



Differences in Family Support and Posyandu Visit Frequency Between Stunted and Non-Stunted 12-59 Months Old Toddlers

Original Article

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Abstract

Stunting is common at the age of 12-59 months. Some things that can affect the growth of toddler are family, parenting patterns, health services and environmental conditions. Family support is very important for children especially for their nutritional status. An example of health services for toddlers is Posyandu. Posyandu has benefits for society include monitoring the growth of toddlers so they do not suffer from stunting. The aim of the study was to determine differences family support and Posyandu visit frequency between stunted and non-stunted 12-59 months old toddlers at Tambakrejo village Pemalang regency. This is a cross sectional study. The research subjects were toddlers 12-59 months old in Tambakrejo village. Stunted was determined by height for age z-score $< -2SD$. Independent t-test dan Mann Whitney test was conducted to determine differences family support and Posyandu visit frequency between stunted and non-stunted toddler. Family support score in the stunted toddler group was 35,77 and Posyandu visit frequency was 5,40 times. Family support score in the non-stunted toddler group was 54,27 dan Posyandu visit frequency was 8,97 times. There was a significant difference family support and Posyandu visit frequency between stunted and non-stunted toddlers. Non stunted toddlers have better family support compared to stunted toddlers. Posyandu visit frequency of stunted toddlers is lower than non-stunted toddlers.

Keywords: *stunting, family support, health care*

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INTRODUCTION

Health development in the 2015-2019 period is focused on four priority programs, namely reducing maternal and infant mortality rates, reducing the prevalence of stunting under five (stunting), controlling infectious diseases and controlling non-communicable diseases [1]. Stunting is a linear growth disorder caused by the presence of malnutrition chronic nutrient intake or chronic or recurrent infectious diseases as indicated by the z-score for height for age less than $-2 SD$ [2].

Indonesia is ranked fifth in the world for the number of children with stunting conditions. Where based on basic health research data (RISKESDAS) in 2013 it is known that the prevalence of stunting under five in Indonesia is 37.2%. This means that 3 to 4 out of 10 toddlers are likely to be stunted. Although based on basic health research data (RISKESDAS) in 2018, the prevalence of stunting decreased to 30.8%, but this figure is still included in the high prevalence [3], [4].

Based on basic health research data (RISKESDAS) in 2013 it can be seen that the prevalence of stunting in Pemalang Regency is quite high, namely 46.28% and the number of stunting toddlers reaches 57,370 people. In 2016 the prevalence of stunting decreased to 21.86%.

However, this condition is still higher than the national reduction target. And based on 2017 PSGdata conducted by the Pemalang District Health Office, there are several villages with a high prevalence of stunting, one of which is Tambakrejo Village [5].

Several things that can affect the growth of toddlers are the family, parenting patterns, health services and environmental conditions [6]. Where family support is very important for children, especially regarding their nutritional status. But in the reality there are still many parents who do not pay attention to the nutritional status of their children, especially parents who are busy working outside, they only provide pocket money without providing nutritious food from home. So that this can cause children to lack nutritional intake [7]. Based on research conducted by Yuli Indarti, it shows that toddlers with good family support have a percentage of poor nutrition 9.3%, where this figure is smaller than the percentage of malnutrition in toddlers with support bad family that is equal to 15.8% [6].

One form of health services for children under five is posyandu. Posyandu has benefits for the community, including monitoring the growth of toddlers so they do not suffer from malnutrition, infants and toddlers get vitamin A, babies get complete immunizations, stimulate growth and development of toddlers by using educational games at the posyandu, detect early growth and development, obtain health education about mothers and children and serves to share knowledge and experiences about maternal and child health. These things show that the role of posyandu is very important in monitoring the growth and development of toddlers [8]. based on research conducted by Andi Sastria stated that there is a relationship between the frequency of posyandu visits and the incidence of stunting in toddlers [9].

Until now, there have not been many studies regarding differences in family support and the frequency of posyandu visits for stunted and non-stunted toddlers. Therefore, in this study, researchers wanted to see if there were differences in family support and the frequency of posyandu visits for stunting and non-stunting toddlers aged 12-59 months in Tambakrejo Village, Pemalang Regency.

MATERIAL AND METHODS

This research is included in the scope of science in the field of community nutrition with an observational research design and a cross sectional approach. The variables in this study include independent variables and dependent variables. The independent variables are stunting and non-stunting, and the dependent variable is family support and frequency of posyandu visits. The population in this study were toddlers aged 12-59 months. The subjects in this study were toddlers aged 12-59 months in Tambakrejo Village, Pemalang Regency who were categorized as stunting and as a comparison, among others, toddlers who were categorized as non-stunted. The study was conducted in April 2021. Subjects were taken at RW 01-RW 07 Tambakrejo Village, Pemalang Regency.

