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Nutrition Knowledge, Breastfeeding and Infant Feeding Practice of Mothers in Cirebon Regency

Pengetahuan Gizi Ibu, Praktik Menyusui dan Pemberian Makan Bayi di Kabupaten Cirebon

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ABSTRACT

Background: Exclusive breastfeeding should be supported by early initiation of breastfeeding (EIBF), provision of colostrum and not providing pre-lacteal feeding.
Objectives: The study objective was to analyze nutritional knowledge and factors related to breastfeeding and feeding practices of lactating mothers.
Methods: A cross-sectional study was conducted in March–November 2020 in Sibubut, Kedungdalem, and Bayalangu Kidul Villages, Cirebon Regency. Study respondents were 44 lactating mothers with under six months infants. Mothers' nutritional knowledge of breastfeeding and breastfeeding/feeding practice were obtained using a validated questionnaire, while the food consumption data of mothers was obtained from two days of 24-hour food recall (weekday and weekend). Spearman's correlation test and Chi-Square analysis were used to analyze the correlation between variables, while the Mann-Whitney test was used to analyze the difference in nutritional knowledge and breastfeeding/infant feeding practice variables based on education level.
Results: Family characteristics (age, mother's education and occupation, household income, parity, family size, and Body Mass Index (BMI) were not correlated with breastfeeding/infant feeding practice (p=0.427; 0.136; 0.481; 0.056; 0.699; 0.241; 0.547, respectively). There was no significant correlation between nutritional knowledge and breastfeeding/infant feeding practice of mothers (p=0.728). No significant difference was found in the nutritional knowledge of breastfeeding (p=0.828) and breastfeeding/feeding practice of infants (p=0.572) between mothers with education > elementary school and ≤ elementary school. More mothers with low education provided pre-lacteal food than mothers with higher education (p =0.046).
Conclusions: The breastfeeding/feeding practice of mothers are still poor regardless of education level. Nutrition education for breastfeeding mothers is required to encourage good breastfeeding/infant feeding practices.

ABSTRAK

Latar Belakang: *Pemberian Air Susu Ibu (ASI) eksklusif perlu didukung dengan praktik menyusui optimal seperti inisiasi menyusu dini (IMD), pemberian kolostrum, dan tidak diberikannya makanan/minuman prelakteal.*
Tujuan: *Penelitian ini bertujuan menganalisis pengetahuan gizi dan faktor-faktor yang berhubungan dengan praktik menyusui/pemberian makan bayi pada ibu menyusui.*
Metode: *Penelitian potong lintang ini dilaksanakan pada Maret–Nopember 2020 di Desa Sibubut, Desa Kedungdalem, dan Desa Bayalangu Kidul, Kabupaten Cirebon. Responden adalah 44 ibu menyusui dengan bayi berumur <6 bulan. Data pengetahuan gizi ibu dan praktik menyusui/pemberian makan bayi diperoleh dengan kuesioner tervalidasi, sedangkan data asupan ibu menyusui diperoleh dari hasil recall asupan 24 jam selama 2 hari (hari kerja dan libur). Analisis korelasi Spearman dan Chi Square dilakukan untuk menguji hubungan antar variabel, sedangkan analisis komparasi variabel pengetahuan gizi dan praktik menyusui/pemberian makan bayi menurut tingkat pendidikan menggunakan uji Mann-Whitney.*
Hasil: *Karakteristik keluarga (usia, pendidikan dan pekerjaan ibu, pendapatan keluarga, paritas, besar keluarga, dan IMT) tidak berhubungan dengan praktik menyusui/pemberian makan bayi (p=0,427; 0,136; 0,481; 0,056; 0,699; 0,241; dan 0,547, berturut-turut). Pengetahuan gizi ibu tidak berhubungan dengan praktik menyusui /pemberian makan bayi (p=0,728). Tidak ditemukan perbedaan nyata dalam pengetahuan gizi tentang ASI (p=0,828) dan praktik menyusui/pemberian makan bayi*

