Health Center, Plumbon Health Center, Babadan Health Center in April to July 2021. The research sample in this study was 196 respondents who were taken by *accidental sampling technique* , This sampling technique relies on easy access to subjects such as surveys of customers at a mall or passers-by on a busy street. Usually referred to as convenience sampling, because of the ease of researchers in conducting and dealing with the subject. Researchers have almost no authority to select sample elements, and this is purely based on proximity and not representativeness. This non-probability sampling method is used when there are time and cost constraints in collecting feedback. In situations where there are limited resources such as in the early stages of the study, convenience sampling is used. The advantage of this sampling technique is that it takes a moment to make it easier to select sample members. The drawback of this technique is that the respondent does not necessarily have the characteristics that the researcher is looking for.

### **Data Types and Sources**

The data used in this study are primary data and secondary data. Primary data collected directly from the results of filling out the questionnaire. Secondary data were obtained from the Puskesmas and the Indramayu District Health Office.

### **Data collection technique**

Data collection technique used : observation, literature search, and questionnaire

### **Operational Definition and Measurement of Variables**

a. Stress level = Independent Variable

Measurement of stress levels focused on 4 dimensions, namely no stress, mild stress, moderate stress and severe stress.

b. Breast Care = Independent Variable

Measurement of breast care focused on 3 dimensions, namely preparation, implementation and evaluation done or not done

c. Smoothness of breast milk = Dependent Variable

The measurement of the smoothness of breast milk focuses on whether or not breast milk is smooth during breastfeeding.

### Data analysis technique

#### a. Instrument Trial

The instrument for measuring stress levels uses standardized instruments, namely: the *Kessler Psychological Distress Scale* and measurements of breast care and breastfeeding fluency. First, the instrument is tested to determine whether it is feasible or not. The following instrument trials will be carried out:

##### 1) Instrument Validity Test

(1) Theoretical Validity (Logic Validity) which is viewed from the material and language terms

- Face Validity: Validation in terms of language and typing by 10 experts with a minimum of S2 education
- Content Validity: Validation of the suitability of the material by 10 experts with a minimum of S2 education

##### (2) Empirical Validity

In the empirical validity test, namely by looking at the product moment correlation score with the help of SPSS for Windows software. In this empirical validation, the questionnaire was tested on 50 respondents.

2) Instrument Reliability Test. the reliability test was carried out using the *Alpha Cronbach* formula technique and using the SPSS for windows program. In this reliability test, the questionnaire was tested on 50 respondents.

#### b. Data analysis

##### 1) Statistical Descriptive Analysis

Descriptive analysis in this study is to provide an overview to the reader by using: Frequency Tables, Diagrams, Graphs.

##### 2) Statistical Inferential Analysis

Inferential statistics discusses how to analyze data and make decisions (related to parameter estimation and hypothesis testing).

##### 3) Statistical Assumption Test

Before testing the research hypothesis, first test the statistical assumptions. The statistical assumption tests are: Normality Test, Homogeneity Test, Linearity Test, Multicollinearity Test, Heteroscedasticity Test.

4) Statistical Hypothesis Test

To determine the effect using: Simple Regression Analysis and T Test / T Test / Mann Whitney U Test to determine the effect simultaneously using Multiples Regression Analysis (Multiple) and F test.

### 3. RESULTS AND DISCUSSION

#### Postpartum Mother's Stress Level in Indramayu Regency

Postpartum stress levels during the COVID-19 pandemic in Indramayu Regency can be seen in table 4.1. following:

**Table 1**  
**Postpartum Mother's Stress Level During the Covid-19 Pandemic in Indramayu Regency (n=196)**

Criteria	Amount	Percentage (%)
No Stress	58	29.6
Mild Stress	32	16.3
Moderate Stress	72	36.7
Heavy Stress	34	17.3
<b>Amount</b>	<b>196</b>	<b>100</b>

Based on table 1. above, it can be seen that most of the postpartum mothers during the COVID-19 pandemic in Indramayu Regency as many as 72 people (36.7%) experienced moderate stress.

#### Breast Care for Postpartum Mothers in Indramayu Regency

Breast care for postpartum mothers during the COVID-19 pandemic in Indramayu Regency can be seen in table 4.2. following:

**Table 2**  
**Breast Care for Postpartum Mothers During the Covid 19 Pandemic in Indramayu Regency (n=196)**

Criteria	Amount	Percentage (%)
Well	88	44.9
Not good	108	55.1
<b>Amount</b>	<b>196</b>	<b>100</b>

Based on table 2 above, it can be seen that the majority of postpartum mothers during the COVID-19 pandemic in Indramayu Regency as many as 108 people (55.1%) had their breast care in the poor category.

