

Correlation Between Covid-19 Pandemic and Breast Milk Production in Postpartum Mothers in Bidan Praktek Mandiri Ucu M, East Jakarta In 2021

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ABSTRACT

The highest percentage of exclusive breastfeeding coverage was in Kepulauan Seribu (the Thousand Islands) area with 97.2% and the lowest was in the West Jakarta area with 60, 5%. The fluency of breast milk production is greatly influenced by psychological factors. The occurrence of the COVID-19 pandemic has made postpartum mothers experience anxiety, which can affect breast milk production. This research used a cross-sectional method. The sample in this research was postpartum mothers on days 1 and 2. The sampling technique used was total sampling, namely 37 postpartum mothers on day 1 and day 2. Data collection was done using a questionnaire that contained 14 questions. Based on the results of the validity test, it was obtained a value of $r_{count} > 0.6139$. This means that 14 questions in the questionnaire were declared valid. Data were then analyzed using univariate and bivariate analysis with the chi-square test to determine the correlation between COVID-19 pandemic anxiety and breast milk production in postpartum mothers at Bidan Praktek Mandiri (Independent Practice Midwife) Ucu M, in East Jakarta in 2021. The results show that there is a correlation between COVID-19 pandemic anxiety and breast milk production in postpartum mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021. It is hoped that health worker can make further efforts to better educate individuals and families, especially pregnant women, to increase the coverage of exclusive breastfeeding, by knowing the effect of COVID-19 pandemic anxiety on breast milk production in postpartum mothers.

Keywords: COVID-19 Pandemic, Anxiety, Breastfeeding Production

Received March 17, 2021; Revised April 10, 2021; Accepted April 28, 2021



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BACKGROUND

Postpartum is a period where the reproductive organs return to normal or return to not being pregnant which takes 6 weeks long (Farrer, 2017). Periods in postpartum are divided into 3, namely: early puerperium, intermedial puerperium, and remote puerperium (Mochtar, 2018). Postpartum mothers experience many changes both physiologically and psychologically. In the physiological changes that occur in postpartum mothers, they experience changes in the reproductive system where they experience a shrinkage process in the uterus after the placenta is born due to contraction of the uterine smooth muscles. Meanwhile, in psychological adaptation changes, there is a sense of fear and worry in new mothers. These psychological adaptation changes will have an impact on mothers who are in the puerperium to be sensitive (Kirana, 2017).

World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) (2018) recommend exclusive breastfeeding for children for at least 6 months and continue it until the children are 2 years old. For mothers to maintain exclusive breastfeeding for 6 months, WHO recommends the initiation of breastfeeding within the first hour of life, where babies only receive breast milk without additional food or drink, including water, are breastfed as requested or as often as the baby wants, and are breastfed directly (not using bottles or pacifiers) (WHO, 2018). According to the WHO data (2016), worldwide coverage of exclusive breastfeeding is only around 36% during the 2007-2014 periods.

The percentage of exclusive breastfeeding for 0-6 months children in Jakarta in 2019 was 70.22%, an increase compared to the percentage of exclusive breastfeeding in 2018, which was 45.29% (Indonesia Health Profile, 2019). However, this coverage has not met the target coverage in DKI Jakarta which was stipulated at 71.88% (East Jakarta City Health Office, 2019). The highest percentage of exclusive breastfeeding coverage was in Kepulauan Seribu (the Thousand Islands) area with 97.2% and the lowest was in the West Jakarta area with 60.5% (DKI Jakarta Health Profile, 2019). Whereas in East Jakarta, the coverage of babies who received exclusive breastfeeding was 61.22% in 2017, then increased to 87.9% in 2018, and decreased to 79% in 2019, however it has met the target coverage in DKI Jakarta at 71.88. % (East Jakarta City Health Office, 2019).

