

Relationship of mother's psychological condition to smooth milk production in breastfeeding mothers

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ABSTRACT

Milk production is strongly influenced by psychological factors. Mothers who experience emotional disturbances can interfere with the let down reflex process which results in the milk not coming out, so the baby does not get enough breast milk and the baby will continue to cry. The research design used an analytic survey with a cross-sectional approach. The study was conducted at the 23 Ilir Health Center in Palembang with samples taken from all populations according to the criteria. The results of the study found 13 respondents (81.2%) of the 37 respondents with unfavorable psychological conditions so that breast milk was not smooth, 15 (71.4%) of 37 respondents with good psychological conditions so that breast milk production was smooth. The statistical test results obtained a p value = 0.004 less than $\alpha = 0.05$ which means $H_0 =$ rejected, so it is stated that there is a significant relationship between breast care and smooth milk production. Odds Ratio (OR) of 10.33 (95% CI = 2.24-52.19) which means that mothers with unfavorable psychological conditions with an odds ratio of 10.33 can affect the smooth production of breast milk. Based on the research results, there is a relationship between the psychological condition of the mother and the smooth production of breast milk, so it is very important to keep the psychological condition of the mother happy and happy during the breastfeeding process.

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INTRODUCTION

Breastfeeding is a natural process and is a task in child health care, but in reality not all mothers can carry out this task properly, are unable to breastfeed or stop breastfeeding early (Rejeki, 2008) in a study (Rimawati et al., 2018)

Breastfeeding is a skill learned by both mother and baby, both of which require time and patience to fulfill the nutrition of the baby for six months. The benefits of breastfeeding mothers prevent ovarian cancer and the benefits include: lower risk of developing breast and ovarian cancer (Jara-Palacios et al., 2015)

The decrease in milk production in the first days after giving birth can be caused by a lack of stimulation of the hormones prolactin and oxytocin which cannot flow smoothly. So many mothers give formula milk to their babies to meet the nutritional needs of these babies. This formula milk also helps mothers in providing substitute feeding when mother's milk is not smooth. For formula milk mothers it is very practical and easy to get. UNICEF emphasizes that formula-fed babies are more likely to be undernourished in the first month of life and the likelihood of formula-fed babies being malnourished is many times higher than babies who are exclusively breastfed. (Roesli U, 2013).

Breast milk is the perfect baby food for the baby after birth, but there are various factors that inhibit breastfeeding from the father and mother (Sitepoe, 2013).

Breast milk will be disrupted if the breastfeeding mother experiences anxiety and psychological discomfort. Mothers who are psychologically disturbed greatly affect the smooth production of breast milk. Mothers still have difficulty breastfeeding in the early postpartum period, and some studies have even found that some mothers feel pessimistic about their ability to breastfeed their babies. Mothers and babies will form an emotional bond when breastfeeding takes place (Vivian, 2011) in research (Kaban et al., 2019).

Even though the benefits of breastfeeding are no longer in doubt, in reality the success of exclusive breastfeeding in some countries is still low (Alzaheb, 2017) in Jenica's research (Eka Firnanda MCRP et al., 2021).

The World Health Organization (WHO) recommends exclusive breastfeeding for at least the first 6 months of life and continued with complementary foods until the age of 2 years. The American Academy of Pediatrics (AAP), Academy of Breastfeeding Medicine (ABM) and the Indonesian Doctors Association (IDAI) recommend the same thing regarding exclusive breastfeeding for at least 6 months (Ramadhan, 2017)

Breastfeeding is influenced by physical and mental health, the type of birth planned, income, education, parity and breastfeeding difficulties. Constraints to breastfeeding, especially in the early period after giving birth, namely breastfeeding which is not smooth because the mother is exhausted due to the labor process afraid of mobilization, especially after the SC (Caesarean section) delivery mother who still has an infusion and catheter installed so that she is lazy to breastfeed, the mother tends to think about herself and find it difficult to care for baby. This condition triggers discomfort that causes stress (Amalia, 2016).

Milk production is strongly influenced by psychological factors. Mothers who experience emotional disturbances can interfere with the let down reflex process which results in the milk not coming out, so the baby does not get enough breast milk and the baby will continue to cry. The baby's cry also makes the mother agitated and interferes with the let down reflex. The more depressed the mother feels because of the baby's crying, the less milk is released (Roesli U, 2012).

Postpartum stress conditions are experienced by 80% of women after giving birth. Feelings of sadness or grumpiness that hit the mother arise within two days to two weeks after delivery. The condition of mothers who are easily anxious and stressed can interfere with lactation so that it can affect milk production. This is because stress can inhibit milk production. The higher the level of emotional disturbance, the less stimulation of the hormone prolactin is given to produce breast milk (Amalia, 2016).

