

Frisca Ronauli Batubara dkk (The Relationship of the Consumption of Mother's Blood Supply Tablets During Pregnancy and the Incidence of Stunting in Toddler)

by Library Referensi

Submission date: 10-Jan-2025 09:32AM (UTC+0700)

Submission ID: 2561858979

File name: IJRR21_Friscaronauli.pdf (224.58K)

Word count: 6222

Character count: 32505

The Relationship of the Consumption of Mother's Blood Supply Tablets During Pregnancy and the Incidence of Stunting in Toddler

Frisca Ronauli Batubara¹, Romauli Lumbantobing², Theofany Firza Vinata³

¹Department of Physiology, Faculty of Medicine, Universitas Kristen Indonesia, Jakarta, Indonesia

²Department of Pharmacology and Therapy, Faculty of Medicine, Universitas Kristen Indonesia, Jakarta, Indonesia

³Faculty of Medicine, Universitas Kristen Indonesia, Jakarta, Indonesia

Corresponding Author: Frisca Ronauli Batubara

DOI: <https://doi.org/10.52403/ijrr.20250121>

ABSTRACT

This research aimed to determine the relationship between maternal consumption of blood supplement tablets during pregnancy and the incidence of stunting in toddlers at the Parungkuda Health Center UPTD in 2024. The type of research used was analytical research with a cross sectional approach. Based on the results of Univariate research, it was found that 16 children experienced stunting (18%) and 73 children did not experience stunting (82%). There were 48 male children (53.9%) and 41 female children (46.1%). Among the mothers at the posyandu who were the most respondents in filling out the questionnaire were Jayanti posyandu, 11 mothers (12.4%) and the fewest were Melati 3 posyandu, Melati 6 posyandu and Melati 9 posyandu, there were 6 mothers (6.7%). It was found that 37 mothers (41.6%) had the highest level of education, while 6 mothers had at least a Diploma or above education (6.7%). There were 42 mothers (47.2%) who married under the age of 21 years. 47 mothers married when they were >21 years old (52.8). It was found that 67 mothers (75.3%) were compliant in consuming TTD. And 22 mothers were disobedient in consuming TTD (24.7). It is known that there are 78 mothers (87.6%) who have a good attitude towards consuming

TTD and 11 mothers (12.4%) who have a bad attitude towards consuming TTD. In the bivariate results, there was a significant relationship between maternal TTD consumption during pregnancy and the incidence of stunting in toddlers, $p=0.000$ ($p<0.05$). These results show that there is a significant relationship between the readiness of mothers to consume TTD during pregnancy and the incidence of stunting in toddlers at the Parungkuda Community Health Center UPTD in 2024 with a result of $p=0.000$ (0.05).

Keywords: pregnant women, macro micro nutrients, iron, TTD, stunting

INTRODUCTION

Pregnant women need adequate nutritional intake to support fetal growth and development. Fulfillment of macro and micronutrients is important for pregnant women. Macronutrient intakes such as protein, fat, and carbohydrates. Meanwhile, micronutrient intake such as calcium, iron, zinc, vitamin A, and vitamin D.¹ Often during the mother's pregnancy, the foods consumed are foods that only contain macronutrients such as energy sources, protein without realizing that the intake of nutrients Microcurrents during pregnancy should not be ignored. It is very important to

intake micronutrients to support the body's metabolism. Lack of micronutrient intake during pregnancy can cause complications such as premature birth, anemia, low birth weight, and failure to thrive (stunting).²

The need for iron intake to meet micronutrient needs during pregnancy is very important because the most abundant micronutrient mineral in the human body is iron. Consuming Blood Supplement Tablets (TTD) is important to help meet iron needs during pregnancy. The TTD intake needed during pregnancy to meet the mother's iron needs is 30-60 mg a day, a minimum of 90 pills during pregnancy starting after the nausea disappears generally in the second trimester.³

Lack of TTD intake and poor attitudes towards TTD consumption can affect iron stores in the spinal cord, which functions to produce hemoglobin (Hb).⁴ The function of Hb is to carry oxygen from the lungs to the rest of the body. A decrease in Hb in the body will cause reduced heme synthesis and reduce the size of erythrocytes (microcytic erythrocytes). This will cause iron deficiency anemia which will reduce the body's immunity, making it easy for the body to experience prolonged infections which will later impact the child's growth.⁵ The consequences for the fetus can cause low iron stores and a high risk of anemia, risk of weight gain, low birth weight and shorter growth than children of the same age (stunting).⁶