It is known that currently there is an outbreak of a new disease, namely the coronavirus which causes diseases ranging from mild to severe symptoms. Corona Virus Disease 2019 (COVID-19) is a new type of virus that has never been previously identified in humans. The clinical manifestations of COVID-19 usually appear within 2 days to 14 days after exposure. Common signs and symptoms of coronavirus infection include acute respiratory symptoms such as fever, cough, and shortness of breath. In severe cases, it can cause pneumonia, acute respiratory syndrome, kidney failure, and even death (WHO, 2019). COVID-19 cases in Indonesia until November 15, 2020, still showed a significant increase in the number of infected patients by 467,113 people with as many as 3,897 new cases, 391,991 recovered patients, and 15,211 deaths (Ministry of Health RI, 2020).

The occurrence of the COVID-19 pandemic has made postpartum mothers experience anxiety, which can affect breast milk production fluency. This is evident from the results of interviews conducted by a midwife, Rusmawati (2020), in her own practice, in which it was revealed that during the pandemic outbreak, most of the mothers who gave birth at the clinic experienced anxiety which affects their breast milk production fluency (Rusmawati, 2020). Research reported that there were more depressive symptoms and anxiety in pregnant women after the COVID-19 pandemic than before the COVID-19, including a tendency to self-harm (Wu, et al., 2020). This can cause dangerous conditions during pregnancy, thus

affecting the condition of the mother and fetus (Durankuş and Aksu, 2020). Research reports that anxiety related to COVID-19 is not limited only to pregnant women, but also to postpartum mothers (Nanjundaswamy et al., 2020). This result is supported by the previous research result which shows that 37 postpartum mothers at Praktek Bidan Mandiri Hj. Rusmawati, Muara Badak (2020), most of whom were worried about COVID-19, with as many as 22 people (59.5%), and the rest were not worried about COVID-19, with as many as 15 people (40.5%). This shows that there is a significant correlation between COVID-19 pandemic anxiety and breast milk production in postpartum mothers.

Based on data from Duren Sawit Public Health Center in the working area of Duren Sawit District, East Jakarta, it is known that exclusive breastfeeding coverage in 2018 was 152 people (62.44%) while in 2019, it decreased to 129 people (46.24%), even though the target of exclusive breastfeeding coverage at Duren Sawit Public Health Center is 50% (Data from Duren Sawit Public Health Center, 2019). Based on the results of direct interviews with respondents at Bidan Praktek Mandiri Ucu M, East Jakarta, there are some respondents whose due is nearing, who feel anxious during the COVID-19 pandemic because they still have to leave the house and check for their pregnancy; they are afraid of contracting the virus and transmitting it to the child and themselves.

Based on the explanation above, researchers were interested in conducting research to determine the correlation between COVID-19 pandemic anxiety and breast milk production in postpartum mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021

METHODS

This research used an analytic design, a research aimed to determine a correlation using the "cross-sectional" method. The population in this research was all postpartum mothers on days 1 to 2 at Bidan Praktek Mandiri Ucu Maryamah, in East Jakarta with an estimated delivery of 37 people from January 15 to February 10, 2021. The sampling technique used was total sampling, namely 37 postpartum mothers on day 1 and day 2. This research was conducted at Bidan Praktek Mandiri Ucu M, in East Jakarta on January 15 to February 10, 2021. The measuring instrument used in this research was a questionnaire.

RESULT

Univariate Analysis

Frequency Distribution of Respondent Characteristics

Table 1.2. Frequency Distribution of Respondent Characteristics at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021

Characteristics of Respondents	Frequency (f)	Percentage (%)
Age		
≤35 years old	24	64.9
> 35 years	13	35.1
Education		
Low	3	8.1
High	34	91.9
Profession		
Does not work	20	54.1
Work	17	45.9

Based on Table 4.1, it is known that of the 37 puerperium respondents, the majority of them are ≤ 35 years old (69.4%), 34 of them have high level of education (91.9%), and 20 of them do not work (54.1%).

Table 1.3. Frequency Distribution of COVID-19 Pandemic Anxiety in Postpartum Mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021

Breast Engorgement Incidents	Frequency (f)	Percentage (%)
Anxious	27	73
Do not feel anxious	10	27
Total	37	100

Based on Table 1.3, it is known that of the 37 puerperium respondents, the majority of them experienced COVID-19 pandemic anxiety, with as many as 27 (73%) people.

