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CORRELATION BETWEEN EXCLUSIVE BREASTFEEDING AND STUNTING IN 24 – 59-MONTH-OLD TODDLERS

Reineldis Elsidianastika Trisnawati[1*], Jayanthy Petronela Janggu[2], Dionesia Octaviani Laput[3], Enjelina Juita[4]

[1,2,3,4]DIII Midwifery Study Program, Universitas Katolik Indonesia Santu Paulus Ruteng
* Email correspondence: reineldys@gmail.com

ABSTRAK PEMBERIAN ASI EKSKLUSIF DENGAN KEJADIAN STUNTING PADA ANAK BALITA 24 – 59 BULAN

Latar Belakang: Sampai saat ini masalah stunting masih menjadi masalah utama di beberapa negara miskin dan negara berkembang termasuk Indonesia, sehingga perlu penanganan yang serius, mengingat anak merupakan generasi penerus bangsa. Kejadian stunting yang terjadi sejak masa kanak-kanak akan berdampak di kemudian hari, yaitu dapat menyebabkan gangguan kognitif dan juga tumbuh kembang anak.

Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan pemberian ASI eksklusif dengan kejadian stunting pada balita usia 24 – 59 bulan di Desa Rai.

Metode: Jenis penelitian yang digunakan adalah analitik dengan pendekatan kuantitatif dengan desain cross sectional. Penelitian ini dilakukan di posyandu di Desa Rai dengan jumlah sampel 92 ibu dengan balita usia 24-59 bulan dengan teknik pengambilan sampel menggunakan teknik purposive sampling. Data diolah dan dianalisis dengan analisis bivariat menggunakan uji Chi Square.

Hasil: Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara pemberian ASI eksklusif dengan kejadian stunting dengan nilai (p value 0,001 dan ni OR 4,6).

Kesimpulan: Pemberian ASI eksklusif memiliki hubungan yang signifikan dengan kejadian stunting pada balita usia 24-59 bulan di Desa Rai.

Saran: bagi peneliti selanjutnya agar dapat meneliti faktor lain yang mempengaruhi stunting yang belum diteliti terkait hal tersebut.

Kata Kunci: ASI eksklusif, Balita,,*Stunting*

ABSTRACT

Background: Stunting has been a major problem in several poor and developing countries, including Indonesia. A serious solution is necessary, considering that the quality of next-generation depends on the children. Stunting that occurs early childhood will impact later in life, which can cause cognitive impairment and interfere with child development.

Purpose: To determine the relationship between exclusive breastfeeding and stunting in children aged 24-59 months old.

Methods: The type of research used was analytic with a quantitative approach with a cross-sectional design. This research was conducted at the child health service in Rai Village with a sample of 92 mothers with toddlers aged 24-59 months old with a purposive sampling technique. The data were processed and analyzed by bivariate analysis using the Chi-Square test.

Results: The results showed a significant positive relationship between exclusive breastfeeding and the incidence of stunting (p-value = 0.001 and OR 4.6).

Conclusion: The results showed a significant positive relationship between exclusive breastfeeding and the incidence of stunting in children aged 24-59 months.

Suggestion: Further researchers are expected to be able to examine other factors that affect stunting besides breastfeeding.

Keywords: Exclusive breastfeeding, stunting, toddler

INTRODUCTION

Stunting is a growth disorder caused by chronic malnutrition or chronic infectious diseases, which is indicated by a prominent problem in several poor and developing countries, including Indonesia. Global data in 2020, the prevalence of stunting in children under 5 years was around 22.0%. Malnutrition stunting is associated with age-inappropriate short stature (UNICEF, 2021).

Based on Riskesdas 2018, the stunting rate was 30.8% in Indonesia. This figure was slightly lower than the 2013 stunting rate of 30.2%. Although it had decreased, it was still far from the target set by the Government through the National Medium-Term Development Plan (RPJMN) 2020-202, which was 14% (Riskesdas, 2018).

Based on the Nutrition Status Monitoring (PSG) results in 2017, one of the provinces with the highest stunting rate for children under five was NTT at 40.3%. This figure is quite high compared to other provinces in Indonesia. Manggarai Regency is one of the centers in NTT Province, with a stunting problem of 23.5% (Manggarai District Health Office, 2020). Stunting in children can be caused by several factors: a history of maternal habits during pregnancy, low birth weight (LBW), infectious diseases acquired by the mother during pregnancy, parental education, exclusive breastfeeding, and early breastfeeding complementary feeding (MPASI). These factors can be an obstacle to improving the pattern of providing food and nutrition for family members with nutritious food (Kemenkes RI, 2018).

In 2019, the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) explained that the long-term effects of stunting include impacts on health, development and the economy. In addition, children who experience stunting impact low learning abilities, so their potential is not optimal, and they can continue to have low work abilities. Furthermore, UNICEF explained that if the parenting pattern is not good, such as not giving exclusive breastfeeding for six months and giving complementary foods on time, the children may be at risk of stunting. Stunting that occurs early on will impact cognitive impairment and future development (WHO, 2019). Incomplete breastfeeding is a major risk factor for stunting in childhood (Wicaksono et al., 2021).

