



The Affect of Covid-19 Pandemic Anxiety on Breast Milk Ejection of Postpartum Mother in Pmb Hj. Faridatul Ampera

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ABSTRACT

COVID-19 pandemic has made postpartum mothers experience anxiety from mild to fear of crowds and lock themselves at home. So that it affects the expenditure of postpartum mother's milk, because the increase in cortisol makes the hormone oxytocin inhibition in its secretion so that the release of breast milk is inhibited. Knowing the effect of the anxiety of the Covid-19 pandemic on the release of postpartum mother's milk at the Independent Practice Midwife Hj. Faridatul Ampera Performance. This type of research is an analytic survey using a cross sectional design. Samples were postpartum mothers who gave birth on June 1-30, 2021, totaling 20 people. Data analysis using Chi Square. Most of the respondents aged 20-35 years amounted to 16 people (80%), completed high school education amounted to 15 people (75%), household members were 12 people (65%), did IMD were 20 people (100%) and the first child parity was 9 people (45%). Most of them were anxious about Covid-19, amounting to 12 people (60%) and not worried about Covid-19 being 8 people (40%). Expenditure of breast milk in postpartum mothers until the second day mostly has not come out amounted to 13 people (65%), while it has come out amounted to 7 people (35%). There is an influence of the anxiety of the Covid-19 pandemic on the release of postpartum mother's milk (p value : $0.002 < : 0.05$). It is recommended that pregnant women always think positively and seek information about health, especially Covid-19 or do relaxation so that they are not anxious.

KEYWORDS :

Anxiety, COVID-19, postpartum mother's milk ejection

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INTRODUCTION





Not producing enough breast milk is one factor that can contribute to breastfeeding failure. According to Hardiani and Mardjun (2019), psychological factors have a significant impact on how smoothly breastfeeding goes. Moms with psychological disorders produce less milk because they prevent letdown reflection. Three days after giving birth, postpartum moms typically experience psychological changes. After giving birth, moms are usually very dependent on their babies and have a pessimistic outlook on caring for them because all of their energy is directed toward themselves. Breastfeeding success is significantly impacted by the mother's serene mental and emotional state. Sadness: The flow of breast milk will be affected if the mother is under stress, is experiencing depressed thoughts, is restless, is anxious, is feeling sad, or is tense. Anxious mothers will produce less breast milk than mothers who are not anxious (Arfiah, 2017). The results of previous research conducted by Arfiah (2017) showed that there was a relationship between anxiety levels and breast milk production during the postpartum period at RSU Anutapura Palu.

Anxiety about giving birth affects 107,000 pregnant women in Indonesia. Astria's (2020) research indicates that pregnant primigravida women feel more anxious. It is possible for pregnant women to experience anxiety, particularly during the third trimester and during childbirth. It is known that a new disease outbreak is currently occurring. The virus in question is the coronavirus, a large family of viruses that can cause illnesses with mild to severe symptoms. A novel virus that has never been found in humans before is called coronavirus disease (COVID-19). COVID-19 clinical symptoms typically show up two to fourteen days after exposure. Signs and symptoms of acute respiratory issues, such as fever, coughing, and dyspnea, are frequently associated with coronavirus infection. In severe cases, it can cause pneumonia, acute respiratory syndrome, kidney failure, and even death. COVID-19 cases in Indonesia as of April 7, 2021, still show a significant increase in the number of infected patients of 1.55 million people, with a total of 4860 new cases, 1.39 million recovered patients, and a death toll of 42,064 people (Ministry of Health of the Republic of Indonesia, 2021).

Because the COVID-19 virus spreads so quickly, pregnant women experience increasing levels of anxiety during the pandemic. As many as 57.5% of respondents had severe anxiety due to poor birth readiness and good knowledge about COVID-19. This is because there is no medicine or vaccine for the COVID-19 virus, which makes pregnant women even more anxious. After all, they are afraid of something undesirable happening. The anxiety of pregnant women about to give birth greatly influences the mother's readiness to prepare for childbirth and the postpartum period. The more anxious a pregnant woman is, the less she will prepare for childbirth and the postpartum period.

