THE RELATIONSHIP BETWEEN EXCLUSIVE BREASTFEEDING HISTORY AND ANIMAL PROTEIN INTAKE WITH THE INCIDENCE OF STUNTING IN INFANTS AGED 6–59 MONTHS IN NGORAN VILLAGE, NGLEGOK SUBDISTRICT, BLITAR

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ABSTRACT

Stunting is a prevalent chronic nutritional issue in Indonesia, resulting in enduring consequences for children's physical and cognitive development. Nutritional elements, including a history of exclusive nursing and consumption of animal protein, are believed to significantly influence stunting. This study seeks to examine the correlation between a history of exclusive breastfeeding and animal protein consumption with the frequency of stunting in children aged 6 to 59 months in Ngoran Village, Nglegok Subdistrict, Blitar District. This research is an observational cross-sectional study of 79 youngsters. Data were gathered by interviews employing questionnaires, anthropometric measures, and evaluation of animal protein consumption utilizing the Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ) approach. The Chi-Square test and Pearson correlation were employed for data analysis. The findings indicated a notable correlation between a history of exclusive breastfeeding and stunting (p = 0.010), as well as between the consumption of animal protein and stunting (p = 0.011). The strong link between the lack of exclusive breastfeeding and inadequate animal protein consumption with stunting prevalence suggests that unmet nutritional requirements from an early age elevate the risk of stunting. Consequently, prompt dietary treatments within the initial 1,000 days of life are essential for averting stunting in children.

***Keywords**: Stunting, Exclusive Breastfeeding, Animal Protein, Toddlers, Child Nutrition.*

INTRODUCTION

Stunting is one of the chronic nutritional problems that remains a major challenge in public health in Indonesia. According to data from the 2022 Indonesia Nutrition Status Survey (SSGI) , the national prevalence of stunting reached 21.6%, while East Java Province recorded a rate of 19.2% (Kemenkes RI, 2022) , still above the threshold set by the World Health Organization (WHO), which is 20% (UNICEF, 2024). Stunting not only reflects physical growth disorders in children, but also has long-term effects on cognitive development, learning capacity, productivity in adulthood, and an increased risk of non-communicable diseases(Anwar et al., 2022).

The causes of stunting are multifactorial, including nutritional, health, environmental, and socioeconomic aspects (Yuwanti et al., 2021). One of the main nutritional factors contributing to stunting is feeding practices in early childhood. Exclusive breastfeeding for the first six months of life has been proven to provide protection against infections and support optimal growth (Anggryni et al., 2021). However, exclusive breastfeeding coverage in Indonesia is still suboptimal, with a national coverage rate of 75.7% in 2022 (Rani et al., 2022).

In addition to exclusive breastfeeding, animal protein consumption also plays a crucial role in supporting children's growth, particularly during the transition to complementary feeding (MP-ASI). Animal proteins such as meat, fish, eggs, and milk contain complete essential amino acids and have higher bioavailability of micronutrients compared to plant proteins, thereby contributing to body tissue development and metabolic functions in children . A number of studies show that low animal protein

consumption is positively correlated with an increased risk of stunting(Sholikhah & Dewi, 2022).

In Blitar District, the incidence of stunting in 2024 was recorded at 5,444 children (Pemerintah Kabupaten Blitar, 2024). One of the areas with a relatively high stunting rate is Ngoran Village, Nglegok Subdistrict. According to data from the local health center in 2023, there were 229 malnourished children in Nglegok Subdistrict, with 8 cases in Ngoran Village(BPS Kabupaten Blitar, 2024). However, to date, data describing specific determinants such as exclusive breastfeeding practices and animal protein consumption patterns in this area remain very limited. Therefore, it is important to conduct an in-depth study on the relationship between exclusive breastfeeding history and animal protein intake on stunting incidence among infants in Ngoran Village. The results of this study are expected to serve as a basis for developing more effective, targeted, and locally data-driven nutrition interventions at the village level.

