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Article

Association Between Mother Factors With Prelacteal Feeding Practice To Newborn In Working Area Of Air Dingin Primary Health Center 2017

Yunita Chairani[1], Yuniar Lestari[2]*

[1] Bachelor of Midwifery Program Faculty of Medicine Andalas University, Niaga, Padang, Indonesia
2 Department of Public Health Science Faculty of Medicine Andalas University, Perintis Kemerdekaan, Padang, Indonesia

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CORRESPONDENCE

Phone: 081261692823
E-mail: yunitachairani2@email.com

A B S T R A C T

The maintenance of infant health can be done by early and exclusive breastfeeding. However, exclusive breastfeeding has not been achieved. This may be due to the administration of prelakteal foods. Prelacteal feeding practice define as administration of food/drink despite of breastmilk without indication to newborn during the first three days without any medical indication. The purpose of this study is to determine the association between maternal factors with prelakteal feeding to newborns in the working area of Air Dingin Primary Health Center. This study was an analytical study with cross sectional design with a sample of mothers who have babies aged 0-12 months in the working area of Air Dingin Primary Health Center. This study was conducted from November 2016 to October 2017. Data will analyze using chi square analysis ($p < 0.05$). A total of 63% of mothers administrated prelakteal foods. The result revealed p-value between prelakteal feeding and maternal knowledge ($p = 0,03$), parity (0,037) and mother's job status ($p = 0,771$). There was a significant relationship between maternal knowledge and parity with prelakteal feeding. It is necessary to provide information to the mother by health workers and to increase mother awareness to get information from KIA book. As well as a concern on primipara mothers.

I. INTRODUCTION

One of nation's welfare indicator is seen from Infant Mortality Rate (IMR) which in 2030 will target to decline the number of neonatal deaths to 12 per 1,000 live births (UN, 2017). Effort that can be taken is to do baby health maintenance with early and exclusive breastfeeding (Mulyani, 2013).

Target of exclusive breastfeeding (80%) has not been achieved either in Indonesia (42%), West Sumatra (62.6%) and in Padang City (70.74%) with lowest achievement from 2013-2015 in Air Dingin Public Health Center (47.9 %, 52.6% and 53.75%) (West Sumatera Health Office, 2015 and Padang Health Office, 2014, 2015 , 2016). One of the factors that affecting the failure of exclusive breastfeeding is the administration of prelacteal food (Patil, 2015 and Nguyen, 2016). Prelacteal food is food or drink despite of breast milk given to infants in the first three days after birth without medical indication and belonging to predominant breastfeeding (Suhardjo, 2010 and Ministry of Health, 2014). Prelacteal feeding is usually relates with culture and beliefs (Watson, 2013).

The most common prelacteal foods in Indonesia are formula milk (82.6%), water (11.9%) and honey (11.7%) (Kemenkes RI, 2013). Several reasons for administrate prelacteal feeding are breastmilk has not come out (32.6%), breastmilk is not enough (19.8%), the advice from parents or family (12%), breastmilk does not exist (7%) and other reasons (2%) (Oktaria, 2012). Prelacteal feeding increases the risk of diarrhea, impairs growth of bowel function and leads to early allergies (Lamberti 2011 and Roesli, 2012). Also can interrupt the breastfeeding process further because the baby will have difficulty to suck milk (Sundaram, 2013). Baby is also full sooner, rarely suckle, and milk production is reduced, so the mother loses self-confidence and begins to stop breastfeeding the baby (Mulyani, 2013 and Novianti , 2013).

Maternal factors can affect prelacteal feeding. Maternal factors are mother's knowledge, parity and job status (Oktaria, 2012; Rohmin, 2015 and Triatmadja, 2016). Prelacteal foods may be administered with some maternal medical indications such as HIV, severe illness, certain drug consumption and infants medical indications such as special milk needs or special measures that listed in the explanation of Indonesian government regulations No. 33 about Exclusive Breastfeeding (2012).