(p=0,572) antara ibu yang berpendidikan tinggi (>sekolah dasar) dan rendah (≤sekolah dasar). Lebih banyak ibu berpendidikan rendah yang memberikan makanan/minuman prelakteal dibandingkan ibu berpendidikan tinggi (p=0,046). ***Kesimpulan:*** *Praktik menyusui/pemberian makan bayi masih kurang baik pada ibu dengan berbagai tingkat pendidikan sehingga diperlukan penyuluhan gizi bagi ibu menyusui untuk mendorong praktik menyusui/pemberian makan bayi yang baik.*

Kata kunci: *Kolostrum, IMD, ASI Eksklusif, Pendidikan Ibu*

INTRODUCTION

Stunting of children under five in Indonesia is still being a health problem that requires special attention and needs to be controlled. Stunting is a malnutrition condition characterized by height- or length-for-age z-score lower than -2 standard deviation.[1] In 2018, 21.9% or 149 million children under five in the world suffered from stunting.[2] The prevalence of stunting under five in Indonesia in 2019 was 27.67%, the highest of the prevalence of other malnutrition problems, while the prevalence in Cirebon Regency was 42.5%.[3] One of the factors causing stunting in Indonesia is the lack of exclusive breastfeeding practice for infants aged 0-6 months.[4]

Exclusive breastfeeding is the practice of breastfeeding without any additional food/drink for babies of age 0-6 months.[5] World Health Organization (WHO) and United Nations Children's Fund (UNICEF) advise all mothers to practice exclusive breastfeeding as recommended. The World Health Assembly (WHA) in 2012 launched six global nutrition targets, one of which mentions the implementation of exclusive breastfeeding globally, reaching 50% by 2012-2015.[6] The results of Basic Health Research (*Riset Kesehatan Dasar*/*Riskesdas*) in 2018 stated that 37.3% of infants in Indonesia have received exclusive breastfeeding, and in Cirebon Regency, infants who received exclusive breastfeeding were 69.1%.[5]

Efforts in providing exclusive breastfeeding need to be supported by optimal breastfeeding practices such as early initiation of breastfeeding (EIBF), colostrum administration, and the absence of prelacteal food/beverages. Exclusive breastfeeding is not only a factor associated with the incidence of stunting in children under five but also can prevent death in children. Previous research has shown that optimized breastfeeding practices can prevent infant mortality by as much as 1.4 million worldwide.[7] In addition, EIBF during the first hour of birth can decrease the risk of the infant getting infections, pneumonia, diarrhea, and even death.[8] Based on previous studies, giving colostrum to infants can reduce infection risk, *stunting*, underweight, and *wasting*.[9]

Exclusive breastfeeding and optimized breastfeeding practices are related to the characteristics and condition of the mother. Research in Brazil in 2018 showed that young mothers were a factor in low breastfeeding practices.[10] In addition, a study in Edinburgh, Scotland in 2017 showed that the family socioeconomic status was positively related to educational status. Therefore, low socioeconomic status could have a negative effect on exclusive breastfeeding.[11] Research in China in 2019 showed that mothers with good employment status could have better working conditions and knowledge to continue to breastfeed their babies and not substitute it with formula milk.[12] Cirebon Regency has high stunting prevalence[4] and low exclusive breastfeeding practice.[5] Moreover, many women in Cirebon still has low education level, i.e. 54% of women aged >15 years never went to school or did not finish elementary school, which might affect their nutritional knowledge.[13] Therefore, low nutritional knowledge and low exclusive breastfeeding practice in Cirebon might contribute to the high prevalence of stunting.

The objective of this study was to analyze the nutritional knowledge and factors related to the practice of breastfeeding/infant feeding of lactating mothers with babies under six months of age in the Cirebon Regency (stunting focus regency). This research is intended to be used as a reference for policy administrators in the making of stunting management programs as well as exclusive breastfeeding and breastfeeding practices programs in Indonesia.

