

Analysis Of Factors Associated With Breast Milk Fluency In Breastfeeding Mothers In Postpartum Room Rsia Siti Khadijah

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Article Info	ABSTRACT
Keywords:	Breast milk is recognized as the best nutrition for infants, providing
Family Support,	essential energy and nutrients during the first six months of life, while
IMD,	also supporting immune function and cognitive development critical for
Smooth Breastfeeding,	a child's healthy growth. Despite its well-documented benefits, many
Nutrition,	mothers face challenges in initiating and maintaining exclusive
Knowledge.	breastfeeding, with one of the main barriers being insufficient milk
	production. In Indonesia, although efforts have been made to achieve
	80% exclusive breastfeeding coverage, 2022 data shows that only
	67.96% of infants under six months receive exclusive breastfeeding, a
	decline from the previous year. This study aims to identify the factors
	influencing the smooth flow of breast milk in Gorontalo, including family
	support, early initiation of breastfeeding (IMD), breastfeeding
	techniques, and maternal nutrition. The research employed a
	quantitative method with a cross-sectional design, conducted in the
	postpartum room of RSIA Siti Khadijah from July to August 2024, with a
	sample of 40 breastfeeding mothers selected through purposive
	sampling. Data were collected through questionnaires and analyzed
	using the chi-square test to examine the relationships between
	independent and dependent variables. The results indicated significant
	relationships between family support and smooth milk flow (p-value =
	0.001 < 0.05), early initiation of breastfeeding (IMD) and smooth milk
	flow (p-value = $0.002 < 0.05$), knowledge of breastfeeding techniques
	and smooth milk flow (p-value = $0.003 < 0.05$), and maternal nutrition
	and smooth milk flow (p-value = $0.003 < 0.05$). This study is expected
	to provide insights into the factors affecting breast milk flow and offer
	recommendations to improve exclusive breastfeeding coverage in
	Gorontalo, supporting the achievement of national targets, and providing
	guidance for designing more effective strategies tailored to the local
	context.
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INTRODUCTION

Breast milk is widely recognized as the best natural nutrition for infants, providing the essential energy and nutrients required during the first six months of life. In addition to its nutritional value, breast milk supports immune function and cognitive development, playing a critical role in ensuring a child's healthy growth (Tamar & Rini, 2022). Despite these well-documented benefits, many mothers face challenges in establishing and maintaining



exclusive breastfeeding. One of the main barriers is insufficient milk production, which significantly contributes to the low rates of exclusive breastfeeding, affecting both maternal and infant health outcomes. In Indonesia, the Ministry of Health has set an ambitious target to achieve 80% exclusive breastfeeding coverage. However, data from 2022 shows that less than half of infants under six months are exclusively breastfed, with national coverage standing at 67.96%, a decrease from 69.7% in 2021. These figures highlight the ongoing struggle to meet national targets and the need for continued efforts to address the barriers mothers face. The Indonesian government has implemented several health initiatives to improve public health, including the First 1000 Days of Life (HPK) program, which focuses on ensuring optimal nutrition for children during critical early developmental stages (WHO, 2023).

Barriers to exclusive breastfeeding include delayed initiation of breastfeeding (IMD) after birth, insufficient milk production (32%), nipple problems (28%), engorged breasts (25%), as well as external factors such as formula milk advertisements (6%) and maternal employment (5%). Family and community attitudes towards breastfeeding also play an important role, as does the support mothers receive from healthcare workers. According to the Ministry of Health (2020), these factors can hinder breastfeeding success, making support from families, communities, and healthcare professionals vital for improving exclusive breastfeeding rates. Data from the 2022 Indonesian Demographic and Health Survey (IDHS) indicates that only 17.3% of postpartum mothers exclusively breastfed, 20.7% did not breastfeed at all, and 62% discontinued breastfeeding before completing the exclusive breastfeeding period. Among the challenges faced by mothers, 79.8% experienced nipple blisters, 5.8% had breast milk stasis, and 12.5% struggled with insufficient milk production. In Gorontalo Province, exclusive breastfeeding coverage was 52.75% in 2021, increased to 53.60% in 2022, and rose to 55.11% in 2023 (BPS, 2023). While there has been some improvement, these figures still fall short of the national target, indicating the need for further interventions to address these challenges.