### Smooth Breastfeeding for Postpartum Mothers in Indramayu Regency

The smoothness of breastfeeding for postpartum mothers during the COVID-19 pandemic in Indramayu Regency can be seen in table 4.3. following:

**Table 3**  
**Smooth Breastfeeding for Postpartum Mothers During the Covid-19 Pandemic in Indramayu Regency (n=196)**

Criteria	Amount	Percentage (%)
Fluent	84	42.9
Not that smooth	112	57.1
<b>Amount</b>	<b>196</b>	<b>100</b>

Based on table 3 above, it can be seen that most of the postpartum mothers during the COVID-19 pandemic in Indramayu Regency as many as 112 people (57.1%) their breast milk was included in the substandard category.

### The Effect of Stress During the Covid-19 Pandemic Period on the Smooth Breastfeeding of Postpartum Mothers in Indramayu Regency

The effect of stress during the Covid 19 pandemic on the smooth breastfeeding of postpartum mothers in Indramayu Regency can be seen in table 5

**Table 5**  
**Cross Table of the Effect of Stress During the Covid 19 Pandemic Period on the Smooth Breastfeeding of Postpartum Mothers in Indramayu Regency**

Stress Level	Breast milk smooth				Amount	%	<i>p Value</i>
	Fluent		Not that smooth				
	n	%	N	%			
No Stress	54	93.1	4	6.9	58	100	0.000
Mild Stress	26	81.2	6	18.8	32	100	
Moderate Stress	4	5.6	68	94.4	72	100	
Heavy Stress	0	0	34	100	34	100	
<b>Amount</b>	<b>44</b>	<b>42.9</b>	<b>112</b>	<b>57.1</b>	<b>196</b>	<b>100</b>	

Based on table 5 It is known that, of all postpartum mothers who were not stressed during the pandemic, 93.1% of their breast milk was smooth, of all postpartum mothers who experienced mild stress, 81.2% of their breast milk was smooth, of all postpartum mothers who experienced moderate stress, 94 ,4% of their breast milk was not smooth and of all postpartum mothers during the pandemic who experienced severe stress, 100% of their breast milk was not smooth. Based on the *chi square* statistical test , a *p value* of 0.000, because the calculated *p value* < (0.05) means  $H_0$  is rejected and it can be concluded, "There is a relationship between stress levels and the smoothness of breastfeeding during the Covid 19 pandemic in Indramayu Regency.

#### The Effect of Breast Care During the Covid-19 Pandemic Period on the Smooth Breastfeeding of Postpartum Mothers in Indramayu Regency

The effect of breast care during the Covid 19 pandemic on the smooth breastfeeding of postpartum mothers in Indramayu Regency can be seen in table 6

**Table 6**  
**Cross Table of the Effect of Breast Care During the Covid 19 Pandemic Period**

Breast Care	Breast milk smooth				Amount	%	<i>p Value</i>
	Fluent		Not that smooth				
	n	%	N	%			
Well	74	84.1	14	15.9	88	100	0.000
Not good	10	9.3	98	90.7	108	100	
<b>Amount</b>	<b>84</b>	<b>42.9</b>	<b>112</b>	<b>57.1</b>	<b>196</b>	<b>100</b>	

Based on table 6 It is known that, of all postpartum mothers during the pandemic who did breast care well, 84.1% of their breast milk was smooth, and of all postpartum mothers who did not take good care of their breasts during the pandemic, 90.7% of their breast milk was not smooth. Based on the *chi square* statistical test , a *p value* of 0.000, because the calculated *p value* < (0.05) means  $H_0$  is rejected and it can be concluded, "There is a relationship between breast care and breastfeeding during the Covid 19 pandemic in Indramayu Regency.

## **4.2. Discussion**

### **Postpartum Mother's Stress Level in Indramayu Regency**

Based on the results of the study, it was found that most of the postpartum mothers during the COVID-19 pandemic in Indramayu Regency as many as 72 people (36.7%) experienced moderate stress. This shows that postpartum mothers in Indramayu Regency during the pandemic experienced moderate stress. This could be due to a pandemic as it is known to have an impact on all fields including the health and economic fields. In the results of the questionnaire, it is known that the mother feels depressed and hopeless with the pandemic condition that does not end quickly. Considering that in addition to moderate stress, there are 17.3% of postpartum mothers who experience severe stress, the researchers provide solutions including: instilling a positive and optimistic mindset in postpartum mothers that the pandemic will end, besides recommending doing things that can reduce stress such as exercise. and relaxation.

