

The Relationship Between Frequency And Breastfeeding Education With The Smoothness Of Postpartum Mother's Breast Milk Production In The Matang Janeng Village Community**Ummu Aiman, Mirna Wati,**

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*Submitted: 01/12/2023**Accepted: 14/12/2023**Published: 22/12/2023***ABSTRACT**

The World Health Organization (WHO), United Nation International Children's Emergency fund (UNICEF) and the Ministry of Health recommend initiating breastfeeding within the first hour of a baby's life, exclusive breastfeeding for 6 months, up to 2 years, breastfeeding must be provided together with a safe breastfeeding companion. and nutritious. Production of breastmilk that is not smooth is one of the factors that causes failure in exclusive breastfeeding. One of the efforts to increase breast milk is by breastfeeding children regularly. The purpose of this study was to determine the relationship between the frequency of breastfeeding and the smooth production of postpartum mother's milk in Matang Janeng Village, Tanah Pasir District, North Aceh Regency. This type of research is analytic with cross sectional study design, with a sample of 38 people by total sampling. This research was conducted from 13 to 26 July 2020 with the method of measuring the distribution of questionnaires. Data processing was performed using the chi square test. The results of the univariate analysis showed that the frequency of breastfeeding in postpartum mothers was mostly in the irregular category amounting to 23 people (60.5%) and the milk production of postpartum mothers was mostly in the non-smooth category amounting to 21 people (55.3%) while the results of the analysis bivariate, it was found that there was a relationship between the frequency of breastfeeding and the smooth production of breast milk for postpartum mothers with a p value of 0.003. It is hoped that respondents can breastfeed their babies regularly so that milk production can come out smoothly so that the baby can be fulfilled with nutrition.

Keywords : Relationship, Frequency of Breastfeeding, Smooth Milk Production, Postpartum Mothers

INTRODUCTION

Breast milk (ASI) is the best food for newborns, directly produced from a mother's breast to her newly born baby. Its composition is tailored to each stage of the baby's growth and development. Breast milk has a significant impact on emotional development, influencing the emotional bond between the mother and the baby ⁽¹⁾.

The World Health Organization (WHO), the United Nations International Children's Emergency Fund (UNICEF), and the Ministry of Health recommend initiating breastfeeding within the first hour of a baby's life, exclusively breastfeeding for the first 6 months, continuing up to 2 years, and providing breast milk along with safe and nutritious complementary foods ⁽²⁾. WHO also adds that during exclusive breastfeeding, certain liquids such as a few drops of syrup containing vitamins, mineral supplements, or medications may be consumed by the baby under specific conditions ⁽³⁾.

Babies who receive exclusive breastfeeding are 14 times more likely to survive in the first six months of life compared to those who do not receive breast milk. Initiating breastfeeding on the first day after birth can reduce the risk of newborn death by up to 45%. Breastfeeding also supports a child's cognitive abilities and helps prevent obesity and chronic diseases later in life. Recent research in the United States and the United Kingdom indicates significant cost savings in healthcare services as breastfed children are less prone to illnesses than those who are not breastfed ⁽⁴⁾.

Despite the widespread awareness of the benefits of breastfeeding worldwide, only 39% of infants under six months received exclusive breastfeeding globally in 2012. China, with a large population, achieved an exclusive breastfeeding rate of only 28%. Some countries, such as Tunisia,

Somalia, Chad, and South Africa, faced challenges in promoting exclusive breastfeeding (UNICEF, 2013). The recommended practice of exclusive breastfeeding for six months has not been well-implemented. According to the findings of the World Breastfeeding Trends Initiative (WBTI) in 2012, only 27.5% of mothers in Indonesia successfully provided exclusive breastfeeding ⁽⁵⁾.

Insufficient breast milk production is one of the factors contributing to the failure of exclusive breastfeeding. This aligns with Chan's ⁽⁷⁾ findings from 44 postpartum mothers, where 44% stopped breastfeeding before the age of 3 months due to inadequate breast milk, 31% due to breast problems, and 25% due to fatigue. One effort to increase breast milk production is regular breastfeeding. The more frequently the baby sucks on the mother's nipple, the greater the increase in breast milk production. Conversely, if the baby stops nursing, there will be a decrease in breast milk. When the baby starts sucking on the breast, two reflexes occur that lead to the timely release of breast milk: the milk production reflex or prolactin reflex stimulated by the hormone prolactin, and the let-down reflex. When the baby sucks on the breast nipple, a hormone called prolactin is produced, regulating the cells in the alveoli to produce milk. This milk is then collected in the milk ducts. Secondly, there is the let-down reflex. The baby's sucking also stimulates the production of another hormone, oxytocin, which causes the muscle cells around the alveoli to contract, pushing the milk towards the nipple. Therefore, the more the baby sucks, the more milk is produced ⁽⁸⁾.