Previous studies have identified various factors contributing to the low rates of exclusive breastfeeding, such as maternal knowledge, family support, and healthcare access (Trismayana & Winata, 2020). However, there is limited research on the social and cultural influences that may impact breastfeeding practices, particularly in regions like Gorontalo. Factors such as local cultural norms, community-based support systems, and healthcare interventions have not been sufficiently explored in the context of exclusive breastfeeding in Indonesia. This study aims to fill this gap by investigating the cultural, social, and healthcare factors that influence exclusive breastfeeding practices in Gorontalo. By examining these factors in detail, the research will provide insights that can help design more effective strategies for improving breastfeeding outcomes, tailored to the local context. Furthermore, this research will contribute to the broader understanding of how region-specific barriers can be overcome to increase exclusive breastfeeding rates, ultimately supporting the achievement of national health goals.



METHODS

This study used quantitative method with descriptive analytic approach and cross-sectional research design. The study was conducted in the postpartum room of Siti Khadijah Hospital, Gorontalo City, from July to August 2024, with a population of 419 breastfeeding mothers recorded from January to March 2024, and a sample of 40 mothers selected using purposive sampling technique. The independent variables in this study included family support, early breastfeeding initiation (IMD), knowledge of breastfeeding fluency. Data were collected using a validated questionnaire and analyzed using the chi-square test to examine the relationship between the independent and dependent variables. This study was conducted following ethical research principles, including on-site research permission, informed consent, anonymity, data confidentiality, and rigor in data collection.

RESULTS AND DISCUSSION

Univariate Analysis Family Support

Table 1. Frequency distribution of family support

Family Support	F	%
Not supportive	15	37,5
Support	25	62,5
Total	40	100

Based on the table above, it is known that of the 40 Respondents, the highest family support studied at Siti Khadijah Hospital was Supporting as many as 25 people (62.5%) and the lowest was Not supporting as many as 15 people (37.5%).

Early Breastfeeding Initiation

Table 2. Frequency Distribution of Early Breastfeeding Initiation (IMD)

Early Breastfeeding Initiation	F	%
Not implemented	6	15
Implemented	34	85
Total	40	100

Based on the table above, it is known that of the 40 respondents of Early Breastfeeding Initiation studied at Siti Khadijah Hospital, the highest was implemented as many as 34 people (85%) and the lowest was not implemented as many as 6 people (15%).

Knowledge of Breastfeeding Techniques

 Table 3. Frequency Distribution of Knowledge of Breastfeeding Techniques

Breastfeeding technique knowledge	F	%
Less	10	25
Good	30	75
Total	40	100



Based on the table above, it is known that of the 40 respondents, the highest knowledge of breastfeeding techniques studied at Siti Khadijah Hospital was 30 people (75%) and the lowest was 10 people (25%).

Nutrition

Table 4. Frequency Distribution of Respondents' Nutrition About Breastfeeding

Nutrition	F	%
Less	20	50
Good	20	50
Total	40	100

Based on the table above, it is known that of the 40 respondents, the nutrition studied at Siti Khadijah Hospital, the majority of breastfeeding mothers' nutrition was lacking 20 people (50%) and the minority of mothers had good nutrition as many as 20 people (50%). **Smoothness of breast milk**

Table 5. Frequency Distribution of Breast Milk Fluency							
Smoothness of breast milk	F	%					
Not smooth	24	60					
Smooth	16	40					
Total	40	100					

Based on the table above, it is known that of the 40 Respondents, the highest breast milk fluency studied at Siti Khadijah Hospital was not fluent as many as 24 people (60%) and the lowest was fluent as many as 16 people (40%).