METHOD

This research is an observational study utilizing a cross-sectional design, aimed at elucidating the correlation between a history of exclusive breastfeeding and animal protein consumption with stunting in children aged 6 to 59 months in Ngoran Village, Nglegok District, Blitar Regency. The study population comprised all children aged 6 to 59 months in the community, amounting to 186 children. The sample was chosen using simple random selection utilizing a lottery method, yielding a total of 79 children according to the Lemeshow formula.

Primary data were obtained by interviews utilizing questionnaires, direct observation, and the measuring of the heights of newborns and their mothers. Secondary data were acquired from the Nglegok Health Center. The independent factors in this study were exclusive breastfeeding history, animal protein consumption, and familial and newborn features.

The dependent variable was stunting, assessed using height-for-age (HAZ) according to WHO criteria (2006). Animal protein consumption was assessed utilizing the Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ) and juxtaposed with the 2019 Recommended Nutrient Intake (RNI).

The history of exclusive breastfeeding was classified according to the Ministry of Health Regulation of 2004. Data were examined by univariate analysis to assess the distribution of respondent characteristics and chi-square testing to investigate the relationships between variables, utilizing SPSS software version 25.

RESULTS AND DISCUSSION

Univariate Test Result

1. Characteristics Of Respondents

Variable		Frekuensi (n)	Persentase (%)
Pendidikan Ibu	Tidak Sekolah	1	1.3
	SD	5	6.3
	SMP	23	29.1
	SMA/SMK	39	49.4
	Perguruan Tinggi	11	13.9
Total		79	100
Pendapatan Keluarga	< 1.500.000	18	22.8
	1.500.000 - 2.500.000	42	53.2
	2.500.000 - 3.500.000	17	21.5
	> 3.500.000	2	2.5

Total		79	100
Pengeluaran Keluarga	< 1.000.000	26	32.9
	1.000.000 - 1.500.000	29	36.7
	1.500.000 - 2.000.000	17	21.5
	> 2.000.000	7	8.9
Total		79	100
Tinggi Badan Ibu	Pendek (< 150 cm)	7	8.9
	Normal (> 150 cm)	72	91.1
Total		79	100

The univariate analysis revealed that the majority of moms of toddlers in Ngoran Village possess a high school education. Approximately 49.4% of women attained a high school education, while 29.1% completed their education at the junior high school level. Of the total, 13.9% are college graduates, 6.3% are primary school grads, and just 1.3% have never had formal education. This suggests that most moms possess adequate formal education, potentially affecting their comprehension of nutrition and child-rearing methodologies. Economically, the majority of households own a monthly income between Rp1,500,000 and Rp2,500,000 (53.2%), whilst 22.8% earn below Rp1,500,000, and just 2.5% have an income of Rp3,500,000. This signifies that most households belong to the lower-middle economic class.

Moreover, regarding household consumption expenditure, the majority of respondents allocate less than Rp1,500,000 monthly, with 36.7% spending between Rp1,000,000 and Rp1,500,000, and 32.9% spending below Rp1,000,000. A mere 8.9% of families can allocate above Rp2,000,000 for monthly expenditure. This circumstance reflects the constrained purchasing capacity of families to satisfy their dietary requirements, potentially compromising the quality of children's nutritional intake, especially regarding animal protein consumption. Simultaneously, the majority of moms of newborns (91.1%) possess a height of ≥150 cm, while just 8.9% are categorized as short (<150 cm). Maternal height serves as an indication of long-term nutritional quality and may correlate with stunting in children, necessitating additional examination of its association with newborn growth.