The inclusion criteria in this study were toddlers aged 12-59 months who resided in Tambakrejo Village, Pemalang Regency and had a KIA book. The exclusion criteria were the subject withdrew from research activities. Subject selection and research data collection was carried out in March 2021. Sampling was carried out using the cluster random sampling method and then divided into 2 groups of nutritional status, namely stunting and non-stunting. Making ethical clearance is submitted to the Health Research Ethics Committee of the Semarang Ministry of Health Poltekkes with number 249/EA/KEPK/2021.

The data collected included data on subject characteristics, subject anthropometry, family support scores, and frequency of posyandu visits. The data on the characteristics of the subjects were obtained through a questionnaire interview. The identity of the subjects included name, date of birth, age, gender, mother's name, mother's date of birth, mother's age, number of children.

Anthropometric measurements were carried out to determine nutritional status based on height and Z-score of height according to age. Data collection was carried out by visiting house to house by implementing health protocols. Measurement of height was carried out using microtoa on each subject and then continued with the measurement of the height for age z-score using the

WHO Antro application. The results of the Z-score of height according to age are used to determine groups of stunted and non-stunted toddlers.

Family support data were obtained through interviews and filling out family support questionnaires obtained from previous studies. The questionnaire guide was measured using a Likert scale with all favorable statements. Family support is measured by several instrument parameters, namely informational support, emotional support, appreciation/assessment support, and instrumental support [10]. The results of filling out the questionnaire were then assessed to determine family support for each subject where if the score was less than 20 it was categorized as low, 21-39 was categorized as moderate, and more than equal to 40 was categorized as high in the information support and rewards parameters, a score of 16 is categorized as high, a score of 5-15 is categorized as moderate, and a score of 4 is categorized as low. In addition, on the parameters of emotional and instrumental support, if a score of 24 is categorized as high, a score of 7-23 is categorized as moderate, and a score of 6 is categorized as low [11].

Data on the frequency of posyandu visits were obtained through a list of posyandu attendance that had been recorded in each subject's MCH book, which was calculated from March 2020 to March 2021. An assessment was then carried out if attendance was 8 times a year then it was categorized as good and if attendance was <8 times within a year it is categorized as not good [12].

The data were then analyzed using a computer statistical program, namely SPSS. Statistical analysis to determine differences in family support and frequency of posyandu visits for stunted and non-stunted toddlers, statistical tests using the independent t-test and Mann Whitney test which previously tested for normality using the Kolmogorov-Smirnov test.

RESULTS

Table 1 shows the characteristics of the research subjects consisting of the age of the child, the sex of the child, and the age of the mother. Toddlers (12-35 months) and toddlers (36-59 months) had the same stunting frequency, which was 50% each. The frequency of stunting with female gender is slightly higher (63.3%) compared to male gender (36.7%). Of the 30 stunting toddlers, there are 76.7% mothers who have children 2 and 23.3% who have children > 2. In addition to the group of non-stunted toddlers there are 2 subjects with mothers who have children more than 5. The number of children in the family has an effect on food security in the family, but in this study the number of children did not have a relationship with the incidence of stunting in children under five in Tambakrejo Village [13].

Table 1. Subject's Characteristic

Variable	Stunting		Non-Stunting	
	n	%	n	%
Age of children				
12-35 months	15	50	20	66.7
36-59 months	15	50	10	33.3
Sex				
Male	11	36.7	18	60
Female	19	63.3	12	40
Age of Mothers				
20-34 years	22	73.3	18	60
≥ 35 years	8	26.7	12	40
Number of children				
≤ 2	23	76.7	18	60
> 2	7	23.3	10	33.3
> 5	0	0	2	6.7

The difference in family support and the frequency of posyandu visits for stunted and non-stunted toddlers is shown in table 3. Based on the results of bivariate analysis using Mann Whitney, it shows that there is a significant difference between the average family support and the frequency of posyandu visits for stunted and non-stunted toddlers ($p < 0.05$). In the stunting toddler group, the average family support score was 35.77 and the average frequency of posyandu visits was 5.40 times. On the other hand, the non-stunted toddler group had an average family support score of 54.27 and an average frequency of posyandu visits 8.97 times. Based on table 3, it is explained that all family support instruments for stunting and non-stunted toddlers have

moderate scores, but there are some stunting toddlers who have low scores of information support and rewards. Meanwhile, for non-stunted toddlers, there are only 8 toddlers who have low information support scores.