Stunting is a condition of growth failure experienced by children under five which is caused by a chronic lack of nutrition which makes the child appear shorter than children his age. This chronic malnutrition can occur from the time the baby is in the womb until the age of birth until the age of two years, or what is usually called the First 1000 Days of Life (HPK). According to the Ministry of Health (Kemenkes), the definition of stunting is a child under five with a z-score value of minus three Standard Deviations (-3SD) to less than minus two Standard Deviations (<-2SD) short, and less than minus three Standard Deviations (<-3SD)

very short. Indicators for assessing stunting status in children under five are based on the Height/Age (TB/U) or Body Length/Age (PB/U) index.⁷ Measuring stunting status in children can be done using anthropometry. Age used in anthropometric measurements is calculated in full months. For Body Length (PB) measurements used in children aged 0-24 months, measurements are taken in the supine position. Height (TB) measurement is used for children aged more than 24 months to 60 months, the measurement is carried out in a standing position. If a child aged 0-24 months can stand and the measurement is taken in a standing position, the measurement is corrected by adding 0.7cm. whereas if the child is over 24 months old, the measurement is taken in a supine position, then the measurement is corrected by subtracting 0.7cm.⁸

According to the World Health Organization (WHO), the prevalence data for children under five experiencing stunting in Indonesia in 2020 was 22.2% or 149.2 million children. One of the countries with the second-highest stunting incidence rate in Southeast Asia. Timor Leste has stunting data of 48.8% and is the country with the highest incidence of stunting in Southeast Asia. In third place is the country of Laos which occupies the country with the highest stunting rate at 30.2% and the country with the lowest stunting sufferers is Singapore with a value of 2.8%.⁹ The number of stunted children under the age of five according to the United Nations Children's Fund (UNICEF) by 22% or 149.2 million in 2020. The results of the 2021 Indonesian Nutrition Status Survey (SSGI) report nationally showed a reduction in stunting rates of 1.6% per year. Most of the 34 provinces in Indonesia showed a decline from 27.7% in 2019 to 24.4% in 2021.¹⁰ Indonesia is in 73rd place out of 116 countries based on the 2021 Global Hunger Index (GHI).¹¹ Based on Health Research data Basic (Risesdas) data in 2018, the prevalence of children under five experiencing stunting decreased, from 37.2% in 2013 to 30.8% in 2018.¹²

Even though West Java does not have the highest prevalence of stunting, this problem will still have an impact if it continues to be ignored because the prevalence of stunting in West Java is 20.4%.¹³ According to data from Open Data West Java, Bogor Regency is the area with the highest prevalence of stunting in 2021, reaching 30,844 toddlers, followed by Bandung Regency with 20,461 toddlers, Cirebon Regency with 15,220 toddlers, Tasikmalaya Regency with 15,183 toddlers, and Sukabumi Regency with 14,347 children under five.¹⁴ Data from the National Team for the Acceleration of Poverty Reduction (TNP2K) in November 2018 shows that Sukabumi Regency is included in the 100 priority regencies/cities for stunting reduction. In 2013, the prevalence of stunting in Sukabumi Regency, 20 villages in 10 sub-districts were included in the program.¹⁵ Stunting will have an impact on the quality of human resources in the long term and also in the short term. In the long term, what will be caused by stunting is a decrease in intellectual capacity, and cognitive decline which will result in low productivity. Meanwhile, the short term caused by stunting is the failure of the growth of children or toddlers so that children experience obstacles in their motor development and cause low height and other health problems.¹⁶

The causes of stunting can be due to many factors, namely, non-exclusive breastfeeding in the first 6 months, short mothers, poor economic status, poor nutritional status during pregnancy, low birth weight, and time of birth of the baby. who are not enough (premature), low level of parental education, and low knowledge of the mother so the lack of information about health regarding pregnancy affects nutritional intake during pregnancy and indirectly this also affects the nutritional status of toddlers.¹⁷

Infants under five years (toddlers) are children in the age group of 12-59 months. A child's future development is influenced by basic growth during toddlerhood because the golden period for child growth and development occurs during toddlerhood. In

the toddler years, early development is formed starting from physical, moral, and personality development. Under-fives are an age group that is vulnerable to nutritional problems and disease.¹⁸ In previous research conducted by M Ihsan H, it was shown that there was a significant relationship between low iron intake during pregnancy and the incidence of stunting because decreased body resistance as a result of iron deficiency facilitates the entry of pathogens into the body and will affect cognitive development and child growth.¹⁹ In research conducted by Fentiana, et al obtained statistical test results with a value of $p=0.03$ and it can be seen that there is a significant relationship between mothers who consume TTD according to standards and those who do not. In this study, the value $OR=1.05$ was also obtained, which means that mothers who consume TTD <90 have a 1.05 chance of having a stunted child.²⁰