Frequency Distribution of Breast Milk Production Fluency in Postpartum Mothers

Table 1.4. Frequency Distribution of Breast Milk Production Fluency in Postpartum Mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021

Knowledge	Frequency (f)	Percentage (%)
Non Smooth	23	62.2
Smooth	14	37.8
Total	37	100

Based on Table 1.4, it is known that of the 37 puerperium respondents, the majority of them had non-smooth breast milk production during the COVID-19 pandemic with as many as 23 (62.2%) people.

Bivariate Analysis

Correlation between COVID-19 Pandemic Anxiety and Breast Milk Production in Postpartum Mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021

Table 1.5

Correlation between COVID-19 Pandemic Anxiety and Breast Milk Production in Postpartum Mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021

COVID-19 Pandemic Anxiety	<i>Breast milk production fluency</i>				Total		P-value
	Non-smooth		Smooth		N	%	
	N	%	N	%			
Anxious	23	85.2	4	14.8	27	100	0,000
Do not feel anxious	0	0	10	100	10	100	
Total	23	62.2	14	37.8	37	100	

Based on Table 1.5, it is known that of the 27 respondents who were anxious about the COVID-19 pandemic, 23 respondents (85.2%) experienced non-smooth breast milk production fluency, and of the 10 respondents who were not anxious about the COVID-19 pandemic, all of them experienced smooth breast milk production fluency (100%). The results of the analysis show that the value of $p = 0.000 < 0.005$, thus there is a correlation between COVID-19 pandemic anxiety and breast milk production in postpartum mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta

DISCUSSION

Correlation between COVID-19 Pandemic Anxiety and Breast Milk Production in Postpartum Mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021

Based on the results of the Chi-square test, a value of $p = 0.000$ ($p < 0.05$) is obtained, thus it can be concluded that H_0 is rejected and H_a is accepted. This means that there is a correlation between COVID-19 pandemic anxiety and breast milk production in postpartum mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021.

The results of this research are in line with Astutik's (2016) theory which states that psychological disorders in mothers cause reduced breast milk production because it will inhibit let down reflexes. Arfiah (2017) also revealed that mothers' mental condition and calm emotions greatly affect the smoothness of breast milk production. If the mother experiences stress, depression, anxiety, sadness, and tension – it will affect the smoothness of breast milk production. Mothers who are anxious will produce less milk than mothers who are not anxious.

Furthermore, this research is also in line with the research conducted by Tambaru (2020) which result in $p = 0.000$ ($p < 0.05$), thus it can be concluded that H_0 is rejected and H_a is accepted, which means that COVID-19 pandemic anxiety affects breast milk production in postpartum mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021.

Based on the results of this research, there were several cases where respondents who experienced anxiety but their breast milk production fluency was smooth, this was probably because most of them were postpartum mothers with a high level of education who generally could accept new things and changes to maintain health, especially regarding breast milk production. Some of the respondents also aged > 35 years old, which means they probably have already had mature thoughts to make decisions to maintain their own health, as when the age increases, the knowledge and experience of the mother will also increase. Most of the respondents also do not work so that they are not tired because they do not have outside activities that will not trigger a decrease in milk production. Researchers also assume that the anxiety that occurs in postpartum mothers is due to thinking too much about negative things. Postpartum mothers should think positively, try to love their babies, and be relaxed when 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 with anxiety, will be affected in terms of their milk production fluency, thus their milk production can decrease and cause milk production fluency to be less smooth (non-smooth).

CONCLUSION

Based on the results of the research that has been done, the researchers analyzed that from the univariate test results, of the 37 postpartum mother respondents, the majority of them are < 35 years old (69.4%), 34 of them have high level of education (91.9%), and 20 of them work (54.1%). Besides, of the 37 postpartum mother respondents, 27 (73%) of them

were experiencing COVID-19 pandemic anxiety, and 23 (62.2%) of them were experiencing non-smooth breast milk production fluency. From the results of the bivariate test, it is known that there is a correlation between COVID-19 pandemic anxiety and breast milk production in postpartum mothers at Bidan Praktek Mandiri Ucu M, in East Jakarta in 2021.

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