

The Relationship between Postpartum Mother's Education and Postpartum Mother's Knowledge of Mastitis in the Independent Midwife Practice of Romauli Medan Marelan 2021

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ABSTRACT

Mastitis is a problem in the breast that is characterized by pain caused by inflammation of the breast which can be accompanied by infection or non-infection. Mother's lack of knowledge about the breastfeeding process can cause errors in breastfeeding positions which result in blisters on the mother's nipples. In addition, it also causes the process of releasing and releasing breast milk that is less than optimal, causing breast engorgement. This study aims to determine the relationship between postpartum mother's education and knowledge about Mastitis in the Romauli Independent Midwife Practice in 2021. This study used a descriptive correlation method. The sample in this study was postpartum mothers 0-42 days in labor and postpartum visits at the Romauli Independent Midwife Practice in 2021 with a total of 30 respondents. Researchers used primary data and the data were processed using SPSS and presented using open tables. The relationship between postpartum mother's education and knowledge about mastitis at the Romauli Independent Midwife Practice in 2021 based on the results of the Spearman's-rank test, $p\text{-value} = 0.009$ ($p < 0.05$) which means that there is a relationship between postpartum mother's education and knowledge of mastitis with sufficient strength of the relationship. Knowledge of postpartum mothers about mastitis can be influenced by important factors, one of which is education. The higher a person's education, the better his knowledge will be.

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1. Introduction

Knowledge is the most important aspect for the formation of one's actions, therefore behavior based on knowledge and awareness will last in the long term compared to behavior that is not based on science and awareness. Knowledge of postpartum mothers about mastitis as one of the breast problems that can affect the breastfeeding process. This condition is characterized by chills, the breast becomes red, tense, hot, swollen, and feels very painful. This disease usually accompanies lactation, so it is also called lactational mastitis or puerperal mastitis. It is increasingly recognized that inefficient milk production due to poor breastfeeding technique is an important cause. Sometimes this condition can be fatal if not immediately given the right action.

Mastitis is a problem in the breast which is characterized by pain in the breast caused by inflammation of the breast which can be accompanied by infection or non-infection. Mastitis is inflammation of the breast tissue that can be caused by a bacterial infection. In infective mastitis, *Staphylococcus aureus* is the most common pathogen. Less commonly, the pathogen may be beta-hemolytic *Streptococcus* (such as Group A or Group B streptococci) or *Escherichia coli*. Community-acquired methicillin-resistant *S. aureus* is increasingly being identified as a pathogen.

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%. The percentage of postpartum mothers who breastfeed reported experiencing signs and symptoms of mastitis in the United States is 9.5% of 1000 women. Data on breastfeeding problems from April to June 2012 in Indonesia showed that 22.5% had sore nipples, 42% of mothers had breast milk dams, 18% of mothers had blocked milk, 11% had mastitis, and 6.5% of mothers had breast abscess. caused by the mother's mistake in breastfeeding her baby (WHO, 2003).

According to data from the Basic Health Research Report (Risksdas) the occurrence of swollen breasts during the postpartum period in women aged 10-54 years according to characteristics in North Sumatra Province, namely 5.17%, South Sumatra 2.36%, and West Sumatra 3.45% (Risksdas, 2018).

Approximately 3% of cases of mastitis continue to be cases of breast abscess. Risk factors for mastitis include swollen breasts or breast milk dams, sore nipples and can also be caused by

maternal activities that can trigger fatigue in mothers. If a nursing mother has problems with sore nipples, then this can lead to the entry of microorganisms that can cause infection in the breast. The habit of emptying the breast that is not optimal also causes static breast milk or breast dam which is a place for microorganisms to develop. (Krogerus et al., 2019).

To be able to prevent the occurrence of mastitis problems in breastfeeding mothers, mothers should be given health education about the breastfeeding process about breastfeeding positions, the process of maximal milk production, breastfeeding time, and breast care (Trisianti, Ika and Nasriyah, 2019). Mother's lack of knowledge about the breastfeeding process can cause errors in breastfeeding positions which result in blisters on the mother's nipples. In addition, it also causes the process of releasing and releasing breast milk that is less than optimal, causing breast engorgement. Mastitis is one of the causes of early weaning in infants due to the pain and discomfort felt by nursing mothers.