This study aims to determine the relationship between maternal factors with prelakteal feeding in newborns in the working area of Air Dingin primary health center 2017.

II. METHODS

This research was a quantitative research with cross sectional design. Conducted in the working area of Air Dingin Primary Health Center, Padang. There were 73 mothers with 0-12 month babies who became sample of this study that meet inclusion criteria and have no exclusion criteria, taken by cluster proportional random sampling. Data collected by interviewed using valid and reliable questionnaire. Data analyzed in univariate and bivariate by using chi-square analysis ($p<0,05$).

III. RESULT

Univariate Analysis

Prelacteal Feeding

Table 1 Distribution of Prelacteal Feeding in the Working Area of Air Dingin Primary Health Center in 2017

Prelacteal Feeding	f (n = 73)	%
Given	46	63.0
Not given	27	37.0

Table 2. Type of Prelakteal Foods

Type	f (n = 64)	%
Formula milk	38	59.4
Water	14	21.9
Honey / honey + water	6	9.4

Tea	2	3.1
Coffee	3	4.7
Others	1	1.6

In this study, 63% of mothers administrated prelacteal foods to their babies (Table 1). The most common types of prelacteal foods are formula milk (59.4%), water (21.9%) and honey (9.4%) (Table 2).

Table 3. Who administrates Prelakteal Foods

Which gives	f (n = 75)	%
Mother	27	36.0
Husband	4	5.3
Close family		
Grandmother	14	18.7
Aunt	5	6.7
Health workers		
Midwife	14	18.7
Nurse	7	9.3
Doctor	4	5.3

Table 4. Reasons for Prelakteal Feeding

Reason	f (n = 74)	%
Breast milk does not exist	14	18.9
Breast milk is not enough	18	24.3
Babies do not want to breastfeed	3	4.1
Baby Crying Continuesly	3	4.1
Breast problems		
Inverted nipple	2	2.7
Big nipple	1	1.3
Suggest a friend	2	2.7
Healthcare advice	6	8.1
Others		
Difficult to move post SC	4	5.4
After administration of Formula Milk	3	4.1
For baby's health	2	2.7
Prevent baby from seizures	1	1.3
Parental advice	15	20.3

A total of 36% of prelacteal foods in this study were administered by the mother, there are also provided by health workers (33.3%) or family (25.4%). Family member that gave prelacteal food the most was grandmother (18.7%) (Table 3). The most prevalent reason for prelacteal feeding was because according to mother, the milk was not enough (24,3%), recommendation from mother's parents (20,3%) and mother's milk did not exist at the beginning of breastfeeding (18,9%) (Table 4).

Independent Variable

Table 5. Distribution of Independent Variable

Variables	f (n =73)	%
Mother's knowledge		
Poor	43	58.9
Good	30	41.1
Parity		
Primipara	26	35.6
Multipara	47	64.4
Mother's job status		
Worked	19	26.0
Not worked	54	74.0

In this study, 58.9% of mothers have a poor level of knowledge (score <76%) (Table 5). A total of 64.4% of mothers still answered incorrectly when asked definition of exclusive breastfeeding and as much as 64.4% of mothers do not know the name of first milk and 63% do not know the meaning of colostrum. There are also 50.7% of mothers who do not know the effects of prelacteal feeding (Table 6). In this study, 74% of respondents are not working and a total of 64.4% respondents are multipara.