2. Characteristics of Toddlers

Variabel	Kategori	Frekuensi (n)	Persentase (%)
Usia	6-24 bulan	39	49.37
	25-36 bulan	13	16.46
	37-59 bulan	27	34.18
Total		79	100
Jenis Kelamin	Laki-Laki	36	45.57
	Perempuan	43	54.43
Total		79	100
Berat Badan Lahir	BBLR (< 2.5 kg)	5	6.33
	Normal (> 2.5 kg)	74	93.67
Total		79	100
Panjang Badan Lahir	Pendek (< 48 cm)	15	18.99
	Normal (> 48 cm)	64	81.01
Total		79	100
Status Gizi (TB/U)	Severely Stunted (Z < -3 SD)	8	10.13
	Stunted (- 3 SD < Z < -2 SD)	10	12.66
	Normal (-2 SD < Z < + 3 SD)	61	77.22
	Tinggi (> +3 SD)	0	0.00
Total		79	100

The univariate analysis of babies aged 6–59 months in Ngoran Village revealed that 49.4% of the total sample belonged to the 6–24 month age group. The 37–59 month age cohort constituted 34.2%, while those aged 25–36 months represented 16.5%. This distribution reveals that about fifty percent of the responders were newborns throughout the early stages of life, a critical period for growth and development. The sample had a very even distribution of genders, with men constituting 45.6% and females 54.4%, indicating no predominance of either gender.

Regarding the birth weight variable, the majority of newborns (93.7%) were born with a normal birth weight (≥2,500 grams), whereas just 6.3% were categorized as having low birth weight (LBW <2,500 grams). In relation to birth length, 81.0% of newborns were born with a normal length (≥48 cm), whilst 19.0% were born with a short length. The data suggest that the majority of newborns possess a birth anthropometric status that aligns with established norms, however a certain percentage are born with body sizes that pose a danger for future growth.

According to height-for-age (HAZ) indices, the majority of newborns (77.2%) were classified within the normal nutritional range. Nonetheless, 12.7% of newborns exhibited stunting (Z-score between -3 SD and -2 SD), and 10.1% were classified as severely stunted (Z-score < -3 SD). This investigation could not identify any newborns with a good nutritional status (Z-score > +3 SD). The data indicate that although most newborns possess adequate nutritional status, the incidence of stunting and severe stunting persists as a critical concern necessitating more focus, especially among early children and those with a history of low birth weight or inadequate development.

Bivariate Test Results

1. Results of Bivariate Test of Breastfeeding History and Stunting in Toddlers

Chi-Square Tests					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.575[a]	1	.010		
Continuity Correction[b]	5.282	1	.022		
Likelihood Ratio	6.588	1	.010		
Fisher's Exact Test				.016	.011
Linear-by-Linear Association	6.492	1	.011		
N of Valid Cases	79				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.18.

b. Computed only for a 2x2 table

The Chi-Square test yielded a Pearson Chi-Square value of 6.575, with 1 degree of freedom and a significance level of $p = 0.010$ ($p < 0.05$). This number signifies a statistically significant correlation between the history of exclusive breastfeeding and the frequency of stunting in children aged 6–59 months in Ngoran Village. This conclusion is corroborated by other analyses, including the Continuity Correction ($p = 0.022$) and Fisher's Exact Test ($p = 0.016$), both yielding significant values < 0.05, with a Linear-by-Linear Association of 6.492 ($p = 0.011$), which suggests a linear relationship between the two variables.

Consequently, babies who did not undergo exclusive breastfeeding had a markedly higher risk of stunting in comparison to those who were exclusively breastfed throughout the initial six months of life. This signifies that the practice of exclusive breastfeeding is essential in reducing stunting, along with the recommendations of the World Health Organization (WHO) and the Indonesian Ministry of Health.

2. Results of Bivariate Test of Animal Protein Intake and Stunting in Toddlers

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.956[a]	2	.011
Likelihood Ratio	8.439	2	.015
Linear-by-Linear Association	6.380	1	.012
N of Valid Cases	79		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.05.

The Chi-Square test shows that there is a statistically significant link between how much animal protein kids aged 6 to 59 months in Ngoran Village eat and how short they are. The Pearson Chi-Square value of 8.956 with degrees of freedom (df) = 2 and a significance level of $p = 0.011$ ($p < 0.05$) shows that the number of stunted children is different depending on how much animal protein they eat.

