

Articles

THE RELATIONSHIP BETWEEN BREASTFEEDING TECHNIQUES AND THE INCIDENT OF SCRATCHED NIPPLES IN PUBLIC WOMEN AT TPMB ARI KRISTIYANI, TAMBUN SELATAN DISTRICT, BEKASI

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A B S T R A C T

According to the results of the Indonesian Toddler Nutritional Status Study (2020), as many as 27.67% of toddlers in Indonesia experience stunting. One intervention that is considered capable of overcoming the problem of stunting is optimal exclusive breastfeeding. Indonesia's exclusive breastfeeding coverage in 2022 was recorded at only 67.96%, down from 69.7% in 2021. The causes of failure to provide exclusive breastfeeding are three factors, namely psychosocial factors, socio-demographic factors and health service factors. Providing knowledge about early breastfeeding will increase positive attitudes and the success of exclusive breastfeeding. The aim of this research is to identify the relationship between breastfeeding techniques and the incidence of sore nipples in postpartum mothers at TPMB Ari Kristiyani, Tambun Selatan District, Bekasi Regency in 2023.

The research method used is a cross sectional survey method. sampling using a total sampling technique of 30 respondents. Univariate analysis uses a frequency distribution and for bivariate tests uses the Chi Square test. This research uses primary data from filling out questionnaires by respondents.

The results showed that of The P value has a value of $0.000 < 0.05$, which means that H_a is accepted and H_o is rejected or means that there is a relationship between breastfeeding technique and the incidence of sore nipples at TPMB Ari Kristiyani.

It is hoped that this research will become a reference for educational materials in independent practice settings, especially breast-feeding techniques so that the breastfeeding process is comfortable and pain-free. It is also hoped that this research will become a basis and reference for further research related to increasing knowledge and become material for further study

I. INTRODUCTION

Reducing the problem of stunting in children is included in the main goal in the 2025 *Global Nutrition Targets*, a key indicator in the sustainable development

goals (SDGs). Stunting is one of Indonesia's problems and the government has targeted the national prevalence of stunting to fall to 14% by 2024 (Supratti et al., 2022).

According to the results of the Study on the Nutritional Status of Indonesian Toddlers (SSGBI) (2020), as many as 27.67% of toddlers in Indonesia experienced stunting, the highest proportion was in NTT province at 43.82% and the lowest was in Bali province at 14.42%, while West Java has a stunting rate among toddlers of 26.21% or ranks 24th with the highest prevalence of stunting out of 34 provinces. According to the West Java Provincial Health Service (2022), the prevalence of stunted toddlers in West Java reached 20.2%. This figure decreased by 4.3 points from the previous year, where in 2021 the prevalence of stunted toddlers was 24.5% (Java Provincial Health Service West, 2023).

One intervention that is considered capable of overcoming the problem of stunting is optimal exclusive breastfeeding. *The World Health Organization* (WHO) even recommends early initiation of breastfeeding within 1 hour after birth, exclusive breastfeeding for babies up to 6 months of age, and continued breastfeeding until 2 years of age or more.

Breastfeeding is one of the most natural and important ways to provide nutrition to newborn babies. The quality of breastfeeding depends not only on the quantity of milk given, but also on the correct breastfeeding technique. One of the problems often faced by breastfeeding mothers is sore nipples. Sore nipples can cause significant pain and can even disrupt the breastfeeding process, reduce the frequency of breastfeeding, and ultimately affect the baby's health (Sunardi, 2020).

Breastfeeding is a natural process, almost all mothers can breastfeed their babies without help from other people, but in reality not all mothers can breastfeed with the correct technique. Breast milk (ASI) is very important for the development, health

and immunity of babies. Therefore, early breastfeeding is an important component in a baby's survival. Breast milk contains protein, fat, sugar and calcium at the right levels (Sunardi, 2020).