Stress affects the continuity of exclusive breastfeeding. The success of breastfeeding is related to milk production while stress can affect milk production. Mothers who experience moderate stress who successfully breastfeed because they are motivated to increase milk production. Motivation comes from oneself, the environment, family, and health workers (Elsanti, 2018).

The smoothness of breastfeeding is influenced by several factors, one of which is psychological factor, namely anxiety. In general, postpartum mothers often experience fatigue and mood changes such as anxiety, worry about themselves and worry about their baby. This anxiety can affect the smooth release of breast milk in post partum mothers (Mardjun et al., 2019)

Postpartum blues is a feeling of sadness and anxiety experienced by mothers after giving birth which lasts 3-14 days after giving birth. Some predisposing factors are psychological factors, social factors and family support (Lestari, 2019).

Exclusive breastfeeding has many benefits for both the baby and the mother. Thus, to support exclusive breastfeeding, we need to know whether the mother has sufficient milk production or not, so we need to know whether the psychological condition of the mother is one of the causes of the uneven production of breast milk. Based on the description above, the researcher is interested in conducting research on "The Relationship of Mother's Psychological Conditions to Smooth Milk Production in Breastfeeding Mothers at the Twenty Three Ilir Health Center Palembang". With the aim of this study to find out whether the psychological condition of the mother can affect the mother's milk production during the breastfeeding process.

RESEARCH METHODS

The type of research used is analytic research with a cross sectional approach. The research was conducted at the Twenty-three Ilir Palembang Health Center from December to January with 37 respondents. Sampling in this study was carried out by non-probability sampling with purposive sampling technique. This study used an instrument in the form of a questionnaire consisting of several question items with statements indicating the psychological condition of the mother and a questionnaire on the smoothness of breast milk production.

The type of data used in this study is primary data, namely data obtained directly from the respondents. The processing of the data obtained from the results of this study was processed manually by grouping the results from the questionnaire sheets that were distributed and then analyzed using statistical tests. After that it is processed using a computerized system, these stages are Editing, Coding, Processing, and Cleaning.

Univariate analysis in this study will produce a frequency distribution that gives an idea of the amount and percentage. Univariate analysis was carried out to analyze the variables of psychological conditions and the variable smoothness of mother's milk production. Bivariate analysis is an analysis of the results of the independent variables thought to have a relationship with the dependent variable. The analysis used is the result of cross tabulation. To test the hypothesis, statistical analysis was carried out using the Chi-square test at a significance level of 95% (ρ - Value <0.05).

RESULTS AND DISCUSSION

Univariate Analysis Results

Tabel 1. Distribution of Mother's Psychological Frequency Conditions and Smooth Milk Production at the Twenty Three Ilir Health Center in Palembang

No	Characteristics of Respondents	Frequency	Percentage (%)
1.	Mother's Psychological Condition		
	a. Not good	16	43.2%
	b. Good	21	56.8%
	Total	37	100%
2	Smooth Milk Production		
	a. Not smooth	15	40.5%
	b. Smooth	22	59.5%
	Total	37	100%

Based on the data in the table above, it is known that of all respondents with unfavorable conditions, there were 16 respondents (43.2%), while in the group with good psychological conditions, there were 21 respondents (56.8%). and on the smooth production of breast milk it can be seen that of all respondents with non-fluent milk production there were 15 respondents (40.5%), while in the smooth milk production group there were 22 respondents (59.5%).

Results of Bivariate Analysis

Tabel 3. Correlation between Mother's Psychological Condition and Smooth Milk Production at the Twenty Three Ilir Health Center in Palembang

Variabel	Criteria	Smooth Milk Production				Total	OR (95% CI)	P (value)
		Not smooth		Smooth				
		n	%	N	%			
Mother's Psychological Condition	Not good	13	81.2	3	18.8	16	0.004	
	Good	6	28.6	15	71.4			21
Jumlah		19	51.4	18	48.6	37		

Based on the results of the analysis in the table above, there are 13 (81.2%) of the 37 respondents with unfavorable psychological conditions so that breast milk is not smooth, 15 (71.4%) of 37 respondents with good psychological conditions so that breast milk production is smooth. The statistical test results obtained a p value = 0.004 less than $\alpha = 0.05$ which means $H_0 =$ rejected, so it is stated that there is a significant relationship between psychological conditions and smooth milk production. Odds Ratio (OR) of 10.33 (95% CI = 2.24-52.19) which means that mothers with unfavorable psychological conditions with an odds ratio of 10.33 can affect the smooth production of breast milk.

