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The Relationship Between Mother's Knowledge About Nutritious Food and the Incidence of Stunting in Toddlers in Gunungagung Village

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Abstract: One of the problems regarding nutrition in Indonesia, especially the problem that occurs in Gunungagung Village, is stunting. Stunting is a disease that is declared chronic and has an impact on the development and growth of stunted sufferers. One of the contributing factors is a lack of nutritional intake. The behavior of providing nutritional intake to toddlers is influenced by a mother's knowledge. Therefore, a mother's knowledge of preparing a nutritious food menu can ensure good nutrition. The aim of this research is to find out and identify the characteristics of respondents from mothers based on age, education, occupation and characteristics of respondents from toddlers based on age and gender, mothers' knowledge about nutritious food, categories of stunting incidents that occur in toddlers and the relationship between mothers' knowledge about food. nutrition and the incidence of stunting among toddlers in Gunungagung Village. This research uses quantitative with a cross sectional design. Sampling used total sampling technique. With a total sample of 48 respondents, the data collection was observation, questionnaires, interviews and documentation. Data analysis used univariate and bivariate analysis (chi square) and correlation. The results of this research are that a p-value of 0.000 is <0.05, so H0 is rejected and H1 is accepted and the correlation is weak in the form of a negative correlation. Based on the results of this description, it can be decided that there is a relationship between maternal knowledge about nutritious food and the incidence of stunting among toddlers in Gunungagung Village with a correlation value of -292 with a weak correlation level.

Keywords: *Mother's Knowledge, Nutritious Food, Stunting.*

INTRODUCTION

Nutritional problems have always been a very popular problem, not only in Indonesia, but also throughout the world. Moreover, the problem of stunting is a challenge for the world because stunting sufferers are one of the factors that hinder human development in the world. As a Developing Country, Indonesia also has major nutritional problems, namely overnutrition and undernutrition. The existence of these problems is at risk of occurring in both rural and urban communities.

This nutritional problem usually occurs during the period of growth and development of children at the age of toddlers because basic growth at this time greatly influences and determines the child's further development. Toddlers are a group that is very susceptible to various diseases, especially malnutrition problems, one of which is stunting.

Atikah Rahayu, S.KM., M.PH et al (2018: 11) stated that stunting is a condition that is stated as failure to grow or growth failure that occurs in toddlers caused by chronic lack of nutritional intake which results in the child having a short height that is not appropriate for their age. The result of lack of

nutrition in children usually occurs since they are still babies in the womb and in the first period after the child is born, but children who experience stunting will be known after the child is 2 years old.

Based on the results of the 2021 Indonesian Nutritional Status Survey (SSGI), the number of stunting cases in Tegal Regency was 28%. However, the TTPS (Stunting Acceleration and Reduction Team) conducted a re-measurement of toddlers in Tegal Regency to coincide with the implementation of BIAN (National Child Immunization Month) in August 2022, obtaining interim results that the prevalence of stunting cases in Tegal Regency decreased to 17.6%.

The decline in stunting cases is based on data from the electronic application for recording and reporting community nutrition (e-PPGMB) with the number of children under 5 years of age, namely 116,868 toddlers. Of the many existing numbers , 87.21 % have their length or height detected. Of the many toddlers whose height has been detected, 17,906 toddlers or 17.6 % have experienced stunting.

There are 5 Health Centers that have a high prevalence of stunting cases in Tegal Regency in 2022, namely Bojong Health Center with a prevalence of stunting cases of 30.1% of toddlers, Kalibakung Health Center at 27.4%, Bumijawa Health Center at 26.2%, Margasari Health Center at 25.7% and Jatibogor Health Center at 25.2% of stunting cases that occur in toddlers. However, there are several Health Centers with a low prevalence of stunting cases, namely 5 Health Centers consisting of 1) Pangkah Health Center with a prevalence of 5.3% 2) Dukuhwaru Health Center 9.6% 3) Kaladawa Health Center 10.5% 4) Pagerbarang Health Center 11.5% and 5) Talang Health Center at 12.7% (Ariadi 2022) .

Stunting in toddlers (five-year-old babies) is the result of several causes that are very often associated with poverty, including health, environment, nutrition, and sanitation. Lack of nutritional intake, especially energy, calcium, iron, zinc (essential minerals), and protein is one of the factors that directly affects babies under 5 years of age who are affected by stunting (Latifah, Prastiwi, and Baroroh, 2020: 144) .

