



Factors Related to Colostrum Feeding of Postpartum Mother at Public Health Center in Kudus

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Abstract

Background: Colostrum is important for babies because it contains many nutrients and body defense substances. The practice of breastfeeding is still lacking and they prefer to give MP-ASI the reason that the baby grows faster, some even believe that colostrum is excrement that must be disposed of. Constraints in giving colostrum are lack of knowledge and wrong beliefs, many mothers do not give colostrum to their babies, and colostrum will adversely affect the health of babies. The purpose of this study was to determine the factors associated with colostrum breastfeeding.

Metode: An analytical descriptive method with the cross sectional approach. The sample of this study was 100 postpartum mothers at the Kudus district health center taken by total sampling, the analysis of this research was carried out by chi-square test, and multivariate analysis with multiple logistic regression. The method used is the enter method. This entry method is carried out repeatedly by removing the independent variable that has the largest p value until leaving the independent variable which has a p value <0.05 in the Wald test. The research instrument used a questionnaire.

Results: The most influential factor on colostrum breastfeeding for newborns was the support of health workers having a value (OR = 13,800, 95% CI = 1,570 – 121,266, p = 0.018 with) meaning that respondents who received support from health workers had a probability of 13,800 times the effect of colostrum breastfeeding in newborns compared to respondents who did not receive the support of health workers.

Conclusion: There is a relationship between Knowledge, exposure to formula milk and support from health workers with colostrum breastfeeding and no husband support with colostrum breastfeeding

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INTRODUCTION

Efforts to develop human resources by giving breast milk as soon as possible. (Sebayang W, 2017), (Agustie et al., 2017) World Health Organization, breast milk is an essential food for the babies' growth and development, shaping the development of intelligence, spiritual, and emotional development so as to reduce infant mortality. (Astuti et al., 2016), (Dağlı & Çelik, 2021) Breastfeeding is the best approach to meeting the nutritional, immunological and psychological needs of infants. Colostrum is released from the first day to the third day. Colostrum helps remove meconium from the baby's intestines, allowing the newborn's intestinal mucosa to be instantly clean and ready to absorb breast milk, which is rich in nutrients, especially protein. (Sebayang W, 2017), (Widaryanti, Yulia Moetina, 2017).

Colostrum-feeding milk can shorten the breastfeeding period. Colostrum can prevent Upper Respiratory Tract Infections and diarrhea. (Nasihah & Mahajiran, 2010) Colostrum has high levels of leukocytes and immunoglobulins (IgA) that prevent neonates from harmful bacteria and viruses. 7,8 Infants who started breastfeeding after 1 hour had a 33% risk of neonatal mortality. Meanwhile, research from Zimbabwe showed that delayed breastfeeding increases the risk of developing neonatal sepsis in the first 1 week of life. (Abie & Goshu, 2019)

According to WHO and UNICEF one of the programs to improve infant nutrition by providing exclusive breast milk. The program target to be achieved is at least 80%. (Khosidah, 2018) Every year, there are 4,608,000 live births in Indonesia. A total of 100,454 people died before the age of one month. There are 184 premature newborn deaths per day, or 8 premature neonatal deaths every hour. (Kristensen-Cabrera et al., 2018)

The results of research conducted by Steve Harakah (2020) in Jeddah explained that colostrum is yellow, thick, and sticky. Some mothers still think colostrum is a disease and is not safe for consumption by babies. Factors that cause mothers not to give colostrum are lack of knowledge and the following information from elders. (Steve Harakeh et al., 2020) Constraints

in giving colostrum milk, lack of knowledge and false beliefs about colostrum. Support from husbands who are not supportive, working mothers, incessant promotion of formula milk, health workers' attitudes and the implementation of the Baby Care Hospital (RSSB) program have not run optimally. (Pada et al., 2015)

According to UNICEF, the global average coverage of exclusive milk is 38%. According to WHO, exclusive milk coverage is still low in many ASEAN countries, including India (46%), the Philippines (34%), Vietnam (27%), and Myanmar (24%). The practice of exclusive breastfeeding in Indonesia in 2020 is 66.1%. In Central Java in 2019 it was 66%. In Kudus Regency, 49.7% is still below the target, which is 80%. (Kemenkes, 2019), (Kudus, 2019). Based on a preliminary survey on January 1st, 2020 at Puskesmas in the Kudus Regency area of 20 normal postpartum mothers. Six mothers understand colostrum where their babies are given perfectly, namely for 3 days, 14 mothers throw away colostrum and give formula milk because they think colostrum is dirty, and cloudy like pus. Therefore, this study aims to determine the factors associated with colostrum breastfeeding in postpartum mothers at the Kudus District Health Center.