WHO and UNICEF recommend providing optimal nutrition for newborns, namely through a global strategy of exclusive breastfeeding for six months. *The American Academy of Pediatrics* (AAP) recommends exclusive breastfeeding for babies for at least 6 months and can be continued at least until the baby is 12 months old. Breast milk is the best nutrition specifically intended for newborns because it contains various antibody components, complete nutrition and is easily digested by newborns compared to formula milk (Perry et al., 2010). Many substances in breast milk are not present at all, or are only present in small amounts in formula milk. Apart from that, in the correct breastfeeding process, babies will get good physical, emotional and spiritual development in their lives (Munawarah, 2018).

Breastfeeding is very important during a child's golden period. The World Health Organization (WHO) has even set the achievement of exclusive breastfeeding of up to 50% by 2025 as a global target (Mavalankar, 2021). This is done as a form of intervention in efforts to improve global nutrition. WHO recommends exclusive breastfeeding for the first 6 months of life, followed by continued breastfeeding with appropriate complementary foods for up to 2 years or more. In 2012, World Health Assembly Resolution 65.6 approved a comprehensive implementation plan on the nutrition of mothers, infants and toddlers, 3 by setting six global nutrition targets by 2025, one of which is to increase the rate of exclusive breastfeeding in the first 6 months to at least 50% (WHO, 2017).

The benefits of exclusive breastfeeding are numerous, but

unfortunately the prevalence of breastfeeding is still relatively low. The World Health Organization (WHO) 2021 reported data on exclusive breastfeeding globally, namely that around 44% of babies aged 0-6 months worldwide received exclusive breastfeeding during the 2015-2020 period, this has not yet reached the target for coverage of exclusive breastfeeding in the world namely 50% (WHO, 2021).

Indonesia's exclusive breastfeeding coverage in 2022 was recorded at only 67.96%, down from 69.7% in 2021, indicating the need for more intensive support so that this coverage can increase. Based on the province, the highest national exclusive breastfeeding will be in West Nusa Tenggara in 2022 with a percentage reaching 79.69% . Coverage in West Java Province during these 3 years, the percentage of exclusive breastfeeding has increased from the previous year, namely 2019 (71.11%), 2020 (76.11%), and 2021 (76.46%) (Central Agency Statistics, 2022).

2017 SDKI data, the achievement of exclusive breastfeeding was 42%, the West Java provincial Health Office in 2021, the achievement of exclusive breastfeeding was 46.4%. Data shows that low breastfeeding is related to breast milk production. (Musmundiroh, 2021).

Information about good and correct breastfeeding techniques must be provided during pregnancy and the postpartum period, such as several research results that *breastfeeding education* is effective in increasing knowledge and attitudes as well as satisfaction with breastfeeding in pregnancies aged 20-36 weeks. Apart from that, research conducted by Glaser et al in Sunardi revealed that the intervention of providing knowledge about breast milk early on would increase positive attitudes and knowledge about breast milk. Starting

from breast milk that doesn't come out smoothly, sore nipples, to babies who are fussy because they can't breastfeed properly. Difficulty breastfeeding usually occurs when a mother has just given birth to her first child because it is a new experience, usually the mother is still awkward about holding the baby, or even panics easily if the baby cries loudly because of something. On the other hand, newborn babies must learn how to breastfeed correctly (Munawarah, 2018) .

The results of Evayanti's research (2019), regarding good breastfeeding techniques in reducing the incidence of cracked nipples, show that there is a relationship between breastfeeding technique and the incidence of sore nipples . Respondents with good breastfeeding techniques were 6.85 times less likely to experience sore nipples than mothers with poor breastfeeding techniques.

The results of Risnaeni's research (2017), the relationship between breastfeeding technique and the occurrence of nipple blisters in postpartum mothers, shows that the above relationship shows that 68.6% of mothers with incorrect breastfeeding techniques experience nipple blisters, while 68.6% of mothers with incorrect breastfeeding techniques 31.4% did not experience sore nipples.