Anxiety among postpartum mothers has been linked to the COVID-19 pandemic, and this could affect the production of breast milk. Ten pregnant women who will give birth in March or April were interviewed for a preliminary study on February 20, 2021, at KRI Budhi Asih. The study revealed that seven individuals were concerned during the COVID-19 pandemic due to the requirement for pregnancy checks, which made mothers fearful of bringing germs from outside the house and potentially harming their unborn child—the impact of COVID-19 Pandemic Anxiety on Postpartum Mothers' Breast Milk Expenditure in PMB Hj. Faridatul Ampera is a claim that the author attempts to prove based on observations and the data above.

MATERIALS AND METHODS





This type of research is an analytical survey using a cross-sectional design, with the sampling technique used in this research is nonprobability sampling with a purposive sampling method. Twenty responders gave birth between June 1 and June 31, 2021. The independent variable in this research is anxiety, and the dependent variable is breast milk production. The instrument used in the research is the COVID-19 pandemic anxiety questionnaire, created and written by Rusmaati. The respondent identity questionnaire contains the respondents' characteristics, consisting of 4 questions: age, education, occupation, and parity. The statement for the COVID-19 pandemic anxiety level variable consists of 54 statements. The research data was analyzed with the Chi-square method.

RESULTS

Findings from studies on the impact of COVID-19 pandemic anxiety on the amount of breast milk produced by new mothers are as follows

Table 1. Respondent Characteristics

Characteristics		f	%
Age	<19 years	2	10
	20-35 years	16	80
	>35 years	2	10
Educational	Junior High	5	25
	Senior High	15	75
	Diploma/ Graduate	0	0
Occupation	Housewife	12	60
	Government employees	0	0
	Private sector worker	8	40
Parity	Primigravida	9	45
	Multigravida	10	50
	Grande Multigravida	1	5

Based on the data presented in Table 1, most respondents are housewives with an average high school education level, and their ages range from 20 to 35.

Table 2. The effect of COVID-19 pandemic anxiety on postpartum mothers' breast milk ejection in PMB Hj Faridatul Ampera

Breast Milk Ejection	COVID-19 Pandemic Anxiety				Total	%	p value
	With Anxiety		No Anxiety				
	f	%	f	%			
No Ejection	11	55	2	10	13	65	
There is ejection	1	5	6	30	7	35	*0,002
	12	60	8	40	20	100	

The statistical test results (Table 1) obtained p value: $0.002 < \alpha: 0.05$ so that H_0 was rejected and H_1 was accepted, namely that there was an effect of Covid-19 pandemic anxiety on postpartum mothers' breast milk ejection at PMB Hj. Faridatul Ampera. Meanwhile, the results of data processing use the formula: X^2 Calculate (11.7216) > X^2 Tabel (3,841), it is means that anxiety about the Covid-19 pandemic has an impact on breast milk production in postpartum mothers.





DISCUSSION

This research is in accordance with research conducted (Arfiah, 2017; Marjun, 2019; Hastuti 2017) showing that there is a relationship between anxiety levels and breast milk production during the postpartum period.

According to the results of research conducted by Kamariyah (2014), there is a relationship between the mother's psychological condition and the smooth production of breast milk. An excellent psychological condition of the mother will motivate her to breastfeed her baby so that the hormones that play a role in breast milk production will increase because breast milk production starts from the breastfeeding process and will stimulate breast milk production.

It was explained according to Guyton (2017), the level of anxiety in postpartum mothers would be accompanied by increased secretion of Adrenocorticotrophic Hormone (ACTH) by the anterior pituitary gland, followed by increased secretion of adrenocortical hormone in the form of cortisol within a few minutes. Cortisol has a direct negative feedback effect on the hypothalamus to reduce the formation of CRF and the anterior pituitary gland to reduce the formation of ACTH. Both of these feedback loops help regulate plasma cortisol concentrations. So, if cortisol increases, this feedback will automatically reduce the amount of ACTH so that it returns to its average value. High cortisol secretion can inhibit the transport of the hormone oxytocin in its secretions to inhibit the release of breast milk products (colostrum, transitional breast milk, mature breast milk).

Ased on research results, postpartum mothers experience anxiety, characterized by the mother always being restless, feeling afraid and uneasy, and always having a bad feeling about being afraid of contracting COVID-19 for herself and her baby. Postpartum mothers must prepare themselves to breastfeed their babies, but some mothers experience anxiety which affects milk production. Nursing mothers must think positively and relax so that they do not experience anxiety and the mother's psychological condition improves. Good psychological conditions can trigger the work of hormones that produce breast milk.