Several studies have been conducted on stunting in children under five. Based on the background, the author is interested in researching "The Relationship between Maternal Blood Supplement Tablet Consumption during Pregnancy and the Incident of Stunting in Toddlers at the Parungkuda Community Health Center UPTD in 2024

MATERIALS & METHODS

Research Methods

This research is a type of analytical survey research with a cross-sectional approach. The main objective is to analyze the relationship between maternal consumption of blood supplement tablets during pregnancy and the incidence of stunting in toddlers at the Parungkuda Health Center UPTD in 2024.

Place and Time of Research

This research was conducted at the Parungkuda Community Health Center and data collection was carried out from April 3 to April 6 2024.

Population and Research Sample

Research Population

The population of this study was all mothers who filled out questionnaires from April 3 to April 6 2024, at several posyandu registered at the Parungkuda Community Health Center in 2024.

Research Sample

The sample in this study was based on a population that met the inclusion and exclusion criteria of the research carried out. The inclusion and exclusion criteria were:

Inclusion Criteria

- Women who are married and have been pregnant and consumed TTD during pregnancy.
- Mothers who have children under five and are willing to be respondents.
- Mothers and toddlers in the Parungkuda Health Center Area on April 3-6 2024.

Exclusion Criteria

- Mothers who are not willing to be respondents
- Mothers who have children over five years old.

Data Processing and Analysis

The data that has been collected will be processed using the Statistical Package for the Social Sciences (SPSS) Version 25 program. The data on stunting children in the questionnaire has not been immediately obtained. The questionnaire asked questions about the child's height, child's age, child's gender, date of posyandu and date of birth of the child, from which data will be processed using the WHO Anthropometric application to determine the prevalence of stunting children. This research involved univariate and bivariate analysis. Univariate analysis is used to observe each variable. In this study, the variables to be analyzed include the child's gender, origin of posyandu, mother's education, mother's age at marriage, mother's TTD consumption intake during pregnancy,

mother's attitude towards TTD consumption, and data on stunting children.

Meanwhile, bivariate analysis is used to examine the relationship between variables. In this study, bivariate analysis was used to find the relationship between how much TTD intake was consumed during pregnancy and the incidence of stunting and the relationship between attitudes regarding TTD consumption and the incidence of stunting

RESULT

The results of this study will be described using univariate and bivariate analysis sequentially. Univariate analysis is a statistical approach used to analyze a single variable. Bivariate analysis is a statistical approach used to determine whether there is a relationship between the dependent and independent variables. Based on the results of research entitled The Relationship between Maternal Blood Supplement Tablet Consumption during Pregnancy and the Incident of Stunting in Toddlers at the Parungkuda Community Health Center UPTD in 2024, with population data during the sampling period from April 3 to April 6 2024, 89 mothers filled out the questionnaire which was distributed widely. in several posyandu registered with the UPTD of the Parungkuda Health Center in 2024. Results from the distribution of respondents in the study This will be explained in the table below:

Univariate Results

In research, this analysis is used to determine the description of the characteristics of one variable without comparing it with other variables.

Prevalence of Stunting

Table 1. Prevalence of stunting data in children under five with the questionnaire filling period from April 3 to April 6 2024 at the Parungkuda Health Center UPTD in 2024.

Table 1. Frequency Distribution of Respondents Based on Stunting Incidents

Stunting	Frequency	Percentage (%)
Yes	16	18
No	73	82
Total	89	100%

The number of respondents was 89 mothers who filled out the questionnaire. Of the 89 mothers, it is known in the table that 16 children experienced stunting (18%) and 73 children did not experience stunting (82%) at

the Parungkuda Community Health Center UPTD in 2024.

Frequency Distribution Based on Gender

Table 2. Frequency Distribution of Respondents Based on Gender

Gender	Frequency	Percentage (%)
Male	48	53.9
Female	41	46.1
Total	89	100%

In total, the questionnaires that mothers have filled in from April 3 to April 6, 2024. Data on the child is obtained namely gender. The table shows that there are 48 male children (53.9%) and 41 female children (46.1%).