Based on a preliminary survey at the Romauli Independent Midwife Practice in November 2020, researchers have conducted interviews with 8 postpartum mothers who made postpartum visits at the Romauli Independent Midwife Practice. From the results of these interviews, there were 7 postpartum mothers who still did not understand what Mastitis was, what were the signs and symptoms. In addition, the researcher also conducted an interview with one of the midwives who worked at the Romauli Independent Midwife Practice about the cases of mastitis recorded at the clinic. From the data, it was found that the occurrence of mastitis cases could reach 5 people in the last month, namely in January 2021.

Based on the above background, the authors are interested in conducting research on "The Relationship of Postpartum Mother's Education with Knowledge of Mastitis in the Romauli Independent Midwife Practice in 2021".

2. Method

The research design used is descriptive correlational with quantitative research with a cross sectional approach. This research was conducted starting from a preliminary survey from January 2021 to May 2021 at the Romauli Independent Midwife Practice. The population in this study were all postpartum mothers 0-42 days who gave birth or who visited the Romauli Independent Midwife Practice in 2021 as many as 30 people. The sampling technique used in this study is total sampling where the number of samples is the same as the population. The instrument used by the researcher was a questionnaire made by the researcher as many as 20 questions about mastitis. The type of data collection used in this research is primary data. The researcher collected data by meeting directly with prospective respondents who happened to come to give birth or post partum visits at the Independent Midwife Practice which was suitable as a data source. The data was processed through statistical test calculations with the Spearman's rank test to see whether there was a relationship or correlation between postpartum mother's education and knowledge about mastitis.

3. Results, Analysis and Discussion

Based on the characteristics of the respondents related to the relationship between postpartum mother's education and knowledge about Mastitis in Romauli's Independent Midwife Practice in 2021. In this study, there are several characteristics described in the table below. Respondents in this study were postpartum mothers 0-42 days in labor and postpartum visits at the Romauli Independent Midwife Practice with a total of 30 respondents. In this study, there are several characteristics which are described in the following tables:

TABLE 1 .
FREQUENCY DISTRIBUTION OF RESPONDENTS' CHARACTERISTICS BY AGE OF POSTPARTUM MOTHER
IN ROMAULI INDEPENDENT MIDWIFE PRACTICE IN 2021

Characteristics	<i>f</i>	%
Age		
17 – 25 Years	15	50.0
26 – 35 Years	15	50.0
Total	30	100.0

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TABLE 2.
FREQUENCY DISTRIBUTION OF RESPONDENTS' CHARACTERISTICS BY EDUCATION OF POSTPARTUM MOTHERS IN ROMAULI INDEPENDENT MIDWIFE PRACTICE IN 2021

Characteristics	<i>f</i>	%
Education		
No school	2	6.7
junior high school	6	20.0
senior High School	20	66.7
College	2	6.7
Total	30	100.0

Table 3.
Frequency Distribution of Respondents' Characteristics based on Knowledge of Postpartum Mothers about Mastitis in Romauli's Independent Midwife Practice in 2021

Knowledge	<i>f</i>	%
Well	3	10
Enough	4	13.3
Not enough	23	76.7
Total	30	100.0

TABLE 4.
THE RELATIONSHIP OF POSTPARTUM MOTHER'S EDUCATION WITH KNOWLEDGE ABOUT MASTITIS IN ROMAULI INDEPENDENT MIDWIFE PRACTICE IN 2021

Education	Knowledge						Amount		<i>p-value</i>
	Well		Enough		Not enough		<i>f</i>	%	
	<i>f</i>	%	<i>F</i>	%	<i>f</i>	%			
No school	0	0.0	0	0.0	2	6.7	2	6.7	0.009
junior high school	0	0.0	0	0.0	6	20.0	6	20.0	
senior High School	2	6.7	3	10.0	15	50.0	20	66.7	
College	1	3.3	1	3.3	0	0.0	2	6.7	
Total	3	10.0	4	13.3	23	76.7	30	100.0	

