

THE RELATIONSHIP BETWEEN NUTRITIONAL STATUS AND ECONOMIC STATUS AND THE INCIDENCE OF *STUNTING* IN TODDLERS IN THE WORK AREA UPTD SIMPANG KIRI HEALTH CENTER SIMPANG KIRI DISTRICT SUBULUSSALAM CITY IN 2024

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# ABSTRACT

*Stunting* is a condition when a child's height is shorter than the standard age due to long- term malnutrition. Based on the Indonesian Nutrition Status Survey (SSGI) of the Ministry of Health, the prevalence of *stunting* among children under five in Indonesia reached 21.6% in 2022. Subulussalam City is the area with the highest *stunting prevalence* in Aceh in 2022, reaching (47.9%). The purpose of this study was to determine the Relationship between Nutritional Status and Economic Status with the Incidence of *Stunting* in Toddlers in the Working Area of the Simpang Kiri Health Center, Simpang Kiri District, Subulussalam City in 2024.

The type of research used in this study is *correlational analysis* with *a cross sectional* approach using primary data and secondary data. The population in this study is all toddlers who are stunted as many as 225 toddlers in the Working Area of the UPTD Simpang Kiri Health Center, Subulussalam City in 2024. The sampling technique in this study uses *total sampling*. The measuring tool used is a questionnaire.

Based on research conducted using *the Chi Square test* with a confidence level of 95%, the results were obtained namely nutritional status (0.000<0.05), and economic status (0.000<0.05), which means that there is a significant relationship between nutritional status and economic status with the incidence of *stunting* in the Working Area of the UPTD Simpang Kiri Health Center, Subulussalam City in 2024.

It is hoped that health workers can further improve the quality of midwifery services, especially counseling about *stunting* in toddlers with the message ABCDE, A (Actively take tablets to increase blood), B (Pregnant women regularly check pregnancy at least 6 times), C (Consume enough animal protein), D (Come to the Posyandu every month), E (Exclusive breastfeeding for 6 months).

***Keywords: Nutritional Status, Economic Status, Stunting***



# INTRODUCTION

According to *the World Health Organization* (WHO) (2015), *stunting* is a disorder of children's growth and development due to chronic malnutrition and recurrent infections, which is characterized by their length or height being below standard. Furthermore, according to WHO (2020), *stunting* is short or very short based on length/height according to age that is less than -2 *standard deviations* (SD) in the WHO growth curve which occurs due to *irreversible conditions* due to inadequate nutritional intake and/or recurrent/chronic infections that occur in 1000 HPK (Regulation of the Minister of Health of the Republic of Indonesia, 2020).

Based on the results of the Indonesian Nutrition Status Study (SSGI) of the Ministry of Health, the prevalence *of stunting among* Indonesian children under five reached 24.4% in 2021, meaning that almost 1 in 4 children under five are stunted*.* Thus, the prevalence of stunting in Indonesia is included in the moderate group according to the World Health Organization standards (Aceh Health Profile, 2021).

The highest stunting *prevalence* is East Nusa Tenggara Province with a *stunting* prevalence of 35.3%, West Sulawesi at 35%, Papua at 34.6%, West Nusa Tenggara / NTB at 32.7%, and Aceh at 31.2%. The prevalence of *stunting* among toddlers in Indonesia continues to show a downward trend. In 2018, the prevalence of *stunting* in toddlers was still 30.8%. Then it dropped to 27.7% in 2019 and *continued* to fall to 24.4% in 2021. And in 2022 this figure decreased by 2.8% from

the previous year, which was 21.6%. The government even targets the end to drop to 14% until 2024 (Aceh Health Profile,

2022).

From the data of the Indonesian Nutrition Status Study (2021), *stunting* prevalence in Aceh is classified as poor, because *it exceeds* the threshold set by the World Health Organization (WHO) standard of (20%). Based on its region, Subulussalam City is the area with the highest *stunting* prevalence in Aceh in 2022, reaching (47.9%). This figure jumped

(6.1%) from 2021 which was (41.8%), North Aceh district ranked second in Aceh with stunted toddler prevalence (38.3%) and Pidie Jaya district with stunted toddler prevalence (37.8%). The lowest *prevalence of stunted* toddlers is in Aceh Jaya district (19.9%) and Banda Aceh City ranks 19th in this province with a stunted number of toddlers (25.1%) (Aceh Health Profile, 2022).

**METHOD**

The type of research used in this study is *correlational analysis* with *a cross sectional approach* using primary data and secondary data. This research was conducted in the Working Area of the Simpang Kiri Health Center, Subulussalam City from January to June 2024.



The population in this study is all toddlers who are stunted as many as 225 toddlers in the Working Area of the UPTD Simpang Kiri Health Center, Subulussalam City in 2024. The sampling technique in this study uses *total sampling*. The measuring tool used is a questionnaire.

The dependent variable in this study is *stunting*. The independent variables in this study are Nutritional Status and Economic Status.This research instrument uses Questionnaire and data processing techniques including *editing, coding, data entry, cleaning* and *tabulating techniques*.

