

## THE RELATIONSHIP OF MOTHER'S KNOWLEDGE ABOUT THE MOVEMENTS OF THE FIRST 1000 DAYS OF LIFE (HPK) AND THE INCIDENT OF STUNTING IN TODDLER IN THE WORKING AREA OF THE SINGKOHOR PUSKESMAS UPTD, 2024

Fitriani Bancin<sup>1</sup>, Ricca Nophia Amra<sup>2</sup>, Rizka Sititah Rambe<sup>3</sup>

1-3Akademi Kebidanan Medica Bakti Persada  
[fitribancin03@gmail.com](mailto:fitribancin03@gmail.com)

### ABSTRACT

Stunting or often called stunting is a condition of impaired growth (body and brain growth) in children under 5 years old (toddlers) due to chronic malnutrition and recurrent infections, especially during the First 1000 Days of Life (HPK). The aim of this research is to find out Relationship between mother's knowledge regarding the first 1000 days of life (HPK) movement in the UPTD work area of Singkohor Community Health Center in 2024. The design of this research is analytical with a cross-sectional approach using primary and secondary data. The sampling technique in this research used simple random sampling, totaling 95 respondents. The measuring instrument used is a questionnaire. Data collection using observation sheets then analysis using a computerized system. The results of statistical tests using the chi-square test with a confidence level of 95% df 1, obtained a p-value of  $0.000 < 0.05$ , meaning  $H_0$  was rejected, so it was concluded that there was a relationship between maternal knowledge about the First 1000 Days of Life (HPK) movement and the incidence of stunting in toddlers in the UPTD Working Area of Singkohor Community Health Center, Singkohor District, Aceh Singkil City in 2024. It is hoped that from the results of this research mothers can increase information, counseling and knowledge about preventing stunting in toddlers by means of nutritional interventions aimed at the first 1000 days of life (HPK).

**Keywords:** *Relationship, Knowledge, Stunting*

### INTRODUCTION

Stunting or often called stunting is a condition of impaired growth (body and brain growth) in children under 5 years of age (toddlers) due to chronic malnutrition and recurrent infections, especially during the First 1000 Days of Life (HPK). Stunting is a condition of failure to thrive in toddlers due to chronic malnutrition so that children are shorter for their age,

which occurs when the baby is in the womb but only appears after the child is 2 years old.

According to the World Health Organization (WHO) in 2023, in 2021 people's capacity to access healthy food will worsen throughout the world. More than 3.1 billion people in the world or 42% cannot afford healthy food. Millions of

children under five continue to suffer from malnutrition, this figure shows an increase from last year. In 2022, 148 million children under five (22.3%) will experience stunting, 45 million (6.8%) will experience wasting or thinness, and 37 million (5.6%) will experience overweight. Based on data from the Asia Development Bank, the prevalence of stunting under five in Southeast Asia is highest in Timor Leste with a prevalence of 48.8%. Indonesia is in second place with a prevalence of 31.8% and Laos is in third place with a prevalence of 30.2%. Meanwhile, the country in Southeast Asia with the lowest prevalence of stunting is Singapore with a prevalence of 2.8% (Natalia and Evitasari, 2020).

Based on data from the 2021 Indonesian Nutrition Status Survey (SSGI), the prevalence of Stunting nationally is 24.4% or 5.33 million toddler. The stunting rate in Indonesia changes every year. The prevalence of stunted toddlers in 2018 from Basic Health Research Results (Riskesmas) data in Indonesia was 30.8%. The prevalence of stunted toddlers in 2019 was 27.67%. The prevalence of stunted toddlers in 2020 is 26.92%. When compared with the 'non-public health problem' limit according to WHO for stunting, which is 20%, Indonesia is still in a state of public health problem (Ministry of Health of the Republic of Indonesia, 2022).

From data from the 2021 Indonesian Nutritional Status Study (SSGI), the prevalence of stunting in Aceh is classified as bad, because it exceeds the threshold set

by the WHO standard of 20%. Meanwhile, in 2022 the prevalence of stunted toddlers in this province will be 31.2%. Based on its area, Subulussalam City is the area with the highest prevalence of stunting in Aceh in 2022, reaching (47.9%). This figure has jumped (6.1) from 2021 which was (41.8%), North Aceh district is ranked second in Aceh with a prevalence of stunted toddlers of (38.3%) and Pidie Jaya district with a prevalence of stunted toddlers of (37.8%). The lowest prevalence of stunted toddlers is in Aceh Jaya district, namely (19.9%) and the city of Banda Aceh is ranked 19th in this province with a stunted toddler rate of (25.1%), (Aceh Health Profile, 2022).