There is a substantial linear link between the adequacy of animal protein intake and the nutritional status (TB/U) of babies, as shown by a Likelihood Ratio of 8.439 with $p = 0.015$ and a Linear-by-Linear Association of 6.380 with $p = 0.012$. The validity test was passed since there were no cells with an expected value less than 5. In real life, these data show that the less animal protein you eat, the more likely you are to become stunted. The research supports this fact, which says that animal protein offers a high quality of vital amino acids and critical micronutrients like iron and zinc that help children grow well..

Results Of The Correlation Test

Correlations				
		K.Stunting	ASIEkslusif	AsupanProtein Hewani
K.Stunting	Pearson Correlation	1	.288**	.318**
	Sig. (2-tailed)		.010	.004
	N	79	79	79
ASIEkslusif	Pearson Correlation	.288**	1	-.097
	Sig. (2-tailed)	.010		.396
	N	79	79	79
AsupanProteinHewani	Pearson Correlation	.318**	-.097	1
	Sig. (2-tailed)	.004	.396	
	N	79	79	79

**. Correlation is significant at the 0.01 level (2-tailed).

Bivariate analysis was used to assess the correlation between a history of exclusive breastfeeding and animal protein consumption with stunting in children aged 6 to 59 months. Pearson's correlation test findings indicated a significant association between exclusive breastfeeding history and stunting, with a correlation value of $r = 0.288$ and a significance level of $p = 0.010$ ($p < 0.05$). This association signifies a positive and substantial link, indicating that children who did not obtain exclusive breastfeeding are more prone to stunting. A notable association was identified between animal protein consumption and stunting, with a correlation value of $r = 0.318$ and $p = 0.004$ ($p < 0.01$).

This positive link suggests that reduced animal protein consumption in babies correlates with an increased risk of stunting. Consequently, it may be inferred that both a history of exclusive breastfeeding and sufficient animal protein consumption are significantly associated with newborn nutritional status, especially concerning stunting. In contrast, no significant correlation was seen between the history of exclusive breastfeeding and the consumption of animal protein ($r = -0.097$; $p = 0.396$), suggesting that these two factors are independent within the framework of this investigation.

Discussion

The research discussion section contains discussions of research results and comparisons with theory and/or similar research.

Discussion of univariate tests

1. Characteristics Of Respondents

Based on the results of univariate tests on the characteristics of respondents in a study on the relationship between exclusive breastfeeding history and animal protein intake with stunting in Ngoran Village, Nglegok District, Blitar Regency, it was found that the majority of mothers had a secondary education level, namely high school/vocational school (49.4%), followed by junior high school graduates (29.1%). Only a small proportion of mothers had completed higher education or had no formal education at all. This educational level plays a crucial role in mothers' knowledge of exclusive breastfeeding practices and the selection of nutritious foods, including animal protein sources, which directly impact children's nutritional status. From an economic perspective, most families fall into the low-income category, earning between IDR 1,500,000 and IDR 2,500,000 (53.2%), with 22.8% earning less than IDR 1,500,000. This limited income affects families' ability to provide nutritious food, especially animal protein, which is relatively expensive, thereby potentially increasing the risk of stunting.

Meanwhile, family expenditure is also relatively low, with the majority spending less than IDR 1,500,000 per month. The low expenditure levels reflect limited budgets for children's nutritional needs, which in turn can affect children's growth and development. The height characteristics of mothers indicate that the majority (91.1%) have normal height, while only 8.9% are classified as short. However, maternal height remains an important variable as it reflects past nutritional status and can contribute to stunting in children. Overall, these respondent characteristics indicate vulnerability to stunting influenced by educational, economic, and maternal nutritional status factors, making them an important basis for further analysis to examine the relationship between exclusive breastfeeding, animal protein intake, and stunting.

