Exclusive Breastfeeding and Educational Attainment of Mother Correlate with Stunting Problem in Musi Rawas Regency

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ABSTRACT

***Background**: Stunting is a growth condition reflected in a height-for-age or length-for-age that is below -2 standard deviations. It is identified by Sustainable Development Goals (SDGs) as a priority objective for global health improvement. **Objective**: This study aimed to determine the factors that contribute to stunting in children younger than 5 years. **Methods**: The study adopted a cross-sectional design and a sample of 150 children under the age of 5 whose mothers were the respondents, was selected using the purposive sampling method. Data were collected through questionnaire interviews and anthropometric measurements. **Results**: The results showed that 28% of children were stunted, with 54.7% being male and 58% not exclusively breastfed. Approximately 60.7% and 57.3% had fathers with a history of smoking and mothers with high education, respectively. The mothers of 74% were unemployed, while 80.7% of the stunted children were from low-income families. Based on statistical analysis, stunting had a significant correlation with a history of exclusive breastfeeding were significantly correlated (p = 0.01) and educational attainment of mothers (p = 0.04). **Conclusion**: The prevalence of stunting remained high compared to the national norm. The incidence was correlated with the educational attainment of mothers and the duration of exclusive breastfeeding. Therefore, mothers should be educated about the value of exclusive breastfeeding to avoid the condition.*

***Keywords**: children under five, exlusive breastfeed, mother's education, Stunting*

INTRODUCTION

According to WHO, stunting is a condition of being short for age which is characterized by a height index value or body length for age of less than -2 standard deviations (Kiik & Nuwa, 2020). Stunting is often used as an index to measure the nutritional status of a community. Children that are stunted may never reach their maximum height and their brains may never fully developmental capacity. Children start life at a significant disadvantage, and this disadvantage persists until adulthood: they struggle academically, earn less as adults, and encounter obstacles to community involvement (UNICEF et al., 2023).

Currently, the number of stunting cases in children under five is the highest when compared to other forms of malnutrition. Based on data on the prevalence of stunting in children under five by WHO, in 2020 as many as 22% or around 149.2 million children under five in the world experienced stunting (UNICEF et al., 2021). Meanwhile, WHO data in 2022 showed that the number of stunting in the world was 148.1 million, or 22.3% in children under five years of age. Around 55% of the number of children affected by stunting are in Asia and 43% are in Africa (UNICEF et al., 2023). Some research showed stunting prevalence in Developing Countries. In India, Odisha had the highest rate of stunting (65%), followed by Maharashtra (59%). Mumbai had the lowest stunting prevalence (31.2%). In

Received: 25-10-2024, Accepted: 15-12-2024, Published Online: 08-01-2025

contrast, the prevalence of stunting was lowest in Myanmar (20.1%) and greatest in Ethiopia's Hidabu Abote District (47.6%), followed by Pakistan (44.4%) and Ethiopia (43.7%) (Verma & Prasad, 2021).

Stunting children has both short-term and long-term effects, such as higher morbidity and mortality, poor learning and development, increased risk of infections and non-communicable diseases, lower fat oxidation, lower energy expenditure, insulin resistance, and a higher risk of developing diabetes, hypertension, dyslipidemia, lowered working capacity, and unfavorable maternal reproductive outcomes in adulthood. Additionally, stunted children who acquire weight quickly after the age of two are more likely to become overweight or obese in the future (Soliman et al., 2021).

Based on Indonesian nutritional status survey data in 2022, the prevalence of stunting in Children under five was 21.6%. The prevalence of stunting is still considered a problem and the stunting reduction rate in Indonesia has not yet met the WHO standard of less than 20% (Kemenkes, 2023). Based on the Indonesian health Survey Data in 2023, stunting prevalence was 21.5%. When compared to other middle-income nations, Indonesia has a relatively high frequency of stunting (Kemenkes RI, 2023). Therefore, the government is targeting to reduce the prevalence to 14% in 2024. From the SSGI data, it is known that the prevalence of stunting in 2021 in the South Sumatra region was 24.8% and decreased to 18.6% in 2022 (Kemenkes, 2023). Data also shows that in 2022 the highest prevalence of stunting was in Kabupaten Musi Rawas, namely 25.4%.