One factor that can influence the incidence of stunting is maternal knowledge. Knowledge about stunting is very necessary because a mother's lack of knowledge about stunting can cause children to be at risk of experiencing stunting. Therefore, the government's efforts to reduce the numbers stunting incident, namely joining Scaling Up Nutrition (SUN). In the SUN Movement, specific interventions are carried out, namely activities specifically aimed at the First 1000 Days of Life (HPK) group. The SUN movement is an effort made by various countries to strengthen action plans to accelerate nutrition improvements, especially handling nutrition from 1000 HPK from pregnancy to children aged 2 years (Hayati, 2021).

The program achievements in the 1000 HPK Movement are mainly from specific intervention programs in Indonesia, there

are several programs that have achieved the targets of the Medium Term Development Plan (RPJMN) that have been set, such as programs carried out when mothers are pregnant, such as the program for giving Blood Supplement Tablets (TTD). in pregnant women >90 it reached 31.3% with a target of 90% which means it has not reached the target, pregnant women with Chronic Energy Deficiency (CED) who received Supplementary Feeding (PMT) reached 37.4% with a target of 65% which means it has not reached the target, Exclusive breastfeeding was 35.7% with a target of 44% which has not yet reached the target, the program for toddlers aged 6-59 months getting vitamin A reached 94.7% and the PMT program for underweight toddlers reached 59.1% with a target of 80% who have not reached the target (Septiawati, 2018).

Based on a preliminary survey conducted at the UPTD Simpang Kiri Community Health Center in 2023, from January to August, the number of toddlers was 1,864 toddlers, 145 of whom were stunted. In the working area of the Simpang Kiri Community Health Center UPTD, there are 12 villages. The number of toddlers affected by stunting in Pegayo Village is 16 toddlers, Subulussalam Village 15 toddlers, Village Iron Stairs 18 toddlers, Kuta Cepu Village 6 toddlers, Suka Makmur Village 16 toddlers, Sikalondang Village 20 toddlers, West Subulussalam Village 12 toddlers, South Subulussalam Village 7 toddlers, North Subulussalam Village 8 toddlers, Belegen Mulia Village 14 toddlers, Danau Tras Village 5 toddlers,

and East Subulussalam Village 8 toddlers. Based on the results of interviews conducted in Pegayo Village and West Subulussalam Village, it can be seen that 5 out of 7 mothers of toddlers who experienced stunting were asked about whether they often had pregnancy checks during pregnancy, then said that during pregnancy, mothers of toddlers were less concerned about their health and rarely checked their pregnancy because assume the baby is fine. Mothers of toddlers were also confused about answering about the first 1000 days of life and said they did not really understand stunting and how to prevent it. Meanwhile, 2 mothers of toddlers who are stunted know what what is stunting and how to prevent it.

Based on this background, the author is interested in conducting research "The Relationship between Mothers' Knowledge About the 1000 HPK Movement and Stunting Incidents in Toddlers in the UPTD Working Area of the Simpang Kiri Community Health Center, Subulussalam City in 2024".

## METHODS

The type of research used in the research is analytical observation with a cross sectional approach, meaning that each research subject is only observed once and measurements are carried out on character status, namely taking data regarding independent and dependent variables (Arikunto, 2017)

The location of this research was carried out in the UPTD Working Area of Simpang Kiri Community Health Center,

Simpang Kiri District, Subulussalam City in 2024 in three villages, namely Sikalondang Village, West Subulussalam Village and Pegayo Village.

The time used to complete this research is from November 2023 to May 2024.

Population is an area consisting of objects or subjects that have certain qualities selected by the researcher which are determined by the object or subject to be studied and then conclusions are drawn. The population in this study were all toddlers in the UPTD working area of Simpang Kiri Community Health Center, Simpang Kiri District, Subulussalam City, totaling 1,864 toddlers.

The sample is a portion of the entire object to be studied and is considered to represent the entire population. The technique used in this sampling is Simple Random Sampling, that is, every member of the population has the same opportunity to be taken as a sample.

In this study, we looked at the relationship between the independent variable, namely stunting in toddlers, and the dependent variable, namely mother's knowledge about 1000 HPK at the Singkohor Aceh Singkil health center in 2024.

The location of this research was carried out in the UPTD Work Area of the Singkohor Health Center, Aceh Singkil Regency in 2024 and the time used to complete this research was from November 2023 to May 2024.

Population is an area consisting of objects or subjects that have certain qualities selected by the researcher which are determined by the object or subject to be studied and then conclusions are drawn. The population in this study were all toddlers in the working area of the UPTD Puskesmas Singkohor, District, Aceh Singkil, totaling 1,864 toddlers.

The sample is a portion of the entire object to be studied and is considered to represent the entire population. The technique used in this sampling is Simple Random Sampling, that is, every member of the population has the same opportunity to be taken as a sample. The samples in this study were taken based on the Slovin formula

$$n = \frac{N}{1 + N(d)^2}$$

Furthermore, after obtaining a sample of 95 people from the total population, namely 3 villages in the UPTD work area of Singkohor Health Center using the Slovin formula, then a simple random sampling technique was carried out, namely by drawing lots. The data analysis in this study was univariate and bivariati analysis.