4. Discussion

The majority of respondents' education in this study was high school with a total of 20 people (66.7%) and a minority of respondents who did not attend school as many as 2 people (6.7%). The results showed that the most common respondents found were high school education as many as 15 people (50.0%) had less knowledge. The results showed that the majority of respondents only had an education equivalent to high school because during their education they did not feel equal educational opportunities from their parents, the high cost of education and so on which made their formal education unable to a higher level. According to Nursalam (2015) education is one of the efforts to develop personality and abilities inside and outside school and lasts a lifetime. Education is given by someone to others about something so that they can understand so that it cannot be denied that the higher a person's education, the easier it is for them to receive information and finally the more knowledge they have.

This is in accordance with the theory of Sulistina (2014) that education affects the learning process. The higher a person's education, the easier that person is to receive information. Likewise, according to Notoatmodjo (2012) that knowledge is very closely related to education where it is expected that someone with higher education will have wider knowledge. According to the researcher's assumption, that the knowledge of respondents based on high school education has

less knowledge due to limitations both compared to higher education, because the higher a person's education, the knowledge will also be wider and it will be easier to receive information, ideas from others, and On the other hand, those who have a low educational background generally have difficulty receiving information. However, it should be emphasized that a person with low education does not mean absolutely low knowledge. Increased knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education. Information obtained from both formal and non-formal education can have a short-term impact (Immediate Impact) resulting in changes or increases in knowledge.

In a study conducted at the Romauli Independent Midwife Practice in 2021 from a total of 30 respondents, it was found that the majority of postpartum mothers' knowledge of mastitis was in the poor category as many as 23 people (76.7%), and sufficient knowledge, namely 4 people (13.3%) and the good category. as much as 3 (10.0%). Knowledge of postpartum mothers about Mastitis is assessed from the ability of postpartum mothers to answer questions about statements about Mastitis. The results of this study are in line with the theory according to Notoatmodjo, 2013 that information obtained from various sources will affect a person's level of knowledge. Someone who gets a lot of information then he tends to have broad knowledge. The more often people read, knowledge will be better than just hearing or seeing. According to Rohmawati (2011) in Taufia (2017) exposure to health information on individuals will encourage health behavior. From the results of the study, the majority of postpartum mothers found that they did not know about Mastitis in terms of Mastitis, the causes, signs and symptoms of Mastitis, how to prevent Mastitis, and how to treat Mastitis. Only a small proportion of postpartum mothers who were respondents in this study had good knowledge about mastitis. The majority of postpartum mothers in this study said they still did not know about Mastitis because they never received information and education about Mastitis.

The results of this study are in line with research conducted by (Endah, 2017) at RSUD Dr. Hardjono Ponorogo, who stated that of the 34 respondents, the majority of postpartum mothers had a poor knowledge category of 18 respondents (52.9%) with a minority of respondents with good knowledge category as many as 4 people (11.8%). In the research journal *Inflammation Prevention Program: As an Effort to Prevent Mastitis in Breastfeeding Mothers in the White Lotus I Posyandu Region I Pungkuran Pleret Bantul* by Riza, et al (2020) that problem 1 is obtained, namely lack of knowledge about mastitis. But after education or delivery of materials as a solution to overcome the participants' lack of knowledge about mastitis, the evaluation results showed 26 participants in the category of understanding the material presented, this was shown from as many as 100% with the evaluation results of the questionnaire in the category of good knowledge. The results of the pretest and posttest evaluations in this service activity showed positive results.

In the research journal Riza, et al (2020) Mother's knowledge increased after community service activities were carried out by providing material about the inflammation prevention program: as an effort to prevent mastitis in breastfeeding mothers in the White Teratai Posyandu I Pungkuran Pleret Bantul area. This activity has a positive impact on mother's knowledge about mastitis prevention. The assumption of the researcher states that the results of the research obtained are the lack of knowledge of postpartum mothers 0-42 days who give birth or those who visit postpartum is evidence that the result of the lack of sources of information obtained or is an error from health workers who are lacking in providing health education regarding how to breastfeed, position breastfeeding, and breast care. This can be the impact of breast problems during breastfeeding, especially the occurrence of mastitis.