Research conducted by Najmawati in Munawarah (2018) states that there is a significant relationship between the influence of position and attachment of the baby. The correct position and attachment of the baby will facilitate the stimulation of the muscles around the breast which has the potential to cause contraction of the smooth muscle and alveoli cells in the breast which function to produce breast milk as well as squeeze the milk out, so that a lot of milk comes out. This is also in line with research conducted by Tauriska which states that correct

attachment will then result in correct baby sucking. If the baby sucks correctly, it will stimulate the hypothalamus which will stimulate the anterior pituitary gland to produce the hormone prolactin and the posterior pituitary to produce the hormone oxytocin. Correct baby sucking is characterized by rounded cheeks, more areola above the mouth, slow, deep sucking and interspersed with rest, sounds can be heard when the baby swallows (Munawarah, 2018) .

It is important to understand that sore nipples are not only a physical problem for the mother, but also have significant emotional and psychological impacts. The pain and discomfort caused by sore nipples can cause stress and frustration in the mother, which in turn can affect the mother's interaction with her baby.

Although many mothers have the desire and determination to breastfeed, the problem of sore nipples is often one of the main obstacles in achieving this goal. Therefore, it is important to conduct in-depth research on breastfeeding techniques and factors related to the incidence of sore nipples . By understanding the relationship between correct breastfeeding technique and the incidence of sore nipples , we can develop appropriate interventions to help breastfeeding mothers overcome this problem.

A preliminary study was conducted by researchers on 4-11 October 2023 at TPMB Arie on 10 postpartum mothers who breastfed their babies, with the results that 5 people were in the fair category, 3 people were in the good category, and 2 people were in the bad category. After measuring the attachment scores of ten mothers, it was found that the average LATCH score for mothers was 6.2, which means they were included in the less effective breastfeeding category. As many as 6 out of 10 people experience sore nipples

. The data described above made researchers interested in conducting research with the title The Relationship Between Breastfeeding Techniques and the Incidence of Sore Nipples in Postpartum Women at TPMB Ari Kristiyani, South Tambun District, Bekasi Regency in 2023.

II. METHODS

The type of research carried out is observational analytics with a cross sectional research design, namely research to study the dynamics of the correlation between risk factors and effects, by approaching , observing or collecting data at one time (point time approach). The population in this study was all postpartum mothers at TPMB Ari Kristiyani in October – November 2023, totaling 30 people.

This research measures using a questionnaire with questions referring to the independent and dependent variables. The research instrument used was the LATCH score belonging to Deborah Jenson, Sheila Wallace, Patricia Kelsay in 1999 by assessing the breastfeeding process subjectively from the mother's perspective, and measuring objectively based on the condition of the baby. So this instrument does not require validity and reliability tests.

III. RESULT

Table 1. Frequency Distribution of Characteristics of Pregnant Women in TPMB Ari Kristiyani, Bekasi Regency

Variable	f	%
Age		
• < 20 or > 35 years	4	13.3
• 20 – 35 years	26	86.7
Work		
• Work	11	36.7
• Doesn't work	19	63.3
Parity		
• Primipara	12	40.0
• Multiparous	14	46.7
• Grande multiparous	4	13.3
Education		
Elementary-middle school	2	6.7
SMA-PT	28	93.3

Childbirth History		
• Never given birth	0	0.0
• Normal	17	56.7
• S.C	13	43.3
Nipple		
• Not good	15	50.0
• Good	15	50.0

Based on table 1 above, it shows that of the 30 respondents there were 26 people (86.7%) aged 20-35 years, 19 people (63.3%) were housewives and did not work. 14 people were multiparous, 28 people (93.3%) graduated from high school or college and 17 people (56.7%) had given birth normally.