Primary data is data obtained directly from the respondents themselves by conducting questions and answers directly to the respondents.

The data taken from this research is secondary data, namely data obtained directly at the UPTD Puskesmas Simpang Kiri, Simpang Kiri District, Subulussalam City in 2024.



According to Notoatmodjo (2018), the data processing technique in this research was carried out by:

1. Editing (Editing) It is a process of checking the number of instruments, completeness of data including completeness of identity, instrument sheet and completeness of instrument filling, so that if there are any discrepancies it can be completed immediately by the author.

2. Coding (Give Code) This is an activity of classifying respondents' answers according to their types so that they can be easily checked. This classification is done by marking each answer with certain codes according to category.

3. Cleaning (Data Collection) This is the data cleaning stage using software which aims to double-check the data entered and the code that has been given is correct and complete.

4. Tabulating (Data Arrangement) This is the process of compiling and calculating the coding data calculated in each category. This method includes data from the question items in the box provided.

Univariate analysis was carried out to see a descriptive picture of each variable studied. Variables analyzed descriptively is Mother's Knowledge About the 1000 HPK Movement with Stunting Incidents

in the form of distribution and percentage of each variable.

Bivariate analysis is used to determine the relationship between analytical properties and design (correlation) between the independent variable and the dependent variable. To prove that there is significance between the independent variable and the dependent variable, chi-square analysis is used. At the limit of significance for the statistical calculation of p value (0.5), if  $p < p$  value (0.5), then ( $H_0$ ) is rejected ( $H_a$ ) is accepted. If  $p > p$  (0.5) ( $H_0$ ) is accepted and ( $H_a$ ) is rejected, it means that the two variables have a statistically significant relationship.

## RESULT A ND DISCUSSION

**Table 1. Frequency Distribution of Mothers' Knowledge About the First 1000 Days of Life (HPK) Movement in the Region Singkohor Aceh Singkil Health Center UPTD work in 2024**

No	Knowledge	Jumlah	
		f	%
1	<i>Good</i>	52	54,7
2	Not enough	43	45,3
<b>Total</b>		<b>92</b>	<b>100</b>

Based on the table above, it can be seen that of the 95 respondents, there were 52 mothers with good knowledge of toddlers (54.7%) and 43 mothers with poor knowledge (45.3%).

**Tabel 2** Frequency distribution of stunting among toddlers at the Singkohor Aceh Singkil health center in 2024

No	Stunting	Jumlah	
		f	%
1	Stunting	46	48,4
2	Not stunting	49	51,6
<b>Total</b>		<b>75</b>	<b>100</b>

Based on the table above, it is known that of the 95 respondents, 46 toddlers were stunted (48.4%) and 49 toddlers were not stunted (51.6%).

**Tabel 4.3** The Relationship between Mother's Knowledge About the First 1000 Days of Life (HPK) Movement and Stunting in Toddlers In the Singkohor Community Health Center UPTD Working Area Year 2024

No	pengetahuan	Kejadian <i>stunting</i>				Jumlah		Nilai <i>P</i>
		Ya		Tidak		f	%	
		f	(%)	f	(%)			
1.	Baik	8	15,4%	44	84,6%	52	54,7%	<b>0,000</b>
2.	Kurang	38	88,4%	5	11,6%	43	45,3%	
<b>Jumlah</b>						<b>95</b>	<b>100%</b>	

Based on the table above, it shows that, of the 95 respondents, it can be seen that there were 44 respondents who had good knowledge of mothers with toddlers who were not stunted (84.6%) and mothers who had less knowledge with toddlers who were stunted were 38 people (88.4%).

The results of statistical tests using the chi-square test with a confidence level of 95% df 1, obtained a p-value of  $0.000 < 0.05$ , so it was concluded that there was a relationship between maternal knowledge regarding the First 1000 Days of Life (HPK) movement and the incidence of stunting in toddlers in the work area. UPTD Puskesmas Singkohor Aceh Singkil 2024.

## DISCUSSION

Relationship between Mother's Knowledge about the First 1000 Days of Life (HPK) Movement and Stunting Incidents in Toddlers in the UPTD Working Area of Simpang Kiri Community Health Center, Simpang Kiri District, Subulussalam City in 2024

Based on the results of the research that has been conducted, it can be seen that of the 95 respondents, 52 mothers had good knowledge (54.7%) and 43 mothers with less knowledge (45.3%). Meanwhile, there were 46 toddlers who experienced stunting (48.4%) and 49 toddlers who were not stunted (51.6%).