Frequency Distribution of Respondents Based on Posyandu Origin

Table 3. Frequency Distribution of Respondents Based on Posyandu Origin

Posyandu Name	Frequency	Percentage (%)
Posyandu Bantar	10	11.2
Kompa village posyandu	9	10.1
Posyandu Jayanti	11	12.4
Posyandu Melati 1	9	10.1
Posyandu Melati 2	7	7.9
Posyandu Melati 3	6	6.7
Posyandu Melati 4	7	7.9
Posyandu Melati 5	8	9.0
Posyandu Melati 6	6	6.7
Posyandu Melati 7	10	11.2
Posyandu Melati 9	6	6.7
Total	89	100%

In table 3 Frequency Distribution of Posyandu Origins, there are 11 posyandu origins registered with the Parungkuda Community Health Center UPTD who filled out the questionnaire. It is known in the table that the largest number of respondents from the Jayanti posyandu were 11 mothers (12.4%). Followed by Posyandu Bantar and Posyandu Melati 7 with 10 mothers (11.2%). At Posyandu Kompa Village and Posyandu Melati 1, there were 9 mothers (10.1%). At

posyandu 5 there were 8 mothers (9.0). In Posyandu Melati 2 and posyandu Melati 4 there were 7 mothers (7.9%) who were respondents. At posyandu Melati 3, posyandu Melati 6 and posyandu Melati 9 there were 6 mothers (6.7%) who were respondents.

Frequency Distribution of Maternal Education

1 **Table 4. Frequency Distribution of Respondents Based on Mother's Education**

Mother's Education	Frequency	Percentage (%)
Elementary School	13	14.6
Equivalent Middle School	33	41.6
Equivalent High School	37	37.1
Equivalent Diploma or above	6	6.7
Total	89	100%

In Table 4, the frequency distribution of the mother's last education is obtained. It was found that the most recent education that mothers had received was junior high school or equivalent, with as many as 37 mothers (41.6%). 13 mothers had taken elementary school and equivalent education (14.6%), 33 mothers had received high school or equivalent (37.1%) and there were also 6

mothers who had taken diploma or above education (6.7%). Diploma education or above is the mother's minimum education at the Parungkuda Community Health Center UPTD in 2024.

Frequency Distribution of Mother's Age at Marriage

Table 5. Frequency Distribution of Respondents Based on Mother's Age at Marriage

Mother's Age	Frequency	Percentage (%)
< 21 year	42	47.2
≥ 21 year	47	52.8
Total	89	100%

In table 5, the Frequency Distribution of Mother's Age at Marriage is known. It was found that from 89 mothers there were 42 mothers (47.2%) who got married at the age of under 21 years. There were 47 mothers

who married when they were >21 years old (52.8).

Frequency Distribution of Compliance with Maternal Blood Supplement Tablet Consumption during Pregnancy

Table 6. Frequency Distribution of Respondents Based on Maternal Blood Supplement Tablet Consumption during Pregnancy

Compliance with Maternal Blood Supplement Tablet Consumption during Pregnancy	Frequency	Percentage (%)
Not Obey	22	24.7
Obedient	67	75.3
Total	89	100%

In table 6, Compliance with Maternal TTD Consumption during Pregnancy, it was found that more mothers were compliant in consuming Blood Supplement Tablets. It was found that 67 mothers (75.3%) were compliant in consuming TTD. And there

were 22 mothers who were disobedient in consuming TTD (24.7).

Frequency Distribution of Maternal Attitudes in Consuming Blood Supplement Tablets

9 **Table 7. Frequency Distribution of Respondents Based on Maternal Attitudes in Consuming Blood Supplement Tablets**

Maternal Attitudes in Consuming Blood Supplement Tablets	Frequency	Percentage (%)
Bad	11	12.4
Good	78	87.6
Total	89	100%

From table 7 Mother's Attitudes in Consuming TTD. It was found that from 89 mothers at several posyandu registered at the Parungkuda Health Center UPTD, more mothers had a good attitude towards consuming TTD. And few mothers behave badly. It is known that there are 78 mothers (87.6%) who have a good attitude towards consuming TTD and 11 mothers (12.4%)

who have a bad attitude towards consuming TTD.

Bivariate Results

The purpose of Bivariate Analysis is to determine the relationship between the independent variable and the dependent variable.