In this study, the majority of mothers had a secondary education level (high school/vocational school) at 49.4%, while those who had never attended school accounted for only 1.3%. These findings align with the results (Khairunnisa & Ghinanda, 2022) in Banda Sakti, Lhokseumawe, which showed that most mothers had higher education (university level at 38.9%) and there was a significant association between maternal education and infant nutritional status (p=0.000). Support also comes from (Marlani & Deswita, 2021) who emphasize the importance of education in shaping mothers' knowledge about nutrition, childcare practices, and food preparation. Meanwhile, (Fitriahadi et al., 2023) found no significant association between maternal education and stunting incidence at the Minggir Health Center, despite the majority of respondents also having a high level of education. These differences in results may be due to the local context and the interaction of other factors such as family income and different food consumption patterns between regions.

Economically, most of the respondents' families in this study had an income between IDR 1,500,000 and IDR 2,500,000 (53.2%), which is categorized as lower-middle income. This condition is consistent with the journal by (Khairunnisa & Ghinanda, 2022), which shows that the majority of respondents had household incomes in the range of Rp750,000–Rp2,500,000, with a significant relationship to the nutritional status of infants (p=0.000). Similarly, (Marlani & Deswita, 2021) noted that 93.5% of respondents in their study were in the low socioeconomic category, emphasizing that family economics significantly influence the variation and quality of food consumption, particularly for animal protein

sources, which are crucial for preventing stunting. This reinforces that financial constraints are the primary risk factor contributing to the high prevalence of stunting.

Regarding employment status, although this study's data does not explicitly state this, (Fitriahadi et al., 2023) mentions that working mothers have a higher risk of stunting, although this is not statistically significant (p=0.590). On the other hand, (Khairunnisa & Ghinanda, 2022) found a significant association between maternal employment and the nutritional status of infants (p=0.000), with the majority of mothers being unemployed (84.4%). Meanwhile, (Marlani & Deswita, 2021) emphasizes that unemployed mothers remain at risk if they lack adequate nutritional knowledge. Thus, maternal employment cannot be viewed in isolation but must be analyzed in conjunction with educational attainment and nutritional knowledge in managing children's food intake.

The height of mothers in this study showed that the majority of mothers were of normal height (>150 cm), with only 8.9% classified as short. Although the three journals did not specifically address maternal height, nutritional literature generally notes that maternal height reflects past nutritional status and is one of the biological factors that can influence the risk of stunting in children. Therefore, despite the small proportion of short mothers in this study, this group still requires attention as part of efforts to prevent stunting across generations.

2. Characteristics of Toddlers

Based on data on the characteristics of toddlers, the age distribution shows that the 6–24 month age group is the largest (49.37%), followed by the 37–59 month age group (34.18%) and the 25–36 month age group (16.46%). This age group plays a crucial role, particularly because the 0–24 month age range is known as the "golden period" or critical window for child development. Malnutrition during this period can have long-term effects, including increasing the risk of stunting that persists into school age. This is reinforced by the findings of (Dewi et al., 2024), who stated that the prevalence of stunting tends to be higher in children over two years of age because nutritional needs during the previous golden period were not optimally met.

In terms of gender, the percentage of female infants is slightly higher (54.43%) than males (45.57%). However, several studies indicate that gender differences are not significantly associated with stunting. (Umiyah & Hamidiyah, 2021) reported that there is no significant relationship between gender and stunting (p = 0.512). A similar finding was also reported by (Dewi et al., 2024), who stated that although there are differences in incidence rates between males and females, these differences are not statistically significant.

Meanwhile, birth weight is one of the relevant indicators of stunting. Data show that most infants have normal birth weight (93.67%), with only 6.33% classified as low birth weight (LBW, <2.5 kg). Although the proportion is small, LBW remains an important risk factor. The journal by (Umiyah & Hamidiyah, 2021) indicates that LBW has a significant association with stunting (p = 0.009). This finding is consistent with the results from , which show that infants with birth weights below 2,500 grams are at higher risk of stunting ($p < 0.05$).

Birth length also plays a role as an indicator of nutritional status during pregnancy. Data show that the majority of infants were born with normal length (81.01%), while the remaining 18.99% were classified as short (<48 cm). (Amalia et al., 2024) reported that birth length <48 cm is significantly associated with stunting (p = 0.018). However, (Umiyah & Hamidiyah, 2021) found different results, showing no significant association between birth length and stunting (p = 0.334), indicating that the influence of birth length may vary depending on the study location and population.