Table 6 Mother's Knowledge

Knowledge Questions	Correct		Wrong	
	f	%	f	%
Exclusive breastfeeding				
Definition of exclusive Breastfeeding	26	35.6	47	64.4
Benefits for baby	73	100	0	0.0
Benefits for mother	72	98.6	1	1.4
Colostrum				
Name of first milk	26	35.6	47	64.4
Definition of colostrum	27	37.0	46	63.0
The benefits of first milk	67	91.8	6	8.2
Prelakteal Food				
Food for babies ages 0-3 days	51	69.9	22	30.1
Time to start feeding despite of breast milk	59	80.8	14	19.2
Impact of prelakteal feeding	36	49.3	37	50.7

Bivariate Analysis

Table 7. Bivariate analysis

Variables	Prelacteal Feeding				Total		95% CI	*p-value*
	Given		Not Given					
	F	%	f	%	f	%		
Mothers know-ledge								
Poor	32	74.4	11	25.6	43	100	3,325 (1,233 - 8,964)	0.03
Good	14	46.7	16	53.3	30	100		
Parity								
Primi para	21	80.8	5	19.2	26	100	3,696 (1,19-11,45)	0.03
Multi para	25	53.2	22	46.8	47	100		
Mother's job Status								
Work	13	68.4	6	31.6	19	100	1,379 (0.454 - 4,189)	0.77
Does not work	33	61.1	21	38.9	54	100		
Total	46	63.0	27	37.0	73	100		

Based on the results of the analysis, there was a significant relationship between prelacteal feeding with mothers knowledge and parity. However, there was no significant relationship between mothers job status with prelacteal feeding (Table 7).

IV. DISCUSSION

The high rate of prelacteal feeding in the working area of the Air Dingin Primary Health Center is worrying. The high rate of formula feeding as prelacteal food can be caused by formula milk advertisement and health workers who take the initiative to administrated formula milk or promoted and gave formula milk to mother when discharged after giving birth (Sutayani, 2012 and Rahmawati, 2016). In this study there was one respondent who was given formula milk while discharged from the health service.

Poor level of mother's knowledge in this study may be caused by lack of information about exclusive breastfeeding, colostrum and prelacteal feeding by health workers. Knowledge or cognitive domain is a very important domain to form a person (overt behavior) (Fitrayeni, 2015). It can also be caused by a lack of awareness of mothers to seek and obtain information about it.

Mothers with poor knowledge are more likely to provide prelacteal foods than well-informed mothers. The result of this study was in line with Rohmin's study (2015) in Palembang City that mothers with poor knowledge were more likely to provide prelacteal foods. In this study, almost most of the mothers do not know the definition of Exclusive breastmilk and colostrum.

According to the mother, breastfeeding can be interspersed with formula milk or water. The most reason to provide prelacteal feeding in this study is because the mother felt that breast milk is not sufficient for infants. This is due to a lack of mother's knowledge about breast milk production in the first three days.

In addition, mother is also not know the impact of prelacteal feeding, and mothers do not felt wrong when administrating prelacteal food to the baby. Mother's poor knowledge and the existence of the habit or belief in the certain foods become the causes of prelacteal feeding (Oktaria, 2012). Maternal knowledge about breastfeeding and prelacteal feeding is influenced by information exposure and the role of health workers in providing health education (Rahmawati, 2016). Midwives have roles and functions in midwifery care in both individuals, groups, and communities (Fitrayeni, 2015).

Therefore, it is necessary to increase the role of health workers in improving mother's knowledge about exclusive breastfeeding, colostrum and prelacteal feeding, and increase mother awareness to seek health information related to breastfeeding in KIA books.

Prelacteal feeding by primiparous mothers was more likely (80.8%) than multiparous mother (53.2%) (Table 7), this was in line with Triatmaja (2016) and Sundaram (2013) studies which stated that multiparous mothers were more likely not to provide food/drinks despite of breast milk to infants during the first three

days ($p < 0.05$), because when they experiencing breastfeeding problems in the first three days after delivery, the multiparous mother was not panicked and not end up administrating prelacteal feeding to their baby. Primiparous mothers usually have fewer breastfeeding experiences than multiparous mothers. Usually primiparous mothers will ask the nearest person while having problems while breastfeeding and there were families who suggested to administrate prelacteal food to overcome the problem as well so the baby's weight can be rised fast and get fat (Lanamana, 2014).