METHODS

This study employed analytic descriptive using a cross-sectional approach. The population of this study was 100 postpartum mothers in the public health center of Kudus. Meanwhile, the total sample was 100 postpartum taken using total samples. The inclusion criteria are all normal postpartum mothers, mothers who were willing to give exclusive breastfeeding, and mothers who had no breastfeeding problems and no problems with breastfeeding their babies. The independent variable is knowledge, formula milk exposure, husband support and health worker support while the dependent variable is colostrum feeding. The instrument for this study was used in the form of the questionnaire. The previous questionnaire was tested for validity and reliability of the questionnaire. The data was later analyzed using the chi-square test

and Multivariate analysis with multiple logistic regression. The research has been approved by the ethical clearance from Muhammadiyah

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RESULTS AND DISCUSSIONS

Table.1 bivariate Analysis

Variable	Giving Colostrum				Total		P Value	OR
	Not Perfect		Perfect		N	%		
	N	%	N	%				
Knowledge of colostrum								
Not enough	17	53,1	15	46,9	32	100	0.001	7,696
Good	10	14,7	58	85,3	68	100		
Husband Support								
Not Support	6	11,5	46	88,5	52	100	0.163	6,72
Support	21	43,7	27	56,3	48	100		
Formula Milk Promotion								
Exposure								
Not Exposed	19	33,9	36	66,1	55	100	0.002	12,415
Exposed	8	18,2	37	81,8	45	100		
Health Worker Support								
Not Support	24	40,7	35	59,3	59	100	0.002	13,800
Support	3	7,3	38	92,7	41	100		

Relationship between Knowledge and Colostrum

Table.1 shows that there is a relationship between the level of knowledge and the provision of perfect colostrum as much as 85.3%. Based on Table.2, shows that there is a relationship between the level of knowledge and the provision of perfect colostrum as much as 85.3%. The findings of this study are in line with the findings stating that strong relationship between the level of knowledge of postpartum mothers on the practice of first breastfeeding. (Astuti et al., 2016) The level of understanding of breastfeeding mothers regarding the benefits of colostrum breastfeeding practices makes mothers consider breastfeeding their babies with colostrum (Lyons et al., 2020). This is reinforced by the results of a univariate study of knowledge of postpartum mothers in the five areas where the majority of the study was conducted with good knowledge. A good mother's knowledge can be influenced by her level of education and information obtained from various media and health workers. (Astuti et al., 2016)

Education can have an impact on a mother's knowledge. The higher the education the mother has, the more she understands

the benefits of colostrum (Egata et al., 2013). Breastfeeding mothers who have extensive information about the benefits of breastfeeding colostrum to babies, thus making mothers happy to give colostrum to their babies. Knowledge heightens one's consciousness, causing one to act according to their knowledge. (Syafaraenan, 2017)

Knowledge in general can shape a person's thinking and affect their daily activities. Similarly, a healthy attitude towards the practice of giving colostrum can be shaped by a high-level understanding of excellent health. In the end, it can encourage people to be able to give colostrum to their babies perfectly. False perceptions of colostrum such as dirty, cloudy and inappropriate for babies. Antibodies and anti-infectives contained in colostrum can help the baby's intestines to grow and develop flora. Mothers who have good enough knowledge can be changed with breastfeeding information collected by mothers. (Khosidah, 2018)

Colostrum has the most antibodies, which protect for the baby when the child's condition is bad, and proteins and minerals such as potassium, sodium and chloride (Bonet et al., 2013). There are more fat-soluble vitamins in the group than water-soluble vitamins. The

good knowledge of this respondent, of course, cannot be separated from the information received by the respondent. This respondent's knowledge can be obtained from various ways such as from books, electronic media such as television and the internet, as well as explanations from the midwife who helped the respondent give birth.

Relationship between Husband's Support and Colostrum

Based on Table.2 bivariate analysis, the results showed that the relationship between the husband's support and colostrum was 88.5%. Support is a moral and material effort given to others to encourage them to carry out their duties.³¹ The presence of a family member helps overcome your presence to inspire the mother to increase her self-confidence and emotions.(Indriani Nasution et al., 2016)

A good husband's support cannot be separated from his attitude. Mothers who get adequate information assistance from their husbands in the form of guidance, instructions, or knowledge relevant to giving colostrum will offer to give colostrum.(Barde et al., 2015). The results of the analysis showed that there was no relationship between partner support and the provision of colostrum, with a p-value of 0.163. Giving perfect colostrum was mostly found in respondents who received their husband's support (81.8.0%) compared to incomplete colostrum given to respondents who did not receive their husband's support (31.3%). This means that the respondent's husband supports his wife more in giving colostrum than those who do not support the activity.

