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The Effect of Anxiety on the Smooth Production of Breast Milk in Postpartum Mother in COVID-19 Pandemic

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Abstract---The COVID-19 pandemic makes mothers who are about postpartum experience anxiety from mild to moderate such as fear in the crowd and confine themselves at home. So that it affects the production of breast milk of postpartum mothers, due to the increase in cortisol makes the inhibition of the transportation of the hormone oxytocin in its secretion so that the production of breast milk is inhibited. To identify the influence of anxiety on the smooth production of breast milk in mothers in the COVID-19 pandemic at RSPAD Gatot Soebroto. This type of research is an analytic survey using a cross-sectional design. The sample was a postpartum mother on the 2nd Floor of PIS RSPAD Gatot Soebroto numbered 35 people. Analyze the data using Chi-Square. There is an influence of COVID-19 pandemic anxiety on the production of postpartum mothers' breast milk (p -value: $0.000 < \alpha : 0.05$). It is recommended for postpartum mothers to always think positively and seek information about health, especially COVID-19, or do relaxation so as not to worry.

Keywords---anxiety, breast milk, COVID-19, fluency, postpartum mother

Introduction

The postpartum period (puerperium) is the period after the birth of the placenta and ends when the bladder returned to the state before pregnancy. This postpartum period lasts 6 weeks or ± 40 days. The postpartum period is a critical period for both mother and baby. Changes that occur during the postpartum period are physical, uteri involution, lactation and production of breast milk, changes in the mother's body system, and psychic changes (Yuliana & Hakim, 2020). Breast milk is a white liquid produced by the mother's breast glands through the lactation process. Breast milk contains all the nutrients the baby needs and protective substances from various germs.

According to the World Health Organization (WHO) recommends that babies should only be given breast milk for at least the first 6 months after the baby is born to achieve optimal growth, development, and health. Optimal breastfeeding is so important that it can save the lives of more than 820,000 children under five and can prevent the addition of 20,000 cases of breast cancer each year (World Health Organization, 2020). According to WHO 2015, the coverage of exclusive breastfeeding in the world is only 40%. In Asia, the coverage of exclusive breastfeeding with the highest coverage is in South Asia at 55%, while the lowest coverage is in Asia Pacific, West Africa, and Eastern Europe at 30%. This is not in accordance with who's the target of increasing exclusive breastfeeding in the first 6 months to at least 50%. This is who's the fifth target by 2025 (Nurhidayati et al., 2021).

The Government of Indonesia has established a national policy related to the exclusive breastfeeding program contained in Government Regulation of the Republic of Indonesia Number 33 of 2012, which states that breast milk is the best source of nutrition that can improve the health of mothers and children. Breast milk is given to the baby from birth for six months, without adding and/or replacing it with other foods or drinks (except drugs, vitamins, and minerals). According to Health Law No. 36 of 2009, during the provision of breast milk, the family, government,

local government, and the community must fully support the mother with the provision of special time and facilities (Kusumaningrum & Sari, 2021).

According to Riskesdas data taken from 2014 - 2018 exclusive breast milk coverage in Indonesia in 2014 amounted to 37.3%, 2015 by 55.7%, in 2016 by 54%, in 2017 by 61.33%, and in 2018 there was a significant decrease of 37.3%. When compared to the target set by the Ministry of Health of Indonesia which is 80%, the achievement of exclusive breast milk at the Indonesian level still has not met the target (Nurhidayati et al., 2021). Factors that affect the failure of breastfeeding are often caused by the onset of several factors, including socio-cultural changes, psychological factors, maternal physical factors, increased promotion of formula, health workers' factors, maternal food, baby birth weight, contraceptive use. The smoothness of breast milk is strongly influenced by psychiatric factors because the mother's feelings can inhibit or increase oxytocin expenditure, anxious mothers will spend less than mothers who are not anxious (Kusumaningrum & Sari, 2021).

Coronavirus Disease 2019 (COVID-19) has been declared by WHO as a global pandemic and in Indonesia is declared a type of disease that causes public health emergencies and non-natural disasters, which not only cause death but also cause considerable economic losses, so that countermeasures including prevention and control are needed (Decree of the Minister of Health of the Republic of Indonesia, 2020). The COVID-19 pandemic caused many restrictions on almost all routine services, both access, and quality, including restrictions in maternal and neonatal health services, such as reduced frequency of pregnancy screenings and delays in classes of pregnant women (Yuliaty et al., 2021; Anisha et al., 2021).

These conditions can cause problems during pregnancy and postpartum because it is a vulnerable time for the mother, while psychological distress can be negative for the mother and her baby. Studies show that higher symptoms of anxiety and depression in pregnant women during prenatal anxiety and depression can lead to changes in physical activity, nutrition, sleep patterns, maternal mood, and fetal health that can increase the risk of miscarriage, premature birth, low birth weight, and lower apgar scores at birth (Demissie & Bitew, 2021).

From the results of a preliminary study conducted on the 2nd Floor of PIS RSPAD Gatot Soebroto through interviews with 7 mothers of postpartum mothers, it was obtained as many as 4 postpartum mothers (57%) experienced anxiety, anxiety, unsettled after childbirth and the first breast milk expenditure was slow (>2 days) (Perzow et al., 2021; An et al., 2021; Goodman et al., 2016). Then as many as 3 postpartum mothers (42%) did not experience anxiety after childbirth and rapid first breast milk production (≤ 2 days). Based on the background above researchers want to know the effect of anxiety on the smooth production of breast milk in postpartum mothers in the COVID-19 pandemic at Gatot Soebroto Hospital.