METHODS

This study was conducted in March-November 2020 at three villages, namely Sibubut Village, Kedungdalem Village, and Bayalangu Kidul Village, Cirebon Regency using a cross-sectional study design. The total subjects of this study were 44 breastfeeding mothers. The sample of breastfeeding mothers was drawn purposively with the inclusion criteria as follows: (1) having a baby of 0-6 months old, (2) the baby was healthy and had no congenital abnormality, and (3) mothers aged 18-40 years old. Interviews using a questionnaire were used for collecting data with all subjects having signed an informed consent form.

This study used a validated questionnaire. The nutritional knowledge questionnaire has a Cronbach alpha value of 0.678. Breastfeeding mothers were asked to answer questionnaires related to the mother's characteristics, food consumption, nutritional knowledge regarding breast milk, and breastfeeding/infant feeding practices. The mother's nutritional status is measured through weighing and height measurement, then converted into Body Mass Index (BMI) by categories. The categories are underweight (<18.5 kg/m^2), normal (18.5–24.9 kg/m^2), overweight (25–27 kg/m^2), and obese (>27 kg/m^2).[14] The 24-hour food recall method taken for two days (weekday and weekend) was used to acquire the food consumption data. Then, food consumption data was processed using the Indonesian Food Composition Table and the adequacy level is calculated using the 2019 Indonesian Recommended Dietary Allowance (RDA).

Nutritional knowledge score data (regarding

breastfeeding) and the breastfeeding/infant feeding practice score were obtained based on the correct answer from the questionnaire (true score = 1, false score = 0). The maximum value of nutritional knowledge and breastfeeding/infant feeding practice are then converted into a score of 100. Furthermore, the nutritional knowledge and breastfeeding/infant feeding practice scores were categorized into good for score >80, moderate for score 60–80, and poor for score <60.[15] The patterns of breastfeeding were divided into exclusive, predominant, and partial breastfeeding. An exclusive breastfeeding pattern intends not to give the baby food or beverage including water other than breastmilk. The predominant breastfeeding pattern is not only breastfeeding the baby but also has given water-based drinks such as water or tea. Partial breastfeeding is breastfeeding babies and providing other foods or beverages such as porridge, formula milk, or other kinds of foods before the baby reaches six months old, which is done continually or as a prelacteal food/beverage.[16]

The mother's characteristics were described by using univariate analysis. The *Mann-Whitney* test was conducted to examine the differences in breastfeeding/infant feeding practices based on the mother's education level. The association between a mother's characteristics and breastfeeding/infant feeding practice was analyzed using Spearman's correlation test. Meanwhile, the *Chi-Square* test was used to analyze the correlation between the level of the mother's education and various components of the breastfeeding/infant feeding practices (EIBF, colostrum administration, pre-lacteal feeding, and breastfeeding patterns). All analyses were carried out using SPSS 20.0 software. This study has passed the ethical review of the Research Ethics Commission involving Human Subjects of LPPM-IPB University with No. 295 / IT3. KEPMSM-IPB / SK / 2020.

RESULTS

The characteristics and nutritional status of mothers examined in this study are presented in Table 1. The average age of the subjects was 29 years old, with the youngest and the oldest being respectively fifteen and forty years old. Most subjects (34%) are graduated from elementary school or equivalent. As many as 91% of the subjects are housewives. 64% of the subjects have a monthly household income of more than or equal to IDR 2,196,416.09 (2020 Cirebon Regency minimum wage).

Parity in this study is classified into primiparous and multiparous. Based on Table 1, subjects with multiparous parity (57%) were more than primiparous (43%) with an average number of children of two people. Most subjects (73%) have a family size with a small category (≤4 people).[17] As many as 48% of subjects have normal nutritional status and the average BMI is 25.69 kg/m^2.

