

Original Article

Comparative Study of Residence Demography With The Duration of Exclusive Breastfeeding in Infants

(Secondary Analysis: Indonesia Demographic and Health Survey Data (IDHS) 2017)

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ABSTRACT

The duration of breastfeeding is influenced by sociodemographic, biomedical, and psychosocial factors. This study aims to analyze the comparison of the duration of breastfeeding for 6-month infants between rural and urban areas in Indonesia using data from the Indonesian Demographic and Health Survey (IDHS) 2017. This study analyzes secondary data from the 2017 Indonesian Demographic and Health Survey (IDHS) with cross-sectional study design and sample of namely infants aged 6 months as many as 15316 subjects. The independent variable in this study is the sociodemographic characteristics of the place of residence (rural/urban). The dependent variable in this study is the duration of breastfeeding. Data processing and analysis was carried out using the Chi Square Test. Chi square test showed the value of $p = 0.00$ ($p < 0.05$). This shows that there is a significant difference between the duration of exclusive breastfeeding in urban and rural areas. There are differences in the demographic factors of rural (rural) and urban (urban)

residence with the duration of exclusive breastfeeding for 6 months for infants.

Key words : breastfeeding, demography, residence

INTRODUCTION

Proper feeding is very important for the growth and development of children. Proper feeding can also prevent malnutrition in children. In this regard, UNICEF and WHO have recommended exclusive breastfeeding for 6 months, followed by solid food when the child is 6 months old, and breastfeeding until the child is 2 years old.¹ The duration of breastfeeding is related to various factors. short-term and long-term impacts. Breastfeeding has been reported to be associated with child intelligence and economic loss globally.² Longer duration of breastfeeding has been reported to be associated with reduced incidence of Acute Respiratory Infections (ARI), reduced incidence of diarrhea, constipation, and fever in children.³ Benefits of longer breastfeeding for mothers has also been reported by various previous studies.

Breastfeeding is proven to improve pancreatic cell function in mothers with a history of Gestational Diabetes Mellitus (GDM)).⁴

The duration of breastfeeding is a health practice that is influenced by sociodemographic, biomedical, and psychosocial factors. Living in a non-slum environment is associated with lower duration of breastfeeding and higher use of formula milk.⁵ Rural urban characteristics are associated with duration of breastfeeding. Previous research reported that the average duration of breastfeeding for children living in rural areas in Asia was significantly higher than for children living in urban areas (14.8 months: 12 months).⁶ The 2017 IDHS data shows that the median duration of breastfeeding in Indonesia is 21.8 months. This figure is still below the standard reference of UNICEF and WHO regarding the recommended duration of breastfeeding, which is 24 months (2 years). It is not known what determinants are related to the duration of breastfeeding in Indonesia. Until now, research on breastfeeding only on breastfeeding has not reached the duration of breastfeeding, therefore researchers are interested in exploring more information about the duration of breastfeeding which will be associated with demographic factors.

METHODS

The design of this research is a literature study using secondary data from the 2017 Indonesian Demographic and Health Survey with crosssectional study design . This survey is a national-scale survey that is carried out regularly every 5 years. The population in this study were mothers with 6-month-old infants in both rural and urban areas as many as 15316 respondents. Respondents who answered they did not know, gave empty/incomplete or missing answers were excluded from this study. The number of samples included in this study were 15316 samples. The independent variables are rural residence and urban residence. The dependent variable is the duration of breastfeeding.

RESULTS

Based on Table 1, it shows that the most maternal age category is in the age group < 20 years in urban areas as well as in rural groups, while the most occupational category of mothers is not working in urban areas as well as in rural areas. The most education categories are Senior High School in urban areas and Elementary School in rural areas

Based on table 2, it shows that the largest percentage in rural areas with the duration of breastfeeding is 55.2%, while the smallest percentage in the duration of never breastfeeding is 6.3%. Based on table 3, it shows that the largest percentage in urban areas with the duration of breastfeeding is 56.7%, while the smallest percentage is in never breastfeeding (4.8%)

Based on table 4, it shows that the largest percentage is in urban and rural areas with the duration of breastfeeding, while the smallest percentage is in urban and rural areas with never breastfeeding. The duration of breastfeeding in both urban and rural areas experienced the same percentage. The results of the chi square test showed the value of $p = 0.00$ ($p < 0.05$). This shows that there is a significant difference between the duration of exclusive breastfeeding in urban and rural areas.

No	variable	Dwelling				
		Urban		Rural		
		n	%	n	%	
1	Mothers age	<20 Y.O	6035	39,4	9281	60,6
		20-35 Y.O	4502	29,4	3094	20,2
		>35 Y.O	4779	31,20	2941	19,2
2	Occupation	No Occupation	6205	40,5	4074	26,6
		Professional	1592	10,4	459	3
		Office Employee	2343	15,3	1305	8,5
		Commerce	2052	13,4	1623	10,6
		Farming (Own land)	107	0,7	3721	24,3
		Laborer	1654	10,8	3369	22
		Service	1363	8,9	765	5
3	Mothers Education	Elementay School (ES)	2557	16,7	4074	26,6
		Junior High School (JHS)	2389	15,6	3936	25,7
		Senior High School (SHS)	5284	34,5	3185	20,8
		University	4778	31,2	995	6,5
		None	308	2	3126	20,4

Table 2 Duration of exclusive breastfeeding for 6 months in infants in rural areas

