

Relationship Between Feeding Pattern And Stunting In Toddlers In Panji Sibura Village, Sidikalang District 2021

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ABSTRACT

Stunting is one of the problems in the growth process because it is related to the problem of death, death, and brain development that is not optimal. Factors directly related to stunting are food intake and health status. Failure to thrive that occurs due to malnutrition at this time will have a bad impact on future life that is difficult to repair. The formulation of the problem is how the relationship between feeding patterns and the incidence of stunting in toddlers in Panji Sibura Village, Sidikalang District 2021. This type of research is analytical observational with a cross sectional design. The research is located in Panji Sibura Village, Sidikalang District. The research population is all mothers who have children under five with a total of 128. The sample size is 56 toddlers. Data analysis used univariate and bivariate with Chi Square test. The study found that there was a significant relationship between feeding patterns and the incidence of stunting. It is recommended for health workers to increase the stunting program that has been implemented.

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INTRODUCTION

Stunting is one of the problems in the growth process because it is related to an increased risk of morbidity, death, and suboptimal brain development. Recently, Indonesia has a fairly severe nutritional problem which is marked by many cases of malnutrition in the community, especially in children under five, both boys and girls. (Anak, Aek and Tobotan, 2020). The threat of nutritional problems happened in the world. As Syarif Y stated there are 165 million children with short stature, about 45% of them live in developing countries and conflict countries, and 9 million of them live in Indonesia (Syarif Y, 2020).

Based on United Nations Children's Fund, stunting has an impact on the level of intelligence, susceptibility to disease, decreased productivity and then hampers economic growth, increases poverty and inequality. UNICEF predicted that the impact of the COVID-19 pandemic on cases of malnutrition in Indonesia is quite large. The representative of UNICEF in Indonesia stated that before pandemic, there were around 2,000,000 million children suffering from malnutrition and

more than 7,000,000 million children under the age of five are stunted. The number of acutely malnourished children under five years of age could increase by 15% globally by 2020 if no action is taken (UNICEF, 2020).

Globally, the prevalence of stunting in children decreased from 39.7% in 1990 to 26.7% in 2010. This figure is expected to reach 21.8% in 2020. The prevalence of stunting in Africa has stagnated since 1990 at around 40%, while in Asia it has decreased from 49% in 1990 to 28% in 2010. The prevalence of stunting in several countries in Southeast Asia is still high, such as Myanmar (35%), Vietnam (23%), and Thailand (16%) (De Onis, 2012).

In Indonesia, the prevalence of stunting has increased from 35.7% (2010) to 37% (2013), where this figure is included in the high prevalence category (Kemenkes RI, 2013). The percentage of short and very short toddlers in North Sumatra Province experienced a significant increase from 2016 to 2018. It was about 15.1% in 2016, 16% in 2017 and 19.2% in 2018. Meanwhile, the percentage of very short toddlers was 9.34% (2016), 12.5% (2017) and 13.2% (2018) respectively. Meanwhile the results of the Health Research Ministry of Basic Health (Riskesdas) in 2018, Dairi Regency was determined the locus of stunting intervention, where 40 percent of the 30,000 toddlers in Dairi experienced failure to grow.

The problem of stunting that occurs describes a chronic nutritional problem, influenced by the condition of the mother or prospective mother, the fetus and infancy/toddler period, including diseases suffered during infancy. Like other nutritional problems, it is not only related to health problems, but is also influenced by various other conditions that indirectly affect health (Sunny, 2018). The impact of stunting can also interfere with mental and intelligence development during adulthood, this impact can be seen from the physical size that is not optimal and the quality of work that is not competitive which results in low economic productivity. Toddlers who are malnourished will experience decreased intelligence, decreased immunity and productivity, mental and emotional health problems, and growth failure. (Asiki, 2019).

