

**THE CORRELATION OF MOTHER KNOWLEDGE ABOUT  
COLOSTRUMS WITH GIVING COLOSTRUMS IN BORN NEW  
BABIES IN BPM MIDWIFE RISMA DARMAWATI  
OF BOGOR CITY**

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**ABSTRACT**

Colostrum is the first liquid secreted by the breast, which is a yellowish viscosity thicker than the mature milk. Little, colostrum is enough to meet the nutritional needs of the baby. Therefore colostrum must be given to newborns. The amount of colostrum varies depending on the baby's suction in the first days of birth. A little, but enough to meet the nutritional needs of the baby. Therefore colostrum must be given to newborns. The purpose of this study is to determine the relationship of mothers about colostrum with the provision of colostrum in newborns at BPM Midwife Risma Darmawati in 2019 ".

This type of research is quantitative analytic, using cross sectional research methods. How to take the sample of this study with total sampling with the number of 35 mother respondents who have children aged 0-12 months at BPM Midwife Risma Darmawati, Cibanteng Village, Bogor Regency. Data collection was obtained through a mother's knowledge questionnaire about colostrum. Data analysis used was univariate and bivariate (Chi Square).

Of the 35 respondents in getting that knowledge, you can know that those who knew about colostrum were 19 people (54.3%), and those who did not know about colostrum were 16 people (45.7%). Giving colostrum in newborns is 16 respondents (45.7%) who did not give colostrum and 19 respondents (54.3%) gave colostrum. Based on the bivariate analysis table statistical test obtained P-Value = 0.012 and  $\alpha = <0.05$  then P value  $< \alpha$ , so that  $H_0$  is rejected, that is, there is a significant relationship between the two variables

There is a correlation between mother's knowledge of colostrum and the administration of colostrum in newborns at BPM Risma Darmawati, Cibanteng Village, Bogor Regency in 2019. The value of p value = 0.012 with p value  $\leq \alpha 0.05$ . This research is expected to improve the knowledge of postpartum mothers about colostrum to be even better and encourage postpartum mothers to give colostrum to newborns.

**Keywords** : *Colostrum, Knowledge, Newborns*

**INTRODUCTION**

Colostrum is the first fluid secreted by the breast glands, which is a liquid with a viscous viscosity that is yellowish in color compared to mature milk. Colostrum contains debris tissue and residual material found in the alveoli and ducts of the breast glands before and after the puerperium. Colostrum also contains white blood cells and antibodies that are

higher than actual breast milk, especially the content of immunoglobulin A (IgA), which helps coat the intestines of the baby who is still vulnerable and prevents germs from entering the baby. IgA is also helpful in preventing babies from developing food allergies.<sup>1</sup>

The benefit of colostrum for babies is that colostrum contains antibody substances, especially

immunoglobulins (IgG, IgA, and IgM) which protect babies from various infectious diseases, especially diarrhea. Colostrum also contains rich in vitamin A which protects babies from eye diseases. In addition, colostrum also contains protein, carbohydrates and low fat, so that it is in accordance with the nutritional needs of the baby in the first days of birth. Colostrum is also an ideal laxative to help remove meconium viz The first baby poop is greenish black. The amount of colostrum produced varies depending on the baby's suction in the first days of birth. Although a little, but enough to meet the nutritional needs of babies. Therefore colostrum must be given to newborns.<sup>2</sup>

A newborn is an hour old baby born at 37-42 weeks of gestation and weighs 2,500-4000 grams. Normal newborn is a baby born in the back of the head through the vagina without using tools, at 37 weeks to 42 weeks of gestation, weighing 2500-4000 grams, Apgar value > 7 and without congenital defects. According to Mochtar (1998), newborns are said to be normal if they have several signs including: *Appearance color* (skin color) of the whole body is reddish, *Pulse (heart rate)* heart rate or > 100 x / minute, *Grimace* (reaction to stimulation) , crying, coughing / sneezing, Activity (muscle tone),

active movement, *Respiration* (breath effort), the baby cries strong.<sup>3 4</sup>