Bivariate Analysis

The relationship between family support and breast milk fluency in the postpartum room of Siti Khadijah Hospital

Table 6. Relationship between family support and breast milk fluency

Smoothness of breast milk								
Family Cunnart	Not Smooth Smooth			Т	Π			
Family Support	F	%	F	%	F	%	- 7	
Not Supprotive	15	37,5	0	0	15	37,5		
Support	9	22,5	16	40	25	62,5	0.001	
Total	24	60	16	40	40	100		

Based on the table above, it shows that families who support the smoothness of breast milk are 16 people (40%) and families who support but their breast milk is not smooth as many as 9 people (22.5%) while families who do not support their breast milk are not smooth as many as 15 people (37.5%) and 0 people (0%). It is known that the statistical value or P-value is 0.001 <0.05, then Ha is accepted, so it can be concluded that there is a relationship between family support and breast milk fluency in breastfeeding mothers in the postpartum room of Siti Khadijah Hospital Gorontalo City.



The relationship between early breastfeeding initiation (IMD) and breast milk fluency in the postpartum room of Siti Khadijah Hospital.

Smoothness of breast milk								
	Not S	Not Smooth Smooth To					Р	
IMD	F	%	F	%	f	%		
Not Implemented	0	0	6	15	6	15	0.002	
Implemented	24	60	10	25	34	85	0.002	
Total	24	60	16	40	40	100		

Table 7. Relationship between early breastfeeding initiation and breast milk continuity

Based on the table above, it shows that of the 6 mothers who did not do IMD, the majority of breast milk was smooth as many as 6 people (15%) were post Sc patients and 0 people (0%) were not smooth. Whereas from 34 people who do IMD, the majority of breast milk is not smooth as many as 24 people (60%) and only 10 people (25%) are smooth. It is known that the statistical value or P-value is 0.002 <0.05, then Ha is accepted, so it can be concluded that there is a relationship between Early Breastfeeding Initiation (IMD) with breast milk fluency in breastfeeding mothers in the postpartum room of Siti Khadijah Hospital Gorontalo City.

The relationship between knowledge of breastfeeding techniques and the fluency of breast milk in the postpartum room of Siti Khadijah Hospital.

		milk flu	ency				
	Smo	oothness	of bre	ast milk			
Knowladaa	Not 9	Smooth		Smooth		Total	Р
Knowledge	F	%	F	%	F	%	
Less	10	25	0	0	10	25	0.003
Good	14	35	16	40	30	75	0.003
Total	24	60	16	40	40	100	

Table 8. Relationship between knowledge of breastfeeding techniques with breast

Based on the table above, it shows that the knowledge of breastfeeding techniques is good with smooth breast milk as many as 16 people (40%) and breast milk is not smooth 14 people (35%) while the knowledge of breastfeeding techniques with breast milk is not smooth as many as 10 people (25%) and smooth breast milk 0 people (0%). It is known that the statistical value or P-value is 0.003 <0.05, then Ha is accepted, so it can be concluded that there is a relationship between knowledge of breastfeeding techniques with breast milk fluency in nursing mothers in the postpartum room of Siti Khadijah Hospital Gorontalo City. **The relationship between nutrition and breast milk fluency in the postpartum room of Siti Khadijah Hospital**

Table 9. Relationship between nutrition and breast milk fluency in the postpartum room

Smoothness of breast milk							
Nutrition	Not Smooth		0	Smooth		Total	Π
	F	%	F	%	F	%	P

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Less	7	17,5	13	32,5	20	50	
Good	17	42,5	3	7,5	20	50	0.003
Total	24	60	16	40	40	100	

Based on the table above, it shows that poor nutrition with breast milk is smooth as many as 13 people (32.5%) and breast milk is not smooth 7 people (17.5%). While good nutrition with breast milk is smooth as many as 3 people (7.5%) and breast milk is not smooth 17 people (42.5%). It is known that the statistical value or P-value is 0.003 < 0.05, then Ha is accepted, so it can be concluded that there is a relationship between nutrition and breast milk fluency in nursing mothers in the postpartum room of Siti Khadijah Hospital, Gorontalo City. Univariate Analysis

Family Support

The results of this study found that the characteristics of subjects based on family support in the most breastfeeding mothers in this study were supportive family support as many as 25 respondents (62.5%) and less support for 15 respondents (37.5%), the family has a role that determines the smoothness of breast milk which greatly affects the mother's emotions.