Another factor that causes stunting is the mother's knowledge of nutritious food. One of the supporters of child survival and growth is by providing MPASI (Complementary Food for Breast Milk). Children do not eat nutritious food and reduced food intake in children occurs because at this age there are often nutritional problems due to difficulty eating in children. In addition, in meeting the nutritional needs of children under the age of five, it is necessary to pay attention so that they are more interested in playing with friends and people around them (Widayanti, Munjiati, and Wiyati, 2020) .

Nutritious food and balanced food are foods that contain all the substances needed by the human body and in sufficient quantities, namely neither excessive nor deficient. This is closely related to children's growth and development, intelligence, and health (Setyaningrum, 2019) . If a child's diet is not achieved properly, it will affect their growth and development so that it can cause a thin, short body, and can even cause other nutritional problems. Dewi Pertiwi Dyah Kusurdayanti, et al (2017: 4–7) stated that there are several nutrients that are very much needed by the toddler's body for their growth and development, including: 1) Carbohydrates, 2) Energy, 3) Fat, 4) Protein, 5) Fiber and 6) Vitamins and Minerals.

In relation to the occurrence of stunting, this occurs because in providing food, mothers do not fully know about foods that have good and healthy nutrition for their child's body needs in order to facilitate growth and development in toddlers and do not fully know how to provide nutritious food properly in preventing stunting. Nowadays, parents prefer fast food or instant food because it is practical and easy without first finding out whether the instant food has sufficient nutritional content or not, in addition, parents who choose this instant food do not provide balanced food with nutritious food and healthy food.

Mothers as parents have a very important role in fulfilling the nutritional needs of their children.

Mothers must have sufficient knowledge and skills as capital to meet their children's nutritional needs. Children's eating patterns must be formed as well as possible by parents who are able to create a comfortable atmosphere and provide attractive food so that their children's nutritional needs are met (Nongyendi & et al., 2013).

The role of mothers in parenting is being able to handle food matters starting from shopping for food menus, preparing food menus, and feeding their children, making schedules and the amount of food for their children (Munawaroh et al. 2022, 49) . Parents who have young children view overcoming nutritional problems from an early age , especially in preventing delays in child development, as trivial and ordinary by ignoring the impact of stunting that occurs in their children.

So basically parents, especially mothers, have a very important role in providing balanced nutritional intake for their children and besides that, a mother must be able to provide good food for her child starting from providing daily food with balanced nutrition and complete nutrition starting from carbohydrates, proteins, vitamins, fats and minerals or commonly called 4 healthy 5 perfect foods. 4 healthy consists of staple foods, side dishes, vegetables, and fruits while 5 perfect is milk which is used as additional nutrition.

Based on the description, a mother must have sufficient or good knowledge about nutritious food or about the substances needed by the toddler's body according to their age. Currently, on social media there is a lot of information about nutritious food, substances needed by the toddler's body and other information.

METHODS

The research method used is quantitative research. Quantitative research is a process of finding knowledge using power in the form of numbers to analyze the information we want to know. Quantitative research methods are research that requires the use of nuances of numbers in data collection techniques in the field (Nicklas et al., 2001) .

In this quantitative research using a *cross sectional approach* . According to Notoatmodjo, S (2005) Cross Sectional is a study that aims to study the relationship between independent variables and dependent variables by conducting measurements/research at the same time and only done once (Widia, 2017) .

The research subjects in this study took place in Gunungagung Village, Bumijawa District, Tegal Regency using 48 respondents consisting of mothers who had toddler-aged children with stunting categories in Gunungagung Village and toddler-aged children with stunting categories. In data collection techniques, there are several techniques that can be used, namely observation, questionnaires, interviews and documentation (KIA books).

Quantitative research on validity is divided into two, namely Validity Testing and Reliability Testing. Data analysis in this study used univariate analysis, ivariate analysis and correlation. Univariate analysis was used to see the frequency distribution of each variable, bivariate analysis to determine the relationship between the level of maternal knowledge about nutritious food and the incidence of stunting in toddlers in Gunungagung village and correlation was used to see the level of relationship between the independent variable and the dependent variable (Mulyaningsih, 2008).

RESULT AND DISCUSSION

Gunungagung Village is one of the villages located in the Bumijawa District, Tegal Regency, Central Java Province. Gunungagung Village has an area of 748.22 m2. The typology in Gunungagung

Village mostly has rice field areas so that Gunungagung Village is a fairly dense area because it has a density of 850. This figure is not small because Bumijawa District has a large number of rice fields. The population of Gunungagung village is 6,276 people, of which 3,160 are male and 3,116 are female, with a total of 1,707 families.

