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Relationship to giving behavior breast milk with mastitis incidents in the working area of the Mongeudong community health center, Lhokseumawe city

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ABSTRACT
The target population in this study was postpartum mothers in the Mongeudong Community Health Center Working Area, Lhokseumawe City. Data analysis used chi square analysis. Results: the majority of respondents were aged 20-35 years as many as 21 people (70%), the majority of jobs were unemployed as many as 22 people (73.3%), the majority had secondary education as many as 15 people (50%). The optimal frequency of breastfeeding was 17 people (56.7 %) and the non-optimal frequency was 13 people (43.3%). The majority did not experience mastitis as many as 22 mothers (73.3 %). The relationship between the frequency of breastfeeding and the incidence of mastitis was found to have a value of p (0.010) < α (0.05), so Ha was accepted. Conclusion: there is a relationship between the frequency of breastfeeding and the incidence of mastitis in the Mongeudong Community Health Center Working Area, Lhokseumawe City.

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INTRODUCTION

Breastfeeding is very important because it can benefit both the baby and the mother. For babies, breast milk is food with nutritional content that is most suitable for the baby's needs, protects against various infections and provides a loving relationship that supports all aspects of the baby's development, including the baby's health and intelligence. For mothers, breastfeeding can ease the economic burden and prevent mastitis in mothers.

The World Health Organization (WHO *)* estimates that the incidence of mastitis in breastfeeding mothers is around 2.6% - 33% and the global prevalence is around 10%. In various countries such as America, the percentage of post-partum mothers who breastfeed report experiencing signs of mastitis as much as 9.5% of 1000 breastfeeding women. In Australia, as many as 8.9% of 1000 women breastfeed [1] .

Nationally, the coverage of babies receiving exclusive breastfeeding in 2018 was 68.74%. This figure has exceeded the 2018 Strategic Plan target of 47%. The highest percentage of exclusive breastfeeding coverage is in West Java Province (90.79%), while the lowest percentage is in Gorontalo Province (30.71%). A total of six provinces have not

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achieved the 2018 Strategic Plan target. In addition, there are nine provinces that have not collected data [2] .

Failure in the breastfeeding process is often caused by several problems, both problems with the mother and the baby, but sometimes failure to breastfeed is thought to be because the baby does not want to breastfeed. Maternal problems that arise during breastfeeding can begin before delivery (antenatal period), in the early postnatal period, and some time after delivery. To avoid problems, it is necessary to pay attention to the frequency of breastfeeding and how to place the baby on the breast when breastfeeding which influences the success of breastfeeding. In the breastfeeding process, if the frequency of breastfeeding is less, breast milk production will not run smoothly. Milk production that is not smooth will cause the baby to suck hard, causing sore nipples. This condition leads to failure to provide breast milk regularly [3] .

The incidence of mastitis in Indonesia is estimated at around 3-20% of breastfeeding mothers who experience mastitis. Most mastitis occurs in the first 6 weeks after the baby is born (most often in the 2nd and 3rd weeks), although mastitis can occur throughout the breastfeeding period even in women who are temporarily not breastfeeding [4] .

From data sourced from the district/city health service, it is known that the number of maternal deaths reported was 141 cases. The largest region contributing to maternal deaths is Pidie Regency with 16 cases, followed by Bireuen and North Aceh with 13 cases, as well as other districts/cities where the number of maternal deaths is between 1 and 11 cases. The percentage of exclusive breastfeeding for babies 0 - 6 months in Aceh in 2018 was 61%. This figure has increased compared to the percentage in 2017 which was 55% [5] .

According to the results of the 2016 Provincial Health Service report, it is known that the number of postpartum mothers in 2010-2011 was 8725 people and 108 people experienced mastitis [6] . Breastfeeding is a natural process where millions of mothers are able to breastfeed their babies without reading a breastfeeding book, whereas if the mother does not want to give breast milk, the mother's breasts will swell and become hard, resulting in mastitis [7] .

Lactation mastitis (inflammation due to breast infection) can develop in the early postpartum weeks after the mother leaves the hospital. Mastitis most commonly occurs in the second and third weeks postnatally, with most reports indicating that 74% to 95% of cases occur within the first 12 weeks. However, about a third of cases of long-term breastfeeding occur after the baby is 6 months old. Mastitis is a systemic reaction such as fever, occurring 1-3 weeks after giving birth as a complication of blocked milk ducts [8] .

There are a number of factors that have been thought to increase the risk of mastitis, namely poor breastfeeding techniques resulting in inefficient milk production, work outside the home which results in long breastfeeding intervals resulting in a lack of time for adequate milk expression and trauma to the breast due to any cause that can damage the tissue. glands and milk ducts which can cause mastitis. Choose a special bra for breastfeeding mothers with material that absorbs sweat. Don't use something that puts too much pressure on the breast, to maintain the hygiene of the breast area. Change your bra

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as often as possible whenever it gets wet with sweat or after wearing it all day. Swollen breasts are usually caused by the baby not breastfeeding often enough or the baby being lazy about breastfeeding, so that breast milk accumulates in the breast. To overcome this, breastfeed as often as possible without scheduling it and massage the breasts [9] .

