

## The Relationship Of Postpartum Mother's Knowledge With Giving Colostrum To Babies

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### ARTICLE INFO

Received : 2022- 03-11

Revised : 2022-04-19

Accepted : 2022-05-30

### Keywords:

Knowledge, Postpartum mothers, Colostrum

### ABSTRACT

Colostrum, the initial fluid secreted by the breasts during early lactation, is renowned for its superior immune-boosting properties, offering crucial protection to newborns against diseases. This study aimed to investigate the association between postpartum maternal knowledge and the provision of colostrum to infants. Utilizing an analytical survey approach, the research involved a population of 37 postpartum mothers. Random sampling was employed to select 37 respondents from the total population. The research instrument comprised a primary data collection tool in the form of a questionnaire consisting of 20 statements. Data processing involved editing, coding, tabulating, and scoring. Findings revealed that the majority of respondents exhibited inadequate knowledge, with 16 respondents (55.0%) scoring below the desired threshold. Statistical analysis using the chi-square test indicated a significant relationship between postpartum mothers' knowledge and the practice of colostrum provision ( $p\text{-value} = 0.044 < 0.05$ ), leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis.

This study underscores the importance of enhancing maternal knowledge regarding colostrum provision, particularly in the context of the Nurkholida Darussalam Midwife Clinic, Panyabungan District, Mandailing Natal Regency. It is recommended that clinic leadership actively engage in educational initiatives to elucidate the benefits of colostrum, ultimately promoting optimal infant health outcomes.

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## INTRODUCTION

Colostrum is the first fluid produced by the breast when breast milk production begins. At the end of pregnancy, the breasts will produce colostrum even though the amount of milk that can be produced is not yet large. The milk production process fills the breasts in one to three days. In the first days, what comes out is still colostrum, which is the first fluid produced by the breasts when breast milk production begins. Breast milk (breast milk) is a natural nutrition for babies because it contains ideal substances that are optimally able to help the growth of the baby's body. Breast milk (breast milk) is an emulsion of fat in a solution of protein, lactose and organic salts produced by the mother's breast glands which is the staple food for babies. The best nutritional composition in breast milk that comes out in the first three days after the baby is born is called colostrum. Colostrum is breast milk produced by the breast glands, which is slightly yellowish in color compared to ordinary breast milk, the surface is a bit rough because it contains fat granules. The content in colostrum is more than in ordinary breast milk.

Exclusive breastfeeding in Indonesia (2019) has been regulated in law, including Law No. 36 of 2009 article 128 paragraphs 2 and 3. Giving colostrum must be carried out by mothers giving birth. Nationally, the provision of colostrum achieved in 2019 was 67.74%. This figure has exceeded the 2019 strategic plan target of 50%. The highest percentage of exclusive breastfeeding coverage is in West Nusa Tenggara Province (86.26), while the lowest percentage is in West Papua Province (41.12%). There are four provinces that have not achieved the 2019 Strategic Plan target, namely Gorontalo, Maluku, Papua and West Papua.

Mandailing Natal health profile (2020) percentage coverage of babies aged < 6 months in Mandailing Natal Regency who receive exclusive breastfeeding with the highest coverage, namely Hutabargot Community Health Center (95.3%), Muara Soma Community Health Center (93.6%) and Manisak Community Health Center (88, 5%). Meanwhile, the lowest percentage of coverage for babies aged < 6 months is in the working area of the Sikara-kara Community Health Center, namely (8.7%), Singkuang Community Health Center (17.6%) and Nagajuang Community Health Center (20.0%). From these data it can be concluded that Most postpartum mothers do not give exclusive breast milk to their babies. Based on this background, the author is interested in researching the relationship between the level of education and knowledge of postpartum mothers and the provision of colostrum.

## METHODS

### Research Techniques

This type of research uses an analytical survey method with a cross sectional approach regarding the relationship between postpartum mothers and giving colostrum to babies. The sample is the object being studied and is considered to represent the entire population. This sampling technique uses total sampling, namely the entire population / total population with a sample size of 37 people This research was conducted at the Nurkholida Pulungan Midwife Clinic in Darussalam, Panyabungan District, Mandailing Natal Regency. The time this research was conducted was from September to January 2022.