Some of the residents of Gunungagung village work as farmers because Gunungagung village has extensive rice fields. Usually farmers manage their agricultural land by planting rice, corn, chili, sweet potatoes, cassava and other crops that can be planted in rice fields. But apart from working as farmers, the people of Gunungagung also work as traders, laborers, livestock breeders, drivers and others.

Based on the results of the data analysis, the following results were obtained:

1. Respondent Characteristics Based on Age, Occupation and Mother's Education

Table 1. Characteristics of Respondents Mothers

Respondent Characteristics	Frequency	Percentage (%)
Mother's Age		
20-29 Years	17	35.4%
30-39 Years	26	54.2%
40-49 Years	5	10.4%
Mother's Job		
Work	21	43.8%
Doesn't work	27	56.3%
Mother's Education		
SD	8	16.7%
SMP	23	47.9%
SMA	17	35.4%
Total	48	100%

Based on the table above, information was obtained that from the 48 samples used for the research , In terms of mother's age , the results obtained respondents aged 20-29 years were 17 (35.4%), aged 30-39 years were 26 (54.2%) and aged 40-49 years were 5 (10.4%). In terms of mother's occupation, information was obtained that respondents who worked were 21 (50%) and respondents who did not work were 21 (50%). Regarding maternal education, information was obtained that respondents with elementary school education were 8 (16.7%), junior high school education was 23 (47.9%) and high school education was 17 (35.4%).

2. Respondent Characteristics Based on Age and Gender of Toddlers

Table 2. Respondent Characteristics Based on Age and Gender of Toddlers

Respondent Characteristics	Frequency	Percentage (%)
Toddler Age		
12-24 Months	11	22.9%
24-36 Months	12	25.0%
37-48 Months	8	16.7%
49-60 Months	17	35.4%
Toddler Gender		
Man	26	54.2%
Woman	22	45.8%
Total	48	100%

Based on the table above, it can be obtained that At the age of toddlers, information was obtained

that respondents aged 12-24 months were 11 (22.9%), aged 24-36 months were 12 (25%), aged 37-48 months were 8 (16.7%) and aged 49-60 months were 17 (35.4%). While on the gender of toddlers, information was obtained that respondents with male gender were 26 (54.2%) and respondents with female gender were 22 (45.8%).

3. Mother's Knowledge About Nutritious Food

Table 3. Observation Results Based on Variables

Variables	Frequency	Percentage (%)
Mother's Knowledge		
Not enough	14	29.2(%)
Enough	24	50.0(%)
Good	10	20.8(%)
Total	48	100(%)

Based on the table above, information was obtained that from the 48 samples used for the research , There were 14 (29.2%) respondents' mother's knowledge with poor criteria, 24 (50%) with sufficient criteria and 10 (20.8%) with good criteria.

Based on the research results above, good maternal knowledge about nutritious food is a mother who is able to know and understand her child's nutritional needs according to their age, is able to know what the contents of nutritious food are and is able to present a menu that will be given to her child so that the child's nutrition is met and can prevent stunting in toddlers.

A person's knowledge can be influenced by various factors such as education, work and age. In this case, a person who has a job and a higher income will be better in terms of knowledge and providing nutritious food for their children. Likewise with education, if a person has a higher education , they will know much more about information about nutritious food and will be better able to provide food with high nutritional content for their children. A person's age will always increase and increase, if a person is in adulthood, it will also be better to get information about nutritious food and with increasing age, a person can affect the increase in knowledge gained.

4. Stunting Incidents in Toddlers in Gunungagung Village

Table 4. Observation Results Based on Variables

Variables	Frequency	Percentage (%)
Short	24	50.0(%)
Very Short	24	50.0(%)
Total	48	100(%)

Based on the table above, information was obtained that respondents with short stunting were 24 (50%) and very short stunting were 24 (50%). The results above provide an overview that the incidence of stunting in Gunungagung Village is short and very short with the majority occurring in the male gender and the minority occurring in the female gender and occurring at the highest age at 49-60 months and the lowest at 37-48 months.

5. The Relationship Between Mother's Knowledge About Nutritious Food and the Incidence of Stunting in Toddlers

Table 5. Relationship between Stunting and Mother's Knowledge

Stunting		Mother's Knowledge			Total	p-value
		Not enough	Enough	Good		
Short	n	1	18	5	24	
	%	4.2%	75.0%	20.8%	100.0%	
Very	n	13	6	5	24	0.000
Short	%	54.2%	25.0%	20.8%	100.0%	
Total	n	14	24	10	48	
	%	29.2%	50.0%	20.8%	100.0%	

Based on the table above, the research results show that these two variables have a relationship as evidenced by the results of the *chi-square test* which obtained a p-value of 0.000, this value is <0.05 so that H0 is rejected and H1 is accepted. Based on the results of the description, it can be concluded that there is a "Relationship between maternal knowledge about nutritious food and the incidence of stunting in toddlers".

