Learning for Pregnant Women About Giving Colostrum to Newborns at the Cimone Health Center, Tangerang City

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Abstract
The purpose of this study was to determine the factors associated with the administration of colostrum to newborns at the Cimone Health Center, Tangerang City, Banten Province. This study uses a type of observational analytic research. The research method used is cross sectional. The population used in this study were women giving birth normally at the Cimone Health Center, totaling 56 people in October 2020. This research used an accidental sampling technique. The results of a statistical study using chi-square showed that the variables of knowledge and family support were related to the administration of colostrum to newborns with a p-value of (0.001 < α (0.05) and (0.004 < α (0.05), so it can be concluded that mothers with good knowledge have a greater chance of giving colostrum than mothers with less knowledge, and mothers with family support have a greater chance of giving colostrum than mothers with unsupportive family support.

Keywords: Pregnant Women, Giving Colostrum, Newborns

Introduction
The morbidity rate (morbidity) is the ratio between the population due to certain diseases and the population at mid-year, and is expressed in per 100 population. The usefulness of knowing this morbidity rate is as an indicator used to describe certain disease patterns that occur in society.

Infant morbidity rate is the ratio between the number of certain infant diseases found in a certain area in 1 year with the number of cases of certain infant diseases found in a certain area in the same period multiplied by one hundred percent.

In order to reduce child morbidity and mortality, the United Nations Children Fund (UNICEF) and the World Health Organization (WHO) recommend giving colostrum immediately after birth and exclusive breastfeeding until the baby is 6 months old. The Indonesian government through the Decree of the Minister of Health has stipulated exclusive breastfeeding for 6 months for mothers in Indonesia.

Colostrum is the first milk that comes out which is often yellow or can also be clear which contains living cells that resemble “white blood cells” which can kill germs so that they can protect the baby’s body from various infectious diseases.

Colostrum also contains protein, high vitamin A and fat so that it fits the nutritional needs of the baby in the first
days of birth and is useful as a laxative to remove the baby's first feces (meconium) from the baby's intestines and prepares the baby's digestive tract for future food.

The prevalence of colostrum in Indonesia is still low. This is shown in the implementation of Early Initiation of Breastfeeding (IMD) which is still lower than the coverage rate of early initiation of breastfeeding in the world, which is 42%, while in Indonesia it is only 39%. This figure is still very low when compared to other countries in some Southeast Asian countries, for example Myanmar (76%), Thailand (50%), and the Philippines (54%).

The Central Statistics Agency (BPS) in 2007 reported that 95% of children under the age of 5 in Indonesia had received breast milk, but only 44% had received colostrum breast milk in the first hour after birth and only 65% had colostrum breast milk in the first day after birth. In 2013 the coverage of Colostrum ASI in Banten Province was 47.9%, this figure was far below the national coverage rate of 54.3%.

Giving colostrum at the beginning of a baby's life is the best action to support the growth and development of the baby in the future. Colostrum is able to provide nutritional value according to the baby's needs, protects against various infections, and provides affection and educates the baby. It is not necessary to give colostrum, special tools and high costs, all it takes is patience, time, a little knowledge about breastfeeding and support from the environment, especially the family.

The results of Nazara's research stated that it was known that mothers who did not give colostrum to their newborns were mostly mothers with less knowledge, 25 people (62.5%), and at least 7 mothers with good knowledge (17.5%).

There are still many mothers who do not know about the importance of giving colostrum to newborns. This is one of the factors influenced by the knowledge factor which is caused by information that is not conveyed properly. The above phenomenon shows that the level of knowledge and education of mothers about breastfeeding, especially colostrum, is still lacking so that colostrum administration is low.

Factors of knowledge, sources of information, education, perception factors, social support, attitudes, socio-culture, and the inability of health workers to motivate in providing additional knowledge for breastfeeding mothers can cause mothers not to give colostrum to newborns.

The purpose of this study was to provide learning to pregnant women about giving colostrum to newborns at the Cimoné Health Center, Tangerang City, Banten Province

**Method**

This type of research uses observational analytic. The research method used was cross sectional, namely a study to study the dynamics of the correlation between risk factors and effects, meaning that each research subject was only observed once and measurements were made of the character status or subject variables at the time of examination, the purpose of this study was to observe the relationship between risk factors with consequences that occur in the form of certain diseases or health conditions at the same time, asked about the problem (effect) as well as the cause (risk factor). The population used in this study were women giving birth normally at the Cimoné Health Center, totaling 56 people in October 2020. This research used an accidental sampling technique. The location of this research was carried
out in the work area of the Cimone Community Health Center, Tangerang City.

Result and Discussion

The Relationship Between Parity With Colostrum Giving

Based on table above, we found that 20 (64.5%) mothers with primiparous parity did not give colostrum, while 11 (35.5%) mothers with multiparous parity gave colostrum.

The results of the chi square test for the P value on the parity variable is 0.214. This shows that the value of P Value > α (0.05) Ho is accepted and Ha is rejected, meaning that there is no significant relationship between parity and Colostrum Administration.

Parity has something to do with the direction of seeking information about mother's knowledge in breastfeeding. The experience gained by the mother can expand one's knowledge in colostrum administration. That the mother's experience in taking care of children influences knowledge about colostrum.