## RESULTS AND DISCUSSION

### Discussion of results

#### Univariate Analysis Results

This univariate analysis aims to describe each relationship between the variables studied. Namely looking at the relationship between postpartum maternal knowledge and giving colostrum to babies. Categorical data, namely age, education, occupation, parity, source of information. Numerical data is looked for for the mean, median and standard deviation, namely:

**Table 1.** Frequency Distribution of Respondents Based on Age at the Nurkholida Midwife Clinic, Panyabungan District, Mandailing Regency, Natal 2022

No	Age	Frequency	Percentage (%)
1	< 20 years	12	32.4
2	20 – 35 years	15	40.5
3	> 36 years old	10	27.0
<b>Amount</b>		<b>37</b>	<b>100</b>

(source; Primary data; 2022)

Based on Table 1. the results of statistical tests show that the majority are aged 20 - 35 years, 15 people (40.5%), while the minority is aged <36 years, 10 people (27.0%).

**Table 2.** Frequency Distribution of Respondents Based on Education at the Nurkholida Midwife Clinic, Panyabungan District, Mandailing Natal Regency, 2022.

No	Education	Frequency	Percentage (%)
1	elementary school	6	16.2
2	JUNIOR HIGH SCHOOL	12	32.4
3	SENIOR HIGH SCHOOL	13	35.1
4	College	6	16.2
<b>Amount</b>		<b>37</b>	<b>100</b>

(source; Primary data; 2022)

Based on Table 2, the results of statistical tests show that the majority of education is from high school, 13 people (35.1%), while the minority has elementary and tertiary education, 6 people (16.2%).

**Table 3.** Frequency Distribution of Respondents Based on Parity at the Nurkholida Midwife Clinic, Panyabungan District, Mandailing Natal Regency, 2022.

No	Parity	Frequency	Percentage (%)
1	Primipara	8	21.6
2	Multiparous	16	43.2
3	Scundipara	7	18.9
4	Grandemultiparous	6	16.2
<b>Amount</b>		<b>37</b>	<b>100</b>

(source; Primary data; 2022)

Based on Table 3, the results of statistical tests show that the majority of Parity are 16 people Multipara (43.3%), while the minority are grandemultipara 6 people (16.2%).

**Table 4.** Frequency Distribution of Respondents Based on Information Sources at the Nurkholida Midwife Clinic, Panyabungan District, Mandailing Natal Regency, 2022.

No	Resources	Frequency	Percentage (%)
1	Mass media	-	-
2	Electronic Media	15	40.5
3	Health workers	10	27.0
4	Neighbors or other people	12	32.4
<b>Amount</b>		<b>37</b>	<b>100</b>

(source; Primary data; 2022)

Based on Table 4, the results of statistical tests show that the majority of information sources come from electronic media, 15 people (40.5%), while the minority comes from information from health workers (27.0%).

## Bivariate Analysis

This analysis is used to test whether there is a correlation or relationship between postpartum maternal knowledge and giving colostrum to babies. This research was carried out using the Chi-Square test.

**Table 6.** Cross Tabulation between the Relationship between Postpartum Mothers' Knowledge and Giving Colostrum to Babies at the Nurkholidah Darussalam Midwife Clinic, Panyabungan District, Mandailing Natal Regency

Nutritional Status of Pregnant Women	Incidence of Low Birth Weight								<i>P-value</i>  0.044
	Good		Enough		Not enough		Total		
	F	%	F	%	F	%	F	%	
Age <20 years	3	8.1	4	10.8	0	0.0	7	18.9	
20-35 years	5	13.5	1	2.7	8	21.6	14	37.8	
>35 years	7	18.9	6	16.2	3	8.1	16	43.2	
Total	15	40.5	11	29.7	11	29.7	37	100	
Elementary education	0	0.0	0	0.0	0	0.0	0	0.0	
JUNIOR HIGH SCHOOL	1	2.7	3	8.1	0	0.0	4	10.8	
SENIOR HIGH SCHOOL	8	21.6	8	21.6	9	24.3	25	67.6	
College	6	16.2	0	0.0	2	5.4	8	21.6	
Total	15	40.5	11	29.7	11	29.7	37	100	
Source Electronic media	0	0.0	0	0.0	4	10.8	4	10.8	
Friends/family information	4	10.8	2	5.4	3	8.1	9	24.3	
Health workers	11	29.7	9	24.3	4	10.8	24	64.9	
Total	15	40.5	11	29.7	11	29.7	37	100	
Primiparous Parity	0	0.0	0	0.0	0	0.0	0	0.0	
Multiparous	2	5.4	6	16.2	6	16.2	14	37.8	
Scundipara	12	32.4	3	8.1	5	13.5	20	54.1	
Grandemultiparous	1	2.7	2	5.4	0	0.0	3	8.1	
Total	15	40.5	11	29.7	11	29.7	37	100	