Table 6. Correlation Results

Correlations			
		Knowledge	Stunting
Knowledge	Pearson Correlation	1	-.292 *
	Sig. (2-tailed)		.044
	N	48	48
Stunting	Pearson Correlation	-.292 *	1
	Sig. (2-tailed)	.044	
	N	48	48

*. Correlation is significant at the 0.05 level (2-tailed)

In the table above, it can be seen that the closeness of the relationship in this study is with a weak correlation/relationship. So it can be concluded that in this study, there is a relationship between maternal knowledge about nutritious food and the incidence of stunting in toddlers in Gunungagung Village with a correlation value of -299 so that the level of correlation/relationship is weak.

Factors that influence stunting include genetic factors, economic status, birth spacing, history of LBW, maternal anemia, environmental hygiene and sanitation, lack of nutrients, family and household factors, inadequate complementary foods, problems in breastfeeding, infection, family economy, maternal knowledge, food security and health services. One of the dominant factors in this study is maternal knowledge. The level of nutritional knowledge of a mother can influence attitudes and behavior in providing nutritious food for the child (Saputri, 2022) .

Parental knowledge, especially knowledge from a mother, can help improve the nutritional status of her child so that they can achieve maximum growth and development. Poor or inadequate knowledge, lack of knowledge about good eating habits, lack of knowledge about nutritious food can determine the behavior and attitude of a mother in providing food for her child including in the right amount and type and according to her child's needs and according to their age stage so that the child can grow and develop optimally.

Mother's knowledge about nutritious food is related to the occurrence of stunting in toddlers in Gunungagung Village. Mother's knowledge about nutritious food is that mothers know about food intake that has good and high nutrition which is related to optimal health given to their children. If you want your toddler to achieve good and optimal growth and development status, then their nutritional intake must also be sufficient. If a person's knowledge is high, then they will be higher in getting information or knowledge, but if a person's knowledge is lacking or low, then they will be less or low in knowing various information or knowledge.

So that the mother's knowledge about nutritious food can determine in providing food with food ingredients that have a high nutritional content consisting of carbohydrates, energy, protein, fat, fiber, vitamins and minerals, knowing how to fulfill her child's nutrition so that she can determine the nutritional status of the toddler is good or not affected by stunting.

So the results of this study are that the p-value is 0.000, the value is <0.05 so that H0 is rejected and H1 is accepted and the correlation is weak with a negative correlation form. Based on the results of the description, it can be concluded that there is a relationship between maternal knowledge about nutritious food and the incidence of stunting in toddlers in Gunungagung Village with a correlation value of -292 with a weak correlation level.

CONCLUSION

Based on the results of the study entitled "The Relationship between Mothers' Knowledge of Nutritious Food and the Incidence of Stunting in Toddlers in Gunungagung Village", the following conclusions can be drawn :

1. Respondent characteristics based on mother's age, the most are in the age range of 30-39 years as many as 26 respondents (54.2%), based on occupation, the most are mothers who do not work as many as 27 respondents (56.3%), based on education level, the most are mothers who are only junior high school graduates as many as 23 respondents (47.9%). While the characteristics seen from the age of toddlers, the most are at the age of 49-60 months as many as 17 toddlers (35.4%) and based on the gender of the toddler, the most stunting occurs in boys with a total of 26 toddlers (54.2%).
2. Mothers' knowledge about nutritious food can be obtained, namely the knowledge of the mothers with the most knowledge is in the sufficient category as many as 24 respondents (50.0 %).
3. Stunting in toddlers in Gunungagung Village, researchers obtained results from 48 toddlers affected by stunting, namely the category of toddlers with short height, namely 24 toddlers (50.0%) and the category of toddlers with very short height, namely 24 toddlers (50.0%).
4. The p-value is 0.000, the value is <0.05 so that H0 is rejected and H1 is accepted, besides that the range of relationships in this study is weak in the form of negative correlation. Based on the results of the description, it can be concluded that there is a relationship between maternal knowledge about nutritious food and the incidence of stunting in toddlers in Gunungagung Village with a weak correlation/relationship and a negative correlation.

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