The research showed that toddlers who were not exclusively breastfed for the first 6 months had a higher risk of stunting (Fikadu et al., 2014). Other studies conducted in other countries such as Ethiopia, also found that breastfeeding is associated with stunted growth in children under 5 years. Children of mothers who are not breastfed are more prone to stunting (Assefa et al., 2013). Therefore, improving nutrition by introducing solid food and complementary feeding when the baby is over 6 months old.

Oktavianisya revealed that exclusive breastfeeding had a significant effect on the prevalence of stunting. Children who were not exclusively breastfed were 2.3 times more likely to be stunted than those who were exclusively breastfed. Mothers whose babies were not exclusively breastfed for the first 6 months had a higher risk of disease than mothers who were not exclusively breastfed (Oktavianisya et al., 2021). Another study also showed that children who were not exclusively breastfed were more likely to be stunted than those who were exclusively breastfed. Exclusive breastfeeding for the first 6 months can help the child's height grow optimally (Wahdah et al., 2015)

Exclusive breastfeeding has many benefits, including complete nutrition, increasing body power, stable mental and emotional intelligence and spiritual maturity followed by good social development. Breast milk is easy to digest and absorb, has a composition of fat, carbohydrates, calories, protein and vitamins, protects from infectious diseases and allergy protection because it contains antibodies, provides intelligence and nerve stimulation, and improves health and intelligence optimally (Mufdlilah, 2017).

The magnitude of the effect of exclusive breastfeeding on the nutritional status of children makes WHO recommend the implementation of an intervention to increase exclusive breastfeeding for the first 6 months as one of the steps to achieve the WHO Global Nutrition Targets 2025 regarding stunting reduction in children under five (WHO, 2016).

Monitoring of Nutritional Status (PSG) in 2017 conducted by the Directorate of Community Nutrition, Ministry of Health of the Republic of Indonesia stated that stunting in Indonesia could be influenced by several factors, including exclusive breastfeeding, households with proper access, sanitation, energy and protein adequacy and poverty levels (Kemenkes RI, 2017). Other studies also explained that many factors cause stunting in children, either directly or indirectly. The direct causes of stunting include nutritional intake and infectious diseases, while indirect causes include parenting, health services, food availability, culture, economy and other factors (Mawaddah, 2019).

RESULT

Table 1

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Frequency Distribution by Gender and Age of Toddlers

Category	F	%
Sex		
Female	47	51.1
Male	45	48.9
Age		
24-35 months old	49	53.3
36-47 months old	30	32.6
48-59 months old	13	14.1
Mothers' education background		
Elementary school	35	38.0
Junior high school	24	26.1
Senior high school	20	21.7
University	13	14.1
Mothers' occupation		
Civil servant	9	9.8
Private employee	16	17.4
Entrepreneur	11	12.0
Farmer	34	37.0
Unemployed	22	23.9

Based on a preliminary study conducted on 10 children aged 2-5 years spread over 2 posyandu in Rai Village, 6 children were stunted, 4 of them did not receive exclusive breastfeeding until the age of 6 months, and 4 others got breast milk but were not exclusive because it was added with formula milk and other additional foods such as bananas and porridge, while the other 3 children were in the normal development category and received exclusive breastfeeding for the first 6 months.

Therefore, the researchers were interested in researching exclusive breastfeeding to see its correlation with stunting in toddlers aged 24-59 months old in Rai Village, Ruteng District, Manggarai Regency in 2021.

This study aims to determine the relationship between exclusive breastfeeding and stunting in toddlers aged 24-59 months old in Rai Village, Ruteng District, Manggarai Regency.

RESEARCH METHODOLOGY

The type of research used was analytic with a quantitative approach with a cross-sectional design. This research was conducted at the posyandu in Rai Village with a total sample of 92 mothers with toddlers aged 24-59 months old using a purposive sampling technique who were willing to be research respondents. The study was carried out from March-May 2021. The independent variable in this study was exclusive breastfeeding, and the dependent variable was the incidence of stunting. The data collection used primary and secondary data. Primary data was obtained through interviews using questionnaires to mothers of children under five regarding the history of exclusive breastfeeding, while the nutritional status of stunting was obtained by measuring the height (TB) of toddlers using microtoise. Data were processed and analyzed by bivariate analysis using the Chi-Square test with a 95% confidence level ($\alpha = 0.05$).

Based on Table 1, most of the children under five are female (51.1%) and aged 24-35 months old (53.3%), and the mothers' education background is elementary school graduates (38.0%) while working as farmers (37.0%).

