

# STUNTING IN TODDLERS BASED ON HAVE NATIONAL HEALTH INSURANCE IN TITI PAPAN VILLAGE, MEDAN DELI SUB-DISTRICT, MEDAN CITY IN 2022

**MARTAULINA SINAGA**

STIKes Mitra Husada Medan.

**LISDAYANTI SIMANJUNTAK**

STIKes Mitra Husada Medan.

**MASTAIDA TAMBUN**

STIKes Mitra Husada Medan.

**ADELINA SEMBIRING**

STIKes Mitra Husada Medan.

**SARA WIDORA PURBA**

STIKes Mitra Husada Medan.

**RISNA YASINA MANIK**

STIKes Mitra Husada Medan.

## Abstract

Stunting (dwarf) is a condition where a toddler has a length or height that is less when compared to age. This condition is measured by length or height that is more than minus two standard deviations of the WHO child growth standard median. The prediction result for stunting toddlers in North Sumatra Province in 2020 is 28.7%, this is a challenge in carrying out activities that contribute to achieving the target of stunting prevention due to the pandemic which has caused disruption to nutrition services, especially in health service facilities and Posyandu due to restrictions on community mobility to prevent transmission of Covid-19. The number of cases in Medan City in 2020 was 491 and there was a decrease in 2021 to 393 cases. Although there has been a decrease, it has not shown a significant figure. The purpose of this study was to look at the nutritional status, economy and health insurance related to stunting in Medan Deli District, Medan City. The results of the study obtained the most stunted toddler data at the age of 25-60 months with a total of 50 respondents (80.6%), female sex as many as 33 respondents (53.2%), body length per age in the short category as many as 29 respondents (62.9%) and the most nutritional status is very poor nutritional status with a total of 26 respondents (42%). And the characteristics of families who have stunting under five are family income in the low category of 51 respondents (80.6%), owners of National Health Insurance in non-existent status of 49 respondents (79%). The statistical test results show a relationship between nutritional status, economy and ownership of health insurance. It is recommended to monitor toddler nutrition, and have health insurance, so that it can assist in toddler health.

**Keywords:** Economy, Health Insurance, Nutritional Status, Stunting.

## INTRODUCTION

Stunting is a child under five with a z-score value less than -2 SD/standard deviation (stunted) and less than -3 SD (severely stunted). Child stunting has immediate and long-term consequences including increased morbidity and mortality as well as detrimental impacts on child development and contributes to intergenerational cycles of malnutrition, hindering economic development. (Beal et al, 2019). The worldwide prevalence of stunting in children under 5 years of age is around 25% and the reduction is around 40% is the global target for 2030. With the dramatic impact of the Covid-19 pandemic, this global target will be even more challenging (Delisle H 2021).

Based on the 2013 Riskesdas, around 37% (almost 9 million) of children under five are stunted. (National Team for the Acceleration of Poverty Reduction (2017). Multifactor that contribute to stunting include lack of nutrition during pregnancy, child infections, poor maternal health, micronutrient deficiencies, breastfeeding, poor socioeconomic status. (Amaha ND & Woldeamanuel BT, 2021). Based on data from the World Health Organization (WHO), Indonesia is the country with the fifth largest prevalence of stunting in the world. (Ministry of Health, 2017) and third in Southeast Asia by 36.4% in 2005-2017. (Ministry of Health, 2018). The prediction result for stunting toddlers in North Sumatra Province in 2020 is 28.7%, this is a challenge in carrying out activities that contribute to achieving the target of stunting prevention due to the pandemic which has caused disruption to nutrition services, especially in health service facilities and Posyandu due to restrictions on community mobility to prevent transmission of Covid-19. (Deputy for Policy Support for Human Development and Equitable Development, Secretariat of the Vice President of the Republic of Indonesia 2021).

The number of cases in Medan City in 2020 was 491 and there was a decrease in 2021 to 393 cases (Medan City Kominfo Service) and the most data was found in Titi Papan Village, Medan Deli District with 62 cases. Cases of Toddlers and Baduta (Babies under the age of two) who experience stunting will have a level of intelligence that is not optimal, this causes children to become more susceptible to disease and in the future there can be a risk of decreasing productivity levels, stunting in general will hamper economic growth, increase poverty and widen inequality. Stunting is not only experienced by poor and underprivileged households/families, but also experienced by non-poor families/those who are above 40% of the social and economic welfare level.