Table 2. Correlation between breastfeeding techniques and sore nipples at TPMB Ari Krstiyani, Bekasi Regency

Breastfeeding technique	Sore nipples				Total	P Value	
	Yes		No				
	f	%	f	%			
Not enough	0	0.0	15	50.0	15	50.0	0,000
Good	15	50.0	0	0.0	15	50.0	
Total	15	50.0	15	50.0	30	100.0	

Based on table 2, 15 respondents (50.0 %) who had poor breastfeeding techniques did not experience sore nipples. However, mothers who have good breastfeeding techniques actually experience sore nipples . The P value has a value of 0.000 < 0.05, which means that Ha is accepted and Ho is rejected or means that there is a relationship between breastfeeding technique and the incidence of sore nipples at TPMB Ari Kristiyani.

IV. DISCUSSION

The research results showed that of the 30 respondents, 15 people (50.0%) had sore nipples, and another 15 people (50.0%) had poor nipple conditions. A total of 15 people (50%) had poor

breastfeeding technique, and 15 people (50%) had good breastfeeding technique. Wahyuni et al. (2019) in their research stated that the majority of respondents had inappropriate breastfeeding techniques, namely 69 respondents (70.4%), while 29 respondents had appropriate breastfeeding techniques (29.6%). Based on Table 4.2, it is known that the majority of respondents experienced sore nipples, namely 76 respondents (77.6 %), while those who did not experience sore nipples were 22 respondents (22.4%).

Based on the results of research on how to give breast milk and the incidence of sore nipples in breastfeeding mothers, it was found that from 60 breastfeeding mothers, it was found that 36 people (60.0

%) gave expressed breast milk. This is in accordance with the theory that breastfeeding is not only given directly but can also be given indirectly (expressed breast milk). Expressing breast milk can also be done manually and with the help of tools, but expressing expressed breast milk manually is better than expressing breast milk with the help of tools. , mechanical pumps usually cause discomfort and are ineffective while massaging the breasts by hand is more natural (Sulymbona et al., 2021) .

Based on table 2, as many as 15 respondents (50.0 %) who had poor breastfeeding techniques actually experienced sore nipples. However, mothers who have good breastfeeding techniques actually experience sore nipples . The P value has a value of $0.000 < 0.05$, which means that H_a is accepted and H_0 is rejected or means that there is a relationship between breastfeeding technique and the incidence of sore nipples at TPMB Ari Kristiyani

The results of research by Wahyuni et al., (2019) found that of the 29 respondents who had the right breastfeeding technique, 13 respondents (44.8%) did not experience sore nipples. Meanwhile, of the 69 respondents with inappropriate breastfeeding techniques, 9 respondents (13.0 %) did not experience sore nipples. The results of the chi square test showed a p value of 0.001, meaning it was smaller than the alpha value ($0.001 < 0.05$) . Thus, it can be concluded statistically with a confidence level of 95%, it is believed that there is a relationship between breastfeeding techniques and sore nipples in breastfeeding mothers in the working area of the Way Sulan health center, South Lampung Regency in 2019. Meanwhile, the OR test results obtained a value of 5.4 (CI 95% 1, 9-14.9), meaning that respondents with proper breastfeeding techniques have a risk of not experiencing sore nipples 5.4 times greater than those with inappropriate breastfeeding techniques.

The results of Keni and Gennika's research in Sunardi (2020) stated that the majority of respondents had good knowledge and attitudes. Respondents who used the wrong breastfeeding technique were respondents who had poor attitudes and knowledge. From the results of the chi-square test, it was found that the level of knowledge of breastfeeding techniques was obtained with a value of $p = 0.00$ which was smaller than $\alpha = 0.05$. (Sunardi, 2020)

Based on the research results, it was found that the number of breastfeeding mothers who experienced sore nipples was 26 people (43.3 %). According to Ambarwati (2008), sore nipples are trauma to the nipples during breastfeeding, apart from that, cracks and the formation of fissures also occur. Sore nipples are a phenomenon that is familiar to breastfeeding mothers, mothers always consider it normal, especially for mothers who are breastfeeding for the first time. However, breastfeeding mothers actually do not know or understand this incident. This shows that mothers' knowledge about the causes of sore nipples is very poor, even though from year to year many mothers experience it. Knowledge is very important for the formation of one's personality. Knowledge is the main basis for treatment and prevention of disease (Suri & Setiawan, 2023)

It does not rule out the possibility that there are some mothers who actually know the causes of sore nipples, but in reality breastfeeding mothers underestimate this and make no effort to avoid it (Sulymbona et al., 2021) .