Table 1. Distribution of lactating mothers based on characteristics and nutritional status

Characteristics	n = 44	%
Age (Year)		
12–16 (Early Adolescent)	1	2
17–25 (Late Adolescent)	16	36
26–35 (Early Adult)	15	34
36–45 (Late Adult)	12	27
Mean±SD	29.0±7.0	
Education Level		
No education	3	7
Elementary School or equivalent	15	34
Junior High School or equivalent	13	30
Senior High School or equivalent	11	25
University or equivalent	2	5
Occupation		
Trader	1	2
Civil servant/Military/Police	1	2
Housewife	40	91
Teacher	2	5
Household Income per Month		
< IDR 2,196,416.09	28	64
≥ IDR 2,196,416.09	16	36
Mean±SD	2,145,132±1,357,122	
Parity		
Primiparous	19	43
Multiparous	25	57
Mean±SD	2±0.9	
Family Size		
Small	32	73
Medium	12	27
Mean±SD	4.0±1.1	

Characteristics	n = 44	%
Nutritional Status (body mass index in kg/m²)		
Underweight (<18.5)	1	2
Normal (18.5–24.9)	21	48
Overweight (25–27)	9	20
Obese (>27)	13	30
Mean±SD	25.69±4.4	

Table 2 presents the intake and level of energy and nutrient adequacy of the subjects. The average intake of energy, protein, fat, and carbohydrates per day of the subjects are 1,148 kcal, 38.1 g, 36.9 g, and 165.1 g, respectively. According to the Indonesian RDA, the subjects' energy and macronutrients adequacy levels such as protein, fat, and carbohydrates are 45.6%, 47.5%, 57%, and 42.2%, respectively.

Table 2. Average intake and nutrient adequacy level per day

Nutrients	Mean±SD
Intake	
Energy (kcal)	1,148±327.2
Protein (g)	38.1±12.9
Fat (g)	36.9±16.1
Carbohydrate (g)	165.1±49.7
Nutrient Adequacy Level	
Energy (% RDA)	45.6±13.19
Protein (% RDA)	47.5±16.22
Fat (% RDA)	57.0±25.03
Carbohydrate (% RDA)	42.2±13.06

The association between all the subjects' characteristics variables and breastfeeding/infant feeding practices (Spearman's correlation test) is presented in Table 3. There was no significant correlation between the subjects' characteristics and practice of breastfeeding/infant feeding (p>0.05).

Table 3. Factors related to breastfeeding/infant feeding practices

Variables	*R*	*p-value*
Age	-0.123	0.427
Mothers' education	0.228	0.136
Mothers' occupation	0.109	0.481
Household income	0.290	0.056
Parity	0.060	0.699
Family size	0.180	0.241
Body Mass Index	0.093	0.547

Astuti (2013) shows no significant correlation between the mother's age and exclusive breastfeeding practice.[18] Untari (2017) also shows that the mother's age is not significantly correlated with exclusive breastfeeding practice.[19] Based on Arintasari (2016), mothers aged <30 years have a greater proportion of giving exclusive breastfeeding than mothers aged over 30 years, with the ideal age group of 20-34 years, which in that age range the mother's desire to provide exclusive breastfeeding for children is very good.[20]

The breastfeeding process can be influenced by the level of the mother's education. Mothers with a higher level of education will be more receptive to information, including the health information for their infants, such as exclusive breastfeeding. However, the results of the study by Hastuti *et al*. (2015) indicated that there is no significant correlation between the level of mother's education and exclusive breastfeeding behavior.[21]