Based on research results and supporting theories, researchers assume that the anxiety that occurs in postpartum mothers is because they overthink about negative things during the COVID-19 pandemic. Postpartum mothers must think positively, love their babies, and relax when breastfeeding. When mothers think positively and remain calm, it will trigger breast milk production so that breast milk can come out smoothly; on the other hand, mothers whose psychological conditions are disturbed, such as feeling anxious, will affect breast milk production so that breast milk production can decrease and cause breast milk not to come out.

CONCLUSIONS

Based on the research results and discussion regarding the influence of COVID-19 pandemic anxiety on postpartum mothers' breast milk production, it was concluded that there was an influence of COVID-19 pandemic anxiety on postpartum mothers' breast milk production ($p\text{-value: } 0.002 < \alpha: 0.005$). It is hoped that health workers will increase efforts to provide good education to individuals and families, especially pregnant women, always to think positively and seek health information, especially COVID-19, so they do not worry.

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Conflict of Interest

There is no conflict of interest.

REFERENCES

- Arfiah. 2017. *The Influence of Anxiety Levels in Adolescent Primiparous Postpartum Mothers on the Ability to Fulfill the Needs of Newborn Babies at Anuntapura RSU Palu*. Program Studi DIII Kebidanan, STIKes Widya Nusantara Palu.
- Depkes RI. 2018. *Maternal and Child Health Book, Volume A*, Jakarta.
- Doremalen, Van N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN, et al. 2020. *Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1*. The New England Journal of Medicine. Massachusetts Medical Society. doi:10.1056/nejmc2004973. PMID 32182409
- Hawari. D. 2016. *Holistic Approach to Mental Disorders, Schizophrenia*. FKUI. Jakarta.
- Hegar. B. 2018. *Breast Milk Surgery Study From Various Scientific Points of View*, IDI Cabang DKI Jakarta.
- Ibrahim, A.S. 2016. *Panic Neurosis and Anxiety Disorders*. Jelajah Nusa.Tangerang.
- Kusumawati, F. 2017. *Mental Nursing Textbook*. Salemba Medika. Jakarta.
- Letko, M, Marzi A, Munster V. 2020. *Functional Assessment Of Cell Entry And Receptor Usage For SARS-Cov-2 And Other Lineage B Betacoronaviruses*. Nature Microbiology: 1–8. doi:10.1038/s41564-020-0688-y
- Notoatmodjo, S. 2015. *Health Research Methodology*. PT Rineka Cipta. Jakarta.
- Nursalam. 2015. *Nursing Care*. Salemba Medika. Jakarta.
- Mardiatun. 2017. *The Influence Of The Supportive-Educative "Orem" Approach On Increasing The Independence Of Postpartum Mothers In Self-Care During The Early Postpartum At The Karang Taliwang Mataram Community Health Center, West Nusa Tenggara*. Jurnal Keperawatan Poltekkes Kemenkes Mataram.
- Mardjun, Zulfikar. 2019. *The Relationship between Anxiety and the Smooth Expression of Breast Milk in Post Partum Mothers While Being Treated at the Kasih Ibu Manado Mother and Child Hospital*. e-journal Keperawatan (e-Kp) Volume 7 Nomor 1.
- Roesli, Utami. 2018. *Get To Know Exclusive Breastfeeding*. Jakarta: Trubus Agriwidya.
- Safrizal ZA, MSi, Danang Insita Putra, PhD, Safriza Sofyan, SE, AK, M.Com, Dr. Bimo MPH. 2020. *General Guidelines for Facing the COVID-19 Pandemic*. Ministry of Home Affairs Working Team. Jakarta.
- Stuart, W.G. 2017. *Mental Nursing Pocket Book*. Penerbit EGC. Jakarta.
- Sugiyono. 2014. *Statistics*. PT. Gramedia Pustaka Utama. Jakarta.
- Sulastri, Wiwin. 2016. *The Relationship Between Maternal Anxiety Levels And Breastfeeding During The Postpartum Period At The Umbulharjo I Yogyakarta Community Health*





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- Tomb, D.A. 2015.. Alih Bahasa : dr Martina Wiwien. *Psychiatry Handbook*. Ed 6. Penerbit EGC. Jakarta.
- Xu H, Zhong L, Deng J, Peng J, Dan H, Zeng X, et al. 2020. *High Expression Of ACE2 Receptor Of 2019-Ncov On The Epithelial Cells Of Oral Mucosa*. International Journal of Oral Science. 12 (1): 8. doi:10.1038/s41368-020- 0074-x)