There are many causes of stunting. Improvements in maternal and paternal education, household socioeconomic status, sanitation conditions, access to maternal health services, and family planning are among the factors that have been found to have a particularly significant impact (Vaivada et al., 2020). Exlusive breastfeeding also influences the incidence of stunting in children under five (Campos et al., 2021)

One of the efforts to handle stunting can be focused on these determinants. Such as providing education on the importance of exclusive breastfeeding for 6 months to prevent stunting in toddlers. Since still in pregnancy, it is very important to provide health education to mothers considering that stunting begins during pregnancy (Setyowati et al., 2022) (Ekholuenetale et al., 2022). Some studies mention that providing education can increase mothers' knowledge about stunting (Ernawati, 2022)(Ginting et al., 2022).

Based on a preliminary study carried out in Kecamatan Tuah Negeri Kabupaten Musi Rawas, it is known that there are around 89 children underfives who are stunted. The novelty of this research is that the samples taken were children underfives whose stunting status was unknown, and then anthropometric measurements were taken directly. The purpose of this study is to identify the factor that contribute of stunting evens in Kecamatan Tuah Negeri District, Kabupaten Musi Rawas.

METHODS

This study used a cross sectional design (Ayu Putri Ariani, 2014). The research was carried out between April and July of 2024. Children under the age of five made up the study's population. Using the sample formula and 150 participants, the sample size was determined. Purposive sampling was used to choose the sample (Sujarweni, 2014). Anthropometric measures and interviews were used to get the data (Soekidjo Notoadmodjo, 2010). A questionnaire was utilized as the data collection tool (Sujarweni, 2014). Anthropometric measurements were taken by measuring the length/height of the children under five. Height is measured using a microtoice height measuring tool (for those who can stand) or a baby length board (for those who cannot stand yet). The microtoice is hung on the wall with a head indicator that can be moved horizontally. The stick on the head indicator is accompanied by a scale in centimeters (Atikah Rahayu, 2018). The results of the height/length measurements are then compared with the age of the children under five, then adjusted to the Anthropometric Table to determine the stunting status of the children under five (Utami, 2016). If height index value or body length for age of less than -2 standard deviations, then it is categorized as stunting (RI, 2017).

Received: 25-10-2024 Accepted: 15-12-2024, Published Online: 08-01-2025

Data analysis was conducted using univariate and bivariate methods. Univariate analysis was conducted by tabulation, to describe using a frequency table of respondent characteristic variables, namely children under five age, gender of children under five, mother's age, mother's occupation, mother's education, family income, history of exclusive breastfeeding, paternal smoking and stunting status of children under five. While bivariate analysis was conducted to determine the relationship between characteristic variables and stunting events. Bivariate analysis used the Chi Square test with the SPSS 21 application. The degree of confidence used was 95% (α = 0.05)(Budiarto, 2002).

RESULTS AND DISCUSSION

The gender of children under five, history of exclusive breastfeeding, paternal smoking, mother's education, occupation, and family income were the features of the samples examined in this study. The sample's characteristics are described in the following table.