One of the factors related to breastfeeding is the mother's occupation. Mothers who do not work tend to be easier to apply exclusive breastfeeding behavior compared to working mothers.[22] However, Ramli (2020) reveals no significant correlation between the status of the mother's employment and exclusive breastfeeding behavior. Exclusive breastfeeding practices are also not widely practiced among many not working mothers (90.5%).[23] Wulansari and Pramono (2014) examined the relationship between household income and exclusive breastfeeding behavior. Their research showed that there is no significant correlation between household income and exclusive breastfeeding behavior.[24] However, it is stated that the socioeconomic status of the family can influence the breastfeeding practice. Research conducted by Sulistitowati and Siswantara (2014) showed that breastfeeding could reduce costs.[25] Different results were found by Maulida *et al*. (2015), where mothers with higher incomes have less good exclusive breastfeeding practices. This poor practice is due to the good economic level which triggers mothers to provide complementary foods with breastfeeding to their infants more quickly.[26]

Parity is the number of children born to a mother, both living and dead. Untari (2017) shows that parity is not correlated to exclusive breastfeeding.[19] Nevertheless, parity is related to breastfeeding practice. It is in line with the research of Mabud *et al*. (2014), which states that parity is correlated to exclusive breastfeeding behavior. Parity affects the absorption of information and knowledge about breastfeeding. More childbirth experiences mean that the mother would receive more information and knowledge.[27]

The study conducted by Oktalina *et al*. (2015) showed that family support had a significant correlation with exclusive breastfeeding behavior.[28] Mothers who received adequate support from their families are more likely to be practicing exclusive breastfeeding than mothers who received less support from their families.[29] In addition, other studies demonstrated that the practice of breastfeeding with family support was 3.5 times more successful than those without support.[30]

The nutritional status of breastfeeding mothers is related to nutritional knowledge, energy and protein intake, physical activity, and BMI.[31] In addition, the nutritional status of breastfeeding mothers is also related to the breast milk flow. Manggabari *et al*. (2018) mention several determinants related to breast milk flow, namely nutritional knowledge, maternal nutritional status, dietary consumption patterns, and dietary restrictions.[32] Malnutrition status in breastfeeding mothers can affect the volume of breastmilk released; thus, it can be related to the implementation of this breastfeeding practice. In this study, although only 2% of mothers were found with malnutrition, the average nutrient adequacy of subjects was classified as deficit because it was less than 80%.[33] This needs to be a concern because the intake of breastfeeding mothers increases during the recovery period, as well as how it affects the process of breast milk formation regularly.[34] Research by Radharisnawati *et al.* (2017) in Manado City shows that fulfilling the nutritional intake of breastfeeding mothers is related to the breast milk flow.[35]

The components of breastfeeding/infant feeding practice (EIBF, colostrum, prelacteal feeding, and breastfeeding patterns) were differentiated based on the level of subjects' education (≤Elementary school and >Elementary school) (Table 4). EIBF has been practiced a lot both for subjects with education ≤Elementary school (61.1%) and those with >Elementary school (57.7%). The majority of subjects have given colostrum to their infants. Subjects with education >Elementary school who provide colostrum are 73.1%, while those with education ≤Elementary school are 55.6%. Subjects with education ≤Elementary school who give prelacteal food/beverage to their infants are more (61.1%) than those with education >Elementary school (30.8%).

Most of the subjects with education level ≤Elementary school (55.6%) and >Elementary school (46.2%) had a partial breastfeeding pattern. Meanwhile, the percentage of exclusive breastfeeding patterns among subjects with education level ≤Elementary school (27.8%) was less than those with education >Elementary school (42.3%). The analysis results of the *Chi-Square* test showed that a significant correlation was found between the mother's education level and prelacteal food/beverage feeding ($p < 0.05$), but no significant correlation was found between the level of mother's education with EIBF, colostrum feeding, and breastfeeding patterns ($p > 0.05$).

