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THE RELATIONSHIP BETWEEN FEEDING PATTERNS AND THE INCIDENCE OF STUNTING IN TODDLERS (AGE 1-5 YEARS) IN POSYANDU MAWAR 5 SUKASARI VILLAGE, KARANGTENGAH SUB- DISTRICT, CIANJUR DISTRICT

Syifa Fauziah[1], Sri Hartati[1], Shinta Arini Ayu[1], Papat Patimah[1]

[1)]STIKes Permata Nusantara, Cianjur

ABSTRACT

Stunting remains a major global health issue, affecting over 160 million children under five. In Indonesia, the prevalence is still high, posing a threat to optimal child development. This study aims to determine the relationship between feeding patterns and the incidence of stunting in toddlers (aged 1-5 years) at Posyandu Mawar 5, Sukasari Village, Karangtengah District, Cianjur Regency. A cross-sectional descriptive-analytic study was conducted involving 53 toddlers and their mothers using total sampling. Data were collected through a validated questionnaire on feeding patterns and anthropometric measurements. Statistical analysis was performed using the Spearman rank test. The findings showed that 67.9% of toddlers received appropriate feeding, while 32.1% did not. Among toddlers with inappropriate feeding, all were stunted (32.1%). A significant relationship was found between feeding patterns and stunting ($p < 0.001$). Inappropriate feeding patterns are strongly associated with the incidence of stunting in toddlers. Educational efforts for mothers regarding proper nutrition and feeding practices are essential in preventing stunting.

Keywords: Toddlers, Diet, Stunting.

Correspondence:
Syifa Fauziah
STIKes Permata Nusantara
Jl. Pasirgede Raya No.6-19, Bojongherang, Kec. Cianjur, Kabupaten Cianjur, Jawa Barat
Sfauziah344@gmail.com

INTRODUCTION

Stunting is a major problem faced by many countries around the world. It is estimated that more than 160 million children under the age of 5 years experience this condition. If left untreated, the number of children experiencing stunting is expected to increase to 127 million by 2025 (World Health Organization, 2018) .

The prevalence of stunting in toddlers worldwide is quite high, reaching 22.3% or around 148.1 million children in 2022. According to (JME, 2023), most of them come from Asia (76.6 million) and Africa (63.1 million). In Indonesia, stunting is still quite high, at 30.8%, also included as one of a number of countries in Southeast Asia (Ministry of Health of the Republic of Indonesia, 2023) . This figure is far above the RPJMN target set at 14% in 2024. Stunting is a major nutritional problem, more dominant than other problems such as malnutrition and obesity.

West Java Province has been designated as one of 12 priority provinces for handling stunting in 2023, with an estimated 968,148 toddlers experiencing stunting. Research by (Nuryanti et al., 2024) shows that the prevalence of stunting in Cianjur Regency exceeds the provincial average, reaching 33.7% in 2021, but in 2022 it decreased by 13.6%.

Several studies have mentioned the factors causing stunting, namely According to (Suryani et al., 2023) Stunting is triggered by various factors, such as malnutrition in pregnant women and toddlers, lack of maternal health knowledge, limited health services, difficulty in accessing nutritious food, high food prices, and lack of access to clean water and sanitation, especially in some areas. Meanwhile, according to research (Hartati et al., 2024) explains that the lack of understanding and information makes people tend to consider stunting as something ordinary and do not recognize its symptoms. This is related to the lack of knowledge of mothers and the role of families in dealing with stunting. One of the key factors is the mother's knowledge about stunting which affects the pattern of providing nutrition to toddlers (Budianto & Akbar, 2023) Meanwhile, according to research (Tunny et al., 2024) , proper feeding patterns greatly affect children's growth. Quality and sufficient food intake in quantity is very important to support physical growth and development. If children do not get enough food variety, they are at risk of lacking essential nutrients which can cause stunting.

Given that stunting has short-term and long-term impacts in the form of stunted growth, reduced cognitive abilities, increased disease, low levels of economic productivity, and less than optimal reproductive outcomes (UNICEF 2020) . Therefore, the author is interested in conducting a study entitled "The Relationship between Feeding Patterns and the Incidence of Stunting in Toddlers (Aged 1-5 Years) in Posyandu Mawar 5, Sukasari Village, Karangtengah Sub-District, Cianjur District".