The results showed that good family support influenced the success of breastfeeding because of the encouraging factors from the family. The family has an important role in motivating mothers to breastfeed through emotional support including support that is realized in the form of affection, trust, attention, listening, and being listened to. This form of support makes the mother feel comfortable, confident, cared for and loved by the family so that the mother can face problems well.

Based on the results of the study, it is known that support from the spouse (husband) and family will provide its own strength for the mother. In essence, the family, especially the husband, is able to function to realize the breastfeeding process. Low family support makes mothers often discouraged from providing breast milk to their babies. Increased family support in the form of attention to the mother will increase the mother's positive thoughts. The greater the support obtained to continue breastfeeding, the greater the ability to survive to continue breastfeeding. In this case, family support is very influential, if a mother lacks support from the family, she will be more easily influenced to switch to formula milk.

According to research by Trismayana & Winata (2020) Family support is the external factor that has the greatest influence on the success of breastfeeding. The existence of family support, especially husbands, will have an impact on increasing the confidence or motivation of mothers in breastfeeding. According to Suririnah, a mother's motivation is crucial in breastfeeding. Nuzulia stated that family support can be provided in the form of informational support, appreciation support, instrumental support and emotional support.

According to the researcher's assumption, family support is related to breastfeeding. A mother who receives support can be said to have a greater chance of breastfeeding than a mother who does not receive support, but it does not rule out the possibility that if the mother's knowledge is lacking, it can make the mother still not breastfeed even though she has full support from the family.



Early Breastfeeding Initiation

The results of this study showed the characteristics of subjects based on Early Breastfeeding Initiation in the most breastfeeding mothers in this study, namely IMD carried out 34 people (85%). IMD is very important for breastfeeding mothers because IMD is done by creating skin-to-skin contact between mother and baby so as to maintain the baby's body temperature remains warm.

The results of the study found that the implementation of IMD has many benefits, namely to create a touch between mother and baby that can make the mother calm, relax and love the baby that has been waiting for a long time, with IMD the mother and baby feel calmer so as to help the baby's breathing and heart rate more stable. Thus the baby will fuss less and thus reduce energy consumption. Skin-to-skin touch can warm the baby so as to reduce the risk of death due to hypothermia (Khaira Rizki et al., 2023; Ristiana et al., 2022).

The results of the study showed that there were 6 respondents who did not perform IMD, of these 6 respondents were post-SC patients. For SC patients, if IMD has not occurred in the delivery room or operating room, or the baby must be moved before one hour, the baby is still placed on the mother's chest when transferred to the recovery room. Early initiation of breastfeeding can be continued in the mother's room.

According to Astuti, early breastfeeding initiation means the beginning of breastfeeding activities in the first hour after the baby is born. Babies suckle on their mothers, skin-to-skin contact by being placed on the mother's stomach or mother's chest, not breastfed by the mother when the baby is just born, which can also be interpreted as a way for babies to suckle in the first hour after birth with their own efforts (babies look for their own mother's nipples) not breastfed. The way babies initiate early breastfeeding is called "the breast crawl" or crawling for the breast (a miraculous natural ability).

According to the researcher's assumptions regarding the importance of early breastfeeding initiation to the community, because there are still strong family and community beliefs about the condition of mothers who need rest after giving birth, and breast milk that comes out on the first day is not good for the baby. It is not easy to change people's perceptions about this, but if they are given an overview of the benefits of early breastfeeding initiation which can reduce bleeding and make breast milk production smooth which reduces household costs. Early breastfeeding initiation (IMD) is very necessary because the baby is placed on the mother's chest so that the baby's skin sticks to the mother's skin so that the baby's body temperature adjusts to the mother's body temperature in order to reduce the risk of death due to hypothermia. While the baby himself gets the opportunity to get to know his mother faster through the touch of the skin, the smell of the body and the voice of the mother. **Knowledge of Breastfeeding Techniques**

The results of this study showed that the characteristics of subjects based on knowledge of breastfeeding techniques in breastfeeding mothers in this study were 30 people (75%) with good knowledge of breastfeeding techniques and only 10 people (25%) with poor knowledge. Good maternal knowledge will affect the smoothness of breast milk because mothers know how to make their breast milk abundant and smooth.



