

## RELATIONSHIP BETWEEN ANXIETY AND BREAST MILK PRODUCTION IN POST PARTUM MOTHERS IN THE OBSTETRIC POLYCLINIC OF HJ BUNDA HALIMAH HOSPITAL, BATAM CITY, YEAR 2024

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### Abstract

Breast milk is the right of every baby, and breastfeeding is an activity that can bring happiness to a mother to be able to provide breast milk to her baby. The problem of the process of breast milk not flowing smoothly is one of the reasons why someone cannot breastfeed their baby, so that the breastfeeding process is dependent/impeded. Psychological disorders greatly affect the mother's psychology during the postpartum period, one of which is anxiety. This research design is an observational analytic, with a Cross-sectional approach. The variables in this study were postpartum mothers and the level of anxiety experienced by postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024 with a total of 30 samples and a questionnaire was filled out by respondents to see anxiety and breast milk production. The analysis test used was the Chi Square test. The results of statistical tests showed that there was a significant relationship between anxiety levels and breast milk production in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024. From the Chi Square results, a p-value of 0.000 was obtained, so it can be concluded that there is a significant relationship. There is a significant relationship between anxiety levels and breast milk production in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024.

**Keywords:** Breast milk, Post partum, Anxiety

## INTRODUCTION

Breast milk (ASI) is the right of every baby, and breastfeeding is an activity that can make a mother happy to be able to provide breast milk to her baby, because breast milk is good for the growth and development of the baby. In order to reduce infant mortality and death rates, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend that babies only be given breast milk (ASI) for at least 6 months, and breastfeeding is continued until the baby is two years old by initiating breastfeeding within the first hour of life, without additional food or drink, including water (Ene Kusumawardani, L. A., 2022).

The target of achieving breast milk is difficult to achieve because one of them is that breast milk does not come out. The problem of the irregular process of breast milk coming out is one of the reasons why someone cannot breastfeed their baby so that the breastfeeding process is dependent/impeded (Nurainun, E., & Susilowati, E., 2021).

Smooth Breast Milk Release is when breast milk comes out which is marked by the release of colostrum from pregnancy to postpartum. The maternal factor that is a problem in breastfeeding is in breast milk release. The problem of breast milk release on the first day after giving birth can be caused by reduced stimulation of the hormone oxytocin. Psychological factors are things that need to be considered such as anxiety. After giving birth, postpartum mothers experience physiological changes that can affect the lactation process.

Facts show that the way the oxytocin hormone works is influenced by psychological conditions. Psychological preparation of the mother before breastfeeding is an important factor that influences the success of

breastfeeding. Anxiety, stress, excessive worry, unhappiness in the mother play a major role in the success of exclusive breastfeeding. Mothers who are always anxious, lack confidence, feel depressed and various forms of emotional tension, may fail to breastfeed their babies. One of the factors that also influences is anxiety (Riadinata, 2024).

Anxiety is a psychological disorder characterized by feelings of deep fear or worry that are not clear about the cause. The symptoms complained of are dominated by psychological factors but can also be caused by physical factors. A person will experience anxiety disorders when the person concerned is unable to cope with psychosocial stressors (Adkha, N., & Ratnawati, R., 2021).

A preliminary study conducted at Hj Bunda Halimah Hospital in Batam City, in July 2024 conducted a control or outpatient visit through the Obstetrics Clinic Polyclinic using the interview method with 13 postpartum mothers, it was found that 13 postpartum mothers experienced problems while breastfeeding, namely anxiety. Several factors that cause anxiety in these mothers are, 7 mothers feel anxious due to irregular breast milk production, 3 mothers feel anxious because they see the condition of their babies who are attached to medical devices such as oxygen and light therapy devices. The last 3 other mothers who feel anxious are caused by changes in their roles as mothers for the first time. Of the thirteen results of the mother's interviews, as many as 3 postpartum mothers on the 3rd day have not produced much breast milk.

## MATERIALS AND METHODS

In the Obstetrics Polyclinic Room of Hj Bunda Halimah Hospital, Batam City, 2024, using the total sampling method. For this study, for the

independent variable, the data collection technique used was to fill out a checklist sheet that was shown to the postpartum mothers as respondents to find out whether they were anxious or not, for the dependent variable by conducting interviews and filling out a checklist sheet that was shown to the postpartum mothers to find out whether breast milk production was smooth or not.