Research conducted in Brazil also shows that children with minimal food consumption or malnutrition from substandard protein content can cause up to 1.5 times the potential to be affected by stunting problems. This study also assessed that children who get fat consumption lower than their needs have the potential to be up to 2 times affected by stunting problems (Brier, 2020)

RESEARCH METHOD

This research is an analytic descriptive study with a cross-sectional design, that emphasizes the time of measurement of independent and dependent variable data only once at a time (Notoatmdjo, 2014). The main objective of this study is to determine the relationship between feeding patterns and the incidence of stunting in toddlers in Panji Sibura Village, Sidikalang District in 2021. The population is subjects (patients) who meet predetermined criteria (Nursalam, 2015). The population in this study were all mothers who had children under five in Panji Sibura Village, Sidikalang District, totaling 128 toddlers. This research was conducted from November 2022 to May 2022. The population in this study were all mothers who had children under five in Panji Sibura Village, Sidikalang District, totaling 128 people.

Measurement Method

The research was conducted by distributing questionnaires to respondents, to reduce the occurrence of errors in filling out the questionnaire, the researcher accompanied the respondents in filling out the questionnaire. The questionnaire was divided into two questions, they are:

- a. Respondent Identity Questionnaire
It contains demographic data for toddlers and maternal demographic data.
- b. Questionnaire on feeding patterns

Feeding patterns were measured using a modified questionnaire from the Child Feeding Questionnaire (CFQ) (Camci, Bas and Buyukkaragoz, 2014). Questionnaire for measuring feeding patterns is given through statements in the form of Likert scale, the answers consist of very often, often, rarely, and never. The statements submitted amounted to 15 questions. Each question item has a choice of answers with a score of 1 to 4. Score 1 for the answer of the respondent who chose the answer never, score 2 for the answer for the respondent who chose the answer rarely, score 3 for the answer for the respondent who chose the answer often, score 4 for the answer for the respondent who chose very frequent answers. Question items consist of the type of food (1, 2, 3, 4, 5), the number of servings of food given (6, 7, 8, 9, 10) and feeding schedule (11, 12, 13, 14, 15). After the questionnaire is answered and the percentage is known, then observe the feeding pattern category. Feeding pattern categories are interpreted as inappropriate: <55% and appropriate: 55% - 100%. The answer is graded 5 (Strongly Agree), 4 (Agree), 3 (Less Agree), 2 (Disagree), and 1 (Strongly Disagree) (Hawari, 2013).

RESULTS AND DISCUSSIONS

Table 1 Frequency Distribution Based on Toddler Characteristics in Panji Sibura Village, Sidikalang District in 2022

Toddler Characteristic	F	%
Old		
12 – 36 Mo	33	58,9
37 – 60 Mo	23	41,1
Gender		
Male	32	57,1
Female	24	42,9
Birth Order		
1 st	28	50,0
2 nd	17	30,4
> 2 nd	11	19,6
Total	56	100

Based on the table 1, it was found that majority of toddlers were 12 – 36 Mo, about 33 toddlers (58,9%). Males were 32 toddlers (57,1%) and mostly of them were at the first boirth order, they were about 28 toddlers (50,0%).

Table 2. Frequency Distribution based on Respondent Characteristic in Panji Sibura, Sidikalang District 2022

Respondent Characteristics	F	%
Old		
< 21 yo	9	16,1
21 – 35 yo	27	48,2
> 35 yo	20	35,7
Education		
Primary School	12	21,4
Junior High School	15	26,8
High School	23	41,1
College	6	10,7
Occupation		
Housewife	18	32,1
Government		
Employee	3	5,4
Private Employee	5	8,9
Enterprenuer	14	25,0
Farmer	16	28,6
Number of Children		

1 child	26	46,4
2 children	19	33,9
> 2 children	11	19,6
Total	56	100

Based on table 2 above, it was known that majority 27 mother (47,2%) were 21 – 35 years old. About 23 mothers (41,1%) were graduated from high school, about 18 (32,1%) mothers were housewives. About 9(23.1%) respondents had enough knowledge and 3 respondents (7.7%) had good knowledge.

Table 3. Frequency Distrubution based on Feeding Pattern and Kejadian Stunting in Panji Sibura Village of Sidikalang District in 2022

Variable	F	%
Feeding Pattern		
Appropriate	35	62,5
Inappropriate	21	37,5
Stunting Incidence		
Short	31	55,4
Very Short	25	44,6
Total	56	100

Based on Table 3 it was found that from 56 respondent, about 35 respondents (62,5%) have correct feeding pattern and (37,5%) respondent had inappropriate feeding pattern, and then it was found stunting incidence from 56 respondents, majority 31 orang (55,4%) experienced short and 25 toddlers experienced very short.