Table 8. Relationship between Compliance with Maternal Blood Supplement Tablet Consumption during Pregnancy and Stunting Incidents

		Stunting		
		Stunting	No stunting	Total
Compliance with TTD consumption	Obedient	3	64	67
	Not Obey	13	9	22
Total		16	73	89

	Value	df	Asymptotic significance (2-sided)	Exact sig. (2-sided)	Exact sig. (1-sided)
Pearson Chi-Square	33.500 ^a	1	.000		
Continuity Correction ^b	29.898	1	.000		
Likelihood Ratio	29.580	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	33.123	1	.000		
N of Valid Cases	89				

Based on table 8, the results show that 67 mothers complied with TTD consumption. And there were 3 children who had stunted children who were compliant in consuming TTD, while there were 64 children who were not stunted in mothers who were compliant with consuming TTD during pregnancy. The results of statistical analysis using the Chi

square method obtained a value of $p=0.000$ ($p<0.05$), this result shows that there is a significant relationship between maternal TTD consumption during pregnancy and the incidence of stunting in toddlers at the Parungkuda Community Health Center UPTD in 2024

Table 8. Relationship between Mother's Attitude in Consuming Blood Supplement Tablets

	Stunting		Total	Value	df	Asymptotic significance (2-sided)	Exact sig. (2-sided)	Exact sig. (1-sided)
	Stunting	No stunting						
Good	5	73	78					
Bad	11	0	11					
	16	73	89					
Pearson Chi-Square	57.265 ^a	1	.000					
Continuity Correction ^b	51.094	1	.000					
Likelihood Ratio	46.702	1	.000					
Fisher's Exact Test						.000	.000	.000
Linear-by-Linear Association	56.622	1	.000					
N of Valid Cases	89							

Based on table 9, the results show that 78 mothers behaved well in consuming TTD. And those who have stunted children include mothers who have stunted children with a good attitude towards consuming TTD as many as 5 children. The results of statistical analysis using the Chi square method obtained a value of $p = 0.000$ (0.05), this result shows that there is a significant relationship between the attitude of maternal TTD consumption during pregnancy and the incidence of stunting in toddlers at the Parungkuda Community Health Center UPTD in 2024.

DISCUSSION

Based on the results of research with a data population of 89 mothers, it was found that the results of the mother's demographic description such as mother's age, mother's age at marriage, education lastly mother. Knowing the prevalence of stunted children, how much mothers consume TTD during pregnancy, and what the mother's attitude is regarding consuming TTD during pregnancy. You can also find out the relationship between the amount of maternal TTD consumption during pregnancy and the incidence of stunting, and find out the relationship between the mother's attitude regarding TTD consumption during pregnancy and the incidence of stunting.

The results of the Univariate research showed that the prevalence of stunted children was obtained at the opening of the questionnaire on April 3-6 2024. From a total of 89 respondents, data was obtained on the child's height, child's age, posyandu date and child's date of birth. From the data obtained, it was processed through the WHO Anthropometric application, then processed in SPSS version 25 and it was found that 16 children were stunted (18%) and 73 children who were not stunted (82%). There were also results from the gender of the child that were found to be more boys, namely 48 children (53.9%) compared to 41 girls (46.1%).

In the UPTD of the Parungkuda Community Health Center, there are several posyandu connected to the puskesmas. Questionnaires

were distributed to the posyandu connected to the puskesmas, namely Posyandu Bantar, Posyandu Jayanti, Posyandu Melati 1-7 and Posyandu Melati 9. It was found that the posyandu with the most respondents was Posyandu Jayanti as many as 11 respondents (12.4%). And the fewest posyandu were Posyandu Melati 6 and Posyandu Melati 3 with 6 respondents (6.7%). The thing that hinders filling out this questionnaire is that there are still many mothers who don't have Android cellphones and the signal is limited in the area.

The mother's most recent education was completion of elementary school equivalent, junior high school equivalent, high school equivalent, as well as a diploma or above. Middle school or equivalent education was the most recent education of mothers, namely 37 mothers (41.6%), and diploma education or above was the least, as many as 6 mothers (6.7%). There are still many mothers who experience low education compared to higher education. It needs to be paid attention again because low maternal education is more dominant than high maternal education. The mother's age at marriage was known in this study, the difference between mothers who married under the age of 21 years and mothers who married over the age of 21 years was not very significant. There were 42 mothers who married under the age of 21 years (47.2%) and 47 mothers who married over the age of 21 years (52.8%).