Table 4. Correlation of breastfeeding/infant feeding practice with education level

Components	Education Level				X^2	p-value
	≤Elementary school (n=18)		>Elementary school (n=26)			
	n	%	N	%		
Early Initiation of Breastfeeding (EIBF)						
Yes	11	61.1	15	57.7	0.051	0.821
No	7	38.9	11	42.3		
Colostrum feeding						
Yes	10	55.6	19	73.1	1.453	0.228
No	8	44.4	7	26.9		
Prelacteal feeding						
Yes	11	61.1	8	30.8	3.991	0.046
No	7	38.9	18	69.2		
Breastfeeding patterns						
Exclusive breastfeeding	5	27.8	11	42.3	1.011	0.603
Predominant breastfeeding	3	16.7	3	11.5		
Partial breastfeeding	10	55.6	12	46.2		

Prelacteal food is food and beverage given to infants before they get breastfed for the first time.[5] In this study, infants were given formula milk as prelacteal feeding. It was found that there was a significant relationship between the feeding of pre-lacteal food/beverage with the level of the mother's education. This outcome is in line with a study in Bangladesh by Sundaram *et al*. (2013) that showed maternal education is related to prelacteal feeding, where high levels of education can help increase the practice of exclusive breastfeeding and reduce prelacteal feeding.[36] Even so, these results differ from research conducted by Triatmaja (2016), which proves that the level of mother's education is not related to prelacteal feeding, with the feeding mostly carried out by mothers with low education.[37] Mothers with higher education levels have better

knowledge to determine the best food for their infants so that the practice of exclusive breastfeeding is more accomplished.[38]

EIBF within one hour after birth is the first step in implementing exclusive breastfeeding. This study cannot prove a significant correlation between EIBF and the mother's education level. This study's outcomes are consistent with studies in Ethiopia and Kuwait, which show that there is no association between a mother's education level and EIBF. However, other factors such as the sex of the baby, birth weight, and medical data such as a method of delivery have a significant relationship with EIBF.[39,40] Raharjo (2014) also shows that the level of education is not related to EIBF, but the knowledge and attitudes of mothers are significantly related.[41]

Colostrum is the first breast milk released for 2–4 days after giving birth, which contains a lot of antibodies for newborns.[42] Moreover, in supporting the implementation of exclusive breastfeeding practice, colostrum administration can also provide the necessary antibodies for newborns. In this study, colostrum feeding to newborns is not related to the mother's education level. These results are not in line with Maita and Shalihah (2015) research, which shows a relationship between giving colostrum and the education level of mothers.[43] The study by Ayunsari *et al.* (2013) also showed a significant correlation between mothers' education level and colostrum feeding, where mothers who had graduated from primary school were 2.036 higher in giving colostrum compared to mothers who did not pass primary education.[44]

This study also could not find the relationship between maternal education and breastfeeding patterns. These outcomes are in line with Fahriani et al. (2014), in which the level of the mother's education is not associated with exclusive breastfeeding behavior.[45] This can happen because even though the level of mothers' education is low, they would still seek knowledge and information related to breastfeeding through the internet and social media. However, Lindawati (2019) proves that a significant relationship is found between mothers' education level and exclusive breastfeeding behavior, with the higher mothers' education, the more likely they are to know the benefits of breastfeeding.[46]

Data on breastfeeding knowledge and practice of breastfeeding/infant feeding are presented in Table 5. The average score of knowledge regarding breastfeeding in subjects with education ≤Elementary school is 78.3 (moderate category) and for subjects with education >Elementary school, the score is 80.8 (good category). No significant difference was found between the two education groups regarding their nutritional knowledge scores (p>0.05). Meanwhile, the score for the practice of breastfeeding and infant feeding for subjects with education ≤Elementary school is 59.7, and the score for those who are >Elementary school is 67.3 (p>0.05). Most subjects have poor scores regarding breastfeeding and infant feeding practices.