Table 1. Frequency Distribution of Sample Characteristics

Variables	n	%
Gender of children under five		
1. Man	82	54.7
2. Woman	68	45.4
History of Exclusive Breastfeeding		
1. Exclusive Breastfeeding	63	42
2. Not Exclusive Breastfeeding	87	58
Paternal Smoking		
1. Non-Smoking father	79	39.3
2. Father Smoking	91	60.7
Mother's Education		
1. High	86	57.3
2. Low	64	42.7
Mother's Occupation		
1. Employed	39	26
2. Unemployed	111	74
Family Income		
1. ≥ Minimum Wage	29	19.3
2. < Minimum Wage	121	80.7

From the sample characteristics table (Table 1) it shows that children under five with male gender are more were 54.7%. For the history of exclusive breastfeeding, it is evident that children under five who are not exclusive breastfed were 58%. Children under five with smoking father are 60.7%. The level of education of mothers is mostly highly educated were 57.3%. Based on the status of the mother's employment, It is evident that the majority are housewives or mothers who do not work. 74%. For the level of family income, it is known that families with incomes below the minimum wage were 80.7%.

Table 2. Average Age of Sample and Respondents

Age	Mean	Minimum	Maximum
Mother	29.68 (Years)	17	48
Children under five	21.25 (Month)	1	58

The aforementioned data shows that the average age of the women in the sample was 29.68 years, while the average age of the children under five in the sample was 21.25 months.

The results of anthropometric measurements carried out on children under fives showed that the number of children under fives with stunting was 28%.

Received: 25-10-2024, Accepted: 15-12-2024, Published Online: 08-01-2025

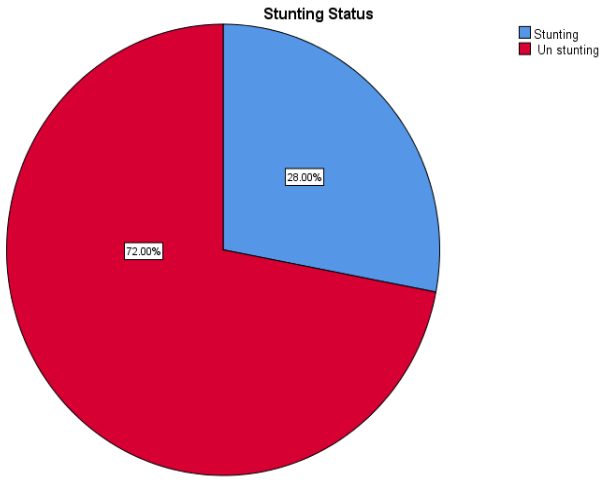

Figure 1. Pie Chart of Stunting Incidence

Relationship between Sample Characteristics and Stunting Incidence

The table below is the result of a bivariate analysis showing the relationship between characteristic variables and the incidence of stunting in children under five.

Table 3. Relationsheep Between Sample Characteristics with Stunting Incidence

Variables	Stunting				Total		P Value (95% CI)
	No		Yes				
	n	%	n	%	n	%	
Gender of Children under five							
Man	54	65.9	28	34.1	82	100	0.09
Woman	54	79.4	14	20.6	68	100	
History of Exclusive Breastfeeding							
Exclusive Breastfeeding	38	60.3	25	39.7	63	100	0.01*
Not Exclusive Breastfeeding	70	80.5	17	19.5	87	100	
Paternal Smoking							
Non-Smoking Father	41	69.5	18	30.5	59	100	0.72
Smoking Father	67	73.6	24	26.4	91	100	
Mother's Education							
High	68	79.1	18	20.9	86	100	0.04*
Low	40	62.5	24	37.5	64	100	
Mother's Occupation							
Employed	32	82.1	7	17.9	39	100	0.16
Unemployed	76	68.5	35	31.5	111	100	
Family Income							
≥ Minimum Wage	20	69	9	31	29	100	0.86
< Minimum Wage	88	72.7	33	33.9	121	100	

According to the statistical study, there is no significant correlation between gender and the incidence of stunting in children under five years old, with a value of p = 0.09. The statistical test revealed a value of = 0.01 for the variable of exclusive breastfeeding history, indicating a significant correlation between the frequency of stunting in children under five and the history of exclusive nursing. The statistical test findings, on the other hand, indicated that there is no significant correlation between the incidence of stunting in children under five and father smoking, with a value of 0.72.

