



THE INFLUENCE OF ANXIETY FACTORS ON THE SMOOTH PRODUCTION OF BREAST MILK IN POSTPARTUM MOTHERS

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ABSTRACT

The World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) have recommended exclusive breastfeeding for at least the first 6 months of life. However, the coverage of exclusive breastfeeding in Indonesia is still not perfect. This is caused by various factors such as stress, pressure, unease, anxiety, sadness, and tension will affect the smoothness of breast milk. The aims of this study was to analyze the effect of anxiety factors on the smooth release of breast milk in postpartum mothers. This research is a type of cross-designed intervention research in Sangkanmanik Village in September 2023. The population in this study was 68 people. The sampling technique uses total sampling. The independent variable of the study was anxiety. The instrument to measure anxiety is the HARS (Hamilton rating scale) questionnaire. The bivariate analysis used in this study was the Chi-Square test. In the bivariate chi square analysis, it was shown that there was a significant and meaningful relationship between anxiety and smooth breast milk expenditure because the p value results were $0.002 < 0.05$.

Keywords: anxiety; breast milk; post partum

First Received

10 January 2024

Revised

18 January 2024

Accepted

30 January 2024

Final Proof Received

28 February 2024

Published

01 April 2024

How to cite (in APA style)

Sumyati, Y., & Sutarno, M. (2024). The Influence of Anxiety Factors on the Smooth Production of Breast Milk in Postpartum Mothers. *Indonesian Journal of Global Health Research*, 6(2), 939-944. <https://doi.org/10.37287/ijghr.v6i2.2774>.

INTRODUCTION

World Health Organization (WHO) and United Nations International Children's Emergency Fund (UNICEF) has recommended exclusive breastfeeding for at least the first 6 months of life and the introduction of adequate nutrition and safe complementary (solid) foods at 6 months along with continued breastfeeding for up to 2 years or longer. In fact, this target is still not achieved because there are still babies who do not receive exclusive breastfeeding, where only about 36% of infants aged 0 to 6 months worldwide were exclusively breastfed during the period 2007 to 2016.(Mauluddina, 2023)(Iswari, 2018. According to (Ministry of Health of the Republic of Indonesia, 2018) stated that the percentage of exclusive breastfeeding for infants 0-6 months in Indonesia in 2018 was 58.3%, in 2017 it was 48.6%, in 2016 it reached 54.3%, slightly increased from the previous year, but this is still below the target of achieving exclusive breastfeeding nationally which is 80%. Breastfeeding is certainly very dependent on the smooth production of breast milk during the puerperium and breastfeeding, various factors can be an obstacle in the smooth production of breast milk, one of which is psychological factors in the form of anxiety.(Yanti, 2020)(Adkha, 2021).

In the puerperium will experience physiological, psychological and social adaptations (Septianingrum, 2020). However, not all postpartum mothers can go through the postpartum adaptation smoothly, many postpartum mothers are easily anxious and stress can interfere with lactation so that it can affect milk production (Palnizky Soffer, 2020). This can inhibit the production of breast milk (Krutsch, 2024). During pregnancy, the hormone prolactin from the placenta increases, but breast milk usually does not come out because it is still inhibited by high estrogen levels. On the second or third day postpartum, estrogen and progesterone levels drop dramatically, so the influence of prolactin is more dominant and it is at this time that milk secretion begins to occur.(Afriana, 2023)(Mauluddina F. &, 2023)(Purwoastuti, 2017) While at the beginning of postpartum, postpartum mothers will feel a lot of feelings of anxiety, feelings that will cause blocking of the mechanism let down reflect (Wahyuni, 2021). Stress will trigger the release of the hormone epineprin or adrenaline which causes narrowing of blood vessels in the alveolus so that oxytocin that should be able to reach its target, namely myopitel cells around the alveolus to contract and push milk that has been made into the active duct becomes uncarried out, so that it can inhibit the production of breast milk products (colostrum, transitional breast milk, mature breast milk). (Andina, 2018)

Psychological conditions such as stress, pressure, unease, anxiety, sadness, and tension will affect the smoothness of breast milk (Ziomkiewicz, 2021). Anxious mothers will release less milk than mothers who are not anxious Psychological changes in postpartum mothers generally occur at 3 days post partum. Two days post partum the mother tends to be negative towards the care of her baby and is very dependent because her energy is focused on herself.(Yusnidaryani, 2022) Based on a preliminary study conducted by looking at the Exclusive Breastfeeding report in the Cimarga puskesmas area, it was found that non-exclusive breastfeeding data reached 30% in 2021, while in 2022 there were 40%. However, specific research and detection have never been conducted. The aims of this study was to analyze the influence of anxiety factors on the smooth production of breast milk in postpartum mothers at UPTD Cimarga Lebak Banten Health Center for the October-December 2023 period.

METHOD

This study is a type of intervention research with a cross sectional design. The location used for this research is in Sangkanmanik Village, Cimarga Health Center working area in September 2023. The population in this study is all postpartum mothers who gave birth at the Cimarga Health Center in October – December 2023 as many as 68 people. The sampling technique uses total sampling. The independent variable of the study was anxiety. The instrument to measure anxiety is the HARS (Hamilton rating scale) questionnaire. The dependent variable in this study was the smoothness of breast milk. The bivariate analysis used in this study is to determine whether there is a relationship between two variables (independent and dependent variables), namely the Chi-Square test.

RESULTS

Table 1 .
Distribution of anxiety frequency in respondents (n=68)

Anxiety	f	%
Anxious	44	64,7
No anxiety	24	35,3

Table 1, it can be seen that of the 68 respondents, most of them experienced anxiety as many as 44 people (64.7%), and respondents who did not experience anxiety as many as 24 people (35.3%).

