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Growing Exclusive Breastfeeding on Relationships and Development in Infants Age 6-12 Months

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ABSTRACT

Breast milk is the single best food for babies aged 0 6 months. For this reason, exclusive breastfeeding for infants aged 0-6 months is the right step to maximize growth and development in infants aged 0-6 months and growth and development at later ages, because babies get proper nutrition and reduce the risk of infectious diseases that can affect nutritional conditions and growing. This study aims to determine the relationship of exclusive breastfeeding to growth and development in infants aged 6-12 months. This type of research is descriptive analytic with a cross-sectional study approach. The population in this study were all infants aged 6-12 months, namely 1538 infants. Sampling using consecutive sampling technique with a sample size of 56 respondents. The results showed that there was no significant relationship between exclusive breastfeeding and growth based on body weight (p = 1,000) and growth based on head circumference (p = 0.743). There was a significant relationship between exclusive breastfeeding and growth based on body length (p = 0.027) and the development of infants aged 6-12 months (p = 0.013). It can be concluded that exclusive breastfeeding has a significant relationship with growth based on body length and development of infants aged 6-12 months. Therefore, it is expected that breastfeeding mothers always give exclusive breastfeeding to infants aged 0-6 months in order to maximize the baby's growth and development and growth and development at a later age.

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1. Introduction

Toddler period is a golden age, where the most rapid growth and development in the human brain, so toddlers are very open and sensitive in accepting various kinds of learning.

The results of the 2018 Basic Health Research (Riskesdas) reported that the percentage of exclusive breastfeeding only decreased with increasing age of the baby with the lowest presentation in children aged 6 months at 30.2%. The coverage of exclusive breastfeeding in West Sumatra in 2014 was 72.5%, experienced a slight increase in 2015 by 75.2%, while in 2016 it decreased by 54.1%.

Based on data from the Padang city health office, the coverage of exclusive breastfeeding for infants aged 06 months in 2014 was 72.7%, decreased in 2015 by 70.7%, while in 2016, 2017 and 2018 it increased by 72.2%, 74 ,7% and 75,98%. In 2019 the coverage of breastfeeding has reached the set target, which is 80% (Dinkes Kota Padang, 2019).

Based on data from the Padang City Health Office in 2019, it was still found that 6.7% of under-fives were malnourished based on BB/U, 9.6% of under-fives were in the short category and 4.4% of under-fives were underweight (Dinkes Kota Padang, 2019).

2. Research metods

This type of research is an observational study with a cross-sectional design. The population in this study were mothers and infants aged 6-12 months. The research sample was mothers and infants aged 6-12 months who met the inclusion and exclusion criteria. The sampling technique in this study was consecutive sampling, which was looking for mothers who had babies aged 6-12 months who met the inclusion and exclusion criteria until the required number of samples was met.

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3. Results and Discussion

Univariate analysis showed that from 56 respondents the majority of respondents were parents with high school education/equivalent as many as 44 people (78.6%), while in terms of occupation the majority of parents were housewives, namely 52 people (92.9%) and in terms of the sex of the baby, it was found that more than half of the respondents were baby girls, as many as 29 people (51.8%).

No	Exclusive breastfeeding	F	%
1.	Education		
	a. SD/ Sederajat	5	8,9
	b. SMA/ Sederajat	44	78,6
	c. College	7	12,5
2.	Work		
	a. IRT/ Tidak Bekerja	52	92,9
	b. Wiraswasta	2	3,6
	c. PNS	2	3,6
3.	Baby gender		
	a. Male	27	48,2
	b. Female	29	51,8

3.1 Frequency Distribution of Respondents Based on Exclusive Breastfeeding

Univariate analysis can be seen that the number of babies who are not exclusively breastfed is higher than those who are exclusively breastfed.

No	Exclusive breastfeeding	F	%
1.	No exclusive breastfeeding	30	53,6
2.	Exclusive breastfeeding	26	46,4
	Amount	56	100

3.2 Distribution of Respondents Growth Frequency Based on Weight/Age

Univariate analysis showed that the growth of infants based on body weight was almost the same between infants who were exclusively breastfed and not exclusively breastfed, where 3.3% of babies who were not breastfed were included in the category of underweight babies, while the group that was breastfed as a whole showed growth based on body weight included in the normal category.

a. Frequency Distribution of Respondents Development

Univariate analysis showed that as many as 40% of infants who were not exclusively breastfed were in the doubtful development category and only 7.7% of infants who were exclusively breastfed were in the doubtful development category.

No	Development	No exclusive breastfeeding (n = 30)		Exclusive breastfeeding (n = 26)	
		F	%	F	%
1.	Doubtful	12	40	2	7,7
2.	In accordance	18	60	24	92,3

3.3 The Relationship of Exclusive Breastfeeding with the Growth of Infants Age 6 12 months

Bivariate analysis showed that there was no difference in infant growth based on body length/age showing a significant correlation (p = 0.027). Meanwhile, in terms of growth based on head circumference also did not show a significant relationship (p = 0.481).

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Uji Chisquare, Fisher exact test, Uji Cintinuity correction

Breastfeeding	Growth					
	Weight/age		Body lengt/age		Head Circumference	
	Kurus	Normal	Pendek	Normal	Mikrosefal	Normal
No exclusive breastfeeding (n=30)	1	29	14	16	6	24
Exclusive breastfeeding (n=26)	0	26	4	22	3	23
P	1,000		0,027		0,481	
OR	1,897 (1,477-2,436)		4,813 (1,332-17,384)		1,917 (0,428-5,584)	

3.4 The Relationship of Exclusive Breastfeeding with the Development of Infants Age 6 12 months

Bivariate analysis showed that developmental problems tended to be dominated by infants who were not exclusively breastfed. Based on the results of statistical analysis, the value of p = 0.013 (p <0.05). Based on the results of further analysis obtained OR = 8.

Uji Chisquare, Uji Fisher exact test

Breastfeeding	Development		P	OR
	Doubtful	In accordance		
No Exclusve Breastfeeding (n = 30)	12	18	0,013	8 (1,588-40,299)
Exclusive breastfeeding (n = 26)	2	24		

3.5 Discussion

Bivariate analysis showed that more than half of the respondents were infants who were not exclusively breastfed, of which 56 infants were sampled as many as 30 infants (53.6%) were infants who were not exclusively breastfed. Babies who were given exclusive breastfeeding were 26 babies (46.4%).

a. Bivariate Analysis

The Relationship of Exclusive Breastfeeding with the Growth of Infants Age 6 12 months

Bivariate analysis showed that the relationship between exclusive breastfeeding and the growth of infants aged 6-12 months which showed a significant relationship on body length indicators, while growth on weight and head circumference indicators did not show a significant relationship.

The Relationship of Exclusive Breastfeeding with the Development of Infants Age 6 12 Months

The development of infants aged 6-12 months in terms of exclusive breastfeeding in this study shows that developmental problems tend to be dominated by infants who are not exclusively breastfed.

4. Conclusion

More than half of the respondents were babies who were not exclusively breastfed. There is no relationship between exclusive breastfeeding and growth based on body weight and head circumference and there is a significant relationship between exclusive breastfeeding and growth based on body length. Exclusive breastfeeding has a significant relationship with the development of infants aged 6-12 months.

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