In this study, the results showed that there was no relationship between parity and colostrum administration, this was because the proportions of parity primiparas and multiparas did not differ much between those who gave colostrum and those who did not give colostrum. Mothers who are pregnant for the first time will tend to seek more information regarding their pregnancy and what needs are good for their future baby before and after birth.

In contrast to multiparous pregnant women, because they already have a lot of experiences from previous pregnancies, they tend to follow the habits or experiences they have experienced, so they are more likely not to give colostrum.

The Relationship Between Knowledge With Colostrum Giving

The results of the relationship between knowledge and giving colostrum showed that mothers with less knowledge did not give colostrum, namely 14 (45.2%), while mothers with good knowledge gave colostrum, namely 17 (54.8%).

The results of the chi square test, the P value on the knowledge variable is 0.001. This shows that the value of P Value < α (0.05) Ho is rejected and Ha is accepted, meaning that there is a significant relationship between knowledge and Colostrum Administration with an OR value of 4.570 so that it can be concluded that mothers with good knowledge have a 4.570 times greater chance of giving colostrum than with mothers who are less knowledgeable.
This research is in line with previous research at the An-Nissa Surakarta Maternity Hospital based on data analysis using the Chi-square test. It was found that the mother's knowledge level was good about giving colostrum as many as 20 people (66.67%), the mother's knowledge level was quite good about giving colostrum as much as 5 people (16.67%), the mother's knowledge level was less about giving colostrum as much as 1 person (3.33%), and the mother's level of knowledge was not good and did not give colostrum as many as 3 people (10%). P value = 0.000 <0.05, meaning that there is a relationship between the level of knowledge of breastfeeding mothers and first breastfeeding (colostrum) at the An-Nissa Surakarta Maternity Hospital.

Knowledge is the most important thing for someone to make decisions, especially making decisions to give breast milk as early as possible or give colostrum as soon as the baby is born. Mothers with good knowledge will know what is best for their babies because the amount of information obtained makes mothers know what needs are good for their babies. In contrast to mothers who lack knowledge who do not have more information about the importance of giving colostrum for the long term, especially for the growth and development of their children.

### Family Support Relationship With Colostrum Giving

Table 3 The Relationship Between Family Support and Colostrum Administration at Cimone Health Center, Tangerang City

<table>
<thead>
<tr>
<th>Family Support</th>
<th>Giving Colostrum</th>
<th>Total</th>
<th>P Value</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Don’t Support</td>
<td>1</td>
<td>3</td>
<td>41</td>
<td>90</td>
</tr>
<tr>
<td>Suppo</td>
<td>1</td>
<td>58</td>
<td>5</td>
<td>20</td>
</tr>
</tbody>
</table>

The results of the relationship between family support and giving colostrum showed that 13 (41.9%) mothers with unsupportive family support did not give colostrum, while 18 (58.1%) mothers with supportive family support gave colostrum.

The results of the chi square test for the P value of the family support variable is 0.004. This shows that the value of P Value <α (0.05) Ho is rejected and Ha is accepted, meaning that there is a significant relationship between family support and Colostrum Administration with an OR value of 2.903 so it can be concluded that mothers with family support have a 2.903 times greater chance of giving colostrum compared to mothers with unsupportive family support.

This research is in line with research conducted at the Labuanbaji Hospital in Makasar where the results of the Chi-square test obtained a value of p = 0.001 with a significance level of α = 0.05. This shows a p value <α, this means that Ha is accepted or there is a relationship between family support and colostrum breastfeeding in infants.

### The Relationship Between Health Worker Support With Colostrum Giving

Table 4. The relationship between the support of health workers and the administration of colostrum at the Cimone Community Health Center, Tangerang City

<table>
<thead>
<tr>
<th>Health Workers Support</th>
<th>Giving Colostrum</th>
<th>Total</th>
<th>P Value</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Don’t Support</td>
<td>1</td>
<td>35</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Suppo</td>
<td>2</td>
<td>64</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>A mou</td>
<td>3</td>
<td>10</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
The results of the relationship between the support of health workers and the provision of colostrum showed that 11 (35.5%) mothers in the category of support from health workers did not support it, while 20 (64.5%) mothers in the category of support from health workers who gave colostrum.

The results of the chi square test for the P value of the variable support for health workers was 0.784. This shows that the value of P Value> α (0.05) Ho is accepted and Ha is rejected, meaning that there is no significant relationship between the support of health workers and the administration of colostrum.

This research is in line with research conducted at the East Amanuban Health Center, it was found that based on the results of statistical tests using the logistic regression test, it showed a value of \( p = 0.093 > 0.05 \). These results explain that \( H_0 \) is accepted with the interpretation that there is no significant effect on the significance level \( \alpha = 0.05 \) between the support of maternal health workers for giving colostrum to newborns.

**Summary**

The results showed that there was no significant relationship between parity and colostrum administration. However, on the contrary, there appears to be a significant relationship between knowledge and giving colostrum, so it can be concluded that mothers with good knowledge have a greater chance of giving colostrum than mothers with less knowledge. Mothers with family support are more likely to give colostrum than mothers with unsupportive families. As well as regarding the support of health workers, it shows that there is no significant relationship between the support of health workers and the administration of colostrum.

**References**