Duration of exclusive breastfeeding	Rural	%
Ever	8456	55,2
Never	963	6,3
Still	5897	38,5

Table 3 Duration of exclusive breastfeeding for 6 months in infants in urban areas

Duration of exclusive breastfeeding	Urban	%
Ever	8686	56,7
Never	733	4,8
Still	5897	38,5

Table 4 Relationship between rural and urban residence with duration of exclusive breastfeeding for 6 months for infants

Duration of exclusive breastfeeding	Rural	%	Urban	%	p value
Ever	8456	55,2	8686	56,7	0,00
Never	963	6,3	733	4,8	
Still	5897	38,5	5897	38,5	

DISCUSSION

1. Duration of Breastfeeding

The duration of breastfeeding is the highest duration of exclusive breastfeeding for 6 months to infants in rural areas, this can happen because rural or rural communities have not considered the importance of 6 months exclusive breastfeeding and the existence of daily work activities is an important factor when viewed from work. Failure to maintain breastfeeding is related to insufficient milk production and the heavy workload of mothers.⁵ Even though their work status is not working, it is only when they are not working for less than 6 months, then before 6 months the mothers will return to work as Farmers / Farm laborers to earn income. This has a positive correlation when viewed from the work of mothers in the village, namely being a farmer / farm laborer who works with a heavy burden.

The duration of breastfeeding is the highest duration in exclusive breastfeeding for 6 months to infants in urban areas. This happens because the knowledge of breastfeeding mothers in urban areas is better due to the ease of accessing information and their better education level when compared to breastfeeding mothers in rural areas. This can be proven by the percentage of education in urban areas is better when compared to rural areas. Most education is SHS in urban areas and ES in rural areas. The results of this study are in line with reports from previous studies that there is no

relationship between parents' education and occupation with the duration of breastfeeding.⁶ Research conducted by Laksono et al, 2021 showed that mothers who graduated from elementary school were 1.167 times more likely to perform exclusively breastfeeding compared to mother who never went to school. In addition, those who graduated from junior high school were 1,203 times more likely to exclusively breastfeed compared to mothers with no education records. Meanwhile, mothers who graduated from high school were 1.177 times more likely to appear exclusively breastfeeding compared to those who had no education record. Mothers who graduated from higher education were 1,203 times more likely to exclusively breastfeed compared to mothers who had never been enrolled in school.⁷

2. Differences in the duration of exclusive breastfeeding in urban and rural areas.

The results showed that there was a significant difference between the duration of exclusive breastfeeding in urban and rural areas. Longer duration of breastfeeding (up to 2 years) has been reported to have various long-term and short-term impacts for mothers and babies (related to intelligence, health budget savings, preventing obesity, incidence of infection, and maternal and child health.⁸ This study analyzes factors -factors related to the duration of breastfeeding in Indonesia. Based on the results of the study, it is known that families in Indonesia are very diverse,

especially in terms of sociodemographic aspects. Some are nuclear families, others are extended families. This can be seen based on the characteristics of the mother's and father's age, number of children, and number of family members (table 1) However, these factors were not related to the duration of breastfeeding for 24 month old children in Indonesia.

The duration of breastfeeding for 24 months is more understood by the community as a norm that has been held for generations. The duration of breastfeeding for 24 months has a different concept from exclusive breastfeeding. Mothers who are able or unable to exclusively breastfeed, including mothers who provide pre-lacteal food/drinks and whose breastfeeding is accompanied by other drinks can also provide breast milk until the child is 24 months old. On the other hand, success in implementing exclusive breastfeeding does not entirely support success in the duration of breastfeeding up to 24 months.⁹

Support from the family environment and the environment where they live and work are very important factors in maintaining the duration of breastfeeding up to 24 months. This can be proven by the different types of work from urban and rural areas where in urban areas the main job is as a farmer with a heavy workload and in urban areas the most work is employees with a lighter workload compared to work in rural areas. Support for the work environment in the form of the availability of a breastfeeding room and adequate rest time for breastfeeding/expressing breast milk is associated with a longer duration of breastfeeding for working mothers.⁵ In urban areas with the second highest number of jobs are employees, although the results of the study show that their work status is not working but this is only temporary until you spend 3 months on maternity leave, so when you return to work it will be easy to use breastfeeding room facilities because almost every office has these facilities, of course this will be much different in urban areas where there are almost

no breastfeeding room facilities at the time. nursing mothers work in the fields.

Factors husband and family environment is no less important. When the husband is able to provide support and play a role as a team in child care, it will increase a mother's confidence, having an impact on improving the quality of breastfeeding.⁹ The support of health workers and birth attendants is also a fairly important factor. It is proven that the recommendation and prescription of formula milk from health care providers at the time of delivery or one week after delivery is significantly related to breastfeeding and formula feeding in infants.¹⁰

CONCLUSION AND RECCOMENDATION

The duration of breastfeeding is the highest duration in exclusive breastfeeding for 6 months to infants in rural areas, with a percentage of 55.2%. Duration of breastfeeding is the highest duration in exclusive breastfeeding for 6 months to infants in urban areas, with a percentage of 56.7%. There are differences in the duration of exclusive breastfeeding for 6 months for infants both in rural (rural) and urban (urban) areas.

The exclusive breastfeeding program can be redesigned by considering demographic factors. People in rural areas need programs that encourage in-depth knowledge, attitudes and behaviors about the benefits of exclusive breastfeeding compared to people in urban areas which are better than people in rural areas.

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