

PARENTS' ECONOMIC STATUS AND NUTRITIONAL INTAKE RELATED TO THE TODDLER'S GROWTH

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ABSTRAK

Indonesia masih menghadapi permasalahan serius terkait stunting. Status sosial ekonomi yang rendah dan status gizi yang buruk menyebabkan permasalahan gizi pada anak. Tujuan penelitian ini adalah menganalisis hubungan status ekonomi orang tua dan asupan gizi dengan tumbuh kembang balita di Puskesmas Senduro Lumajang. Penelitian ini merupakan penelitian cross-sectional. Populasi dalam penelitian ini adalah ibu yang mempunyai balita di wilayah kerja Puskesmas Senduro Lumajang. Responden dalam penelitian ini berjumlah 251 responden, diambil dengan teknik purposive sampling. Variabel independen dalam penelitian ini adalah status ekonomi orang tua dan asupan gizi balita. Pertumbuhan balita merupakan variabel terikat. Analisis data menggunakan uji Spearman's Rho dengan signifikansi $\alpha \leq 0,05$. Hasil penelitian menunjukkan terdapat hubungan yang signifikan antara status ekonomi dengan pertumbuhan balita ($p=0,000$ $r=0,66$), dan terdapat pula hubungan yang signifikan antara asupan gizi dengan pertumbuhan balita ($p=0,000$ $r=0,809$). Diharapkan orang tua memperhatikan pemenuhan kebutuhan gizi balita yang beragam dan seimbang sesuai kemampuan ekonominya. Perlu dilakukan penelitian lebih lanjut mengenai asupan gizi dengan menggunakan instrumen canggih FFQ untuk mengukur asupan gizi, asupan gizi balita dapat diketahui dalam 6 bulan hingga 1 tahun terakhir.

Kata kunci : asupan gizi, balita, orang tua, pertumbuhan, status ekonomi, stunting

ABSTRACT

Indonesia is still facing serious problems regarding stunting. Low socio-economic status and bad nutritional status cause nutritional problems in children. The purpose of this study was to analyze the relationship between parents' economic status and nutritional intake with growth in toddlers at Senduro Lumajang Public Health Center. This research is a cross-sectional study. The population in this study were mothers with toddlers in the work area of the Senduro Lumajang Public Health Center. Respondents in this study were 251 respondents, taken by purposive sampling technique. The independent variables in this study were parents' economic status and toddler's nutritional intake. The growth in toddlers was the dependent variable.. the data was analyzed using the Spearman's Rho test with a significance of $\alpha \leq 0.05$. The results showed that there was a significant relationship between economic status and growth in toddlers ($p=0.000$ $r=0.66$), and there was also a significant relationship between nutritional intake and growth in toddlers ($p=0.000$ $r=0.809$). Parents are expected to pay attention to complete various and balanced nutritional needs for toddlers according to their economic capabilities. It is necessary to carry out more research on nutritional intake using the advanced FFQ instrument to measure nutritional intake, toddlers nutritional intake can be identified in the last 6 months to 1 year.

Keywords : economic status, growth, nutritional intake, parents, stunting, toddlers

INTRODUCTION

Indonesia is still facing serious problems that have an impact on Human Resources (HR), one of the problems that is quite high is the problem of growth in children which causes stunting (Ministry of Health of the Republic of Indonesia, 2018). Stunting is thought to contribute to half of all child deaths globally (UNICEF, 2019). Millions of Indonesian children are threatened by stunting, data on the prevalence of stunted toddlers collected by

the World Health Organization (WHO). Indonesia is included in the third country with the highest prevalence of stunted toddlers in the Southeast Asia region, with an average of 36.4% in 2005-2017 (Ministry of Health of the Republic of Indonesia, 2018).

The number of stunted children under five reached 29.9% based on the results of research in Indonesia conducted by UNICEF (2020). Based on the results of the 2021 Indonesian Nutrition Status Survey (SSGI), in East Java Province there are 23.5% of toddlers stunted, Lumajang Regency is in 4th place with the highest number of stunting in East Java at 30.1% (BPS, 2021). One of the areas in Lumajang Regency that has the highest prevalence of stunting is in the Senduro District area. In August 2022, the number of stunted toddlers in Senduro District was 149 toddlers with a percentage of 21%.

The prevalence of stunting has decreased from year to year, but interventions to accelerate stunting reduction need to be optimized to realize the 2020-2024 National Medium Term Development Plan (RPJM) regarding the prevalence of stunting falling to 14% in 2024 (Ministry of Health of the Republic of Indonesia, 2020). The causes of stunting are multidimensional, not only parenting and feeding patterns for toddlers but there are other supporting factors, namely poverty and the environment (Ministry of Social Affairs, 2021). According to the theory of the causes of stunting issued by WHO (2013), a big factor that causes stunting is low quality nutritional intake, while the context of the factors that cause stunting is influenced by economic status.