The results showed that a person's knowledge is closely related to the individual's behavior towards breast milk fluency. Most of the respondents only put the nipple into the mouth when breastfeeding, whereas the correct way to breastfeed is to put all the nipples and breast areola so that the milk comes out smoothly. In addition, mothers also breastfeed their babies irregularly. Mothers who already have good knowledge will know that for smooth breastfeeding it is necessary to eat healthy and nutritious foods, consume lots of water so that breastfeeding mothers do not experience dehydration so that the milk supply can run smoothly and breastfeeding mothers must maintain their psychological condition and take plenty of rest so that conditions are well maintained.

According to Prasetio et al (2020), knowledge is a very important thing in determining a person's behavior, because knowledge determines a person's perceptions and habits in everyday life, especially in breastfeeding. A good level of knowledge can also affect the mindset of a person or even society from negative to positive because it is based on awareness, interest, and consideration of positive attitudes. There are several kinds of factors that can affect the level of knowledge, one of which is education. Health education is basically an activity to convey health messages to the community or individual. With this message, it is hoped that the community or individual will gain good knowledge so that it brings a change in mindset, namely providing breastfeeding according to the expected recommendations. This study relates to research conducted by Mawor Mariane, that a high level of knowledge can influence mothers in breastfeeding.

According to the researcher's assumption, the higher the mother's knowledge, the better the breastfeeding behavior. The results found where most respondents have good knowledge and good breastfeeding behavior, this is due to the breastfeeding experience of the mother and they believe that the nutritional content in breast milk is very complete and good for babies.

Nutrition

The results of this study show the characteristics of subjects based on nutrition in good breastfeeding mothers 20 people and less nutrition in breastfeeding mothers 20 people. Nutrition is very influential on maternal nutrition. The mother's exposure to food should be able to maintain good nutrition to maintain breast milk quality, the mother must consume foods that contain nutrients or a diet with balanced nutrition principles and consume a variety of foods, especially dark green vegetables that are good for breast milk production.

The results of the study found that the food consumed by the mother had no special food as long as the food and drinks were nutritious enough in the form of rice, fish, and vegetables. If the food consumed by the mother is nutritious and balanced, breast milk production will be good (Apriana & Lilia, 2023). The food consumed by the mother indirectly affects the quality, as well as the amount of milk produced by the mother. Breastfeeding mothers do not need to eat excessively, but simply maintain a balance of nutritional consumption. In reality, there are no specific foods or drinks that can produce breast milk, although many believe that certain foods and drinks will increase milk production.

The results of the research obtained foods consumed by mothers are not complete such as fruits and milk, if the mother consumes nutritious foods it is more than enough because



food is very important for breastfeeding mothers to increase the fluency of breast milk (Tamar & Rini, 2022)

According to (Wulandary et al, 2020) The nutritional adequacy of breastfeeding mothers will be closely related to the fluency of breast milk given to their babies. By fulfilling the nutritional needs of breastfeeding mothers, breast milk production will increase. So that the dietary factors and balanced food intake need to be applied for breastfeeding mothers to help smooth their breast milk. What is more interesting is that the nutritional status before pregnancy also significantly affects the success of breastfeeding.

According to the researcher's assumption, nutrition is very important for breastfeeding if the mother consumes nutritionally adequate food and nutrition is more than enough because food is very important for breastfeeding to increase milk production. Therefore, the nutrition of the mother during the breastfeeding period will indirectly determine the nutritional status if the mother has good nutrition, the better the nutritional status of the mother and also the nutritional status of the baby.

Breastfeeding Smoothness

The results of this study show that the majority of subjects' characteristics based on breastfeeding smoothness in breastfeeding mothers were those with poor milk flow, totaling 24 individuals, while only 16 mothers had smooth breastfeeding. Many mothers do not give breast milk to their babies due to issues such as insufficient milk production, milk not flowing, and the belief that breast milk alone cannot meet the baby's needs because the baby remains fussy. As a result, there is a tendency for mothers to provide complementary foods, such as formula milk. (Hanifa et al., 2024)

The study indicates that breastfeeding smoothness is influenced by the mother's nutrition patterns, and the adequacy of milk for the baby can be assessed based on whether the baby gets enough milk. To determine if milk is sufficient, criteria include: milk flowing from the nipple, the breast feeling firm before feeding, the baby gaining weight according to age, the baby being able to sleep soundly for 3-4 hours after feeding, and the baby urinating 8 times a day.