(Source: Primary Data, 2022)

Based on the results of data analysis using the chi-square test, a significance value of 0.044 was obtained. Based on this value, because the p value is  $<0.05$ , then  $0.044 < 0.05$ , it can be concluded that "Postpartum Mothers' Knowledge is Related to Giving Colostrum".

Based on the research results, it was found that the knowledge of postpartum mothers with giving colostrum at the Nurkholida Darussalam Midwife Clinic, Panyabungan District, Mandailing Natal Regency, was that the majority had poor knowledge, namely 16 respondents (55.0%) while the minority had good knowledge, namely 9 people (23.8%). Research results. Sari (2015) conducted in Bireun district, North Aceh showed that 24 children were given additional food at the age of 1 month, the majority of whom were given additional food with mashed banana. The type of banana that is often given is chicken banana. Based on the research results, the majority of mothers at the Nurkholida Midwife Clinic have the motivation to give colostrum. This is supported by the knowledge of mothers, the majority of whom have knowledge about colostrum in the good category. With enough knowledge people and less knowledgeable people.

In terms of giving colostrum, maternal factors have a very strong influence. UNICEF research results (2016) show that in several Southeast Asian countries, there are traditional practices that do not support the provision of colostrum. There are also several traditional practices that put sweet substances

in the mouth of newborn babies after birth or during the neonatal period which have been proven to be detrimental to the baby's health. In reality, even though mothers breastfeed their babies, the influence of habits that support optimal use of colostrum such as giving additional food to babies and giving colostrum drinks, on the grounds that the colostrum has not yet been released. There are also mothers who do not understand how to give it and when is the right time to give complementary foods to breast milk. Many mothers think that a baby who cries after being given colostrum indicates that the baby is still hungry and colostrum alone is not enough. This was also encouraged by the culture of the previous family, which gave food such as bananas to newborn babies so that the babies would stop crying.

## CONCLUSION

Based on the results and analysis of research on the relationship between knowledge of postpartum mothers and giving colostrum to babies at the Nurkholida Midwife Clinic, Panyabungan District, Mandailing Natal Regency in 2022, the following conclusions can be drawn from the results of research on 37 respondents at the Nurkholida Darussalam Midwife Clinic, Panyabungan District, Mandailing Natal Regency, 2022. 2022 based on the characteristics of the majority having good knowledge, 15 respondents (40.5%) and the minority having sufficient and poor knowledge, 11 respondents (29.7%), based on the characteristics of the majority age >35 years as many as 16 respondents and the minority <20 years as many as 7 respondents (18.9), while the characteristics of maternal education are that the majority of mothers have a high school education, namely 25 respondents (67.6) and the minority are mothers with a junior high school education, 4 respondents (10.8%), based on the characteristics of the majority of information sources through health workers, 24 respondents (64.9) and the minority via electronic media were 4 respondents (10.8%), based on the parity characteristics of the majority, namely scundipara, 20 respondents (54.1%) and the minority, namely Grandemultipara, 3 respondents (8.1%). From the results of research on 37 respondents, a p value of 0.044 with  $\alpha = 0.05$  was obtained, so it can be concluded that there is a significant relationship between postpartum mothers' knowledge and giving colostrum to babies.  $H_0$  is rejected and  $H_a$  is accepted, meaning there is a relationship between postpartum mothers' knowledge and giving colostrum to babies at the Nurkholida Darussalam Midwife Clinic, Panyabungan District, Mandailing Regency, Natal 2022.

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