Some opinions that prevent post partum mothers from giving colostrum immediately to newborns, including fear of the baby getting cold, after giving birth the mother is too tired to breastfeed her baby, colostrum does not come out or the amount of colostrum is not sufficient, and colostrum is not good and even dangerous for the baby. This will not happen if a post partum mother has good knowledge and gets support from her family.<sup>5</sup> Knowledge is the result of human senses, or the result of a person's knowing of objects through their senses (eyes, nose, ears, etc.).<sup>6</sup> The

habit of postpartum mothers in Indonesia is often encountered by mothers who do not have knowledge about breastfeeding which is white and thick yellow liquid or what is called colostrum is thrown away is considered to cause abdominal pain in babies. Therefore, before mature milk or (ASI) comes out, the baby is given replacement food such as sugar water and honey, as a result of this lack of understanding it is detrimental to the baby's health.<sup>7</sup>

From the data obtained at BPM Midwife Risma Darmawati, it was found that there were still many postpartum mothers who did not give colostrum to their babies. Due to the

large number of post-partum mothers who visit BPM Midwife Risma Darmawati is low-educated with the majority of junior high school education and does not understand colostrum and has not taken the act of giving colostrum.

From a preliminary study conducted by researchers in November 2017 at BPM Bidan Risma Darmawati, Cibanteng Village, Bogor Regency, it was found that 12 mothers with live babies aged 0-5 months, of which there were 2 mothers who were knowledgeable and gave colostrum to their babies. 6 mothers were knowledgeable enough and gave colostrum to their babies and 4 mothers were less knowledgeable and did not give colostrum to their babies.

From the results of the interview, 2 knowledgeable mothers said they understood colostrum and had given their babies, 6 knowledgeable mothers said they did not understand colostrum but had given their babies and 4 knowledgeable mothers said they did not give colostrum to their babies because they did not understand colostrum and had an opinion. Colostrum is dirty milk.

Based on the data above, the formulation of the problem in this study is "Is There a Relationship between Mother's Knowledge of

Colostrum and Giving Colostrum to Newborns at BPM Midwife Risma Darmawati 2019."

The purpose of this study was to determine the relationship between maternal knowledge about colostrum and colostrum administration to newborns at BPM Midwife Risma Darmawati 2019 ".

## RESEARCH METHOD The

type and design of this study is an analytical study which aims to determine the relationship between maternal knowledge and colostrum administration to newborns at BPM Bidan Risma Darmawati, Cinangneng Village, Bogor Regency. The study design used approach *cross sectional*. This approach is intended to see the influence between the independent variable and the dependent variable.<sup>8</sup>

This research was conducted at BPM Bidan Risma Darmawati, Cibanteng Village, Bogor Regency. The population in this study were all mothers who visited BPM Bidan Risma Darmawati to carry out immunizations with babies aged 0-12 months, totaling 35 people. The sampling technique used in the study was *Total Sampling* where the sample used was all mothers who visited BPM Bidan Risma, Darmawati, Cibanteng Village, Bogor Regency in 2019 and were willing to be

respondents, totaling 35 mothers. The variables of this study consist of independent variables with dependent variables. The independent variable is the mother's knowledge and the dependent variable is giving colostrum to newborns.

## RESEARCH RESULTS

Table 1 Distribution of Mother's Knowledge Frequency About Colostrum in BPM Midwife Risma Darmawati Cibanteng Village, Bogor Regency in 2019.

No	Knowledge	Frequency	Percentage (%)
1	Know	19	54.3%
2	Don't Know	16	45.7%
<b>Total</b>		<b>35</b>	<b>100.0%</b>

Table 1 about frequency distribution Mother's knowledge can be seen that of the 35 respondents most of them know about colostrum, amounting to 19 people (54.3%).

Table 4.2 Frequency Distribution of Colostrum for Newborns at BPM Midwife Risma Darmawati Cibantenng Village, Bogor Regency in 2019.