The researcher assumes that the reasons some mothers do not breastfeed are related to factors such as knowledge, nutrition, and family support. However, breastfeeding has a significant impact on a baby's health. Babies who are breastfed for the first six months of life tend to grow healthier and smarter (Indrayani & Setiyani, 2022). Nevertheless, only a few respondents were able to breastfeed, as most struggled due to the belief that they had insufficient milk, milk flow problems, and the baby being fussy after breastfeeding but calming down after receiving additional food or drink. Babies under six months of age should only be given breast milk, as their digestive systems are not mature enough to digest other foods or drinks, which could lead to various illnesses.

Bivariate Analysis

The Relationship Between Family Support and Breastfeeding Smoothness

The study results show that 16 families (40%) supported mothers in breastfeeding smoothly, while 9 families (22.5%) supported mothers but with poor milk flow, and 15 families (37.5%) did not support breastfeeding, with no instances of smooth breastfeeding in



this group. The statistical value, or P-value, is 0.001 (<0.05), so the alternative hypothesis (Ha) is accepted, meaning that family support is related to breastfeeding smoothness for mothers in the postpartum room at RSIA Siti Khadijah, Gorontalo City.

After conducting research at RSIA Siti Khadijah on the variable of family support, 16 respondents (40%) with family support reported smooth breastfeeding, while 9 respondents (22.5%) had poor milk flow. This is due to several factors, such as milk not coming out at the time of delivery, a lack of nutrition or food that can promote milk production, and a lack of knowledge on how to produce milk.

The research results show that a successful breastfeeding experience involves the teamwork of the mother, baby, father, and family environment. Fathers and family play a crucial role by providing informational, emotional, and practical support that helps mothers in the breastfeeding process. Family support plays a significant role in ensuring successful breastfeeding, as difficulties often occur in the first 10-14 days post-delivery, such as engorged breasts, sore nipples, and fussy babies who refuse to breastfeed, which can lead to early cessation. In such cases, the support of the husband and family is essential to ensure smooth breastfeeding.

The Relationship Between Early Initiation of Breastfeeding (IMD) and Breastfeeding Smoothness

The study reveals that of the 6 mothers who did not perform IMD, the majority had smooth breastfeeding (6 individuals or 15%), while no one had poor milk flow. On the other hand, of the 34 mothers who performed IMD, the majority had poor milk flow (24 individuals or 60%), and only 10 had smooth breastfeeding (25%). The statistical value or P-value is 0.002 (<0.05), so the alternative hypothesis (Ha) is accepted, meaning that there is a significant relationship between Early Initiation of Breastfeeding (IMD) and breastfeeding smoothness for mothers in the postpartum room at RSIA Siti Khadijah, Gorontalo City.

After research at RSIA Siti Khadijah, it was found that 24 respondents (60%) who performed IMD had poor milk flow, possibly due to factors such as insufficient breastfeeding or the addition of formula milk, which made the baby less willing to nurse. In contrast, the 6 respondents (16%) who did not perform IMD had smooth breastfeeding, likely due to sufficient nutrition and fluid intake, as well as frequent breastfeeding sessions.

The Relationship Between Knowledge of Breastfeeding Techniques and Breastfeeding Smoothness

The study results show that mothers with good knowledge of breastfeeding techniques had smooth breastfeeding (16 individuals or 40%) and poor milk flow (14 individuals or 35%). Conversely, mothers with poor knowledge of breastfeeding techniques had poor milk flow (10 individuals or 25%), with no instances of smooth breastfeeding. The statistical value or P-value is 0.003 (<0.05), indicating a significant relationship between knowledge of breastfeeding techniques and breastfeeding smoothness.