The degree of maternal education and the prevalence of stunting in children under five years old are significantly correlated, according to the examination of the link between the two. The p-value for this relationship was 0.04. With a value of p = 0.16, the data analysis results

Received: 25-10-2024 Accepted: 15-12-2024, Published Online: 08-01-2025

indicated that there was no significant correlation between the incidence of stunting in children under five and the occupation of the mother. With a value of p = 0.86, the examination of the association between family income level and the incidence of stunting revealed no significant relationship.

The results of the study showed that the incidence of stunting was relatively high were 28%. This figure is relatively high and is above the stunting rate in South Sumatra, which is 18.6% and is still above the national stunting reduction target, which is 14% (Kemenkes RI, 2018)(Kemenkes RI, 2023).

One of the nutritional issues brought on by long-term dietary shortages is stunting. Early childhood stunting, particularly within the first 1000 days of a child's existence, will affect the caliber of human resources (HR). Body organs that are stunted do not grow and develop as best they can. Every year, stunting in children under five results in 55 million Disability-Adjusted Life Years (DALYs), or the loss of a healthy life expectancy, and 1.5 million (15%) of all deaths in children under five worldwide (Kiik & Nuwa, 2020).

The study showed that there was a relationship between the history of exclusive breastfeeding and the prevalence of stunting in children under five. This outcome is consistent with the research of Campos et al. in Mexico (Campos et al., 2021). The results of this study are also in line with the results of Chaveepojnkamjorn et al in Phra Nakhon Si Ayutthaya Province, Thailand (Chaveepojnkamjorn et al., 2021). Research by Hadi et al. states that providing exclusive breastfeeding can reduce stunting rates by up to 20% in poor households and 50% in richer families (Hadi et al., 2021). Babies' primary diet consists of breast milk. Therefore, the quantity and quality of breast milk should not be lacking. The quantity and quality of breast milk are very dependent on the nutritional intake of breastfeeding mothers (Candra, 2020).

Breastfeeding through Inadequate practices can cause stunting. The baby's growth, including the possibility of stunting, is undoubtedly significantly influenced by the nutrition it receives from birth. Stunting may result from a failure to provide exclusive breastfeeding, early weaning procedures, and early nursing commencement (Kiik & Nuwa, 2020).

Colostrum is found in breast milk that is produced on the first day of life. Colostrum is full of antibodies and other essential nutrients for intestine development and infection resistance, all of which are critical for a baby's survival. Children that are exclusively breastfed may grow taller (Anita et al., 2023).

TGF B (Transforming Growth Factor Beta), which is produced in breast milk, balances pro- and anti-inflammatory chemicals to allow the intestines to operate appropriately. Additionally, growth hormones found in breast milk help the baby's digestive tract adapt by promoting the development of bacterial colonies, cell maturation, and the expansion of digestive tract cells (Wijaya, 2019).

According to the study's findings, the incidence of stunting in children under five years old was significantly correlated with the mother's educational attainment. In Sub-Saharan Africa, a study by Quamme et al. found a link between maternal education and childhood stunting (Quamme & Iversen, 2022). This study also supports studies conducted in Lampung by Sutarto et al., which found a link between stunting in children under five and mother education (Sutarto et al., 2020). These results are also in line with the research of Mutusari et. al and the research of Laksono et al (Mutiarasari et al., 2021)(Dwi et al., 2022). According to a study by Sari et al., mothers' awareness of stunting prevention for children ages 0-24 months can be greatly increased through stunting detection education (Sari et al., 2021). According to Amaha, the most significant predictors of child stunting in Ethiopia seem to be mother education, the quantity of prenatal care visits, and the location of delivery (Amaha, 2021).