No	Cognitive Function	Frequency	Percentage %
1	Given	19	54.3%

2	16	45.7%
Not Given		
<b>Total</b>	<b>35</b>	<b>100.0%</b>

Based on Table 2 regarding the distribution of the frequency of giving colostrum to newborns, it can be seen that most of the 35 respondents gave colostrum to newborns, amounting to 19 respondents (54.3%).

Table 3 The Relationship between Mother's Knowledge of Colostrum and Giving Colostrum to Newborns, Cibanteng Village, Bogor Regency in 2019.

Mother's								OR
s	Giving Colostrum						P	
Known							Value	
ge of					Total			
	Given		Not Given					
	N	%	N	%	N	%		
Know	14	40.0	5	14.3	19	54.3	0.012	6.160
≥ 13		%		%		%		
Don't			1					
know	5	14.3	1	31.4	16	45.7		
<13		%		%		%		
	1							
	19	54.3	6	45.7	35	100.0		
Total		%		%		%		

The results of the analysis of the relationship between mother's knowledge of colostrum and giving colostrum to newborns at BPM Bidan Risma Darmawati, Cibanteng Village, Bogor Regency in 2019. It can be seen that 19 respondents (54.3%) knew about colostrum and those who gave colostrum to

newborns. totaled 14 respondents (40.0%). With a *P value* of 0.012 this means that *P value*  $\leq 0.05$  so that the alternative hypothesis (*H<sub>a</sub>*) is accepted and the null hypothesis (*H<sub>o</sub>*) is rejected. This shows that there is a relationship between maternal knowledge about colostrum and the provision of colostrum to newborns at BPM Bidan Risma Darmawati, Cibanteng Village, Bogor Regency in 2019.

## DISCUSSION

### a. Mother's Knowledge About Colostrum

Table 4.1 regarding the frequency distribution of Mother's Knowledge can be seen that from 35 respondents most of them knew about colostrum, amounting to 19 people (54.3%). This is supported by research conducted by Mardiana Mustafa, 2015 concerning "The Relationship Between Knowledge and Attitudes of Post-Postpartum Women and Giving Colostrum to Newborns in Rskd Mother and Child Mother Earth Makasar". From 89 respondents indicated that as many as 77 respondents or 86.5% had good knowledge.<sup>9</sup>

The results of the analysis conducted by researchers showed that many respondents knew about colostrum. This happened

because of several things that could affect knowledge about colostrum, namely education, information / mass media, environment, experience, age.<sup>10</sup> The same is the case in the field even though the mother's education level is low, where the mother's knowledge is closely related to education. However, it can also be seen from several factors that can affect a mother's knowledge of colostrum, including information or mass media.

### b. Giving Colostrum to Newborns

Table 4.2 shows that from 35 respondents it can be seen that 19 respondents (54.3%) gave colostrum.

This is supported by research conducted by Lilis Dwi Nurindah Sari, 2015 on "The Relationship between Post Partum Mother Knowledge About the Benefits of Colostrum and Colostrum Giving to Newborns at Bps. Aida Hartatik Amd, Keb Ds.Dlanggu Kec. Deket Lamongan ". From 28 respondents, it can be seen that there are 21 respondents (75%) or most of them give colostrum to newborns.<sup>11</sup>

The results of the analysis conducted by researchers, most of

the respondents gave colostrum to newborns. This happens because of several factors, one of which is the knowledge factor. According to the data obtained from the results of filling out the questionnaire by respondents where respondents tend to know about the benefits of colostrum for newborns with the level of respondent's knowledge of the importance of providing colostrum and the benefits of colostrum for newborns, it is in the sufficient category. This is what encourages respondents to give colostrum to newborns as is the case in the field.