The data analysis in this study was univariate and bivariate analysis. Univariate analysis is in the form of frequency distribution and percentage of each variable. Bivariate analysis uses *the chi-square statistical test.*

**RESULT AND DISCUSSION**

# Table.1 Distribution of stunting frequency based on nutritional status

|  |  |  |
| --- | --- | --- |
| **Status Gizi** | **f** | **%** |
| Good | 144 | 64 |
| Less | 81 | 36 |
| **Total** | **225** | **100** |

Based on the frequency distribution in the table above, it can be seen that of the 225 respondents who have good nutritional status, as many as 144 children under five (64%) and those who have poor nutritional status as many as 81 people (36%).

# Table.2 Distribution of stunting frequency based on Economic Status Status

|  |  |  |
| --- | --- | --- |
| **Economic**  **Status** | **f** | **%** |
| Tall | 62 | 27,6 |
| Low | 163 | 72,4 |
| **Total** | **225** | **100** |

Based on the frequency distribution in the table above, it can be seen that of the 225 respondents who have high economic status, 62 people (27.6%) and those who have low economic status are 163 people (72.4%).

# Table 3. Results of Bivariate Analysis of the Relationship between Nutritional Status and the Incidence of Stunting in Toddlers in the Working Area of the Simpang Kiri Health Center, Subulussalam City

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Status**  **Gizi** |  | ***Stunting* in**  **Toddlers** | |  | **P*-Value*** |
|  | ***Stunting*** | | **No**  ***Stunting*** | |  |
|  | **f** | **%** | **f** | **%** | **0,000** |
| **Good** | **144** | **64** | **0** | **0** |  |
| **Less** | **81** | **36** | **0** | **0** |
| **Total** | **225** | **100** | **0** | **0** |  |

After conducting a Statistical Test using *the Chi-Square* Test with a 95% accuracy rate, a P-Value of 0.000<0.05 was obtained. Thus, it can be concluded that there is a relationship between nutritional status and stunting incidence in the UPTD Working Area of the Simpang Kiri Health Center, Subulussalam City in 2024.



This research is in line with research conducted by Masluhiya (2020) out of 40 respondents who experienced *stunting*, there were 25 (62.5%) respondents who experienced poor nutritional status with the results of *the chi square* statistical test with a 95% accuracy rate resulting *in a p- value* of 0.000<0.05.

Nutritional status is a state determined by the level of the body's need for calories and nutrients obtained from food intake with measurable physical impacts (Kanah, 2020).

This study is in line with Yuningsih's (2022) research, showing that the majority of stunted toddlers , both with short or very short conditions with malnourished status, are 26 toddlers (43%), the results of *the chi square* statistical test with a 95% fertility rate produce *a p- value* of 0.004<0.05. Therefore, it can be concluded that there is a relationship between nutritional status and the incidence of *stunting* in toddlers.

# Table 3. Results of Bivariate Analysis of the Relationship between Economic Status and the Incidence of Stunting in Toddlers in the Working Area of the Simpang Kiri Health Center, Subulussalam City

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Economic Status** | ***Stunting* in Toddlers** | | | | **P*-Value*** |
| ***Stunting*** | | **No**  ***Stunting*** | |  |
|  | **f** | **%** | **f** | **%** | **0,000** |
| **Tall** | **62** | **27,6** | **0** | **0** |  |
| **Low** | **163** | **72,4** | **0** | **0** |
| **Total** | **225** | **100** | **0** | **0** |  |

After conducting a Statistical Test using *the Chi-Square* Test with a 95% accuracy rate, a p-Value of 0.000<0.05 was obtained. Thus, it can be concluded that

there is a relationship between economic status and stunting incidence in the UPTD Working Area of the Simpang Kiri Health Center, Subulussalam City in 2024.

Low economic status is considered to have a significant impact on the likelihood of children becoming thin or short (UNICEF, 2019). The low economic status of the family will affect the choice of food they consume so that it usually becomes less varied and less in quantity, especially in children such as sources of protein, vitamins, and minerals, thus increasing the risk of malnutrition (Bishwakarma, 2018).

This theory is in line with research (Irviani et al., 2019), showing that there is a significant relationship between family economic status and stunting incidence in the Working Area of the Barombang Health Center, Makassar City. From this study, as many as 192 respondents, there were 137 (71.4%) low-income families, the results of *the chi square* statistical test with a 95% accuracy rate resulted in *a p-value* of 0.020<0.05.

This research is in line with research (Ahyana et al, 2022) showing that out of 40 children who are *stunted*, there are 28 (70%) low-income families with the results of *the chi square* statistical test with a confidence level of 95% resulting *in a p- value* of 0.036<0.05. Therefore, it can be concluded that there is a significant relationship between family economic status and the incidence of *stunting* in toddlers.



# CONCLUSION

There is a significant relationship between Nutritional Status and Economic Status with the incidence of *Stunting* in Toddlers in the Working Area of the Simpang Kiri Health Center, Simpang Kiri District, Subulussalam City in 2024.

Nutritional status affects the incidence of *stunting* in toddlers because the better the nutritional status of the child, the better the growth and development process. Malnutrition in children can not only cause *stunting* but can affect underweight in children due to lack of vitamins and minerals, therefore mothers need to pay attention to food intake in children by providing nutritious and high- protein foods, so that children's nutritional needs will be met.

Low economic status can affect *stunting* in toddlers, because they lack food needs such as insufficient nutrition. And if the family's economy is high, then the need for food and nutrition is also sufficient, so that the influence of stunted toddlers is low.

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