The research results showed that there was a frequency distribution of maternal TTD consumption during pregnancy, the minimum intake of maternal TTD consumption during pregnancy was 90 items during pregnancy. In this study, there were 67 mothers (75.3%) who adhered to consuming TTD more than 90 pills during pregnancy. And mothers who were not compliant, namely consuming less than 90 TTD pills during pregnancy, were 22 mothers (24.7%). The results of research on mothers' attitudes towards TTD consumption showed that there were more mothers who had a good attitude towards TTD consumption during pregnancy, namely 78

mothers (87.6%) and there were also 11 mothers who had a bad attitude towards consuming TTD during pregnancy (12.4%) Pregnant women who are deficient in micronutrients are at great risk of stunting in their children, because nutritional needs for mothers during pregnancy increase. Iron is important during pregnancy because the body needs it. TTD is recommended for consumption by pregnant women to help meet iron needs. Lack of iron during pregnancy can result in low iron stores and a high risk of anemia, risk of low birth weight and shorter growth than children of the same age (stunting).

The results in this study showed a significant relationship between maternal TTD consumption during pregnancy and the incidence of stunting with a p-value of 0.000 ($p < 0.05$). According to research conducted by Sibarani M at SD Negeri 054901 Sidomulyo Stabat, Langkat Regency, it shows a value of $p = 0.008$ ($p < 0.05$), thus it can be concluded that there is a significant relationship between maternal TTD intake during pregnancy and the incidence of stunting.²¹ It is also explained in research conducted by Fentiana, et al regarding the relationship between TTD consumption and the incidence of stunting using 2013 Riskesdas data analysis with samples of mothers throughout Indonesia, obtained results There is a significant relationship between mothers who consume TTD during pregnancy and the incidence of stunting in children aged 0-23 months. In statistical tests that have been carried out, it was found that 2,890 (39.3%) children were not stunted from mothers who consumed >90 TTD pills during pregnancy and there were 62,306 (62.8%) stunted children from mothers who consumed >90 TTD pills during pregnancy. The results of the analysis were also carried out in this study and obtained an OR value of 1.05, which means that mothers who consumed <90 TTD pills during pregnancy had a 1.05 times chance of having stunted children compared to mothers who consumed >90 TTD pills during pregnancy.²² However, the research of

Munirah, et al is not in line with this research, where the results were not significant between adherence to TTD consumption and the incidence of stunting, it was found that the p-value was >0.910 . It is possible that this could be caused by other factors that cause stunting.²²

Attitude is a person's behavior in daily life. The results of this study found that there was a relationship between the mother's attitude in consuming TTD and the incidence of stunting. The result value is p-value 0.000 (<0.05), with these results it is known that there is a relationship between the mother's attitude in consuming TTD and the incidence of stunting in toddlers at the Parungkuda Health Center UPTD in 2024. According to Misriani M, it was found that there is a relationship between the mother's attitude in TTD consumption during pregnancy with the incidence of stunting at the Hamparan Perak Community Health Center, Deli Serdang Regency. In the chi-square test, the p-value was obtained at 0.02 ($p < 0.05$) with the conclusion that there was a relationship between attitude and the incidence of stunting. In research conducted by Suryanih, et al, the chi-square test result was $p = 0.024$, which means that in this study there was a relationship between knowledge and attitudes towards using Fe tablets among women in preventing stunting in RW 012 Sukamekar Village.

In this study, it can be seen that maternal compliance with TTD consumption during pregnancy can influence the occurrence of stunting in children. And the mother's attitude in consuming TTD also greatly influences the incidence of stunting. The mother's attitude can be influenced by the influence of other people, personal experience, education, mass media, family and the desire from within oneself to behave in the best way. TTD is fulfilling the need for iron intake that mothers need during pregnancy. Apart from consuming TTD which must be sufficient, namely a minimum of 90 items during pregnancy, a good attitude in consuming it also needs to be considered to optimize the TTD that has been consumed.