Education level affects a person in receiving information. People with a better level of education will be easier to receive information than people with a lower level of education. This information is used as a provision for mothers to care for their children under five in everyday life. In general, the possibility of stunting in children is higher if the level of education of the parents is lower. The chance of stunting is usually about twice as high for children of parents with the

Received: 25-10-2024, Accepted: 15-12-2024, Published Online: 08-01-2025

lowest education compared to the highest. Low education of caregivers or mothers can increase the prevalence of stunting (Kiik & Nuwa, 2020).

One of the things that can influence someone's degree of knowledge is their educational background. A person's level of education will influence their capacity for thought; the more educated they are, the more easily they can reason and comprehend the knowledge they are given. The cognitive capacity of an individual to receive and comprehend information, including that pertaining to stunting prevention, is significantly influenced by his educational attainment.

Efforts to prevent stunting can be done early, namely since the baby is still in the womb. One of the prevention efforts that can be done is to provide early health education to mothers. Ariyanti et al mentioned that the role of mothers in the golden phase is very important in preventing stunting in children. The important role of mothers in preventing stunting in children lies in three phases: the preconception phase, the prenatal phase, and the infant - toddler phase. Given the role of mothers as a key factor in the effort to combat stunting, it is very important to involve health workers and family support to empower mothers in strengthening aspects of knowledge and skills in self-management to prepare for pregnancy and child development (Saleh et al., 2021). Health education can influence a person's learning process. Through providing education to someone, it can increase knowledge and the ability to behave healthily. One method of health education is through audio-visual media. This method is very effective to be given to mothers because they can repeat the information given and understand it well. Health education with this method can also reach many people. The use of audio visual media can be in the form of advertising videos, animated videos, short films and graphic videos (Ginting et al., 2022). Through health education media, information about the importance of exclusive breastfeeding, the importance of good nutrition for children under five to prevent stunting can be conveyed and can certainly increase the knowledge of mothers exposed to this information.

This study's practical limitations include the potential for collecting skewed data via memory recall-based questionnaires. Additionally, because this study employed a cross-sectional methodology, it was unable to make inferences about the causality of connections.

CONCLUSION

According to the study's findings, the incidence of stunting in children under five years old was significantly correlated with the mother's educational attainment, and stunting in children under five years old was significantly correlated with the history of exclusive breastfeeding. Providing education to mothers about preventing stunting can certainly increase the mother's knowledge so that mothers can apply it in caring for children under five. One important aspect in preventing stunting is the importance of providing exclusive breastfeeding to children under five as an important factor in optimizing children under five growth.

ACKNOWLEDGEMENT

This research was funded by the Directorate of Research, Technology, and Community Service of the Directorate General of Higher Education, Research, and Technology 2024, in accordance with Research Contract Number: 0016.009/UN9/SB1.LP2M.PT/2024. For this reason, the researcher would like to thank them for funding to carry out this research activity.

REFERENCES

Amaha, N. D. (2021). *Maternal factors associated with moderate and severe stunting in Ethiopian children : analysis of some environmental factors based on 2016 demographic health survey*. *6*, 1–9.

Anita, B., Mangun, M., Dewi, I. M., Asiyah, S., Wayan, N., Ningtyas, R., Aminatussyadiah, A., Lalita, E. M. F., Yugistyowati, A., Wijinindyah, A., Longulo, O. J., & Manueke, I. (2023). *Stunting*. Pustaka Aksara.

Atikah Rahayu, D. (2018). *STUDY GUIDE - STUNTING DAN UPAYA PENCEGAHANNYA Bagi Mahasiswa Kesehatan Masyarakat* (S. K. Hadianor (ed.); 1st ed.). CV Mine.

Received: 25-10-2024 Accepted: 15-12-2024, Published Online: 08-01-2025

Ayu Putri Ariani. (2014). *Aplikasi Metodologi Penelitian Kebidanan dan Kesehatan Reproduksi*. Nuha Medika.

Budiarto, E. (2002). *Biostatistika untuk Kedokteran dan Kesehatan Masyarakat*. EGC.

