

**THE EFFECT OF STRESS ON SMOOTHNESS OF BREAST MILK FLOW IN
POSTPARTUM MOTHER IN DELIMA (PARTURITION) ROOM OF SAYANG
REGIONAL GENERAL HOSPITAL CIANJUR**

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ABSTRACT

According to WHO data, the global average rate of exclusive breastfeeding in 2016 was approximately 38%. Many mothers face challenges during breastfeeding, with one common issue being disrupted milk flow. One contributing factor to this problem is maternal stress. Sayang Regional General Hospital in Cianjur is a maternal and child healthcare provider that handles around 5,679 childbirths annually. This study aimed to examine the effect of stress on the smoothness of breast milk production among postpartum mothers in the Delima (Parturition) Room at Sayang Regional General Hospital, Cianjur, in 2019. This research employed a descriptive correlational design with a cross-sectional approach. The study population consisted of 176 postpartum mothers, and 64 were selected using purposive sampling. Data were collected using the Depression Anxiety Stress Scales (DASS-42), structured questionnaires, and interviews to assess the smoothness of breast milk production. Univariate analysis was conducted using frequency distribution, while bivariate analysis used the Chi-Square test. Results showed that 29.7% of mothers experienced stress, and 65.6% had disrupted breast milk flow. The Chi-Square test revealed a significant relationship between stress and breast milk production smoothness, with a p-value of 0.001 ($p < 0.05$). These findings suggest that maternal stress negatively affects the smoothness of breast milk production. It is recommended that nurses and midwives provide additional support to breastfeeding mothers by offering emotional encouragement, teaching correct breastfeeding techniques, and avoiding rigid breastfeeding schedules to help reduce stress and improve breastfeeding outcomes.

Keywords : Smoothness of breast milk flow, Stress, Postpartum

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INTRODUCTION

Postpartum is the period after childbirth that is needed to restore the reproductive organs, usually around six weeks (Mansur, 2014). The presence of a baby will change life physically, emotionally, psychologically and economically. Of course there are many things that must be prepared and one of the most important is giving ASI (breast milk), because by breastfeeding a baby it means providing essential nutrition, protecting from infectious diseases and most importantly establishing a special relationship with the baby (Wulandari and Handayani, 2011). Stress is a state of being depressed both physically and mentally (Nurwanti, 2012). Postpartum stress is the feelings of sadness and anxiety that women experience after giving birth and are worse around the third or fourth day after giving birth. Sylvia (Susanti. et al, 2017).

The psychological changes experienced by postpartum mothers can be caused by the adjustment phase of the mother towards her role as a parent. On 3-4 days postpartum, the mother will experience a taking-hold period phase where the mother becomes very sensitive, so she needs guidance and encouragement from nurses to deal with criticism experienced by the mother (Saleha, 2009).

The incidence of postpartum stress in the world is quite high, that is 26-85%. From several studies, it has been explained that as many as 50% of mothers after giving birth experience stress and depression, almost 80%, new mothers experience feelings of sadness after giving birth or often called postpartum stress. (Pieter & Lubis, 2010) states that 50-70% of all postpartum mothers will experience this syndrome. This statement is supported by Sarton (in Usal Ismani, 2013) who said that 10-15% of mothers experience postpartum stress. Research related to stress in postpartum mothers was also carried out by sipasulta in 2010 which gave the result that the majority of postpartum mothers experienced stress as much as 59.9%.

Whereas in Indonesia, according to Hidayat, it is around 50-70% and this can lead to postpartum depression. In accordance with the results of research conducted by Amalia (2015) that there is a relationship between stress to the smoothness of milk in breastfeeding mothers after giving birth. More higher the emotional disturbance, more less the stimulation of the hormone prolactin is given to produce breast milk (Prasetyono, 2009).