Table 2. Family Support and Frequency of Posyandu Visits for Each Group

Variabel	<i>Stunting</i>			Mean \pm SD	<i>Non Stunting</i>			Mean \pm SD	<i>P</i>
	Low (n)	Moderate (n)	High (n)		Low (n)	Moderate (n)	High (n)		
Dukungan keluarga									<0,001*
Information	8	21	1	35.77 \pm	8	17	5	54.27 \pm	
Emotional	0	30	0	11.48	0	27	3	12.37	
Score	6	24	0		0	20	10		
Instrument	1	29	0		0	24	6		
Posyandu Visit (times/year)				5,40 \pm 1.92				8,97 \pm 1.97	<0,001*

DISCUSSION

This research was conducted on 60 children who live in Tambakrejo Village, Pemalang Regency. Subjects are male and female with an age range of 12-59 months who have a MCH handbook and are registered at the Posyandu in Tambakrejo Village. The results of this study showed that as many as 50% of the 60 children were stunted or had a z-score < -2SD. The most stunting toddler group occurred in toddlers with female gender. Stunting is chronic malnutrition due to lack of nutrient intake for a long time and is usually followed by frequent illness [14]. Incidence of stunting in children can be caused by several factors, namely family and household, food intake, breast milk, and infection [4].

There are several subjects from the group of stunted and non-stunted toddlers who have mothers aged 35 years, where that age is a high-risk age. High risk is a greater danger during pregnancy and childbirth, when compared to normal pregnant women. In addition, mothers with high risk will allow growth disorders in children [15]. In addition, based on the results of the study, there are several mothers who have children >2 and >5, which according to theory, a large number of children will lead to less food intake and this is also a problem. factors in determining the nutritional status of children [13]. However, it can be concluded that these two things cannot be determined as factors causing stunting in children under five in Tambakrejo Village.

As already mentioned, one of the causes of stunting in children is family and household factors. Families and households are providers of food for children under five. Families who do not know good nutritional intake for toddlers will provide food that cannot meet the needs of toddlers so that it will affect the growth of toddlers [16]. Based on research, family support for children who live in Tambakrejo Village is good, as indicated by the frequency of samples with high family support scores more than samples with moderate family support scores, and all respondents stated that the role of child care is more likely to be carried out by mothers.

However, based on the analysis of a different test using Mann Whitney, it shows that there is a significant difference between the average family support for stunting and non-stunted toddlers. Where the average score of lower family support is owned by stunting respondents, namely 35.77 while the average score for non-stunted respondents is 54.27. This proves that family support affects the incidence of stunting in toddlers. The results of the study are almost the same as the research conducted by Nurul which states that there is a relationship between family support and the nutritional status of toddlers [17]. Both of these studies are in line with the existing theory that one of the factors that influence the nutritional status of children is family factors, and instrumental support instruments. According to the theory, the informative support provided by the family to the subject is a form of family health care function [18]. The low informational support in this study was due to the fact that family members never told mothers or discussed child care, food choices, and growth and development. child. While the support of appreciation or assessment is an affective form of the family in improving health status. Through the support of appreciation, a person will get recognition for his abilities, no matter how small and simple. Recognition can be in the form of praise so that someone will feel more appreciated, loved, and relied on [19]. However, in this study the thing that caused the low award support score was the lack of recognition and praise from family members for the mother in caring for the child. Furthermore, instrumental support is support provided by the family directly which includes

material assistance in the form of financial or services [18]. Instrumental support in this study that was not obtained by the mother was that if the child was sick and had to come to the posyandu, the mother would take the child alone without being accompanied or replaced. by other family members.

One of the indirect causes of stunting in children under five is the existing health services in the community. One of the forms of health services that exist in the community is posyandu [20]. The activity of toddlers to the posyandu has a very large influence on monitoring nutritional status. Toddlers who are routinely weighed and weighed every month will know the changes in their nutritional status [21]. Based on the results of the study, there were 30 respondents (50%) with a high frequency of posyandu attendance and some of them having a low frequency of posyandu visits. Most respondents with poor posyandu attendance stated that it was too difficult to go to posyandu because they had to take care of several children alone.

In addition, the results in this study indicate that there is a difference in the frequency of posyandu visits for stunted and non-stunted toddlers where the average frequency of posyandu visits for stunted toddlers is lower (5.40 times) compared to non-stunted toddlers (8.97 times). The results of a study by Andi Sastria stated that there was a relationship between the frequency of posyandu visits and the incidence of stunting in toddlers [9]. Both of these studies are in line with the existing theory that mothers with regular posyandu visits will get the latest information about health that is useful in determining a healthy lifestyle in every day, besides that the family can understand what foods are given to meet the nutritional status of toddlers, as well as the importance of monitoring nutritional status on a regular basis [22].

CONCLUSION

There are differences in family support and the frequency of posyandu visits for stunted and non-stunted toddlers. Non-stunted toddlers have better family support than stunting toddlers. The frequency of posyandu visits for stunted toddlers is lower than for non-stunted toddlers.

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Efforts should be made to develop the posyandu cadres in each family to increase family support, especially in monitoring the nutritional status of children and the need for support for the revitalization of posyandu by encouraging the community to be active in posyandu in early detection of stunting in children.

CONFLICTS OF INTEREST

Conflict of interest : Authors state no conflict of interest.

Disclosure statement : No author has any financial interest or received any financial benefit from this research.

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