Table 2.
Distribution Based on History of Breastfeeding in Rai Village, Ruteng District, Manggarai Regency

Exclusive Breastfeeding	F	%
Non-exclusive	53	57,6
Exclusive	39	42,4

Based on Table 2, most toddlers are not given exclusive breastfeeding in their first 6 months (57.6%).

Table 3.
Distribution of Stunting in Toddlers in Rai Village, Ruteng District, Manggarai Regency

Stunting	F	%
Stunting	37	40,2
Normal	55	59,8

Based on Table 3, 55 toddlers have a normal height (59.8%), while toddlers who experience stunting are 37 toddlers (40.2%).

Table 4.
Relationship of History of Exclusive Breastfeeding with Stunting in Rai Village

History of Exclusive Breastfeeding

History of Exclusive Breastfeeding	Stunting		Normal		*P-Value*	OR (95% CI)
	n	%	n	%		
Non-exclusive	29	54.7	24	45.3	0.0001	4.682 (1.816-12.070)
Exclusive	8	20.5	31	79.5		

Based on Table 4, 29 toddlers who are not exclusively breastfed at the age of 0-6 months are mostly stunted (54.7%), while 31 exclusively breastfed toddlers are mostly abnormal (79.5%).

The statistical test obtains a p-value of 0.001 ($p<0.05$). There is a significant relationship between breastfeeding and stunting in toddlers aged 24-59 months old, with an odds ratio of 4.6. Thus, toddlers who are not given exclusive breastfeeding at the age of 0-6 have a 4.6 times greater likelihood of experiencing stunting than those who are fully breastfed.

DISCUSSION

The results indicated that from 92 toddlers, 53 (54%) toddlers who were not exclusively breastfed at the age of 0-6 months were mostly stunted. Meanwhile, 39 (42.4%) toddlers exclusively breastfed were normal or did not experience stunting, while 31 exclusively breastfed toddlers were mostly abnormal (79.5%). Based on the chi-square statistical tests, a p-value of 0.001 was obtained. There was a significant relationship between exclusive breastfeeding and stunting and an OR value of 4.682, meaning that toddlers who were not exclusively breastfed at the age of 0-6 months old had a 4.6 times risk of experiencing stunting when compared to children who were exclusively breastfed.

The results of this study align with Uwiringiyiman's, showing that exclusive breastfeeding could prevent stunting problems. Exclusive breastfeeding is one way to provide the best nutrition to toddlers (Uwiringiyimana et al., 2019). Toddlers who were not exclusively breastfed had a 6.1 risk of experiencing stunting when compared to infants who were exclusively breastfed (Sujendran et al., 2015). Lestari's research revealed that the stunting rate was higher in children who were not exclusively breastfed. Children who were not exclusively breastfed were 6.5 times more likely to experience stunting than those exclusively breastfed (Lestari et al., 2014).

The extent to which exclusive breastfeeding affects children's nutritional status made WHO recommends exclusive breastfeeding for the first 6 months as one of the steps to achieve WHO's 2025 global nutrition targets to reduce stunting in children under five (WHO, 2016).

Ikatan Dokter Anak Indonesia (IDAI) menjelaskan bahwa pemberian ASI eksklusif selama enam bulan bermanfaat untuk mencapai tumbuh kembang yang optimal. Setelah usia enam bulan, bayi harus dilengkapi dengan makanan pendamping ASI dan terus menyusui sampai anak berusia 24 bulan. Pemberian ASI dilakukan hingga anak berusia 2 tahun (Ikatan Dokter Anak Indonesia (IDAI), 2016).

Menurut asumsi peneliti bahwa sangat penting bagi seorang anak untuk mendapatkan nutrisi yang baik pada masa balita terutama pada

The Indonesian Pediatrician Association (IDAI) explained that exclusive breastfeeding for six months is beneficial for achieving optimal growth and development. After six months of age, infants should be supplemented with complementary foods and continue breastfeeding until the child is 24 months old. Breastfeeding is carried out until the child is 2 years old (Indonesian Pediatrician Association (IDAI), 2016).

According to the researchers' assumption, a child needs to get good nutrition in toddlerhood, especially at 0-6 months. Babies are only given exclusive breastfeeding at that age without additional food. Children need to get exclusive breastfeeding to grow well. Breastfeeding in this study has a relationship with stunting in toddlers because many mothers do not breastfeed exclusively. Mothers' ignorance about the benefits can also affect

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breastfeeding.

CONCLUSION

There was a significant relationship between exclusive breastfeeding and the prevalence of stunting in children aged 24-59 months in Rai village. Toddlers who were not exclusively breastfed at the ages of 0-6 months were 6 times more likely to experience stunting than those who were exclusively breastfed.

SUGGESTION

Health workers should work with integrated healthcare center (*posyandu*) cadres to provide education to mothers and families to encourage exclusive breastfeeding without supplementing with complementary foods or formula milk. It is also recommended that further researchers examine other factors contributing to stunting besides exclusive breastfeeding.

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