The hormone prolactin plays a role in the process of producing breast milk. This hormone is produced by the pituitary gland, located in the brain which affects various physiological functions of the body. Another hormone related to the release of breast milk is the hormone oxytocin. If there is stress in breastfeeding mothers, there will be a blockage of the "let down" reflection. This is caused by the release of adrenaline which causes vasoconstriction of the alveoli blood vessels, so that oxytosis has little hope of reaching the target myoepithelial organ. So that the breasts will enlarge and abscesses will arise which will result in the breastfeeding process because there will be pain. Because the "let down" reflex is not perfect, so a thirsty baby will not be satisfied. This dissatisfaction is an additional stress for the mother and in the end the baby does not get the maximum exclusive breastfeeding (Rukiyah, et al, 2010).

From the results of a preliminary study in January-March in Delima (Parturition) room of Sayang Regional General Hospital Cianjur in March 2019, researchers obtained secondary data, that is a population of 176 mothers. From postpartum mothers whose milk had not come out, there is several reasons were

disclosed, that is because they still felt pain after giving birth, felt tired and weak, no one helped to take care of the baby and were afraid to breastfeed because they still had a urinary tube and an IV installed, this was a trigger factor discomfort and stress.

Based on the description on the background problem's above, given the importance of breastfeeding to baby as nutrition and antibodies for the growth and development of baby. One of the factors that influence the smooth production of breast milk is the psychological factor of stress. So the researchers formulated this research problem, that is: "Is there any effect of stress on the smooth production of breast milk in postpartum mothers Delima (Parturition) room of Sayang Regional General Hospital Cianjur?". And the purpose of this study was to find out whether there is an influence between stress on the smooth production of breast milk in postpartum mothers in Delima (Parturition) room of Sayang Regional General Hospital Cianjur.

METHOD

The method used in this study is descriptive correlational with a purposive sampling approach. The number of samples was 64 postpartum mothers. The data collection technique used a standardized questionnaire, namely the Depression Anxiety Stress Scales 42 (DASS 42).

Statement and interviews sheets to observe the smooth production of breast milk. The analysis used was univariate with frequency distribution and bivariate with Chi-square test. The results showed that 29.7% of mothers experienced stress and 65.6% of mothers did not breastfeed smoothly. The results of the Chi-square test obtained a p-value of 0.001 (p-value <0.05) which means that there is an influence between stress on the smoothness of milk production in postpartum mothers.

The research location was carried out in the Delima (Parturition) room of Sayang Regional General Hospital Cianjur, while the research was carried out in March-June 2019. Ethics in research refers to the ethical principles applied in research activities. This research does not harm or endanger research subjects, as well as confidentiality and balancing harms and benefits.

RESULT

The data in Table 1 presents the frequency distribution of stress levels among postpartum mothers in the Delima (Parturition) room of Sayang Regional General Hospital, Cianjur. Out of 64 respondents, the majority experienced moderate to heavy stress levels, with 29.7% categorized as having medium stress, 28.1% as heavy, and 12.5% as very heavy. Meanwhile, 18.8% of the mothers reported normal stress levels, and 10.9% experienced light stress. These findings indicate that a significant proportion of postpartum mothers in this setting are facing considerable psychological stress during the postpartum period. This situation highlights the importance of early psychological screening and appropriate interventions to reduce the risk of postpartum depression. Comprehensive postpartum care should not only focus on physical recovery but also address maternal mental health.

Table 1. Distribution of stress levels for postpartum mothers

The Level of Stress	Frequency	Percentage (%)
Normal	12	18.8
Light	7	10.9
Medium	19	29.7
Heavy	18	28.1
Very Heavy	8	12.5
Total	64	100.0

Table 2 shows the frequency distribution of smooth milk production among postpartum mothers in the Delima (Parturition) room of Sayang Regional General Hospital, Cianjur. Of the 64 respondents, 65.6% experienced difficulties in milk production, while only 34.4% reported smooth milk production. This indicates that the majority of postpartum mothers encountered challenges in initiating or maintaining lactation during the early postpartum period.