## RESULTS AND DISCUSSION

### 1. Research Results

Based on the results of research entitled "Relationship Between Anxiety And Breast Milk Production In Post Partum Mothers In The Obstetric Polyclinic Of Hj Bunda Halimah Hospital, Batam City, Year 2024". Data on the frequency distribution of respondents was obtained based on the results studied, as follows:

#### a. Univariate Analysis

In this study, there are two characteristics of respondents, namely, Anxiety and Breast Milk Production, as can be seen in the following table:

**Table 4.1**  
**Frequency Based on Anxiety Level in Postpartum Mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024**

Anxiety	Frekuensi (f)	Persentase (%)
Mild	18	60
Moderate	8	26.7
Severe	4	13.3
Total	30	100

Based on table 4.1 Frequency Distribution Based on Anxiety Levels in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024 with 30 respondents, the most postpartum mothers were found to be in the mild

anxiety category, with 18 people (60%) in the mild anxiety category, 8 people (26.7%) in the moderate category and 4 people (13.3%) in the severe category. Send feedback Side panels History Saved Translation results available.

**Table 4.2 Frequency of breast milk production in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City 2024**

Produksi ASI	Frekuensi (f)	Persentase (%)
Smooth	19	63.3
non-Smooth	11	36.7
Total	30	100

Based on table 4.2 Frequency Distribution Based on Breast Milk Production in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024 with a total of 30 respondents, the most postpartum mothers were found in the smooth breast milk production category with a total of 19 people (63.3%) in the smooth breast milk production category and the remaining 11 people (36.7%) in the non- smooth breast milk production category in 2024.

#### b. Bivariate Analysis

**Table 4.3 Relationship between Anxiety and Breast Milk Production in Postpartum Mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City Year 2024**

Anxiety	Produksi ASI						Value (P)
	Smooth		Non Smooth		Total		
	N	%	n	%	n	%	
Mild	17	89.5	1	9.1	18	60	0.000
Moderate	2	10.5	6	54.4	8	26.7	
Severe	0	0.0	4	36.4	4	13.3	
	19	100	11	100	30	100	

Based on the table above, it was found that in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda

Halimah Hospital, Batam City in 2024 from a total of 18 respondents, it was found that the mild anxiety level with smooth breast milk production was 17 respondents (89.5%) and not smooth was 1 respondent (9.1%). At the moderate anxiety level with smooth breast milk production with a total of 8 respondents, there were 2 respondents (10.5%) and at the moderate anxiety level with not smooth breast milk production there were 6 respondents (54.4%). At the severe anxiety level with a total of 4 respondents, there were no respondents with smooth breast milk production or a total of 0 (0.0%) and at the severe anxiety level with not smooth breast milk production there were 4 respondents (36.4%).

## DISCUSSION

### a. Post partum maternal anxiety

This study was conducted using primary data on the Relationship between the Level of Doctor Compliance at Hj. Bunda Halimah Hospital and Prescription Writing. The research sample was 30 respondents and the data was analyzed using the chi square test. The most data obtained were postpartum mothers with mild anxiety categories with a total of 18 people (60%), with mild anxiety categories, 8 people (26.7%) with moderate categories and 4 people (13.3%) in severe categories.

These results are in line with research conducted by Apriana and Lilia entitled factors related to breast milk production in postpartum mothers in 2023 with results showing that out of 86 breastfeeding mothers, respondents with mild anxiety levels were 70 people (81.4%) more than respondents with

moderate anxiety 16 people (18.6%).

Lifestyle changes that occur in postpartum mothers before giving birth are very different from after giving birth, can be one of the factors causing anxiety in postpartum mothers. Changes in sleep patterns, coupled with new responsibilities, namely taking care of a baby, and having to adjust quickly can also be one of the factors causing anxiety in postpartum mothers.

Postpartum mothers who have breastfed before and have experience in dealing with the same thing more than once, can have an impact on increasing the ability to overcome dilemmas that cause anxiety after giving birth. Meanwhile, postpartum mothers with a relatively young age, with a smaller number of parities, can cause a high possibility of severe anxiety because they have not had experience in taking care of babies after giving birth. (Bentelu, 2015).

- ### b. Breast milk production in postpartum mothers
- With 30 respondents, the most postpartum mothers were found to be in the smooth breast milk production category, with 19 people (63.3%) in the smooth breast milk production category and the remaining 11 people (36.7%) in the non-smooth breast milk production category. These results are in line with research conducted by Apriana and Lilia entitled factors related to breast milk production in postpartum mothers in 2023 with results showing that out of 86 breastfeeding mothers with a smooth breast milk production category, there were 64

people (74.4%) more than the category that was not smooth, namely 22 people (25.6%). Postpartum mothers whose breast milk is not smooth are caused by several factors including mothers who experience fatigue after giving birth, either by Caesarean Section or spontaneous vaginal delivery, most mothers feel afraid to mobilize, so that mothers feel lazy to breastfeed their babies and in the end mothers choose to give formula milk to their babies. Meanwhile, breast milk production in postpartum mothers who do not experience anxiety and regulate anxiety well has the potential for smoother breast milk production (Amalia, 2016).