METHOD

This research employed a quantitative correlational design. The population in this study were toddlers aged 1-5 years at Posyandu Mawar 5 totaling 53 people. All respondents were involved in this study (total sampling). Data collection was carried out by direct measurement (Height & Weight) of toddlers also using a questionnaire filled out by the toddler's mother about feeding pattern as many as 15 questions. The questionnaire questions were adopted from research (Anggi, 2022) and have obtained permission from the maker. The questionnaire has been tested for validity and reliability before use. Before starting the study, all participants involved

and participating in this study were given sufficient and accurate information regarding the purpose of the study, their involvement and all knowledge related to this study. The researcher provided an information sheet and consent sheet to participants to be signed in order to participate in this study. Then all participants gave their consent to participate in this study. The analysis used in this study was descriptive analytic with a cross-sectional approach.

Before conducting the research, this research has obtained ethical approval from the Health Research Ethics Committee of STIKes Permata Nusantara with certificate number Ref: 003/9.V-KEPK PERNUS/I/2025. The research materials (questionnaire and consent form) have been approved by the Research Ethics Committee of STIKes Permata Nusantara.

RESULT

The results of this study are presented by first describing the characteristics of the respondents involved in this study. Then continued with the findings of the variables measured in this study.

Table 1: Frequency Distribution of Toddler Characteristics

Variables (n= 53)	N	%
Gender		
• Male	25	47.2
• Female	28	52.8
Age		
• 1 year	16	30.2
• 2 years	17	32.1
• 3 years	4	7.5
• 4 years	15	28.3
• 5 years	1	1.9

Table 1 describes the sample consisted of 28 females (52.8%) and 25 males (47.2%). Most toddlers were 2 years old (32.1%), followed by 1 year (30.2%), 4 years (28.3%), 3 years (7.5%), and 5 years (1.9%).

Table 2: Frequency Distribution of Mother's Characteristics

Variables (n= 53)	N	%
Work		
• Housewife	36	67.9
• Laborer	11	20.8
• Trader	6	11.3
Age		
• 16-25 Years	22	41.5
• 26-35 Years	29	54.7
• 36-45 Years	2	3.8
Education		
• Elementary School	7	13.2
• Junior High School	31	58.5
• Senior High School	14	26.4
• College	1	1.9

Number of children		
• <4 children	51	96.2
• >4 children	2	3.8

Table 2 show the sample consisted of 28 females (52.8%) and 25 males (47.2%). Most toddlers were 2 years old (32.1%), followed by 1 year (30.2%), 4 years (28.3%), 3 years (7.5%), and 5 years (1.9%).

Table 3: Frequency Distribution of Feeding Patterns

Dietary habit	**N**	**%**
Not exactly	17	32.1
In accordance	36	67.9
Total	**53**	**100**

Based on Table 3, the results show based on questionnaire responses, 67.9% of mothers (36 respondents) applied appropriate feeding patterns, while 32.1% (17 respondents) followed inappropriate patterns.

Table 4: Frequency Distribution of Stunting Nutritional Status (H/A)

Stunting (H/A)	**N**	**%**
Stunting	17	32.1
No stunting	36	67.9
Total	**53**	**100**

Based on table 4 above, anthropometric data showed that 32.1% of toddlers (17 respondents) were categorized as stunted, and 67.9% (36 respondents) had normal growth.

Table 5: Frequency Distribution of Feeding Patterns with Stunting Incidence in Toddlers (Ages 1-5 Years)

Dietary habit	***Stunting***				**Total**	***P mark***
	Stunting	%	No Stunting	%		
Appropriate	0	0	36	67.9	36	0.000
Not exactly	17	32.1	0	0	17	
Total	17	32.1	36	67.9	53	

Table 4.5 shows the results of statistical tests using the Spearman rank test. The test results show a Sig. (2-tailed) value of 0.000, which means the p- value < 0.05. Of the total 53 respondents, 36 people (67.9%) had the right diet and did not experience stunting. Meanwhile, 17 people (32.1%) who had an inappropriate diet experienced stunting.

DISCUSSION

The result shows that most respondents are included in the right diet pattern as many as 36 respondents (67.9%). According to (Ristia et al., 2023) a good diet includes the right type, amount, and meal schedule for children. The success of fulfilling children's nutrition depends on the role of mothers who must have knowledge and skills in planning nutritious food.