Table 2.
Frequency Distribution of Smooth Milk Expenditure (n=68)

Smooth breastfeeding	f	%
Fluent	26	38,2
Not smooth	42	61,8

Table 2, it can be seen that from 68 respondents, most of their breastfeeding is not smooth as many as 42 people (61.8%), and respondents whose breast milk is smooth as many as 26 people (38.2%).

Table 3.
The Effect of Anxiety on the Smoothness of Breast Milk (n=68)

Categories anxiety	Categories Fluency of Breast Milk				Total	P value	Odd Ratio	
	Not smooth		Fluent					
	f	%	f	%				
Anxious	23	33.8	21	30.9	44	64.7	0.002	7.667
No Anxiety	3	4.4	21	30.9	24	35.3		
Total	26	38.2	42	61.8	68	100		

Table 3 which is the result of *chi square analysis*, it is shown that there is a significant and meaningful relationship between anxiety and smooth breastfeeding expenditure because the *p value* results are $0.002 < 0.05$. Nilao OR 7, 667.

DISCUSSION

Univariate Analysis

Based on the results of univariate analysis in table 5.1, it can be seen that the number of pregnant women who have problems in breast milk expenditure is 26 people, while pregnant women who do not have problems in milk expenditure are 42 people. In addition, the results also showed that pregnant women who experienced non-smooth breastfeeding had an average anxiety score of 20.42 higher than pregnant women who did not experience problems with smooth breastfeeding, with a score of 16.14. The results of cross-tabulation between anxiety and smooth breastfeeding also showed that almost all breastfeeding mothers who were not anxious had milk that came out smoothly, namely 21 people and only 3 people who had difficulty in dispensing breast milk. While in the group of breastfeeding mothers who experienced anxiety, the majority experienced problems in breast milk expenditure, which was as many as 23 people (33.8).

These results are in line with research conducted by (Mardjun, 2019) that anxiety can increase the prevalence of non-smooth breastfeeding expenditure, it was reported in this study that in primiparous with smooth breastfeeding expenditure in 2-4 postpartum days in the working area of the Lubuk Kilangan sub-district health center with a score most (73.3%) respondents experienced mild anxiety and most (66.7%) experienced non-current breast milk expenditure. Anxiety is a mood disorder characterized by feelings of deep fear or worry. The symptoms complained of are dominated by psychological factors but can also be by physical factors. A person will experience anxiety disorders when the person concerned is unable to cope with psychosocial stressors. (Rahmi, 2020) Anxiety and milk expenditure are influenced by several factors, either directly such as breastfeeding behavior, maternal psychology, maternal physiology, or indirect ones such as socio-cultural and infant, which will affect the mother's psychology (Fernández-Tuñas, 2023). Then the change in the role of a mother requires adaptation that must be undertaken. Responsibility increases with the presence of a newborn baby. The encouragement and attention of other family members is a positive encouragement

for the mother. During pregnancy, the hormone prolactin from the placenta increases, but breast milk usually does not come out because it is still inhibited by high estrogen levels.(Suryaman, 2021)

Bivariate Analysis

In the bivariate chi square analysis, it was shown that there was a significant and meaningful relationship between anxiety and smooth milk expenditure because the p value results were $0.002 < 0.05$. This result is in line with research conducted by those who reported that there was a significant relationship between anxiety and smooth milk expenditure where the value of ρ - Value = 0.001 was smaller than $\alpha = 0.05$, this study explained that explaining that the cause of anxiety experienced was due to discomfort and pain in the mother's breasts so that the mother did not breastfeed. Mothers who do not breastfeed will experience swelling in the breasts, pain in the nipples and closed milk ducts that cause the baby to be lazy to breastfeed, increasing anxiety in the mother.(Aji, 2021) In theory at the beginning of postpartum, postpartum mothers will feel a lot of anxiety, feelings that will cause blocking of the let down reflect mechanism (Dewi, 2023). Stress will trigger the release of the hormone epineprin or adrenaline which causes narrowing of blood vessels in the alveolus so that oxytocin that should be able to reach its target, namely myopitel cells around the alveolus to contract and push milk that has been made into the active duct becomes undone, so that can inhibit the production of breast milk products (colostrum, transitional breast milk, mature breast milk) .(Salat, 2019)

During pregnancy, the hormone prolactin from the placenta increases, but breast milk usually does not come out because it is still inhibited by high estrogen levels. On the second or third day postpartum, estrogen and progesterone levels drop dramatically, so the influence of prolactin is more dominant and it is at this time that milk secretion begins to occur. While at the beginning of postpartum, postpartum mothers will feel a lot of feelings of anxiety, feelings that will cause blocking of the mechanism *let down reflect* (Mohd Shukri, 2019). Stress will trigger the release of the hormone epineprin or adrenaline which causes narrowing of blood vessels in the alveolus so that oxytocin that should be able to reach its target, namely myopitel cells around the alveolus to contract and push milk that has been made into the active duct becomes uncarried out, so that it can inhibit the production of breast milk products (colostrum, transitional breast milk, mature breast milk).(Ellyna Putri Yulianti, 2022)

CONCLUSION

Bivariate results with chi square showed that there was a significant and meaningful relationship between anxiety and smooth breast milk expenditure because the p value results were $0.002 < 0.05$. It is hoped that this research can be used as advice and input on midwifery practice in various health service settings in Educational, Social and Community Institutions, and Midwives Independent Practice to be aware and take early action on psychological disorders in the form of anxiety and non-smooth breastfeeding.

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