The research highlights that 30 respondents (75%) had good knowledge, but 14 of them (35%) still had poor milk flow. This was due to various factors such as inverted nipples, insufficient milk production, and sore nipples. Some mothers received little attention from their families when their breasts hurt from breastfeeding, and this led to formula feeding



instead. On the other hand, those with good breastfeeding technique knowledge were able to breastfeed effectively, with correct positioning and latch, which stimulated milk production.

The findings align with previous studies by Febriarsi and Fatma Tika, which showed that respondents with better knowledge of breastfeeding techniques were more likely to experience smooth breastfeeding. The P-value of 0.000 (<0.05) confirms a significant relationship between knowledge and breastfeeding smoothness. The researcher assumes that one reason for difficulties in breastfeeding is the lack of public awareness about the benefits of breastfeeding and when it should start, especially among first-time mothers or those with lower education.

The Relationship Between Nutrition and Breast Milk Smoothness

The research findings indicate that 13 mothers (32.5%) with poor nutrition had smooth breast milk flow, while 7 mothers (17.5%) had unsmooth milk flow. In contrast, 3 mothers (7.5%) with good nutrition had smooth milk flow, and 17 mothers (42.5%) had unsmooth milk flow. The statistical analysis shows a P-value of 0.003 < 0.05, meaning the hypothesis is accepted. Therefore, it can be concluded that there is a significant relationship between nutrition and the smoothness of breast milk flow in breastfeeding mothers at the RSIA Siti Khadijah hospital in Gorontalo.

Further research conducted at RSIA Siti Khadijah showed that mothers with poor nutrition and smooth milk flow numbered 13 (32.5%), while those with poor nutrition and unsmooth milk flow were 7 (17.5%). Overall, 50% of the respondents had poor nutrition. For those with good nutrition, 3 mothers (7.5%) had smooth milk flow, and 17 mothers (42.5%) had unsmooth milk flow, with 50% of respondents categorized as having good nutrition.

The study found that many mothers with good nutrition did not have smooth milk flow due to factors such as low income, limiting their ability to buy food that supports breast milk production. On the other hand, mothers with poor nutrition who had smooth milk flow produced enough milk due to hormonal balance and frequent breastfeeding, which stimulates milk production.

According to the research, adequate nutrition plays a crucial role in a baby's physical growth and milk production. A study by Walyantini (2019) found a significant relationship between food intake and smooth breast milk flow, with a P-value of 0.001 < 0.05. Optimal breast milk flow occurs when mothers consume a balanced diet rich in protein and other nutrients while maintaining regular eating patterns. In the RSIA Siti Khadijah study, it was observed that some mothers who didn't eat nutritious foods consistently had smooth milk flow, while others did not. This suggests that hormonal balance, frequent breastfeeding, and other factors like protein and vitamin intake can stimulate milk production, even when mothers do not consume ideal amounts of food. The key is maintaining a diet rich in protein, vitamins, and minerals while staying hydrated with 8-12 glasses of water per day.

Breastfeeding mothers need to consume a healthy diet containing the necessary proteins, fats, minerals, carbohydrates, and water to support milk production. Without sufficient nutrition, the production and quality of breast milk may suffer, ultimately impacting the health of the baby. In conclusion, nutrition significantly affects the smoothness of breast



milk production. A well-balanced diet and proper nourishment are essential to ensure that mothers can produce enough high-quality milk for their babies.

CONCLUSION

This study found that there was a significant relationship between family support, early breastfeeding initiation (IMD), knowledge of breastfeeding techniques, and maternal nutritional status with the smooth flow of breast milk in breastfeeding mothers at Siti Khadijah Hospital Gorontalo. All of these factors contributed significantly to breastmilk flow, with their respective p-values <0.05. Therefore, to increase the success of exclusive breastfeeding, it is important for families, medical personnel, and the community to provide greater support to breastfeeding mothers, as well as ensuring that mothers get the right information about breastfeeding techniques and optimal nutrition. Recommendations for this study are to strengthen breastfeeding education programs at the family and community level, increase social support in hospitals, and pay more attention to maternal nutrition in an effort to achieve higher exclusive breastfeeding coverage in Gorontalo and Indonesia in general.

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