Table 5. Mothers' nutritional knowledge and breastfeeding/infant feeding practice scores

Category	Breastfeeding/infant feeding practice (n(%))			p-value
	Good (>80)	Moderate (60–80)	Poor (<60)	
Nutritional knowledge				
Good (>80)	10 (22.7)	6 (13.6)	12 (27.3)	0.728
Moderate (60–80)	6 (13.6)	2 (4.5)	6 (13.6)	
Poor (<60)	0	1 (2.3)	1 (2.3)	
Mean±SD	92.9±4.17	63.9±4.17	40.1±10.69	

There were 10 subjects (22.7%) who have good nutritional knowledge and good breastfeeding/infant feeding practice Based on the Chi-Square test, no significant correlation was found between mothers' nutritional knowledge and breastfeeding/infant feeding practice (p>0.05). This finding is in line with a study by Alimuddin *et al.* (2017) who also found no association between mothers' knowledge and exclusive breastfeeding practice.[47] Husnayain *et al.* (2021) also stated there was no correlation between mothers' knowledge of breastfeeding and exclusive breastfeeding practice.[48] However, Diana and Adi (2019) showed a significant correlation between breastfeeding knowledge and exclusive breastfeeding practice.[49] Mothers' knowledge of breastfeeding is an important factor in increasing exclusive breastfeeding practice but understanding and application of the breastfeeding practice are still poor among some mothers.

Table 6. Mothers' nutritional knowledge and breastfeeding/infant feeding practice scores based on the education level

Category	Education Level				p-value
	≤Elementary school (n=18)		>Elementary school (n=26)		
	n	%	n	%	
Nutritional knowledge					
Good (>80)	12	66.7	16	61.5	
Moderate (60–80)	5	27.8	9	34.6	
Poor (<60)	1	5.6	1	3.8	
Mean±SD	78.3±17.57		80.8±12.62		0.828

Category	Education Level				p-value
	≤Elementary school (n=18)		>Elementary school (n=26)		
	n	%	n	%	
Breastfeeding/infant feeding practice					
Good (>80)	5	27.8	11	42.3	
Moderate (60–80)	4	22.2	5	19.2	
Poor (<60)	9	50	10	38.5	
Mean±SD	59.7±23.69		67.3±25.99		0.572

No significant score difference was found between mothers with low and high education in knowledge and practice. The outcomes of this study are similar to those of Pitaloka *et al*. (2018), namely that low or high levels of education are not associated with exclusive breastfeeding practice.[50] Even so, in a research conducted in Bangladesh, mothers with higher levels of education would provide colostrum to their infants because they had better knowledge about breastfeeding compared to mothers with low education.[51] The mother's education level plays a role in influencing nutritional knowledge and breastfeeding/infant feeding practice. Mothers who have formal education are more open to information about exclusive breastfeeding through various media that can contribute to exclusive breastfeeding practice.[52]

Breastfeeding of infants aged 0—6 months is essential for their growth and development since their gastrointestinal tract has not been developed well. Mothers' knowledge of breastfeeding will help them to understand the importance of breastmilk and its impact on the growth and development of their infants.[53] Information and comprehension on breastfeeding practice is important to be given since pregnancy, especially information on EIBF and colostrum. This information will support optimal exclusive breastfeeding practice since birth.[54]

The strength of this study is we could show the breastfeeding/feeding practice of lactating mothers with low socioeconomy who live in the stunting focus area. This study signifies that regardless of their educational level, most mothers had poor breastfeeding/feeding practices. This implicates that other factors, such as culture, family support from husband and extended family, and access to health care services and nutrition information might contribute to the poor practice. Unfortunately, we did not assess these other factors, which makes it the limitation of our study.

CONCLUSION

Mother characteristics and the nutritional status of breastfeeding mothers were not significantly related to the breastfeeding or infants feeding practice aged 0-6 months. No significant difference was found between the nutritional knowledge on breast milk and breastfeeding or infants feeding practice aged 0-6 months for mothers with different educational levels. However, more mothers with less education than Elementary school provided prelacteal food than mothers with higher education ($p < 0.05$). Nutrition education for breastfeeding mothers needs to be carried out with adapting to the mothers' education level to encourage good breastfeeding/infant feeding practices.

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CONFLICT OF INTEREST AND FUNDING DISCLOSURE

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