Damage to breast milk is caused by narrowing of the lactiferous ducts, so that the remaining breast milk collects in the duct system which results in swelling, the cause is due to abnormalities in the nipples, swollen breasts, pain and heat. Swelling usually occurs on the third and fourth day after giving birth. If the breasts are still swollen, painful and red due to infection, mastitis is occurring. Mastitis is inflammation of the breast, and if it remains swollen with pus, it is called an abscess. Breast abscess which is a continuation of mastitis [10] .

Mothers who experience postpartum infections are usually characterized by fever >380C, which occurs for 2 consecutive days. The pathophysiology of infections in the postpartum period is the same as the pathophysiology of infections in other body systems . Mastitis is an infection that occurs in the postpartum period which attacks the breasts or mammary glands. The most frequent cause of this infection is staphylococcus aureus. Clinical manifestations or signs that a mother is experiencing mastitis include chills accompanied by an increase in body temperature, lethargy, no appetite, enlarged breasts, pain, redness and swelling. If this is not treated immediately it will lead to an abscess [11] .

Breast swelling and pain begins postpartum, first to fourth day and can continue longer in women who do not breastfeed. Moderate swelling is experienced by 21-52% of women while severe swelling occurs in 1-44%. Moderate pain was reported to be experienced by 29-68% of women, and 10-33% of women experienced severe pain for up to 14 days. narrowing of the breast milk ducts caused by the milk curdling so that it blocks the lumen of the ducts. If this disorder is not treated immediately, it will cause mastitis and breast abscess. As a result, babies do not receive exclusive breast milk [12] .

Based on data obtained from the Lhokseumawe City Health Service from January to December 2021, the number of maternal deaths based on age, sub-district and health center was 189 people. The number of postpartum mothers was 8,573 people (89.7%). Of this total, 8,570 people received health services from medical personnel [13] .

Based on an initial survey conducted in the Mongeudong Community Health Center Work Area, Lhokseumawe City, data was obtained from January to April 2021. The number of babies receiving exclusive breast milk was 178 babies, the number of postpartum mothers was 121 people and the number of postpartum mothers who experienced mastitis was 12 people [14]. Based on the background above, researchers are interested in researching "The relationship between breastfeeding behavior and the incidence of mastitis in the Juli II Health Center Work Area, Bireuen Regency".

METHOD

The scope of this research includes frequency of breastfeeding and incidence of mastitis. The location of this research is in the Working Area of the Mongeudong Community Health Center, Lhokseumawe City . The time of this research was from April to October 2021. This

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type of research used analytical research with a *cross sectional approach* . The data analysis used in this research is *chi square analysis* . The sampling method used in this research was *total sampling* . The sample required for this research is 30 people.

RESULTS AND DISCUSSION

Based on research that has been carried out aimed at finding out the relationship between the frequency of breastfeeding and the incidence of mastitis in the Working Area of the Mongeudong Community Health Center, Lhokseumawe City with a total of 30 respondents, the author can explain the results of the research in the presentation below:

Respondent characteristics

Mongeudong Working Area of Lhokseumawe City can be described as follows:

Table 1. Frequency Distribution of Respondents Based on Mother's Characteristics in the Mongeudong Work Area, Lhokseumawe City in 2021

No.	Category	Frequency	Percentage (%)
	Age		
1 .	20-35 Years	21	70
2.	>35 Years	9	30
	Amount	30	10 0
	Work		
1.	Work	8	26.7
2.	Doesn't work	22	73.3
	Amount	30	100
	Education		
1.	Base	9	30
2.	Intermediate	15	50
3.	Tall	6	20
	Amount	30	100

Based on table 1, it can be seen that the majority of respondents are 20-35 years old namely 21 people (70%). The majority of jobs respondents 22 people (73.3 %) were not working. The majority of education respondents 15 people (50%) are Intermediate.

Univariate Analysis

Frequency of Breastfeeding

Table 2 . Frequency Distribution Based on the Frequency of Breastfeeding in the Working Area of the Mongeudong Community Health Center, Lhokseumawe City in 2021

No.	Frequency of Breastfeeding	Frequency	Percentage (%)
1 .	Optimal	17	56.7
2.	Not optimal	13	43.3
	Amount	30	100

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Based on table 2, it is obtained from respondents in the Puskesmas Work Area Mongeudong, Lhokseumawe City 17 people (56.7 %) gave optimal breast milk and 13 people (43.3%) did not give optimal breast milk.

Mastitis

Table 3 . Frequency Distribution Based on Mastitis Incidents in the Working Area of Mongeudong Health Center, Lhokseumawe City in 2021

No.	Mastitis	Frequency	Percentage (%)
1 .	Inflammation	8	26.7
2.	Not Inflamed	22	73.3
	Amount	30	100

Based on Table 4 it was found that the majority of respondents were in the Puskesmas Work Area Mongeudong, Lhokseumawe City experienced Mastitis as many as 22 people (73.3 %) .