### **Breast Care for Postpartum Mothers in Indramayu Regency**

Based on the results of the study, it was found that the majority of postpartum mothers during the COVID-19 pandemic in Indramayu Regency as many as 108 people (55.1%) had their breast care in the poor category. This shows that postpartum mothers in Indramayu Regency during the pandemic period, their breast care was not good. If this continues, it is feared that it will not only interfere with the smooth flow of breast milk, but also postpartum mothers will experience inflammation of the breasts due to the presence of dams in the breasts. For this reason, researchers provide a solution, that while still breastfeeding, postpartum mothers should continue to carry out routine breast care so that there is no dam on the postpartum mother's breasts.

### **Smooth Breastfeeding for Postpartum Mothers in Indramayu Regency**

Based on the results of the study, it was found that most postpartum mothers during the COVID-19 pandemic in Indramayu Regency, as many as 112 people (57.1%) had their breast milk in the substandard category. This shows that postpartum mothers in Indramayu Regency during the pandemic, their breast milk is not smooth. This could be because the postpartum mother is experiencing stress due to the pandemic so that it affects the



hormones that secrete breast milk, besides that it could be due to poor breast care factors (Darmawati, 2021).

### **The Effect of Stress During the Covid-19 Pandemic Period on the Smooth Breastfeeding of Postpartum Mothers in Indramayu Regency**

Based on the *chi square* statistical test, a *p value* of 0.000, because the calculated *p value* < (0.05) means  $H_0$  is rejected and it can be concluded, "There is a relationship between stress levels and the smoothness of breastfeeding during the Covid 19 pandemic in Indramayu Regency. This shows that postpartum mothers who experience stress will not produce smooth milk, whereas postpartum mothers who are not stressed will produce smooth milk. This is in accordance with Rizky Amalia's research (2017) that there is a relationship between stress and the smooth flow of breast milk in breastfeeding mothers after childbirth at RSI A. Yani. Supported by research by Sari, Azza and Dewi (2015) that there is a significant relationship between psychological stress and the smooth production of breast milk in primiparous mothers who breastfeed. Therefore, the researcher assumes that postpartum mothers are trying to reduce the incidence of stress because it will affect the production of breast milk which results in the baby not getting exclusive breastfeeding.

Seeing this condition, the solution is for health workers, in this case nurses and midwives, to pay more attention to how to reduce stress on postpartum mothers, either by relaxation methods or by encouraging positive thinking.

### **The Effect of Breast Care During the Covid-19 Pandemic Period on the Smooth Breastfeeding of Postpartum Mothers in Indramayu Regency**

Based on the *chi square* statistical test, a *p value* of 0.000, because the calculated *p value* < (0.05) means  $H_0$  is rejected and it can be concluded that there is a relationship between breast care and breastfeeding during the Covid 19 pandemic in Indramayu Regency. This shows that postpartum mothers who do not perform breast care, their milk will not flow smoothly, on the other hand, postpartum mothers who do breast care, their milk will come out smoothly. This is in accordance with research by Permata Dian and Aritonang (2017) that there is a relationship between breast care ( $p = 0.007$ ) and smooth milk production. Supported by research by Muslim VY and Halimatusyadiyah (2017) that there is an effect of breast care on the smooth release of breast milk in post partum

mothers, it is strengthened by research by Nita haerawati (2010) that there is a relationship between breast care and milk production.

Therefore, researchers assume that breast care is very important so that the smooth production of breast milk continues so that the impact on babies gets nutritious food, namely breast milk as needed. Seeing this condition, the solution is for health workers, in this case nurses or midwives, to always provide health education about the importance of breast care.

#### 4. CONCLUSION

Based on the results of research conducted from April - July 2021 in Indramayu Regency, the following conclusions can be drawn:

- a. 36.7% of postpartum mothers during the COVID-19 pandemic in Indramayu Regency experienced moderate stress.
- b. 55.1% of postpartum mothers during the COVID-19 pandemic in Indramayu Regency, their breast care was in the poor category.
- c. 57.1% of postpartum mothers during the COVID-19 pandemic in Indramayu Regency, their breast milk was in the substandard category.
- d. There is a relationship between stress levels and the smooth running of breastfeeding during the Covid 19 pandemic in Indramayu Regency.
- e. There is a relationship between breast care and breastfeeding during the Covid 19 pandemic in Indramayu Regency.

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