Meanwhile, according to (Landaburu, 2024), a good diet has a significant effect on stunting in toddlers. This is because adequate nutritional intake, a variety of nutritious foods, and a regular meal schedule can help prevent malnutrition. Food hygiene is also important to reduce the risk of infection that can interfere with nutrient absorption. In addition, maternal nutritional knowledge plays a role in developing a healthy diet, supporting physical growth and overall child development.

According to research (Herza Olivina et al., 2024) it is stated Several risk factors for stunting and the most dominant one influencing stunting is parenting, because feeding practices are related to the quality of consumption which increases nutritional adequacy so that it affects the nutritional status of toddlers.

It can be seen that most respondents are in the normal category, namely 36 respondents (67.9%). This is in accordance with (Rahmawati et al., 2024) which states that stunting in children has a serious impact that affects their growth and development. Children who experience stunting usually have a height below the standard for their age, which can result in physical and mental disorders. In addition, they are at risk of experiencing cognitive delays, which have an impact on academic achievement. Children who experience stunting are also more susceptible to infectious diseases because of their weak immune systems. Socially, they may face stigma that affects their self-confidence and social interactions.

In addition, according to research conducted by (Amalika et al., 2023) it was stated that dietary patterns that affect stunting in toddlers are mainly seen from inadequate nutritional intake, low meal frequency, and monotonous types of food. Toddlers who experience stunting generally receive unbalanced food, such as only consuming eggs and rarely vegetables, and only eating twice a day.

Table 5 shows the results of statistical analysis conducted using the lambda test and contingency coefficient. From the test results, the Sig. (2-tailed) value was obtained as 0.000, indicating that the p-value in the table was <0.05. Thus, H0 was rejected and Ha was accepted, indicating a significant relationship between feeding patterns and the incidence of stunting in toddlers (aged 1-5 years) at Posyandu Mawar 5, Sukasari Village. Based on the results of the research that has been conducted, it was found that the right feeding pattern can determine the nutritional status of toddlers to be normal, while the wrong feeding pattern can cause toddlers to experience stunting.

This is reinforced by research (Ginting et al., 2024) which states that feeding patterns have a significant relationship with the incidence of stunting in children, where good quality and frequency of eating support optimal growth and development. The selection of nutritious foods, such as vegetables and protein, as well as regular feeding ensures adequate calorie intake. In addition, research (Mandara et al., 2024) strengthens by stating that there is a significant relationship between feeding patterns and the incidence of stunting in children. The low level of food diversity, where many children only consume less than five types of nutritious foods, results in a lack of essential nutrients needed for optimal growth and development.

According to research (Anwar et al., 2022) it is stated that feeding patterns affect the risk of stunting because they can affect the nutritional intake needed for optimal child growth and development. Poor nutrition, poor food quality, and inappropriate feeding times can inhibit growth and development.

Researchers faced several limitations. The number of respondents did not match the target of the health center, nutritional status (weight) was only measured at one time when the study was conducted, mothers were less cooperative, many toddler respondents cried and did not want to be examined directly so that researchers had to find other alternatives so that the study could be carried out.

CONCLUSION

This study shows that as many as 17 respondents (32.1%) experienced stunting and as many as 36 respondents (67.9%) did not experience stunting. Thus, it can be concluded that there is a significant relationship between diet and stunting, with a sign value (2-tailed) of 0.000 indicating that the p-value is less than <0.05. The right feeding pattern can affect the nutritional status of toddlers in the normal category, whereas if the feeding pattern is not right, it can cause toddlers to experience stunting.

RECOMMENDATION

The results of this study are expected to be beneficial for various stakeholders. For educational institutions, the findings can serve as an additional reference on feeding patterns and stunting incidence, contributing to the body of research within the institution and serving as a basis for future studies. For respondents (parents or caregivers), the study may increase their knowledge and awareness of the importance of child nutrition in preventing stunting. For posyandu officers and village health workers, the results highlight the need to strengthen existing programs and enhance information dissemination related to stunting. Regular evaluation of stunting prevention programs is essential to ensure that activities are well-targeted and effective. Lastly, for future researchers, this study can serve as a foundation for further exploration into the factors influencing stunting among toddlers, both in Sukasari Village and in broader geographical contexts.