Bivariate Analysis

Table 4 . The Correlation between the Frequency of Breastfeeding and the Incidence of Mastitis in the Mongeudong Work Area, Lhokseumawe City in 2021

No.	Mastitis	Frequency of Breastfeeding				Total		A	P value
		Optimal		No					
		F	%	F	%	F	%		
1 .	Inflammation	1	3.3	7	23.3	8	26.6		
2 .	Not Inflamed	16	53.4	6	20	22	73.4	0.05	0.010
	Amount	17	56.7	13	43.3	30	100		

Based on table 5, it can be concluded that the majority of respondents did not experience inflammation mastitis with a non-optimal frequency of breastfeeding was 16 people (53.4%), and the majority experienced inflammatory mastitis with a non-optimal frequency of breastfeeding as many as 7 people (23.3%).

the chi-square statistical test showing the relationship between the frequency of breastfeeding and the incidence of mastitis, it was found that the p value was (0.0 10) < α (0.05), so Ha was accepted, Ho was rejected and it could be concluded that There is a relationship between the frequency of breastfeeding and the incidence of mastitis in the work area of the Mongeudong Health Center, Lhokseumawe City. Year 20 21 .

Discussion

From the results of research conducted on 1 7 - 28 July 2021 to 30 mothers by distributing questionnaires In the Working Area of the Mongeudong Community Health Center, Lhokseumawe City In 20 21 , several results were found, including that 8 people experienced mastitis (26.3 %), did not experience mastitis , namely 22 people (73.7 %), so it can clearly be seen that the majority of mothers did not experience mastitis. Judging from the characteristics of respondents in the work area of the Mongeudong health center,

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Lhokseumawe City , Respondents have an age range of 20-35 years, and generally they have secondary education and do not work,

Based on the cross table (*crosstab)* between the frequency of breastfeeding and the incidence of mastitis , generally respondents who experience mastitis are respondents whose frequency of breastfeeding is not optimal , namely 7 people (23.3). *the chi-square* statistical test between the relationship between the frequency of breastfeeding and the incidence of mastitis showed that the value p (0.0 10) < α (0.05) means that Ha is accepted, Ho is rejected and it can be concluded that There is a relationship between the frequency of breastfeeding and the incidence of mastitis in the work area of the Mongeudong health center, Lhokseumawe City. Year 20 21 .

According to researchers' assumptions, there is a relationship between the frequency of breastfeeding and the incidence of mastitis . Because swollen breasts are usually caused by the baby not breastfeeding often enough or the baby being lazy about breastfeeding, so that breast milk accumulates in the breast (mastitis). To overcome this, give breast milk as often as possible without scheduling it. In this study, the majority of respondents did not experience mastitis because mothers provided optimal breast milk to their babies.

The optimal breastfeeding frequency range is between 8-12x every day. But it's best to breastfeed your baby without a schedule (on demand), because the baby will determine your own needs. Where if the mother does not provide enough breast milk with a small amount of frequency you will experience mastitis, you must breastfeed the baby if the baby cries for no other reason (peeing, biting ants/mosquitoes, defecation) or the mother feels like breastfeeding her baby. Baby A healthy person can empty one breast in about 5-7 minutes and breast milk The baby's stomach will be empty within 2 hours. To maintain try to balance both breasts until the breasts feel empty, so that breast milk production remains good. Every feeding starts from the breast last fed. During breastfeeding, mothers should wear a bra which can support the breasts, but not too tight .Mastitis is inflammation of the breasts that become red, swollen, sometimes followed by pain and heat, increased body temperature, and the feeling of a solid mass occurring 1-3 after delivery which is caused by continued blockage of the milk ducts [15] .

The results of this research are confirmed by previous research conducted by Nuswatul Khaira (2014) " The Relationship between Frequency of Breastfeeding and the Incidence of Mastitis in Breastfeeding Mothers 0 - 6 Months at the Mother and Child Hospital in Banda Aceh " Analytical research design with a *cross sectional approach* . The population in this study was breastfeeding mothers, totaling 32 respondents with a sample of 32 respondents. Technique Sampling in this research was carried out using the accidental sampling method. This research was conducted at the Banda Aceh Mother and Child Hospital on July 30 2013. Data was collected by distributing questionnaires using the chi-square statistical test . The research results show the P.Value value (> 0.05) 0.006. The research hypothesis which states that there is a relationship between the frequency of breastfeeding and the incidence of Mastitis is proven or acceptable .

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CONCLUSION

After conducting research and discussion regarding the relationship between the frequency of breastfeeding and the incidence of mastitis in the Working Area of the Mongeudong Health Center, Lhokseumawe City , it can be concluded that: (1) The majority of mothers in the Working Area of the Mongeudong Health Center, Lhokseumawe City do not experience mastitis , namely 22 mothers (73.7 %). (2) From the results of the *chi-square* statistical test showing the relationship between the frequency of breastfeeding and the incidence of mastitis, it was found that the value of p (0.0 10) < α (0.05) means that Ha is accepted and Ho is rejected and it can be concluded that there is a relationship between the frequency of breastfeeding and incidence of mastitis in the Working Area of the Mongeudong Health Center, Lhokseumawe City , 20 21 .

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