Based on the TB/U (height-for-age) nutritional status indicator, the majority of infants were in normal condition (77.22%), but 12.66% were classified as stunted and 10.13% as severely stunted, indicating that approximately 22.8% of infants experienced growth impairments. This is a fairly high figure and requires appropriate intervention. (Dewi et al., 2024) emphasize that nutritional status is greatly influenced by feeding patterns, exclusive breastfeeding, and family income. These three factors have been proven to have a significant association with stunting ($p < 0.05$).

Overall, the available data show that most infants are in good nutritional condition, but approximately one in five children experience growth problems. Based on a review of the literature, the most consistent factors associated with stunting are low birth weight and low birth length. Meanwhile, age and gender do not show a statistically significant relationship, but remain important to consider in the context of growth monitoring. Adding other variables such as dietary patterns, exclusive breastfeeding, and family income levels would strengthen the analysis, as these factors are the primary determinants of stunting, as demonstrated in the study by (Dewi et al., 2024).

Discussion of Correlation Test Results

Based on the results of Pearson's correlation test, this study shows that there is a significant relationship between exclusive breastfeeding history and animal protein intake with stunting in children aged 6–59 months in Ngoran Village, Nglegok District, Blitar Regency. The correlation between stunting and exclusive breastfeeding history showed a value of $r = 0.288$ with $p = 0.010$, while the correlation between stunting and animal protein intake showed a value of $r = 0.318$ with $p = 0.004$. Since the p-values for both variables are below 0.01, the relationship is statistically significant at the 99% confidence level. This positive correlation, although seemingly contrary to the theory that exclusive breastfeeding and animal protein can prevent stunting, is likely due to the variable coding system, for example, if higher numerical codes indicate incomplete exclusive breastfeeding or low animal protein intake. Thus, this finding can be interpreted to mean that infants who do not receive exclusive breastfeeding and have low animal protein intake are more likely to experience stunting.

These findings are consistent with research conducted by (R. Amalia et al., 2022), which showed that inappropriate complementary feeding practices, such as early introduction or insufficient quantities, increase the risk of stunting by up to 7.87 times, while infants with protein deficiency have a 6.5-fold higher risk of stunting compared to those with adequate intake. Consumption of animal protein sources such as eggs, meat, and milk is also reported to directly contribute to increased child height. The study emphasizes the importance of providing high-protein, nutrient-rich foods, particularly animal-based sources, from the early stages of complementary feeding to support optimal growth. However, different results were found in the study by (Vernanda & Ruhana, 2023), which did not find a significant association between exclusive breastfeeding history or protein intake and stunting. These differences may be due to delayed nutritional interventions in the sample group or biases in food consumption assessment, especially if recall methods were conducted in a short timeframe or after counseling.

Overall, the results of this analysis indicate that inaccuracies in exclusive breastfeeding and low animal protein intake are two important factors that can increase the risk of stunting in children. Therefore, nutritional interventions need to be implemented in a timely and sustainable manner, especially during the critical 1,000 Days of Life (HPK) period, to support optimal physical growth and development of children and prevent stunting.

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CONCLUSION

This study reveals that there is a strong link between a child's history of exclusive breastfeeding and their consumption of animal protein with stunting in children aged 6 to 59 months in Ngoran Village. Pearson's correlation test indicated that there was a link between stunting and exclusive breastfeeding history ($r = 0.288$, $p = 0.010$) and between stunting and animal protein consumption ($r = 0.318$, $p = 0.004$). These positive connections show that not exclusively nursing and not getting enough animal protein are linked to a higher risk of stunting in kids. So, to stop stunting, it's vital to nurse just for the first six months and eat enough animal protein. Timely nutritional treatments, especially in the first 1,000 days of life (HPK), are very important for helping babies grow properly and avoiding stunting.