REFERENCES

Amalika, LS … Purwanto, E. (2023). Exploration of Feeding Patterns in Stunting and Non-Stunting Toddlers Based on Socio-Cultural Perspectives in West Legung Village. *Journal of Social Sciences* , *9* (2), 209–220. https://doi.org/10.23887/jiis.v9i2.71402

Anggi, NP (2022). Relationship between Diet Patterns and Stunting Incidence in Children Aged 3-5 Years in Mengani Village 2021. *Journal* , *33* (8.5.2017), 2003–2005. www.aging-us.com

Anwar, S. … Sunardi, S. (2022). Systematic Review of Risk Factors, Causes and Impacts of Stunting in Children. *Journal of Health Sciences* , *11* (1), 88. https://doi.org/10.32831/jik.v11i1.445

Budianto, Y., & Akbar, MA (2023). The Relationship between Mother's Knowledge and Attitude about Stunting with Nutritional Provision Patterns in Toddlers. *Journal of Professional Nursing Research* , *5* (3), 1315–1320. https://doi.org/10.37287/jppp.v5i3.1726

Ginting, T. … Lusten, P. (2024). The Relationship between Food Intake Patterns and the Incidence of Stunting in Toddlers Aged 12-59 Months in Bandar District, Simalungun Regency. *Ibnu Sina: Journal of Medicine and Health-Faculty of Medicine, Islamic University of North Sumatra* , *23* (2), 104–109.

Hartati, S. … Auparai, S. (2024). Mothers' knowledge and attitudes towards stunting prevention

in toddlers (1-5 years) in West Java, Indonesia. *Malahayati International Journal of Nursing and Health Science* , *7* (1), 80–86. https://doi.org/10.33024/minh.v7i1.202

Herza Olivina … Dewi Purnamawati. (2024). Analysis of Additional Food Patterns as a Risk Factor for Stunting in Toddlers at the Pasar Prabumulih Health Center. *Antigen: Journal of Public Health and Nutrition* , *2* (3), 230–243. https://doi.org/10.57213/antigen.v2i3.384

JME. (2023). Child malnutrition levels and trends: Joint UNICEF/WHO/World Bank Group Estimates of Child Malnutrition: Key Findings 2023 Edition. *UNICEF, World Health Organization and World Bank Group* , *24* (2), 32.

Ministry of Health of the Republic of Indonesia. (2023). Fact Sheet: Stunting in Indonesia and Its Determinants. *Ski* , 1–2.

Landaburu, J. (2016). ResearchNo Title No Title No Title. *Addition of Sodium Benzoate and Potassium Sorbate (Anti-Inversion) and Stirring Speed as an Effort to Inhibit Inversion Reactions in Sugarcane Juice* , *10* (2), 1–23.

Mandara, F. … Katunzi, F. (2024). The relationship between feeding practices and stunting in children under two years of age in mainland Tanzania: a mixed methods approach . *National Research Center* Bulletin . https://doi.org/10.1186/s42269-024-01266-3

Nuryanti, E. … Nency, A. (2024). The Relationship between Clean Water Sanitation Patterns, Parental Smoking Actions and Behaviors with the Incidence of Stunting in Toddlers Aged 12-59 Months in the Sukanagara Health Center Work Area in 2024. *Inovatif: Journal of Social Science Research* , *4* (3), 10965–10980. https://doi.org/10.31004/innovative.v4i3.11808

Ristia, A. … Bustanul Ulum College of Health Sciences-Aceh, S. (2023). In Toddlers Aged 12-59 Months in Bukit Selamat Village, Sungai Raya District, East Aceh Regency. *Equatorial Midwifery Journal* , *46* , 46–51.

Suryani, K. … Widiastari, NK (2023). Analysis of Causative Factors of Stunting. *Florence Nightingale Nursing Journal* , *6* (1), 8–12. https://doi.org/10.52774/jkfn.v6i1.112

Year, PB … Nursing, F. (2024). *(RELATIONSHIP BETWEEN FEEDING PATTERNS AND INCIDENTS* . *13* (1), 81–87.

Tunny, R. … Husada, M. (2024). *The Relationship between Food Intake Patterns and the Incidence of Stunting in Toddlers Aged 24-59 Months in the Mangoli Health Center Working Area, Sula Islands* .

United Nations Children's Fund (UNICEF). (2020). The Situation of Children in Indonesia - Trends, Opportunities, and Challenges in Fulfilling Children's Rights. *Unicef Indonesia* , 8–38.

World Health Organization. (2018). *World Health Organization. Reducing stunting in children: equity considerations to achieve the 2025 Global Nutrition Targets. World Health Organization; 2018.*