Breast milk can also help empty the mammary alveoli thereby giving a signal to the hypothalamus to increase prolactin secretion. This can also help breastfeeding mothers who have nipple problems, one of which is sore nipples (Novayelinda, 2012). Frequent expressions of breast milk can increase breast milk production and conversely, low expression frequencies cause a lack of

breast milk volume. Many mothers do not understand the technique of expressing breast milk, especially expressed breast milk, and think that expressing breast milk only helps empty the breasts, especially when the baby no longer wants to breastfeed and the mother's breasts are full, mothers also think that squeezing the breasts can risk sore nipples.

According to Rosita in Munawarah (2018), most sore/scratched nipples are caused by errors in positioning and attaching the baby. Sore nipples can cause mastitis and abscesses in the breast. Apart from causing sore nipples, incorrect breastfeeding techniques can also result in breast milk not coming out optimally, thus affecting subsequent milk production or the baby being reluctant to breastfeed.

Nipple abnormalities include long, short, inverted and flat nipples. The occurrence of inverted and flat nipples is very frequent in newborn care practice. These conditions should not be a barrier to breastfeeding if expert counseling and advice is appropriate, however, nipple problems can cause a delay in the initiation of breastfeeding and thus prevent the baby from getting colostrum. The mother's inability to attach the baby to the breast can cause infrequent breastfeeding frequency and causes breast swelling, and will result in milk production tending to decrease (Munawarah, 2018).

Research conducted by Najmawati in Munawrah 2018 stated that there was a significant relationship between the influence of position and attachment of the baby. The correct position and attachment of the baby will facilitate the stimulation of the muscles around the breast which has the potential to cause contraction of the smooth muscle and alveoli cells in the breast which function to produce breast milk as well as squeeze the milk out, so that a lot of milk comes out.

Other research conducted by Tauriska said that correct attachment will then result in correct baby sucking. If the baby

sucks correctly, it will stimulate the hypothalamus which will stimulate the anterior pituitary gland to produce the hormone prolactin and the posterior pituitary to produce the hormone oxytocin. Correct baby sucking is characterized by rounded cheeks, more areola above the mouth, slow, deep sucking and interspersed with rest, sounds can be heard when the baby swallows.

According to researchers, inappropriate or poor breastfeeding techniques can contribute to the incidence of sore nipples in breastfeeding mothers. Several factors that may be related to the close relationship between breastfeeding technique and sore nipples include if the mother does not sit or does not position the baby properly when breastfeeding, which can cause excessive pressure on the nipple. Wrong position of the baby or incorrect latching technique on the mother's breast can also cause irritation and sores on the nipples. If the baby frequently releases and attaches the nipple incorrectly, this can result in excessive friction and irritation of the nipple. Babies who breastfeed with strong or aggressive sucking can cause sores on the nipples. Additionally some mothers have shorter or flatter nipples, which may make it difficult for the baby to latch onto the breast properly.

Ensuring mother and baby use correct breastfeeding techniques, including comfortable positions, a strong latch, and good latch-ons, can help prevent or reduce the risk of sore nipples.

V. CONCLUSION

Based on the results of research conducted by researchers regarding the relationship between breastfeeding techniques and the incidence of diaper rash. A total of 15 people (50%) had poor breastfeeding technique, and 15 people (50%) had good breastfeeding technique. A total of 15 respondents (50.0 %) who had poor breastfeeding techniques did not experience sore nipples. However,

mothers who have good breastfeeding techniques actually experience sore nipples . The P value has a value of 0.000 < 0.05, which means that Ha is accepted and Ho is rejected or means that there is a relationship between breastfeeding technique and the incidence of sore nipples at TPMB Ari Kristiyani

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