The results of research by Khadija et al (2022) carried out in Pakistan, low socio-economic status, poor eating patterns, and lack of awareness about healthy and balanced eating patterns are big factors causing growth and nutritional problems in children, including stunting and wasting. Stunting has an impact on children's failure to grow and is susceptible to disease, the long-term impact will affect the country which will reduce human resource productivity. Low economic status can cause poor nutritional intake, thus contributing to the incidence of short height in children (Adhikari et al, 2019). With this research, researchers can identify behavioral factors that influence growth disorders, especially the incidence of stunting in toddlers in the Senduro Lumajang Public Health Center working area, so that early intervention can be immediately given regarding parents' behavior in providing nutritional intake for toddlers.

METHOD

This type of research is quantitative research with a cross sectional approach. The population in this study were mothers and toddlers in the work area of the Senduro Lumajang Health Center. Respondents in this study were 251 respondents, taken using a purposive sampling technique. The independent variables in this study are the economic status of parents and the nutritional intake of toddlers. for growth in toddlers is the dependent variable in this study. Correlation between independent and dependent variables analyzed using Spearman's Rho test with significance $\alpha \leq 0.05$ with the help of the SPSS application. This research has passed the ethical test from the Health Research Ethics Committee, Faculty of Dentistry, Airlangga University, Surabaya with Number 350/HRECC.FODM/III.2023.

RESULTS

Based on table 1, it was found that there were 173 (68.9%) toddlers with normal height. and toddlers with short to very short height were 78 (31.1%).

Table 1. Distribution of Toddler Growth in the Senduro Lumajang Public Health Center Working Area in March-May 2023

		f	%
Toddler growth	Very short	22	8.8
	Stunting	56	22.3
	Normal	173	68.9
		251	100

Table 2. Frequency Distribution of Economic Status of Parents of Toddlers in the Senduro Lumajang Public Health Center Work Area in March-May 2023

		f	%
Parents' economic status	Very	87	34.7
	Middle	118	47
	High	46	18.3
		251	100

Table 2 shows that almost half of parents of toddlers (47%) are of middle economic status in the work area of the Senduro Lumajang Public Health Center.

Table 3. Frequency Distribution of Nutritional Intake for Toddlers in the Senduro Lumajang Public Health Center Working Area in March-May 2023

Variable	Category	f	%
Nutritional Intake In Toddlers	Lack of intake	56	22.3
	Moderate level deficit	24	9.6
	Mild level deficit	21	8.4
	Normal	140	55.8
	Excess intake	10	4
Total		251	100

Table 3 shows that the majority of toddlers have a normal nutritional intake category (55.8%), and a small number of toddlers have a deficient intake category (22.3%).

Table 4. Distribution of the Relationship between Parental Economic Status and Growth in Toddlers in the Senduro Lumajang Public Health Center Work Area in March-May 2023

Parents' Status	Economic	Toddler Growth							
		Very short		Stunting		Normal		Total	
		f	%	f	%	f	%	f	%
Low		21	8.4	46	18.3	20	8	87	34.7
Middle		1	0.4	8	3.2	109	43.4	118	47
High		0	0	2	0.8	44	17.5	46	18.3
Total		22	8.8	56	22.3	173	68.9	251	100
Spearman's Rho test p=0.000 r=0.66									

Table 4 shows that parents with high economic status have toddlers with normal height

growth as much as 17.5%, and parents with middle economic status have toddlers with normal height growth as much as 43.4%. A small number of parents with lower economic status correspond to short to very short height growth in toddlers, as much as 18.3%. The results of statistical tests using Spearman's Rho with $\alpha \leq 0.05$ obtained a degree of correlation of $p = 0.000$, which means H_1 is accepted. The results of this analysis show that there is a relationship between the economic status of parents and the growth of toddlers. If you look at the Spearman's Rho coefficient value of $r=0.66$ which is in the range 0.600-0.799, it can be said that the relationship that occurs is a strong relationship and the relationship between these variables is in the same direction, meaning that the lower the economic status of the parents, the slower the toddler's growth.

Table 5. Distribution of the Relationship between Nutritional Intake and Growth in Toddlers in the Senduro Lumajang Public Health Center Working Area in March-May 2023

Nutritional Intake in Toddlers	Toddler Growth							
	Very short		Stunting		Normal		Total	
	f	%	f	%	f	%	f	%
Lack of intake	19	7.6	32	12.7	5	2	56	22.3
Moderate level deficit	2	0.8	19	7.6	3	1.2	24	9.6
Mild level deficit	1	0.4	2	0.8	18	7.2	21	8.4
Normal	0	0	3	1.2	137	54.6	140	55.8
Excess intake	0	0	0	0	10	4	10	4
Total	22	8.8	56	22.3	173	68.9	251	100

Spearman's Rho test $p=0.000$ $r=0.809$

Based on table 5, it shows that almost the majority of toddlers in the normal nutritional intake category have normal height growth, as much as 54.6%. Toddlers with energy insufficiency are in the category of insufficient intake and the majority have short to very short height growth as much as 20.3% in the work area of the Senduro Lumajang Public Health Center. The results of statistical tests using Spearman's Rho with $\alpha \leq 0.05$ obtained a degree of correlation of $p = 0.000$, which means H_1 is accepted. The results of this analysis show that there is a relationship between nutritional intake and growth in toddlers. If we look at the Spearman's Rho coefficient value of $r=0.809$ which is in the range of 0.800-1000, it can be said that the relationship that occurs is a very strong relationship and the relationship between these variables is in the same direction, meaning that the less nutritional intake, the slower the toddler's growth.