Based on the results of the research conducted, it was stated that the results of statistical tests carried out with the Chi Square test obtained p -value = 0.161 ($p > 0.05$), then the hypothesis (H_0) was rejected. This shows that there is no relationship between postpartum mother's education and knowledge about Mastitis in the Romauli Independent Midwife Practice in 2021. However, from the tests carried out, there were 11 cells with an Expected Count value of less than 5, which means that an alternative test must be carried out, namely the Spearman's Rank Test. The researcher conducted the Spearman's Rank test and obtained p -value = 0.009 ($p < 0.05$), then H_a was accepted. The results of the statistical test showed that there was education for postpartum mothers with knowledge about mastitis. Knowledge is the result of knowing, and this can occur after people perceive through the five human senses (sight, hearing, smell, taste and touch) of a particular object. One's knowledge can be obtained through education, social media, social and cultural relationships, and experience.

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Education is one of the important factors for a person or society that is needed to support the occurrence of a balanced and perfect condition in a life that affects the quality of human beings themselves. Education is more than a mere teaching, which is known as the process of the transfer of various kinds of knowledge, changes in values, and until the formation of the human personality with all aspects that include the process. Research results are in line with research Husnun (2014) on the relationship between the characteristics of postpartum mothers and mastitis in the working area of the Cot Seumeureng Public Health Center, Samatiga District, Aceh Regency. know about mastitis (SMA) as many as 6 people (46.2%). The study also stated that the respondent's education influenced the respondent in an effort to overcome the problem of mastitis in the community. This is shown from the research data, namely respondents with post-partum mothers' education in the college category who know about mastitis 4,667 times greater than respondents with categories who do not know about mastitis.

This is in line with the expression of Trahartati (2015) Education is an activity carried out by someone consciously and planned to build a good personality and also improve the abilities or skills that exist in each individual in order to achieve certain goals in life. According to Susanti (2011), less education can affect a person's habits, where the higher a person's education, the smarter a person is in overcoming the problems he is experiencing. Research results are in line with research Husnun (2014) on the relationship between the characteristics of postpartum mothers and mastitis in the working area of the Cot Seumeureng Public Health Center, Samatiga District, Aceh Regency, that of the 48 total respondents, it was found that the majority of respondents with good knowledge of mastitis were 29 people (82.9%) and a minority of respondents had poor knowledge of 5 people (38.5%), where it was also stated that respondents who had good knowledge of mastitis were 7,733 times greater than respondents who did not know about mastitis. This means that respondents with good knowledge will behave well and prevent mastitis and can improve the degree of public health.

Based on the results of the study, the researcher assumes that education is closely related to one's knowledge, especially regarding mastitis. Someone with a good quality of education, will be more knowledgeable as well. In addition, one's knowledge can affect one's behavior in thinking and having good health quality. The knowledge gained can be increased with the existence of adequate facilities and one of them can be obtained by taking education.

5. Conclusion

Based on the results of research with 30 respondents regarding knowledge about Mastitis in postpartum mothers at the Romauli Independent Midwife Practice, it can be concluded that:

1. The education of postpartum mothers at the Romauli Independent Midwife Practice in 2021 can be found that of the 30 respondents, the majority with high school education, namely 20 respondents (66.7%).
2. Postpartum mothers' knowledge of mastitis at the Romauli Independent Midwife Practice in 2021 found that of the 30 respondents, the majority with knowledge in the poor category were 23 people (76.7%)
3. The relationship between postpartum mother's education and knowledge of mastitis in the Romauli Independent Midwife Practice in 2021 based on the results of the Spearman's-rank test, p -value = 0.009 ($p < 0.05$) which means that there is a relationship between postpartum mother's education and knowledge of mastitis with sufficient strength

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