DISCUSSION

Breastfeeding is influenced by physical and mental health, the type of birth planned, income, education, parity and breastfeeding difficulties. Constraints in breastfeeding, especially in the early period after giving birth, namely breastfeeding which is not smooth because the mother is exhausted due to the delivery process. This condition triggers discomfort, causing stress. (Amalia, 2016). Psychological adaptation in the postpartum period is a cause of emotional stress for new mothers, even difficult when there are great physical changes (Walyani, 2017). The psychological condition of the mother can affect milk production because it needs adjustments for postnatal mothers, in this case health workers play an important role in continuing to improve comprehensive and quality health services with the provision of knowledge and skills they have so that they are expected to be able to provide knowledge or information to prepare psychological conditions. mothers so that mothers are smooth in giving breast milk or breastfeeding the baby for the first time so that the baby gets breast milk and mothers who often breastfeed will help the milk production process so that the milk comes out smoothly (Kamariyah, 2014).

The results of univariate data analysis showed that the frequency distribution of respondents with unfavorable conditions was 16 respondents (43.2%), while in the group with good maternal psychological conditions there were 21 respondents (56.8%), and respondents with non-fluent milk production were 15 respondents (40.5%). while in the smooth milk production group there were 22 respondents (59.5%). In the results of bivariate analysis there were 13 (81.2%) of the 37 respondents with unfavorable psychological conditions so that breast milk was not smooth, 15 (71.4%) of 37 respondents with good psychological conditions so that milk production was smooth. The statistical test results obtained a p value = 0.004 less than $\alpha = 0.05$ which means $H_0 =$ rejected, so it is stated that there is a significant relationship between psychological conditions and smooth milk production.

The psychological state in the form of stress in the mother giving birth is called the baby blues syndrome, namely the feelings of sadness and anxiety experienced by women after giving birth and are worse around the third or fourth day after delivery. However, this study did not use the term baby blues syndrome because this study limited only the symptoms that lead to stress levels and not the symptoms of baby blues syndrome, the symptoms of which tend to be postpartum depression. (Ningrum, 2017).

Researchers argue that the emergence of stress in postpartum mothers who breastfeed their babies can be caused by several factors including physical changes, as well as the support of the closest family so that it influences psychological changes. This is in line with opinion (Masrinih & Wahtini, 2020). The involvement of the father in providing emotional and physical support to breastfeeding mothers so that the involvement of the father also determines the smoothness of the let down reflex which is influenced by the mother's emotions. Husband's support is one of the factors that influence the success of mothers in exclusive breastfeeding..

This is in line with several studies where the results obtained P-value = 0.00 (<0.05). This shows that there is a relationship between psychological conditions and milk production (Maesaroh, 2016). Based on the chi square analysis, ρ is 0.041; which means there is a relationship between the stress level of breastfeeding mothers and breastfeeding in the first month. Odds Ratio (OR) of 9.33 (95% CI = 1.38, 63.20) which means that mothers with moderate to severe levels of stress have a 9.33 greater probability of not breastfeeding in the first month (Ulfa & Setyaningsih, 2020).

Research conducted by (Rimawati et al., 2018). Regarding the psychological and physical conditions in exclusive breastfeeding for working mothers, the research results show that unfavorable psychological conditions can affect the quality of breast milk for breastfeeding mothers, this is in line with the research results obtained by researchers.

The effect of stress on milk production occurs through a very complex process. Acute stress can affect the milk production process by inhibiting the release of prolactin in milk production for 8 to 10 hours. This can also cause a decrease in levels of the hormone oxytocin and disrupt the activity of the sympathetic nervous system, while chronic stress can cause inhibition of milk production in the alveoli of the breast, causing cessation of milk production. prolonged. The process of milk production is also greatly influenced by how often the mother empties her breasts. Regular emptying affects the prolactin and insulin levels in the mother's blood (Istighosah & Sari, 2021). As shown (Elsanti, 2018). The stronger the baby's sucking power, the more milk will be produced. Mothers will not lack milk, because milk will continue to be produced, as long as the baby continues to suckle. Mothers eat and drink enough, accompanied by confidence that they can breastfeed their children.

The researchers argue that apart from good psychological conditions, the milk production process is also strongly influenced by nutrition. Nutritional factors can affect the production and quality of breast milk. There are several foods that are considered important, such as katu vegetables, banana blossoms, foods that contain high protein and a regular mother's diet.

CONCLUSION

Based on the results of the study, it was known that 16 respondents (43.2%) had unfavorable conditions for all respondents, while in the psychological condition group of mothers there were 21 respondents (56.8%). as many as 15 respondents (40.5%), while in the smooth milk production group there were 22 respondents (59.5%). The results of the statistical test obtained a value of $p = 0.004$ less than $\alpha = 0.05$ which means $H_0 =$ rejected, so it is stated that there is a significant relationship between psychological conditions and the smooth production of breast milk. Odds Ratio (OR) of 10.33 (95% CI = 2.24-52.19) which means that mothers with unfavorable psychological conditions with an odds ratio of 10.33 can affect the smooth production of breast milk.

Mental conditions and a calm mind greatly affect milk production, if the mother experiences stress, depressed thoughts, is not calm, sad and tense, milk production will be significantly affected.

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