Insufficient consumption of TTD and poor attitudes towards consuming it can increase the risk of stunting. Stunting affects the quality of human resources which has an impact on the risk of a nation's productive decline because in the long term the impact on children is that stunting can disrupt the child's health, disrupt the educational process and productivity in the future. Therefore, it is important to support and implement stunting prevention programs, such as providing TTD to mothers during pregnancy to meet the needs of the first 1000 days of a child's life. Consumption according to recommendations accompanied by a good attitude can prevent stunting in children. To eliminate stunting in the long term in Indonesia there must be cooperation between all groups of society. Both from the government in carrying out the best stunting prevention programs, supported by health workers who educate the public about what nutrition mothers need during pregnancy and how to have a good attitude in implementing it to support stunting prevention, and also of course from the community itself who is willing to accept information, apply, and do it. With support and cooperation between groups of society, stunting prevention programs can be implemented, and the incidence of stunting in Indonesia can be reduced year by year to improve the quality of human resources in Indonesia and achieve Indonesia becoming a developed and better country.

CONCLUSION

From the research results, it was found that there was a significant relationship between maternal TTD consumption during pregnancy and the incidence of stunting in toddlers, $p=0.000$ ($p<0.05$) and there was also a significant relationship between the attitude of maternal TTD consumption during pregnancy and the incidence of stunting in toddlers. at UPTD Parungkuda Community Health Center in 2024 with a result of $p=0.000$ (0.05).

Declaration by Authors

Ethical Approval: Approved

Acknowledgement: None

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

1. KUSDALINAH, Suryani D. Intake of macro and micro nutrients in stunted elementary school children in Bengkulu City. Aceh Nutrition Journal. 2021 May;6(1):93-9. DOI: <http://dx.doi.org/10.30867/action.v6i1.385>
2. Maksum TS, Hulinggi P. Assessment of iron and folic acid intake in pregnant women. Proceedings of the Mini National Seminar on Student Research. 2022 Dec;1(2):67-71.
3. Rahayu A, Yulidasari F, Putri AO, Anggraini L. Study guide - stunting and efforts to prevent it for public health students. 1st ed. CV Mine. 2018.
4. Tarigan N, Sitompul L, Zahra S. Intake of energy, protein, iron, folic acid and anemia status of pregnant women in the Petumbukan health center working area. Innovation Vehicle. 2021 Jun;10(1).
5. Dewi EK, Nindya TS. The relationship between adequate levels of iron and zinc and the incidence of stunting in toddlers aged 6 - 23 months. Amerta Nutr. 2017 Dec:361-8. DOI : 10.2473/amnt.v1i4.2017.361-368.
6. Anitya PC, Senjaya AA, Somoyani NK. The relationship between maternal nutritional status during pregnancy and the incidence of stunting in the work area of the Kintamani VI Community Health Center technical implementation unit in 2022. J Ilm Midwifery. 2023 May;11(1). DOI: <https://doi.org/10.33992/jik.v11i1.2075>
7. Secretariat of the Vice President of the Republic of Indonesia. 100 priority districts/cities for intervention for stunted children. 1st ed. National Poverty Alleviation Team. 2017
8. Minister of Health of the Republic of Indonesia. Republic of Indonesia Minister of Health Regulation number 2 of 2020 concerning child anthropometric standards. 2020
9. Hatijar H. The incidence of stunting in infants and toddlers. J Ilm Kes Sandi Husada. 2023 Jun;12(1). DOI: <https://doi.org/10.35816/jiskh.v12i1.1019>
10. Asih AK, Wahyudi A, Rahutami S. Analysis of the incidence of stunting in toddlers aged 24-59 months in the Mariana health center