Campos, A. P., Vilar-Compte, M., & Hawkins, S. S. (2021). Association Between Breastfeeding and Child Overweight in Mexico. *Food and Nutrition Bulletin*, *42*(3), 414–426. https://doi.org/10.1177/03795721211014778

Candra, A. (2020). *EPIDEMIOLOGI STUNTING* (1st ed.). Fakultas Kedokteran Universitas Diponegoro Semarang.

Chaveepojnkamjorn, W., Songroop, S., Satitvipawee, P., Pitikultang, S., & Thiengwiboonwong, S. (2021). Association between Breastfeeding and Child Stunting among Adolescent Mothers. *Universal Journal of Public Health*, *9*(6), 484–491. https://doi.org/10.13189/ujph.2021.090617

Dwi, A., Id, L., Dwi, R., Id, W., & Amaliah, N. (2022). *Stunting among children under two years in Indonesia : Does maternal education matter ?* 1–11. https://doi.org/10.1371/journal.pone.0271509

Ekholuenetale, M., Okonji, O. C., Nzoputam, C. I., & Barrow, A. (2022). Inequalities in the prevalence of stunting, anemia and exclusive breastfeeding among African children. *BMC Pediatrics*, *22*(1), 1–14. https://doi.org/10.1186/s12887-022-03395-y

Ernawati, A. (2022). Media Promosi Kesehatan Untuk Meningkatkan Pengetahuan Ibu Tentang Stunting. *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK*, *18*(2), 139–152. https://doi.org/10.33658/jl.v18i2.324

Ginting, S., Simamora, A., & Siregar, N. S. N. (2022). *Penyuluhan Kesehatan Tingkatkan Pengetahuan Ibu Dalam Mencegah Stunting* (M. Nasrudin (ed.); 1st ed.). PT. Nasya Expanding Management.

Hadi, H., Fatimatasari, F., Irwanti, W., Kusuma, C., Alfiana, R. D., Asshiddiqi, M. I. N., Nugroho, S., Lewis, E. C., & Gittelsohn, J. (2021). *Exclusive Breastfeeding Protects Young Children from Stunting in a Low-Income Population : A Study from Eastern Indonesia*. 1–14.

Kemenkes. (2023). *Hasil Survei Status Gizi Indonesia (SSGI) 2022*. 1–7.

Kemenkes RI. (2018). Laporan Riskesdas 2018 Kementrian Kesehatan Republik Indonesia. In *Laporan Nasional Riskesdas 2018* (Vol. 53, Issue 9, pp. 154–165). http://www.yankes.kemkes.go.id/assets/downloads/PMK No. 57 Tahun 2013 tentang PTRM.pdf

Kemenkes RI. (2023). *SURVEI KESEHATAN INDONESIA 2023*. https://www.badankebijakan.kemkes.go.id/ski-2023-dalam-angka/

Kiik, S. M., & Nuwa, M. S. (2020). *Stunting Dengan Pendekatan Framework WHO* (R. Fahik (ed.); 1st ed., Issue Mi). CV.Gerbang Media Aksara.

Mutiarasari, D., Miranti, M., Fitriana, Y., Pakaya, D., Sari, P., Bohari, B., Sabir, M., Wahyuni, R. D., Ryzqa, R., & Hadju, V. (2021). A determinant analysis of stunting prevalence on under 5-year-old children to establish stunting management policy. *Open Access Macedonian Journal of Medical Sciences*, *9*, 79–84. https://doi.org/10.3889/oamjms.2021.5622

Quamme, S. H., & Iversen, P. O. (2022). Prevalence of child stunting in Sub-Saharan Africa and its risk factors. *Clinical Nutrition Open Science*, *42*(2022), 49–61. https://doi.org/10.1016/j.nutos.2022.01.009

RI, S. W. P. (2017). *100 Kabupaten/Kota Prioritas Untuk Intervensi Anak Kerdil (Stunting)*. Tim Nasional Percepatan Penanggulangan Kemiskinan.