- c. The relationship between anxiety and breast milk production in postpartum mothers. Based on the table of the relationship between anxiety and breast milk production in postpartum mothers in this study, the majority of results obtained were mild anxiety levels with smooth breast milk production totaling 17 respondents (89.5%) and no respondents were found with smooth breast milk production or totaling 0 respondents (0.0%) and at a severe anxiety level with non-smooth breast milk production totaling 4 respondents (36.4%). These results are in line with research conducted by Mardjun et al. entitled the relationship between anxiety and smooth breast milk production in postpartum mothers while being treated at the Kasih Ibu Manado Mother and Child Hospital in 2019 with the results of the study showing that out of 68 respondents, some respondents

experienced mild anxiety totaling 24 respondents (35.3%) and in the Chi-Square statistical test ( $\chi^2$ ) and continued with the Fisher Exact test at a significance level of 95% ( $\alpha = 0.05$ ), indicating a significant relationship between anxiety and smooth breast milk production at the Kasih Ibu Manado Mother and Child Hospital. Where the value of  $p$ -Value = 0.001 is smaller than  $\alpha = 0.05$ .

The results of this study are also in line with the study entitled "The relationship between anxiety of breastfeeding mothers and smooth breast milk production at BPS Kerta Timur, Sumenep Regency" based on analysis with the Spearman correlation test, it was found that there was a relationship between anxiety of breastfeeding mothers and smooth breast milk production with a  $p$  value of 0.001 and a correlation value of 0.769 which means reliable/close. Postpartum maternal anxiety can affect the smoothness of breast milk production, where the anxiety experienced by postpartum mothers will inhibit the production of prolactin and oxytocin hormones so that breast milk production is inhibited which will affect the success of exclusive breastfeeding. Yunita (2017).

Breastfeeding mothers who experience anxiety will cause the function of endocrine hormones, prolactin and oxytocin to decrease. The hormones oxytocin and prolactin work to continue on the posterior pituitary, stimulating alveolar cells and myoepithelial cells to release or flow breast milk through the lactiferous ducts so that it enters the baby's mouth (let down reflex). Similar to the

endocrine hormone system, it works to control several glands, especially the pituitary gland located at the base of the skull, in the pituitary fossa of the sphenoid bone, which consists of 2 lobes, namely the anterior and posterior lobes. The posterior lobe secretes an important role in producing (Anti Diuretic Hormone) ADH regulates the amount of water that passes through the kidneys and the hormone oxytocin which functions to stimulate contractions during childbirth and the release of breast milk during breastfeeding (Suyanti, 2021).

Anxiety experienced by postpartum mothers can cause activities to be disrupted, with significant changes in lifestyle from pregnancy to postpartum, it will cause activities to be disrupted. Anxiety experienced by postpartum mothers will cause their physical fitness to be disrupted, so that the physical is less fit due to changes that occur after giving birth, such as reduced sleep quality, increased responsibility in taking care of babies will cause the body's ability to produce breast milk to also decrease. (Bentelu, 2015).

Based on the anxiety experienced by postpartum mothers, researchers assume that anxiety that occurs in postpartum mothers is caused by negative thoughts related to the difficulty of how to take care of and raise children. Postpartum mothers must think positively, try to 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 flow smoothly, conversely,

mothers whose anxiety is disturbed, such as feeling anxious, will affect breast milk production so that breast milk production can decrease and cause breast milk to be less smooth. (Mardjun et al., 2019)

## **CONCLUSIONS AND RECOMMENDATIONS**

### **1. Conclusions**

Based on the results of research on the relationship between anxiety and breast milk production in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024, it can be concluded that:

- a. The majority of postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital have mild anxiety.
- b. The majority of postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital have smooth breast milk production.
- c. There is a significant relationship between anxiety and breast milk production in postpartum mothers at the Obstetrics Polyclinic of Hj Bunda Halimah Hospital, Batam City in 2024.

### **2. Recommendations**

- a. For Hj. Bunda Halimah Hospital Researchers expect every medical service institution, especially for postpartum mothers, to educate postpartum mothers to be better able to control anxiety so that anxiety does not affect breast milk production.
- b. For Educational Institutions  
It is expected that the results of this study can be a source of information, reference and

learning material as well as broader research development for those who will conduct further research, can add to the literature as a means of enriching the knowledge of readers regarding the relationship between anxiety and breast milk production in Postpartum mothers at the Obstetrics Polyclinic of Hj. Bunda Halimah Hospital, Batam City.

c. For Further Researchers

The researcher hopes that further research on the relationship between anxiety and breast milk production in postpartum mothers will be carried out and it is suggested that these variables be considered or added with a larger number of respondents and using different research techniques.

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