Table 2. Distribution of Smooth Milk Production for Postpartum Mothers

Smooth Milk Production	Frequency	Percentage (%)
Smooth	22	34.4
Not Smooth	42	65.6
Total	64	100.0

Table 3 presents the frequency distribution of the effect of stress on smooth milk production among postpartum mothers in the Delima (Parturition) room of Sayang Regional General Hospital, Cianjur. The results show a clear pattern: all mothers who experienced normal and light stress levels (18.8% and 10.9%, respectively) had smooth milk production, while none of them reported difficulties. In contrast, among mothers with medium to very heavy stress levels, the majority had not smooth milk production—38.1% of medium stress, 42.9% of heavy stress, and 19.0% of very heavy stress levels. The statistical test showed a significant association between stress levels and milk production with a p-value of 0.000, indicating that higher stress levels are strongly linked to difficulties in lactation.

Table 3. Distribution of the Effect of Stress on Smooth Milk Production in Postpartum Mothers

Postpartum mothers							
The Level of Stress	Smooth Milk Production				Total		P Value
	Smooth		Not Smooth				
	Freq	%	Freq	%	Freq	%	
Normal	12	54,5	0	0	12	18.8	0,000
Light	7	31,8	0	0	7	10,9	
Medium	3	13,6	16	38,1	19	29,7	
Heavy	0	0	18	42,9	18	28,1	
Very Heavy	0	0	8	19,0	8	12,5	
Total	22	100	42	100	64	100	

DISCUSSION

The result of this study showed a significant association between stress levels and milk production, indicating that higher stress levels are strongly linked to difficulties in lactation. These are consistent with findings by Wang et al. (2019), who also observed that stress impairs milk production in postpartum mothers. The Roy adaptation model used in this study suggests that stress affects the body's ability to adapt to post-birth changes, which could impact milk production. It was found that 29.7% postpartum mothers experienced stress, and 12 respondents (28.1%) did not experience stress. The percentage of spontaneous postpartum mothers who experience stress is included in the high category compared to the percentage of spontaneous postpartum mothers who do not experience stress. This is in accordance with the statement of Pieter & Lubis (in Kusumadewi, 2010) stating that 50-70% of all postpartum women will experience postpartum stress syndrome.

This study shows that stress in postpartum mothers originates from psychological stress. Where there is a sense of anxiety, worry and fear of the mother. The emergence of feelings of anxiety because of worry about the prospective baby to be born, whether the baby will be born perfect or there is no psychological condition of the mother who is overwhelmed by the baby, financial problems and prohibitions or myths that must be obeyed by postnatal mothers are internal factors that cause stress on postpartum mother (Supartini, 2011).

While the results of the study obtained data on the smoothness of postpartum mother's milk production in Delima (Parturition) room of Sayang Regional General Hospital Cianjur, based on the Univariate test it was obtained that the frequency distribution of 64 respondents showed that the majority 42 people (65.6%), their milk production was not smooth, and almost half that is 22 people (34.4%) had good milk production. Based on the characteristics of the data, postpartum mothers in this study were aged 20-35 years, there were 44 (68.8%) and based on parity, 37 (57.8%) were primiparous and those who experienced non-fluency Breast milk on average on the third day after delivery.

Researchers argue that the smooth production of breast milk is very important because breast milk is the only source of nutritional intake for baby, especially newborns. In addition, breast milk is needed for baby to growth and development, considering that the content of breast milk is very good. Therefore the role of management in Partum room is very important. The management that supports the success of breastfeeding that must be done is the baby must immediately given to the mother, teaches the correct breastfeeding technique, do not schedule breastfeeding because it can hinder the smooth process of breastfeeding and most importantly provide lactation clinic facilities or a special room for breastfeeding mothers.