- working area, Banyuasin district in 2023. J Kes Saelmakers PERDANA. 2023 Aug;6(2). DOI: 10.32524/jksp.v6i2.993
11. Minister of Health of the Republic of Indonesia. Decree of the Minister of Health of the Republic of Indonesia number hk.01.07/menkes/1928/2022 concerning national guidelines for stunting management medical services. 2022.
 12. Indonesian Ministry of Health. 2018 RISKESDAS National Report. 2018.
 13. Munira SL. Results of the 2022 Indonesian Nutritional Status Survey (SSGI) [Internet]. Indonesian Ministry of Health. 2023 Feb. Available from: DOI: from: https://ayosehat.kemkes.go.id/pub/files/files/46531_MATERI_KABKPK_SO_S_SSGI.pdf
 14. Open Data for West Java Province. Number of stunted toddlers by district/city in West Java [Internet]. 2022. Available from: [https://opendata.jabarprov.go.id/id/dataset/nomor-balita-stunting based-kabupatenkota-di-jawa-barat](https://opendata.jabarprov.go.id/id/dataset/nomor-balita-stunting-based-kabupatenkota-di-jawa-barat)
 15. Wiguna AR, Meigawati D, Amirulloh MR. Implementation of stunting prevention policies by the health service in Sukabumi district. J Social Sciences, Politics and Humanities. 2022 Feb;6(1).
 16. Rahman H, Rahmah M, Saribulan N. Efforts to handle stunting in Indonesia bibliometric analysis and content analysis. J Film Government of the Equatorial Voice (JIPSK). 2023 Jun;8(1).
 17. Hidayati DU, Yulastini F, Fajriani E. The influence of education in the first 1000 days of life (HPK) on the knowledge and attitudes of women of childbearing age (WUS). J of Holistic Nursing and Health Science [Internet]. 2022 Nov;5(2):169-177. Available Online: <https://ejournal2.undip.ac.id/index.php/hnhs>
 18. Sikerja IYB. Literature review: the relationship between maternal characteristics, iron and zinc intake during pregnancy with the incidence of stunting in children under five [scientific paper]. Medan: Medan Health Polytechnic, Department of Nutrition. 2021.
 19. Ihsan HM. Risk factors for stunting in children aged 6 - 12 months in the Bajo tribe. J Scientific Nutrition. 2018 Apr;5(1):59-74.
 20. Fentiana N, Tambunan F, Ginting D. Stunting, pregnancy checks and consumption of blood supplement tablets by pregnant women in Indonesia: riskesdas data analysis 2013. J Human Asylum Nursing. 2022 Jul;7(2)
 21. Sibrani M. The relationship between zinc and iron intake and the incidence of stunting in public elementary school 054901 Sidomulyo Stabat Langkat Regency. Medan Health Polytechnic (Thesis). 2019
 22. Munirah L, Sumarni S, Isaura ER. The relationship between compliance with the consumption of blood-added tablets and the upper arm circumference of pregnant women with the incidence of stunting in East Nusa Tenggara province. Public Health Nutrition Media. 2023 Nov;12(2):698-703.
- How to cite this article: Frisca Ronauli Batubara, Romauli Lumbantobing, Theofany Firza Vinata. The relationship of the consumption of mother's blood supply tablets during pregnancy and the incidence of stunting in toddler. *International Journal of Research and Review*. 2025; 12(1): 174-184. DOI: [10.52403/ijrr.20250121](https://doi.org/10.52403/ijrr.20250121)

Frisca Ronauli Batubara dkk (The Relationship of the Consumption of Mother's Blood Supply Tablets During Pregnancy and the Incidence of Stunting in Toddler)

ORIGINALITY REPORT

17%

SIMILARITY INDEX

17%

INTERNET SOURCES

17%

PUBLICATIONS

8%

STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Udayana University Student Paper	3%
2	garuda.kemdikbud.go.id Internet Source	2%
3	Mona Lydia, Christina Olly Lada, Anderias Umbu Roga. "Comparison of Indicators of Families at Risk of Stunting in High-Income Regencies and Low-Income Regencies in East Nusa Tenggara Province", JURNAL INFO KESEHATAN, 2023 Publication	2%
4	gijhsr.com Internet Source	2%
5	storage.googleapis.com Internet Source	2%
6	perpustakaan.poltekkes-malang.ac.id Internet Source	1%

7	Submitted to Konsorsium Perguruan Tinggi Swasta Indonesia II Student Paper	1 %
8	ejournal.unsap.ac.id Internet Source	1 %
9	Muthmainah, Hanik Badriyah Hidayati, Budi Yanti. "Improving Health for Better Future Life: Strengthening from Basic Science to Clinical Research", CRC Press, 2023 Publication	1 %
10	ejournal.lucp.net Internet Source	1 %
11	Wismalinda Rita, Bintang Agustina Pratiwi, Betri Anita, Nur Hidayah et al. "Family Characteristics of Stunting in Lebong Regency", Jurnal Aisyah : Jurnal Ilmu Kesehatan, 2022 Publication	1 %
12	journal.send2sub.com Internet Source	1 %
13	jurnal.umuslim.ac.id Internet Source	1 %
14	Fatimah Fatimah, Alvina Yasmine Yusuf, Fauza Rizqiya, Revinel Revinel, Tria Astika Endah Permatasari. "The Relationship of Knowledge and Attitude of Pregnant Mothers Anemia	1 %

Trimester III with Compliance with Fe Tablet Consumption in Pasar Kemis Community Health Center, Tangerang Regency", Jurnal Aisyah : Jurnal Ilmu Kesehatan, 2023

Publication

Exclude quotes On

Exclude matches < 1%

Exclude bibliography On