**c. "The Relationship between Mother's Knowledge Level of Colostrum and Giving Colostrum to Newborns at BPM Midwife Risma Darmawati Cibanteng Village, Bogor Regency in 2019"**

The results of the analysis of the relationship between maternal knowledge about colostrum and colostrum giving to newborns at BPM Midwife Risma Darmawati Cibanteng Village, Bogor Regency Year 2019. It can be seen that of the 19 respondents (54.3%) knew about colostrum and those who gave colostrum to newborns totaled 14 respondents

(40.0%). With a *P value* of 0.012 this means that *P value*  $\leq 0.05$  so that the alternative hypothesis (*Ha*) is accepted and the null hypothesis (*Ho*) is rejected. This shows that there is a significant relationship between the level of maternal knowledge about colostrum and the provision of colostrum to newborns at BPM Bidan Risma Darmawati, Cibanteng Village, Bogor Regency in 2019.

This is in line with research conducted by Lilis Dwi Nurindah Sari, 2015 regarding "The Relationship between Post Partum Mother Knowledge About the Benefits of Colostrum and Colostrum Giving to Newborns at BPS. Aida Hartatik Amd, Keb Ds. Dlanggu Kec. Deket Lamongan. " The results obtained from 20 respondents with good knowledge and provide colostrum as much as 19 (95%). The results of the statistical test *Chi-Square* obtained a *P value* of 0.000, this means that the *P value* is  $<0.05$  so that the alternative hypothesis (*Ha*) is accepted and the null hypothesis (*Ho*) is rejected. This shows that there is a relationship between the knowledge of post partum mothers about the benefits of colostrum and the provision of colostrum to newborns at BPS

Aida Hartatik Amd. Keb. Dlanggu Village, Deket Lamongan District 2015.<sup>11</sup>

The results of the research showed that there was a relationship between the mother's level of knowledge about colostrum and the provision of colostrum to newborns. This happens because several factors influence one of them is the level of knowledge.

Mothers with high knowledge have a tendency to give colostrum. This shows the link between knowledge about colostrum and its giving.

<sup>11</sup>

This needs attention and becomes material for stepping into more specific actions about what steps must be taken in providing correct knowledge about the benefits of colostrum administration for mother and baby. Knowledge is a guide in shaping a person's actions and behavior. The existence of knowledge will raise a person's awareness which ultimately triggers him to behave in accordance with the knowledge he has. The better the mother's knowledge about colostrum the higher the awareness to take actions in accordance with this knowledge.<sup>12</sup>

Based on the researcher's analysis, the researcher believes that maternal knowledge is influenced by the lack of information including about the benefits and advantages of colostrum. The more information obtained, the better the knowledge. Where a good level of mother's knowledge about the benefits of giving colostrum makes the mother motivated to give colostrum to her baby.

## CONCLUSION

1. It is known that the results of research at BPM Midwife Risma Darmawati Cibanteng Village, Bogor Regency in 2019 from 35 respondents, most of the respondents knew about colostrum, amounting to 19 respondents (54.3%).
2. It is known that the results of research at BPM Bidan Risma Darmawati Cibanteng Village, Bogor Regency in 2019 from 35 respondents, most of the respondents gave colostrum to newborns, amounting to 19 respondents (54.3%).
3. Based on the statistical test *Chie-Square*, the *P value* was 0.012.  $P\ value \leq 0.05$  means that  $H_a$  is accepted  $H_o$  is rejected. With

the value Odds Ratio for knowledge (know / don't know) 6.160. It can be concluded that there is a significant relationship between maternal knowledge and the provision of colostrum to newborns at BPM Midwife Risma Darmawati Cibanteng Village, Bogor Regency in 2019.

## SUGGESTIONS

### 1. for Educational Institutions

As input to institutions to be able to improve the quality and quantity of institutions, especially in enhancing facilities and infrastructure for researchers.

### 2. For BPM Midwife Risma Darmawati

As input for the BPM Midwife Risma Darmawati to provide counseling about colostrum to postpartum mothers in order to increase postpartum mothers' knowledge about colostrum to be better and encourage postpartum mothers to provide colostrum to newborns.

### 3. For Respondents

As input to respondents to give colostrum to newborns.

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