Research Methods

This type of research survey analytics cross-sectional design. The population of postpartum mothers in Gatot Soebroto Hospital is 35 people. The sampling technique is nonprobability sampling with total sampling so that the sample is taken throughout the population (Zhou et al., 2021; Mulyani et al., 2017; Brockington, 2004). Analysis data of chi-square test. The characteristics of postpartum mothers on the 2nd floor of PIS RSPAD Gatot Soebroto based on the age of the most dominant respondents are the age of 20-35 years as many as 22 people (62.9%). Based on the most dominant respondent parity is multipara parity as many as 26 people (74.3%). Based on the work of the most dominant respondents as a housewife as many as 20 people (57.1%). Based on the most dominant type of labor is labor with c-section as many as 18 respondents (51.4%).

Tabel 1

The effect of anxiety on the smooth production of breast milk during the COVID-19 pandemic on the 2nd floor of PIS RSPAD Gatot Soebroto

No.	Breast Milk Production	Anxiety during pandemic COVID-19				Total	P-Value	
		Anxious		Not Worried				
		N	%	N	%			
1.	No	21	60%	5	14,3%	28	74,3%	.000
2.	Yes	1	2,9%	8	22,9%	9	25,7%	
	Total	22	62,9%	13	37,1%	35	100%	

It is known that the value of p-value $0.000 < 0.005$ means that there is a significant influence of postpartum mother anxiety on the smooth production of breast milk during the COVID-19 pandemic on the 2nd floor of PIS RSPAD Gatot Soebroto.

Results and Discussion

Based on the results of the study it is known that of the 28 breast milk people who did not come out, the highest proportion of anxiety about the COVID-19 pandemic amounted to 21 people (60%), but some did not come out who were not worried about the COVID-19 pandemic amounted to 5 people (14.3%). As for the 9 breast milk people out, the highest proportion in not anxious COVID-19 pandemic amounted to 8 people (22.9%), but some came out experiencing anxiety about the COVID-19 pandemic amounted to 1 person (2.9%) (Peng et al., 2020; Gonzalez-Garcia et al., 2021). The results of the statistical test obtained the results of p-value: $0.000 < \alpha: 0.05$ so that H_0 was rejected and H_a accepted that there was an influence of anxiety pandemic COVID-19 on the expenditure of breast milk mother postpartum at RSPAD Gatot Soebroto. This is in line with the research Pri Hastuti1 2020 conducted Mother ATHAHIRA Healthy House with cross-section method as many as 30 people with sampling techniques nonprobability sampling and instruments used in the form of questionnaires where the results of the study There is an anxiety influence COVID-19 pandemic on postpartum maternal breast milk expenditure (p-value: $0.000 < \alpha: 0.05$).

Aryani & Afrida (2021), Expresses that anxiety is a concern due to a perceived threat to health. Health concerns and anxiety associated with epidemics or pandemics can have significant psychological impacts e.g., stress, disturbing negative thoughts, avoidance. Expressing that anxiety is a natural disorder of feelings characterized by feelings of fear or deep and ongoing worry. The period of pregnancy, childbirth, and postnatal is a period of severe stress, anxiety emotional disorders, and adjustment (Susilo et al., 2020; Wahyudi et al., 2019; Asmariyah et al., 2021). In the process of breastfeeding, there are two important processes, namely the process of milk production reflex and the process of milk production (let down reflex) both of which are influenced by hormones regulated by the hypothalamus. The mental condition and emotions of the mother are calm greatly affect the smoothness of breast milk. If the mother experiences stress, depression, unsettledness, anxiety, sadness, and tense thoughts will affect the smoothness of breast milk. Anxious mothers will be less breast milked than mothers who are not anxious (Mardjun et al., 2019).

Based on the results of research that postpartum mothers experience anxiety marked mother is always agitated, feeling afraid, feeling anxious, feeling unsettled, and always have a bad feeling of fear of contracting COVID-19 in her and her baby Postpartum mother should prepare to breastfeed her baby, but some mothers experience anxiety that affects breast milk expenditure. Breastfeeding mothers should think positively and relax so as not to experience anxiety and the psychological condition of the mother becomes good, good psychological condition can trigger the work of hormones that produce breast milk (De Jager et al., 2014; Lonstein, 2007; Matthey et al., 2003).

Based on the results of research and supporting theories, researchers assume that anxiety occurs in postpartum mothers because they think too much about negative things during the COVID-19 pandemic. Postpartum mothers should think positively, try to love their baby, and relax when breastfeeding. When the mother thinks positively and remains calm will trigger the production of breast milk so that breast milk can come out smoothly, on the contrary, 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 (Negeri, 2020; Saleh, 2019; Sulaeman et al., 2019; Mulyani, 2018).

Conclusion

There is an influence of anxiety on the smooth production of breast milk of postpartum mothers with p-value: $0.000 < \alpha: 0.05$ then it can be concluded that there is a significant influence of anxiety on the smooth production of breast milk in mothers nifas in the pandemic COVID-19 on the 2nd floor of PIS RSPAD Gatot Soebroto.

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