DAFTAR PUSTAKA

Amalia, M. R., Nuryani, Talibo, S. D., Setiawan, D. I., & Alimuddin. (2024). Analisis Determinan Kejadian Stunting di Wilayah Pesisir Danau Limboto . Muhammadiyah Journal of Nutrition and Food Science , 4(1), 65–73.

Amalia, R., Ramadani, A. L., & Muniroh, L. (2022). Associations of Complementary Feeding Practice History and Protein Adequacy Level with Childhood Stunting in the Working Area of Puskesmas Bantaran in Probolinggo Regency. Media Gizi Indonesia (National Nutrition Journal), 17(3), 310–319.

Anggryni, M., Mardiah, W., Hermayanti, Y., Rakhmawati, W., Ramdhanie, G. G., & Mediani, H. S. (2021). Faktor pemberian nutrisi masa golden age dengan kejadian stunting pada balita di negara berkembang. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 5(2), 1764–1776.

Anwar, S., Winarti, E., & Sunardi, S. (2022). Systematic review faktor risiko, penyebab dan dampak stunting pada anak. Jurnal Ilmu Kesehatan, 11(1), 88–94.

BPS Kabupaten Blitar. (2024). Kecamatan Nglegok Dalam Angka . CV Aska Putra Pratama .

Dewi, A. B. F. K., Napu, A., & Hadi, N. S. (2024). Analysis of Determinant Factors Stunting The Pilolodaa Health Center Area Gorontalo City. Darussalam Nutrition Journal, 8(2), 123–134.

Fitriahadi, E., Arintasari, F., & Merida, Y. (2023). Karakteristik Ibu Dengan Kejadian Stunting . Jurnal Keperawatan, 15(4), 41–50.

Kemenkes RI. (2022). Buku Saku Hasil Studi Status Gizi Indonesia (SSGI) tingkat Nasional, Provinsi, dan Kabupaten/Kota Tahun 2022. Kemenkes RI.

Khairunnisa, C., & Ghinanda, R. S. (2022). Hubungan Karakteristik Ibu Dengan Status Gizi Balita Usia 6-24 Bulan Di Puskesmas Banda Sakti Tahun 2021. Jurnal Pendidikan Tambusai , 6(1), 3436–3444.

Marlani, R., & Deswita, M. N. (2021). Gambaran Karakteristik Ibu yang Mempengaruhi Kejadian Stunting Balita Usia 24-59 Bulan di Puskesmas Talang Banjar Kota Jambi . Jurnal Ilmiah Universitas Batanghari Jambi, 21(3), 1370–1373.

Pemerintah Kabupaten Blitar. (2024). Jumlah Balita Sunting . Https://Data.Blitarkab.Go.Id/Data/Jumlah-Balita-Stunting-70y2yrzo.

Rani, H., Yunus, M., Katmawanti, S., & Wardani, H. E. (2022). Systematic literature review determinan pemberian ASI eksklusif di Indonesia. Sport Science and Health, 4(4), 376–394.

Sholikhah, A., & Dewi, R. K. (2022). Peranan protein hewani dalam mencegah stunting pada anak balita. JRST (Jurnal Riset Sains Dan Teknologi), 6(1), 95–100.

Umiyah, A., & Hamidiyah, A. (2021). Characteristics of Children with Stunting . Oksitosin: Jurnal Ilmial Kebidanan, 8(1), 66–72.

UNICEF. (2024). World Breastfeeding Week: UNICEF and WHO call for equal access to breastfeeding support.

Vernanda, D. A., & Ruhana, A. (2023). Hubungan Asupan Energi, Protein, Dan Pemberian Asi Eksklusif Dengan Kejadian Stunting Pada Balita Di Bojonegoro . Jurnal Gizi Universitas Negeri Surabaya, 3(3), 384–390.

Yuwanti, Y., Mulyaningrum, F. M., & Susanti, M. M. (2021). Faktor–faktor yang mempengaruhi stunting pada balita di Kabupaten Grobogan. Jurnal Keperawatan Dan Kesehatan Masyarakat Cendekia Utama, 10(1), 74–84.