The influence of the closest person to mothers with the decision to provide prelacteal food should be considered. Health workers can provide information not only to mothers but also to closest persons to mothers such as husbands or mothers' parents when mothers did antenatal visits. Health workers can also improve the focus of ANC services and information on primiparous mothers.

There was no significant different of prelacteal feeding prevalance between worked mothers and not worked mothers. Although there was no association, worked mother administrated prelacteal feeding more than unworked mother (68.4% : 61.1%). This was because in worked mothers the family income is higher, so the family's ability to buy formula milk is also higher. This can be seen from the type of prelacteal food that most given in this study is formula milk.

The results of this study were in line with the Triatmaja (2016) study in Bogor which found that prelacteal feeding by mothers who worked more than mothers did not work. Mothers will work more to increase family income, so this can cause mothers to start feeding despite of breast milk to their babies. While unworked mothers have more time with their baby, so it tends not to provide food/drinks despite of breast milk within the first 24 hours to the baby (Asemahagn, 2016). The tendency of mothers to work in providing prelacteal foods can be attributed to high levels of family income on working mothers, which increases the purchasing ability of families.

V. CONCLUSION

Prelacteal feeding is related to mother's knowledge and parity. Therefore it is necessary to increase the provision of information about EIB, exclusive breastfeeding, problems while breastfeeding and prelacteal feeding to the community, especially pregnant women who visit ANC and become a concern on primipara mother and mother's family.

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REFERENCES

Asemahagn, M. A. Determinants of Exclusive Breastfeeding Practices Among Mothers In Azezo District Northwest Ethiopia. *International Breastfeeding Journal* 11(22):1-7

Dinas Kesehatan Kota Padang. 2014. *Profil Kesehatan Tahun 2013*. Dinkes Kota Padang. Padang

_____. 2015. *Profil Kesehatan Tahun 2014*. Dinkes Kota Padang. Padang

_____. 2016. *Profil Kesehatan Tahun 2015*. Dinkes Kota Padang. Padang

_____. 2015. *Profil Kesehatan 2014 Provinsi Sumatera Barat*. Dinkes Kota Padang. Padang

Fitrayeni, Suryati dan Faranti, R. M. 2015. Penyebab Rendahnya Kelengkapan Kunjungan Antenatal Care Ibu Hamil Di Wilayah Kerja Puskesmas Pegambiran. *Jurnal Kesehatan Masyarakat Andalas* 10(1) : 101-107

Kementerian Kesehatan RI. 2014. *Riskesdas 2013 dalam Angka*. Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI. Jakarta

_____. *Infodatin Pusat Data dan Informasi Kementerian Kesehatan RI*. Kemeterian Kesehatan RI. Jakarta

_____. 2016. *Profil Kesehatan Indonesia Tahun 2015*. Kementerian Kesehatan RI. Jakarta

Lamberti, L. M., Walker, C. L. F., Noiman, A., Victoria, C dan Black, R. E. 2011. Breastfeeding and The Risk For Diarrhea Morbidity and Mortality. *BMC Public Health* 11(3):S15

Lanamana, M. E., Acihayati, Y. P dan Susilo, W. H. 2013. *Faktor-faktor yang Berhubungan Dengan Pemberian Makanan Prelakteal Serta Implikasinya Terhadap Berat Badan Bayi Usia 0-6 Bulan di Puskesmas Atambua Selatan 2013.* S1 Keperawatan Jalur A Sekolah Tinggi Ilmu Kesehatan Sint Carolus. Jakarta

Mulyani, N. S. 2013. *ASI dan Pedoman Ibu Menyusui*. Nuha Medika. Yogyakarta

Novianti dan Rizkianti, A. 2013. Pemberian Asupan Prelakteal Sebagai Salah Satu Faktor Kegagalan ASI Eksklusif Pada Pekerja Buruh Industri Tekstil di Jakarta. *Jurnal Kesehatan Reproduksi* 5(1):23-26