DISCUSSION

The results of the research show that the lower the economic status of the parents, the shorter the growth of toddlers or the higher the number of people experiencing stunting in the work area of the Senduro Lumajang Public Health Center. Nearly half of parents of toddlers have middle economic status. Parents with upper middle economic status have toddlers with normal height growth and parents with lower economic status have toddlers with short (stunting) to very short (very stunted) height growth in the Senduro Lumajang Public Health Center working area.

Based on this research, researchers found several facts from respondents that parents

with middle to upper economic status mostly provide a budget to meet their food needs with a balanced menu where the food they consume contains nutrients in the type and quantity that suits their needs. Apart from that, facts in the field show that families with incomes below the minimum wage have more children with stunting than families with incomes above the minimum wage. According to Nakphong and Beltrán-Sánchez (2021), economic status factors, especially household wealth, employment and family income, are the main drivers of stunting in children. Overall, stunted children come from households with lower wealth and maternal education level. Also lower are parents' jobs in agriculture and the service industry. This is in line with research by Habimana et al (2023) carried out in Rwanda using a cross-sectional method, which found that families with low incomes experienced a higher prevalence of stunting compared to families with high incomes.

Based on the Lawrence Green theory, health behavior are influenced by three factors, that are predisposing factors, enabling factors, and reinforcing factors. Economic status is included in the predisposing factors which is a factor that causes the formation of behavior that is the basis or motivation for behavior (Fertman and Allensworth, 2010). According to causal theory stunting by WHO (2013) that the context of the causes of stunting is one of them namely poverty, income, wealth and work which are related with economic status.

According to Elinel et al (2022), in their research, they stated that economic status is considered to have a significant impact on the incidence of stunting in children. A picture of economic status can be seen through the income earned. Income Low levels will influence parents in providing limited nutritional diversity to their toddlers. Reduced nutritional diversity is a strong predictor of stunting in toddlers. Based on the findings of statistical analysis, it can be concluded that parents' economic status influences budget provision in terms of nutritional diversity. Parents still have to meet their children's varying nutritional needs according to their economic capabilities. Nutritional intake is not only obtained from expensive food but can also be obtained from agricultural, plantation and livestock products.

The results of the research show that the more nutritional intake is lacking, the shorter the growth of toddlers or the higher the stunting in the Senduro Lumajang Public Health Center working area. Toddlers with energy insufficiency are in the category of insufficient intake and the majority have short to very short height growth (stunting) in the work area of the Senduro Lumajang Public Health Center. The energy intake obtained in this study only describes the nutritional intake of toddlers in a day. Based on this research, researchers found several facts from respondents that toddlers with normal height growth tend to fulfill their macro nutritional needs (energy, carbohydrates, protein, fat) in a day compared to toddlers with short to very short height growth.

The results of Shi's (2021) research explain that insufficient overall energy intake is a factor in the failure of linear growth in children. Energy is an accumulation of consumed macronutrients. Nutritional intake that is insufficient for the body's needs can cause energy imbalance, prolonged energy imbalance will affect the function and structure of stunted growth (Ayuningtyas, Simbolon and Rizal, 2019). This is in line with research (Sari, Astuti and Khasanah, 2022) that there are several factors that influence nutritional intake and the incidence of stunting, namely energy intake and protein intake.

One of the big factors causing stunting is giving low quality food (WHO, 2013). This means low quality food is the low quality of micronutrients, the diversity of types of food consumed and low animal food sources, foods that are not contains nutrients, complementary foods that contain low energy.

Lack of nutritional intake is one of the consequences of morbidity and mortality in toddlers. High nutritional requirements are required for rapid growth during childhood. Parents need to pay attention children's nutritional intake needs in terms of quantity, quality

and safety adjusted for age (Wulan et al, 2022). It can be concluded that parents who have toddlers are growing short to very short height tends to be low in height provide daily nutritional intake for their children, including foodstuffs used as a source of energy, namely carbohydrates, protein and fat. Fulfilling toddlers' energy needs to promote physical growth as well as providing proper nutrition for every day, even though they are toddlers getting enough calories but not enough or not enough consuming protein will make it difficult for them to grow in height (Wulandary and Sudiarti, 2021).

CONCLUSION

Most of the parents's toddler have middle economic status, most toddler have normal nutritional intake categories and most toddlers have normal height growth. The economic status of parents has an impact on height growth in toddlers, where the lower the economic status of parents, the slower the toddler's growth. Nutritional intake has an impact on height growth in toddlers. The more inadequate nutritional intake, the slower the growth of toddlers, putting them at risk of stunting.

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