Based on the findings of the study it was known that majority 33 toddlers (58,9%) were 12 to 36 months old. In accordance with research conducted by Welasasih et al., 2012, showed that most toddlers in the age group of 23-36 months experienced stunting. About 32 males (57.1%) experienced stunting. According to (Damayanti, 2016), the higher the prevalence of stunting in male toddler, the greater the risk of experiencing malnutrition due to the greater need for protein energy in males. Gender determines the size of a person's protein energy needs. And the majority of toddlers born in 1st (first) order as many as 28 people (50.0%). Then the results of this study note that the majority of mothers aged 21-35 years old as many as 27 people (48.2%). Mother's age is one of the factors that can affect the nutritional status of toddlers. This could be due to other factors, such as knowledge of the mother because in this study the age of the mother was still relatively young (<35 years) so that young mothers did not have sufficient knowledge about nutrition during pregnancy or after delivery.

The education of most of the respondents in this study was high school with 23 people (41.1%). According to Ni'mah and Nadhiroh (2015) the level of mother's education also determines whether or not it is easy for a mother to absorb and understand the nutritional knowledge obtained. Education is needed so that someone, especially mothers, is more responsive to nutritional problems in the family and is expected to be able to take appropriate action as soon as possible. For the majority of mothers' work as housewives (IRT) as many as 18 people (32.1%).

Another thing that must be considered is the ability of a family to buy food does not only depend on the size of the family income, but also the price of food itself and the level of management of home garden resources at the research site. Most of them have yards so they can meet their needs. This research is also inconsistent with (Anindita, 2012), showing no relationship between family income levels and the incidence of stunting in toddlers. This could be because the income received is not fully spent on basic food needs, but for other needs. A high level of income does not necessarily guarantee good nutritional status for toddlers, because the level of income is not necessarily allocated enough for food needs.

Based on the results of the study, it was shown that the results of the analysis of the pattern of feeding with the incidence of stunting in Panji Sibura Village, Sidikalang District in 2021 were the

respondents who provided the right diet with the incidence of stunting in the short category as many as 20 people (35.7%) while those who provided the right eating pattern with the incident very short stunting category as many as 15 people (26.8%). Then, 11 people (19.6%) gave an inappropriate diet with stunting in the short category, while 10 people (17.9%) gave an inappropriate diet with very short stunting. The results of the Chi-Square test obtained a p value <0.004 meaning that there is a relationship between feeding patterns and stunting in toddlers in Panji Sibura Village, Sidikalang District in 2021

Toddlers who come from families with low economic status experience more stunting than toddlers with high economic status. This research is also in accordance with research conducted by (Ramos, Dumith and César, 2015) in Brazil that the prevalence of stunting is two times higher with low socioeconomic levels when compared to toddlers with high socioeconomic levels. Lower family economic status tends to have stunted children (Lee et al. 2010).

The right feeding pattern is a feeding pattern that is in accordance with the type of food, the amount of food and the child's meal schedule. Based on this study, most of the respondents had implemented the proper feeding pattern for stunted toddlers in the short category. This is because the feeding patterns obtained in this study only describe the current condition of toddlers, whereas according to research from Priyono et al. (2015) the nutritional status of stunting toddlers is an accumulation of previous eating habits, so feeding patterns on certain days cannot directly affect their nutritional status. The key to success in fulfilling children's nutrition lies in the mother. Good eating habits are very dependent on the mother's knowledge and skills on how to prepare food that meets nutritional requirements (Suhardjo, 2003).

The researcher also found several facts from the respondents related to the feeding patterns of stunted toddlers who felt the need for nutritional consultation and assistance. Some toddlers are used to consuming only rice and vegetable broth, then there are toddlers who only like to eat porridge on the grounds that it is difficult to eat even up to the age of more than 2 years, as well as less varied food processing from toddler mothers who prefer to buy more practical food.

CONCLUSION

Majority toddlers were 12 – 36 months old. Gender - male and the majority of toddlers in first born order. Majority mothers were 21 – 35 years old and majority were graduated from high school and worked as housewives. There was a significant relationship between feeding pattern and stunting incidence in Panji Sibura Village, Sidikalang district in 2022.

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