The smoothness of the lactogenesis process determines the onset of lactation. Onset of lactation is one of the indicators of the occurrence of lactogenesis phase II, measured by the mother's perception of when her breasts feel firm, full, or heavy, and until breast milk or colostrum is released. Initial breastfeeding (breast milk) is crucial as it provides many benefits for both the mother and the baby to learn breastfeeding. The baby's failure to latch is one of the factors causing lactation onset to be more than 3 days. The frequency of breastfeeding is related to the stimulation of sucking on the breast, triggering the production of oxytocin and prolactin to produce breast milk. Breastfeeding more than 6 times in the first 24 hours after birth can ensure an adequate supply of breast milk in the following days ⁽⁹⁾.

Low breast milk production in the first days after childbirth poses a challenge to early breastfeeding. Efforts to stimulate prolactin and oxytocin hormones in mothers after childbirth, in addition to expressing breast milk, can also be done through breast care, early breastfeeding initiation (IMD), oxytocin massage, as well as the duration and frequency of breastfeeding on demand.

Based on the preliminary survey conducted by the researchers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency in 2020, there were a total of 38 postpartum mothers with infants.

Based on the initial exploration conducted by the researchers on 10 pregnant mothers with infants, only 2 mothers mentioned breastfeeding their babies more than 8 times a day. They reported smooth breast milk production, indicated by occasional spontaneous milk release and a calm demeanor of the baby during each breastfeeding session. On the other hand, the remaining 8 mothers stated that they breastfed their babies less than 8 times a day, and they reported irregular breast milk production. This was characterized by frequent crying of the baby during breastfeeding due to insufficient milk supply.

Based on the preliminary survey conducted by the researchers, the researchers are interested in selecting the title "The Relationship Between Breastfeeding Frequency and the Smoothness of Postpartum Mother's Breast Milk Production in Matang Janeng Village, Tanah Pasir District, North Aceh Regency".

METODE

This type of research is analytical, aiming to find the influence between independent and dependent variables. The approach used is cross-sectional (cross-sectional study), a research method where variables are observed simultaneously at the same time. In this study, the researchers want to investigate the relationship between breastfeeding frequency and the smoothness of postpartum mother's breast milk production in Matang Janeng Village, Tanah Pasir District, North Aceh Regency. Research Location This research was conducted in Matang Janeng Village, Tanah Pasir District, North Aceh Regency. Research Period The research was carried out from July 13 to July 26, 2020. Population and Sample Population The population in this study includes all breastfeeding postpartum mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, totaling 38 individuals. Sample The sampling method used is total sampling, where the entire population is taken as the sample, consisting of 38 individuals. Data Collection Technique Observation, which involves direct observation in Matang

Janeng Village, Tanah Pasir District, North Aceh Regency, is the targeted sampling area. This technique is intended to obtain information related to the collected data.

Interviews: This involves collecting secondary data related to the variables under investigation.
Questionnaire (survey): This technique serves as a research instrument used to obtain primary data from each respondent. The questionnaire used in this study is directly filled out by the respondents.
Research Instrument: The instrument for this research is developed in the form of a questionnaire, adopted or taken from an available source, specifically studied by Simamora ⁽¹⁰⁾. It consists of 8 statements relevant to the type or title of the research, aiming to understand the relationship between breastfeeding frequency and the smoothness of postpartum mother's breast milk production.

Result

Table of Frequency Distribution of Breastfeeding in Postpartum Mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency

Table 1
Frequency Distribution of Postpartum Mother's Breastfeeding in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, Year 2020

No	Incidence of Diarrhea in Toddlers	F	%
1.	Organized	15	39,9
2.	Unorganized	23	60,5
	Amount	38	100

From Table 1, it can be observed that the breastfeeding frequency of postpartum mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, in the year 2020, mostly falls under the category of irregular, with a total of 23 individuals, constituting 60.5%.

Table of Frequency Distribution of Breast Milk Production Smoothness in Postpartum Mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency

Table 2
Frequency Distribution of Breast Milk Production Smoothness in Postpartum Mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, Year 2021

No	Availability of Clean Water Facilities	F	%
1.	Organized	17	44,7
2.	Unorganized	21	55,3
	Amount	38	100

From Table 2, it is evident that the smoothness of breast milk production in postpartum mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, in the year 2020, mostly falls under the category of "Not Smooth," comprising 21 individuals, which accounts for 55.3% of the total.

The relationship between breastfeeding frequency and the smoothness of breast milk production in postpartum mothers.

Table 3
Frequency Distribution of the Relationship Between Breastfeeding Frequency and the Smoothness of Breast Milk Production in Postpartum Mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, Year 2021

Breastfeeding frequency	The smoothness of breast milk production in postpartum mothers				F	%	A	P - Value
	f	%	f	%				
Organized	10	66,7	5	33,3	15	100	0.05	0.003
Unorganized	7	44,7	21	69,6	23	100		

From Table 3, it is known that out of 15 individuals who breastfed regularly postpartum, 10 experienced smooth breast milk production, while only 5 encountered irregular production. On the other hand, among the 23 individuals who breastfed irregularly postpartum, 7 experienced smooth breast milk production, and 16 encountered irregular production. It is evident that there is a significant relationship between breastfeeding frequency and the smoothness of breast milk production in postpartum mothers, with a significant value (p) of 0.003 (p-value < 0.05). This implies that the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted, signifying a significant association between breastfeeding frequency and the smoothness of breast milk production in postpartum mothers.