The causes of stunting are caused by multi dimensions, namely 1) Poor parenting practices, including a lack of maternal knowledge regarding health and nutrition before and during pregnancy, and after the mother gives birth. Facts show that 60% of children aged 0-6 months do not get breast milk (ASI) exclusively, and 2 out of 3 children aged 0-24 months do not receive complementary foods for ASI 2) Limited health services including Ante Natal Care (ANC) Post services Natal Care (PNC) and quality early learning. The Ministry of Health reports that the attendance rate of children at Posyandu has decreased from 79% in 2007 to 64% in 2013 and children have not received adequate access to immunization services. 3) Lack of access to clean water and sanitation. From

the data obtained, 1 out of 5 households in Indonesia still defecates in open spaces, and 1 out of 3 households do not have access to clean drinking water.

From the causes above, a comprehensive intervention plan is needed to reduce the prevalence of stunting by providing education and family empowerment. The purpose of this service is to provide education to mothers/families who have stunted toddlers and empower them to be able to provide action and care for these toddlers. The service is carried out by providing education to mothers/ families who have stunted toddlers in Titi Papan Village, Medan Deli District, Medan City.

## RESEARCH METHOD

This study used a cross sectional design carried out in 3 stages. Stage I is identification of the problem which is carried out by interviewing cadres, health workers. At this stage get stunting toddler data. Stage 2 is the implementation stage. This stage provides informed consent/agreement to be the subject of research. Stage 3 is the evaluation stage and follow-up plan.

## RESULTS AND DISCUSSIONS

The research result based on independent variables can be seen in the following table:

### 1. Characteristics of Toddlers

The characteristics of toddlers who experience stunting in Titi Papan Village, Medan Deli District can be seen in Table 1.

**Table 1: Characteristics of Stunting Toddlers in Titi Papan Village, Medan Deli District**

Characteristics of Toddler	Frequency	%
<b>Age</b>		
0-24 month	12	19,4
25-60 month	50	80,6
<b>Total</b>	<b>62</b>	<b>100</b>
<b>Gender</b>		
Man	29	46,8
Women	33	53,2
<b>Total</b>	<b>62</b>	<b>100</b>
<b>Body Length/Age</b>		
Dwarf	23	37,1
Very stunted	39	62,9
<b>Total</b>	<b>62</b>	<b>100</b>
<b>Nutritional Status</b>		
Very poor nutrition	26	42,0
malnutrition	25	40,3
Normal	11	17,7
<b>Total</b>	<b>62</b>	<b>100</b>

From Table 1 it was found that the most stunted toddlers were aged 25-60 months with a total of 50 respondents (80.6%), female sex as many as 33 respondents (53.2%), body length per age in the short category as many as 29 respondents (62.9%) and the most nutritional status is very poor nutritional status with a total of 26 respondents (42%).

## 2. Family Characteristics

The characteristics of families of toddlers who experience stunting in Titi Papan Village, Medan Deli District can be seen in Table 1.

**Table 2: Characteristics of Stunting Toddler Families in Titi Papan Village, Medan Deli District**

Family Characteristics	Frekuensi	%
<b>Income</b>		
Low	51	80,6
Secondary	11	19,4
<b>Total</b>	<b>62</b>	<b>100</b>
<b>Have National Health Insurance</b>		
There isn't any	50	80,6
There is	12	19,4
<b>Total</b>	<b>62</b>	<b>100</b>

From Table 2, it is obtained data on the characteristics of families with stunting under five, namely family income in the low category of 51 respondents (80.6%), JKN owners in non-existent status as many as 49 respondents (79%).

## 3. Statistical Test Results

Statistical test results for the relationship between JKN ownership and body length and nutritional status in toddlers who experience stunting in Titi Papan Village, Medan Deli District can be seen in Table 3.