Nguyen, T. T., Withers, M., Hajeebhoy, N dan Frongillo, E. A. 2016. Infant Formula Feeding at Brith Is Common and Inversely Associated with Subsequent Breastfeeding Behavior in Vietnam. *The Journal of Nutrition Community and International Nutrition* 7(2) : 2102-2108

Oktaria, M. 2012. *Hubungan Pengetahuan Ibu Tentang ASI Eksklusif, Inisiasi Menyusui Dini, Tempat Persalinan dan Penolong Persalinan Terhadap Pemberian Makanan Prelakteal Pada Bayi 0-5 Bulan di Wilayah Puskesmas Balai Agung Kota Sedayu Kabupaten Musi Banyuasin Tahun 2012*. Fakultas Kesehatan Masyarakat Universitas Indonesia. Jakarta

Patil, C. L., Turab, A., Ambikapathi, R., Nesamvuni, C., Chandyo, R. K., Bose, A., Islam, M. M., Ahmed, A. M. S., Olortegui, M. P., De Moraes, M. L dan Caulfield, L.E. Early Interruption of Exclusive Breastfeeding : Result From Ther Eight Country MAL-ED Study. *Journal of Health, Population and Nutrition* 34(10) : 1-10

Penjelasan Peraturan Pemerintah Republik Indonesia Nomor 33 Tahun 2012 *Pemberian Air Susu Ibu Eksklusif*. 1 Maret 2012. Tambahan Lembaran Negara Republik Indonesia Tahun 2012 Nomor 5291. Jakarta

Rahmawati, W., Wirawan, N. N., Wilujeng, C. S., Fadhilah, E., Nugroho, F. A., Habibie, I. Y., Fahmi, I dan Ventyaningsih, A. D. I. 2016. Gambaran Masalah Gizi pada 1000 HPK di Kota dan Kabupaten Malang, Indonesia. *Indonesian Journal Of Human Nutrition* 3(1) : 20-31

Roesli, U. 2012. *Panduan Inisiasi Menyusui Dini Plus ASI Eksklusif*. Pustaka Bunda. Depok

Rohmin, A., Malahayati, N dan Hartati. 2015. Faktor-faktor yang Mempengaruhi Praktik Pemberian Makanan Prelakteal Pada Bayi Baru Lahir di Kecamatan Bukit Kecil Kota Palembang. *Jurnal Kesehatan* 4(2) : 183-189

Suhardjo. 2010. *Pemberian Makanan Pada Bayi dan Anak*. Edisi keempat. Kanikus. Yogyakarta

Sundaram, M. E., Labrique, A. B., Mehra, S., Ali, H., Shamim, A. A., Klemm, R. D. W., Junior, K. P. W dan Christian, P. 2013. Early Neonatal Feeding Is Common and Associated with Subsequent Breastfeeding Behavior in Rural Banglasdesh. *The Journal Of Nutrition Community and International Nutrition* 143(1) : 1161-1167

Sutayani, D. P. 2012. *Hubungan Pemberian Makanan Prelakteal dengan Proses Menyusui di Wilayah Kerja Puskesmas Rowotengah Kecamatan Sumberbaru Kabupaten Jember*. Ilmu Keperawatan Universitas Jember. Jember

Triatmaja, N. T. 2016. Faktor-faktor yang Berhubungan dengan Pemberian Makanan Prelakteal : Studi Cross Sectional di Kota Bogor Tahun 2015. *Jurnal Wiyata* 3(2) : 214-222

United Nations. 2017. *Goal 3: Ensure Healthy Lives and Promote Well-being for All at All Ages*. http://www.un.org/sustainabledevelopment/health/. 19 Juni 2017 (10:00)

Watson, R. R., Grimble, G., Preedy, V. R dan Zibadi, S. 2013. *Nutrition In Infancy*. Volume 1. Humana Press : London