According to the research findings of Roznowski (2020), excellent family support cannot be separated from a positive family attitude. Mothers who get information from their families in the form of guidance, direction, or adequate knowledge about giving colostrum. The magnitude of the role of the family, especially the husband in providing support and motivation to his wife to give colostrum, determines the success of exclusive breastfeeding.(Roznowski et al., 2020)

Many things affect the husband's low support for his wife in giving colostrum. One of these factors is that traditional family patterns still color people's lives. The pattern is a division

where the husband is the breadwinner, while the wife takes care of the family (Alves et al., 2016). The involvement of the family, especially the partner, determines the effectiveness of giving colostrum. The husband's most crucial task is to create an environment and conditions that facilitate breastfeeding. In addition to supporting the needs of mothers such as nutritional needs. The participation of partners, families, and all parties is very important for the success of giving colostrum.(Syafaraenan, 2017)

According to Roesli (2011), the husband's involvement has one of the strongest influences on a mother's decision to breastfeed. The husband believes that breastfeeding is not only the mother's responsibility. The husband plays an important role in the effectiveness of breastfeeding.(Syafaraenan, 2017) The presence of the husband's role in avoiding the stress of breastfeeding mothers can be done by giving neck and muscle massages with warm compresses to stimulate adrenaline which affects the mother's psychology. According to the findings of a study, there was an increase in the amount of colostrum before performing neck massage and breast massage with warm compresses on postpartum mothers.(Kurniati et al., 2019)

Relationship between Exposure to Promotion of Formula Milk and Colostrum

Based on Table.2 bivariate analysis, advertising is a message that is used for notification to others posted in the mass media. Sources of information have a vital impact on a person's attitude or decision to act. Sources of information influence the mother's behavior. Sources of information can influence whether or not colostrum is given, and the role of health workers in providing colostrum information. (Syafaraenan, 2017) Efforts are made by educating family, friends, and close relatives about the importance of breastfeeding colostrum.(Syafaraenan, 2017)

The results of the analysis showed that there was a relationship between exposure to formula milk advertising and the practice of first breastfeeding, p-value 0.002. Giving perfect colostrum was found in respondents who were exposed (81.8%) compared to respondents who had formula milk promotions

that were not exposed (33.9%). The mother's doubts about giving formula milk to her baby and the influence of the mass media with various promotions of the content of formula milk, which in the end the mother decided to give formula milk.(Indrasari et al., 2012)

Exposure to formula milk is shown in various media, both print and electronic (Azad et al., 2018). The number of advertisements that offer various kinds of dairy products with all their advantages can influence mothers to try using formula milk. Mothers who are influenced by milk advertisements think that milk advertisements provide many conveniences coupled with situations that require mothers to leave their babies, namely being left to work outside the home. This is what causes the choice to fall on canned milk which is easy to find on the market with a variety of packaging and advantages

Relationship between Health Worker Support and Colostrum

Based on Table.2 bivariate analysis, the support provided to health professionals by feeding infants with the first breast milk showed up to 92.7%. The support health worker is someone who is influenced by the environment. All actions, words and deeds are disturbed by

the surrounding community. Given the very important position of health workers, health workers participate in fostering awareness of health development. The participation and support of health workers are vital in fostering public awareness.

Research conducted by Indrasari (2012) found a relationship between delivery support and first breastfeeding.(Indrasari et al., 2012) Health workers, both doctors, midwives, and nurses in Dhaka, Pakistan, and other developed countries provide health information about the importance and benefits of colostrum for pregnant women starting from the antenatal visit at the hospital. Some mothers consider colostrum to be a disease and unsafe for babies to consume. The role of health workers is very important in seeking to increase mothers' knowledge about the benefits of colostrum for babies.(Steve Harakeh et al., 2020)

Health professionals play an important role in the effectiveness of first feeding. The importance of the role of health workers in involving babies for the first time with colostrum(Khosidah, 2018) Not all health workers provide information regarding the importance of colostrum for babies.(Bai et al., 2017)

Table. 2 Results of Multivariate Analysis Using Multiple Logistic Regression

Independent variable	B	P value	OR	(95% CI)
Knowledge	2,041	0,001	7,696	2,313 – 25,612
Formula Milk Promotion Exposure	2,519	0,002	12,415	2,853– 54,031
Health Worker Support	2,625	0,002	13,800	1,570 – 121,266
Konstan	-5,820	0,000	0,003	

Table. 2 stated that there are three variables influence the provision of colostrum, namely knowledge, exposure to formula milk promotion and support from health workers who have a relationship in the practice of giving colostrum. There is a relationship between knowledge and colostrum feeding, where mothers who have good knowledge are 7.6 times more likely to do colostrum feeding than mothers with enough knowledge. There is a relationship between exposure to formula milk and colostrum feeding where mothers who do not get exposure to formula milk are 12.4 more likely to do colostrum feeding than exposed mothers. There is a relationship of

support between health workers and colostrum feeding where mothers who receive the support of health workers are 13.8 more likely to do colostrum feeding than mothers who do not have support from health workers. This is in line with the research result by (Boucher et al., 2017) stating that some variables relating to colostrum breastfeeding are knowledge, health workers and so on.

CONCLUSION

From the results of this study, it was found that knowledge of postpartum mothers, exposure to information on formula milk and support from health workers had a relationship

with the practice of giving colostrum.

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