## RESULTS AND DISCUSSIONS

**Table 3: The Relationship between Have National Health Insurance and Stunting in Toddlers in Titi Papan Village, Medan Deli Sub-District, Medan City In 2022**

Variable	Body Length / Age				Amount		Significant
	Very stunted		Dwarf				
	n	%	N	%	n	%	
Have National Health Insurance							
There isn't any	17	33,3	34	66,7	51	100	p=0,165
There is	6	54,5	5	45,5	11	100	
Total	23	37,1	39	62,9	62	100	

From the chi square test , it was found that there was a relationship between JKN ownership and nutritional status indicating that there was a relationship with a value of  $p=0.005$

**Table 4: Relationship between Have National Health Insurance and Nutritional Status in Titi Papan Village, Medan Deli Sub-District, Medan City In 2022**

Variable	Nutritional status				Amount		Significant
	Very poor nutrition/ malnutrition		Normal				
	n	%	N	%	n	%	
Have National Health Insurance							
There isn't any	42	82,4	9	17,6	51	100	p=0,005
There is	9	81,8	2	18,2	11	100	
Total	51	83,3	11	17,7	62	100	

From the chi square test , it was found that there was a relationship between JKN ownership and nutritional status indicating that there was a relationship with a value of  $p=0.005$

**Table 5: Relationship between Income Family and Have National Health Insurance in Titi Papan Village, Medan Deli Sub-District, Medan City In 2022**

Variable	Have National Health Insurance				Amount		Significant
	There isn't any		There is				
	n	%	N	%	n	%	
Income Family Low	51	100	0	0	51	100	p=0,000
Secondary	0	0	11	100	11	100	
Total	51	82,3	11	17,7	62	100	

From the chi square test , it was found that there was a relationship between income Family and Have National Health that there is a relationship with JKN ownership, the statistical test shows a value of  $p = 0.000$

From the chi square test , it was found that there was a relationship between income and JKN ownership that there is a relationship with JKN ownership, the statistical test shows a value of  $p=0,000$ . This study aims to assess the prevalence of stunting in toddlers based on JKN ownership. Boys only experience a slightly higher difference in girls. Research in China reports that it is significantly higher in girls (1.3%) than boys (1, 1%). (Soekatri MY, at. all, 2020). At the individual level, the prevalence of stunting is more in boys than girls.

The odds of stunting among boys are 28% higher than the odds among girls (OR 1.28; 95% and the odds of severe stunting among boys are 34% higher than the odds among girls (OR 1.34; 95% BCI; 1.14- 1.57). (Hagos S, Haile Mariam D, Wolde Hanna T, Lindtjorn B, 2017).

Studies conducted in Indonesia show that given the link between poverty and malnutrition, including stunting, children will be more likely to consume less and lower quality food and also the diversity of food may be less, especially during the period when complementary foods are started. (Soekatri MY, at. all, 2020). The body length/age of toddlers in the short category (62.9%) and very short category (37.1%) and the most stunted toddler nutritional status is very poor at 42%.

Based on a literature study in developing and Southeast Asian countries conducted by Apriluana G and Fikawati S (2018) Malaysian data show that households with low income experience stunting 2.1 times compared to households that do not have low income, meaning that low income affects the incidence stunting as well as data obtained from Indonesia but stunting that occurs in Indonesia is actually not only experienced by poor and underprivileged households/families but also experienced by households/families that are not poor above 40% (TNP2K, 2017).

Studies that have been conducted in Bangladesh show that children from poor families are significantly more likely to experience stunting, whereas households with higher socioeconomic status have more ability to allocate the necessary resources related to nutrition for their children. (Kumar ET all, 2021). Household economic inequality and its relation to malnutrition in stunted children is a controversial issue. Several studies have shown the potential for increased household income in increasing access to and consumption of goods and services, which in turn increases malnutrition. (Hagos S, Haile Mariam D, Wolde Hanna T, Lindtjorn B, 2017).

## CONCLUSION

Have National Health Insurance has a relationship with nutritional status where nutritional status is closely related to the occurrence of stunting and proves that there is a relationship with the occurrence of stunting in Titi Papan Village, Medan Deli District .

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