Saleh, A., Syahrul, S., Hadju, V., Andriani, I., & Restika, I. (2021). Role of Maternal in Preventing Stunting: a Systematic Review. *Gaceta Sanitaria*, *35*, S576–S582. https://doi.org/10.1016/j.gaceta.2021.10.087

Sari, G. M., Rosyada, A., Himawati, A., Rahmaniar, D., Purwono, P. B., Airlangga, U., Airlangga, K., Ship, H., Airlangga, U., & Airlangga, U. (2021). *EARLY STUNTING DETECTION EDUCATION AS AN EFFORT TO INCREASE MOTHER ' S*. *57*(1), 70–75.

Received: 25-10-2024, Accepted: 15-12-2024, Published Online: 08-01-2025

https://doi.org/10.20473/fmi.v57i1.23388

Setyowati, E., Musfiroh, M., Leonardo, A., Samsuddin, & Sari, A. L. (2022). Exclusive Breastfeeding as an Effort to Prevent Stunting in Toddlers Ilham Arief STIkes Widya Dharma Husada Tangerang. *Neuoquantology*, *20*(5), 3668–3675. https://doi.org/10.14704/nq.2022.20.5.NQ22664

Soekidjo Notoadmodjo. (2010). *Metodologi Penelitian*. Rineka Cipta.

Soliman, A., De Sanctis, V., Alaaraj, N., Ahmed, S., Alyafei, F., Hamed, N., & Soliman, N. (2021). Early and long-term consequences of nutritional stunting: From childhood to adulthood. *Acta Biomedica*, *92*(1). https://doi.org/10.23750/abm.v92i1.11346

Sujarweni, V. W. (2014). *Metode Penelitian : Lengkap, Praktis, dan Mudah Dipahami*. Pustaka Baru Press.

Sutarto, S., Azqinar, T. C., & Puspita Sari, R. D. (2020). Hubungan Tingkat Pendidikan Ibu dan Pendapatan Keluarga dengan Kejadian Stunting pada Balita di Wilayah Kerja Puskesmas Way Urang Kabupaten Lampung Selatan. *Jurnal Dunia Kesmas*, *9*(2), 256–263. https://doi.org/10.33024/jdk.v9i2.2380

UNICEF, WHO, & WORLD BANK. (2021). Levels and trends in child malnutrition; UNICEF/WHO/World Bank Group-Joint child malnutrition estimstes 2021 edition. *World Health Organization*, 1–32. https://data.unicef.org/resources/jme-report-2021/

UNICEF, WHO, & WORLD BANK. (2023). Level and trend in child malnutrition. *World Health Organization*, 4. https://www.who.int/publications/i/item/9789240073791

Utami, N. W. A. (2016). Modul Antopometri. *Diklat/Modul Antopometri*, *006*, 4–36. https://simdos.unud.ac.id/uploads/file_pendidikan_dir/c5771099d6b4662d9ac299fda52043c0.pdf

Vaivada, T., Akseer, N., Akseer, S., Somaskandan, A., Stefopulos, M., & Bhutta, Z. A. (2020). Stunting in childhood: An overview of global burden, trends, determinants, and drivers of decline. *American Journal of Clinical Nutrition*, *112*, 777S-791S. https://doi.org/10.1093/ajcn/nqaa159

Verma, P., & Prasad, J. B. (2021). Stunting, wasting and underweight as indicators of under-nutrition in under five children from developing Countries: A systematic review. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, *15*(5), 102243. https://doi.org/10.1016/j.dsx.2021.102243

Wijaya, F. A. (2019). *ASI Eksklusif : Nutrisi Ideal untuk Bayi 0-6 Bulan*. *46*(4), 296–300.

Received: 25-10-2024 Accepted: 15-12-2024, Published Online: 08-01-2025