The results of statistical tests using the chi-square test with a confidence level of 95% df 1, obtained a p-value of  $0.000 < 0.05$ , so it was concluded that there was a relationship between maternal knowledge regarding the First 1000 Days of Life (HPK) movement and the incidence of stunting in toddlers in the work area. UPTD Simpang Kiri Community Health Center, Simpang Kiri District, Subulussalam City in 2024.

The results of this research are in line with the results of research conducted by Emilia (2023), it can be seen that of the 60 respondents who had good knowledge, 34 respondents had the majority of stunting incidents in the normal category, namely 31 respondents (91.2%) while 26 respondents with less knowledge accounted for the majority of stunting incidents in the stunting category, namely 15 toddlers (57.7%). The results of the chi-square statistical test analysis obtained the Asymp value. Sig =  $0.000 < 0.05$ , so it can be concluded that there is a significant relationship between maternal knowledge about the first 1000 days of life and the incidence of stunting in toddlers at the Kereng Bangkirai Health Center, Palangka Raya City in 2022.

The results of this research are also in line with the results of research conducted by Winarsih (2022) which stated that the results of 150 analyzes revealed the distribution of respondents' knowledge about fulfilling 1000 HPK nutrition ( $p=0.026$ ). This result is also similar to the results of research conducted by Husna (2020) which states that there is a relationship between maternal knowledge about 1000 HPK and the incidence of stunting with a p value =  $0.010 (< 0.05)$ .

The results of this research are also in line with the results of research conducted by Septiawati (2018). The results of the analysis from 60 respondents show that there is a relationship between knowledge of the 1000 HPK Movement and the occurrence of stunting ( $pvalue=0.021$ ) which shows that there is a relationship between knowledge about the First 1000 Days of Life (HPK) Movement and the incidence of stunting in toddlers in the Boom Baru Palembang Public Health Center working area. 2018.

This is different from research conducted by Faridi & Wardani (2020) which showed the results that maternal knowledge about 1000 HPK did not have a significant relationship with the incidence of stunting ( $p=0.200$ ). Similar research conducted by Haris et al (2019) also stated that there was no relationship between maternal knowledge about 1000 HPK and the nutritional status of babies aged 6-24 months ( $p=0.158$ ), where knowledge is an indirect factor that influences the nutritional status of babies.

Good knowledge will create good behavior if it is supported by a person's willingness and ability to improve behavior. Mothers' low knowledge about 1000 HPK will have an impact on the nutritional status of toddlers, that is, toddlers are twice as likely to experience poor nutritional status compared to mothers with good knowledge (Nazihah, 2021).

According to researchers' assumptions, parental knowledge about nutrition helps improve the nutritional status of children to achieve growth maturity. Lack of knowledge about good eating habits, as well as insufficient knowledge about stunting determine the mother's attitude and behavior in providing food for her child, including the right type and amount so that the child can grow and develop optimally. Children with stunting easily develop health problems, both physical and psychological. Judging from the results of this study, it shows that there are still toddlers who experience stunting whose mothers have less knowledge.

Lack of information obtained by mothers can cause mothers to lack knowledge about stunting. Therefore, health workers should increase health promotion efforts for pregnant women and those with toddlers to be able to provide education about the First 1000 Days of Life and the incidence of stunting.

## CONCLUSION

Based on the research results, it can be seen that the majority of mothers' knowledge about the First 1000 Days of Life Movement (HPK) out of 95 respondents were mothers of toddlers who had good knowledge, namely 52 people (54.7%). Meanwhile, stunting in toddlers, of the 95 respondents, the majority of toddlers experienced stunting, namely 46 people (48.4%).

From the results of statistical tests using the chi-square test with a confidence level of  $0.000 < 0.05$ , it was concluded that there was a relationship between mother's knowledge about the First 1000 Days of Life (HPK) movement and the incidence of stunting in the Singkohor Aceh Singkil Community Health Center UPTD Work Area in 2024.

### Suggestions

#### 1. For Researchers

To increase the knowledge of researchers in conducting further research and to increase the insight and knowledge gained about the First 1000 Days of Life Movement (HPK) with the incidence of stunting in toddlers.

#### 2. For Educational Institutions

Research as a reference or reading and as knowledge information. As well as as a comparison tool for future researchers. And as an input and reference for the author which can be continued with wider variables.



### 3. Divide the research location

Health workers, especially at Community Health Centers, are expected to further increase health promotion efforts for pregnant women and those with toddlers and can provide education about the First 1000 Days of Life and the incidence of stunting.

### 4. For Respondents

Especially for mothers of toddlers, they are expected to always look for information about the benefits of the 1000 HPK Movement and recognize the signs of stunting in toddlers. By looking for information about the signs of stunting and knowing the benefits of the 1000 HPK Movement in the media and in writing so that mothers are more alert and can prevent or overcome stunting in toddlers.

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