Discussion

1. Univariate Analysis

a. Breastfeeding Frequency

From the research results, it is found that the breastfeeding frequency among postpartum mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, in the year 2020, mostly falls under the category of irregular, with a total of 23 individuals, constituting 60.5%.

From the research results, it is evident that the majority of postpartum mothers do not breastfeed regularly, and there is a correlation with the age of postpartum mothers, mostly falling in the 20-30 years category. This is because, at this age, mothers typically have limited experience, with an average of 1 to 2 children. There is also a correlation with the education level of mothers, with the majority falling into the middle category. This suggests that mothers may have limited knowledge about what is best for their babies, particularly regarding the benefits of frequent breastfeeding for optimal breast milk production and infant growth. Furthermore, the research indicates a correlation with the occupation of mothers, where the majority are either unemployed or work as homemakers. This is likely related to the frequency of breastfeeding, as many mothers are occupied with their daily roles as homemakers, leaving them with less time to seek information on breastfeeding and its benefits for smooth breast milk production.

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b. The Smoothness of Breast Milk Production in Postpartum Mothers

From the research results, it is found that the smoothness of breast milk production in postpartum mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, in the year 2020 mostly falls under the category of not smooth, with a total of 21 individuals, constituting 55.3%.

From the research results, it is evident that the majority of breast milk production in postpartum mothers is not smooth, and there is a correlation with the age of mothers, mostly falling in the 20-30 years category. This is because mothers at this age often lack experience in breastfeeding to ensure smooth breast milk production, as they typically have 1 or 2 children on average. Additionally, there is a correlation with the education level of mothers, with the majority falling into the middle category. This suggests that mothers may have limited knowledge about factors contributing to smooth breast milk production. Furthermore, the research indicates a correlation with the occupation of mothers, where the majority are either unemployed or work as homemakers. This is likely related to the smoothness of breast milk production, as most of the mothers' time is already dedicated to their daily roles as

homemakers, resulting in fatigue and exhaustion. This may lead to infrequent breastfeeding, affecting the smoothness of breast milk production.

According to the researcher's assumption, the lack of smoothness in breast milk production in the not smooth category is attributed to postpartum mothers having limited access to information. This is because mothers are often too busy taking care of their children and handling daily tasks, leaving them with insufficient time to seek information on how to ensure smooth breast milk production.

2. Bivariate Analysis

1. The Relationship Between Breastfeeding Frequency and the Smoothness of Breast Milk Production in Postpartum Mothers.

From the research results, it is indicated that there is a relationship between breastfeeding frequency and the smoothness of breast milk production in postpartum mothers, with a p-value of 0.003, where $p < 0.05$. This implies that breastfeeding frequency is associated with the smoothness of breast milk production in postpartum mothers.

This result is consistent with a previous study conducted by Rahmi et al. ⁽¹¹⁾, which investigated the analysis of factors related to the smoothness of breastfeeding in nursing mothers in the Working Area of the Lhong Community Health Center, Aceh Besar Regency, using an analytic research approach with a cross-sectional design. The research findings indicated a significant relationship between breastfeeding frequency and the smoothness of breastfeeding, with a p-value of 0.001.

This is in line with the theory proposed by Dewi & Sunarsih ⁽¹²⁾, which suggests that insufficient breastfeeding duration and scheduling may lead to a decrease in breast milk production. Scheduled breastfeeding may have less favorable outcomes because the baby's suckling significantly influences the stimulation of breast milk production. Breast milk is recognized as the best nutrition for infants. It is specially tailored for human babies, featuring a perfectly balanced composition that meets the developmental needs of infants ⁽¹³⁾.

According to the researcher's assumption, one effort to increase breast milk production is by breastfeeding the child regularly. The more frequently the child suckles on the mother's nipple, the more there will be an increase in breast milk production. Conversely, if the child stops breastfeeding, there may be a decrease in breast milk production, which could lead to nutritional deficiencies in the baby. Breastfeeding mothers are also advised to maintain a regular eating pattern and consume foods rich in nutrients and nutrition to ensure the smooth production of breast milk ⁽¹⁵⁾.

Other factors that can contribute to less smooth breast milk production in postpartum mothers include insufficient intake of nutritious food, postpartum mothers experiencing anxiety or stress, lack of rest, not practicing breast care, and insufficient support from the husband or family in breastfeeding. These factors can also result in less smooth breast milk production. And during the research, there were no specific challenges as the postpartum mothers were willing to participate as respondents. However, it's worth noting that the researcher was assisted by a friend during the study ⁽¹⁶⁾.

CONCLUSION

The majority of breastfeeding frequency among postpartum mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, falls into the irregular category, totaling 23 individuals with a percentage of 60.5%. The majority of breast milk production smoothness in postpartum mothers in Matang Janeng Village, Tanah Pasir District, North Aceh Regency, falls into the not smooth category, totaling 21 individuals with a percentage of 55.3%. There is a significant relationship between breastfeeding frequency and the smoothness of breast milk production in postpartum mothers, with a p-value of 0.003, which is less than α (alpha) at 0.05 significance level.

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