Based on the results of bivariate analysis, it was found that from 64 respondents, there were 12 respondents whose stress levels were normal, as many as 12 people (54.5%) had smooth milk production. From the 7 respondents whose stress level was mild, there were 7 (31.8%) whose milk production was smooth. Also, from 8 respondents, no one had very high levels of stress and had smooth milk production (0%).

From these data, it can be seen that there is a tendency that the higher of stress level, the lower the postpartum mother's milk production or in other words the more stressed postpartum mother it can cause the lower her milk production. From the results of the Chi-Square test analysis with a 5x2 cross table, the P value of Pearson Chi-Square = 0.000 is obtained. P value (0.000) < α (0.05), then H_0 is rejected, thus it can be concluded that there is an effect of stress on the smooth production of breast milk in postpartum mothers in Delima (Parturition) room of Sayang Regional General Hospital Cianjur.

The Research conducted by Kamariyah (2014) regarding psychological conditions affecting breastfeeding mothers' milk production. The statistical results obtained were $p=0.001$, it means that there was a relationship between the psychological condition of breastfeeding mothers and the smooth production of breast milk.

The researchers argue that there is a tendency that the higher of stress level, the lower the postpartum mother's milk production or in other words, the more stressed the postpartum mother it can cause the lower her milk production. The Worries that baby Isn't receiving enough milk, it can exacerbate stress and lead many mothers to turn to the formula. Therefore, 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 the psychological condition of the mother so she can smoothly breastfeed, so the baby gets Breast milk and mothers who often breastfeed will help produce milk so the milk comes out smoothly. Breastfeeding is also an advantage, all of these benefits are not only felt by the baby, but also by the mother, the environment and even the country. Breastfeeding success is influenced by psychological preparation, which is carried out since pregnancy.

Based on the results and discussion above, it can be concluded that to reduce stress in postpartum mothers, there are efforts that can be made to support mother's psychology, including supporting mothers through the periods of pregnancy and childbirth, husbands and close family to build closer relationships, avoid conflict between husband and wife and strive for a calm and relaxed atmosphere. In addition, the husband can accompany the wife during breastfeeding, the father's support is felt by the mother. Thus the obligations can be carried out properly. This is in accordance with Roy's adaptive theory, to identify the adaptation of postpartum mothers to inadequate milk production, so it can be seen whether the adaptation made by the client is adaptive or mal-adaptive. besides the support of health workers for the problems faced by clients, social support from the closest people such as husbands or biological mothers is needed to strengthen client coping so the client can go through the adaptation process optimally.

CONCLUSION

Based on the results of a study involving 64 postpartum mothers in the Delima (Parturition) Room of Sayang Regional General Hospital Cianjur, the findings revealed an overview of stress levels and the smoothness of breast milk production among postpartum mothers. The study showed that nearly one-third of the participants (29.7%) experienced moderate stress levels. Additionally, the majority (65.6%) had difficulty with smooth breast milk production. The Chi-Square test analysis indicated a significant relationship between stress levels and the smoothness of breast milk production, with a p-value of 0.000 ($p < 0.05$). Therefore, it can be concluded that stress has an effect on the smoothness of breast milk production in postpartum mothers. These findings highlight the importance of addressing the psychological well-being of mothers after childbirth as a crucial factor in supporting successful breastfeeding.

RECOMMENDATION

It is recommended that healthcare providers, especially nurses and midwives, provide emotional support and stress management interventions for postpartum mothers to promote smoother breast milk production. Health workers should create a comfortable, supportive environment in the maternity ward and offer counseling or relaxation techniques to reduce stress. In addition, breastfeeding education should be emphasized, including teaching correct breastfeeding techniques and reassuring mothers about their milk production. It is also advised not to impose rigid breastfeeding schedules but instead encourage mothers to breastfeed on demand, which may help improve milk flow and strengthen mother-infant bonding. Further research is suggested to explore other factors that may influence lactation and to develop more comprehensive breastfeeding support programs.

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