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Family Food Availability Income and Consumption Patterns Cause Wasting in Toddlers in Martapura Timur District

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ABSTRACT

Asting, a condition characterized by low body weight in toddlers, has a prevalence of 28.94% in Martapura Timur District. This study aimed to explore the relationship between income, food availability, and consumption patterns as factors contributing to wasting among toddlers aged 12-59 months. Using a Cross-Sectional design, data were collected from 45 purposively sampled toddlers through questionnaires, food availability forms, and food frequency forms. Spearman Rank correlation (α=0.05) was employed for data analysis. Findings revealed that most mothers were under 20 or over 35 years old, with junior high school education and predominantly unemployed. Male toddlers were slightly more prevalent, with 82.2% classified as wasting and 17.8% in severe wasting. Low family income (below the minimum wage) was common (71.1%), and food availability ranged from insufficient to barely sufficient. Consumption patterns were largely suboptimal (64.4%), with staple food intake (<150 g/day) limited to rice and corn, animal protein (50 g/day) from eggs only, plant protein (<40 g/day) primarily from tofu, and minimum vegetable consumption (30 g/week of pumpkin, 1-3 times weekly). Statistical analysis indicated significant relationships between family income (p=0.048, r=0.296), food availability (p=0.048, r=0.296), and consumption patterns (ρ=0.002, r=0.455) with wasting. The strongest relationship was found in food availability. Efforts are being made to increase awareness through health centers, encouraging mothers to utilize home yards for food production, enhancing food availability, and improving children's diets. Addressing these factors can help reduce the prevalence of wasting and promote better nutrition in toddlers.

Keywords: *wasting in toddlers, family food availability, income, consumption patterns*

1. INTRODUCTION

Wasting or low weight in toddlers for their height is a serious health problem in many developing countries, including Indonesia, characterized by a z-score of BB/TB of less than -2 SD for wasting and a z-score of BB/TB of less than -3 SD for severely wasting.(1). Wasting is an important indicator of inadequate short-term nutritional intake and can have adverse effects on children's growth and development, including increased risk of disease and death.

Factors that influence wasting in toddlers are very complex and include various economic, social, and environmental aspects. One of the main factors that is often identified is the level of family income. Low family income is often associated with limited access to nutritious food, which ultimately affects the nutritional intake of toddlers. Limited food availability, both in terms of quantity and quality, is also a challenge for low-income families in providing adequate food for children's growth and development. In addition, family consumption patterns, including the types of food consumed by toddlers, are greatly influenced by nutritional knowledge, food preferences, and local culture. Unbalanced consumption patterns and lack of food diversity can cause deficiencies in essential nutrients, which exacerbate the risk of wasting in toddlers. Although many efforts have been made by the government and various institutions to reduce wasting rates, the results have not

been entirely adequate. Therefore, it is important to understand more deeply the relationship between family income, food availability, and consumption patterns in the context of toddlers who experience wasting. This study is expected to provide a clearer picture of these factors and provide relevant recommendations for more effective interventions.

In Indonesia, based on the results of the Indonesian Nutritional Status Survey (SSGI), it shows that nationally the prevalence of wasting based on indicators of body weight according to height (BB/TB) or body weight according to body length (BB/PB) in toddlers was 7.1% in 2021 and increased by 0.6% to 7.7% in 2022. [(1)].

The prevalence in South Kalimantan in 2021 was 10.3%. The prevalence of wasting decreased by 0.5% to 9.8% in 2022 (SSGI, 2022). Although the prevalence of wasting has decreased, wasting is still a major problem of malnutrition in Indonesia because it has not reached the target of the 2020-2024 National Medium-Term Development Plan (RPJMN) of 7%.(2).In 2022, an estimated 148.1 million children under 5 years of age will suffer from stunting, wasting, overweight, or underweight.[(2,3)].

The results of the Nutritional Status Survey (SSGI) in 2022 in Banjar Regency showed a wasting prevalence rate in toddlers of 10.7%. From these data, it shows that the wasting prevalence rate in Banjar Regency is still high compared to the national prevalence rate of 7% and the provincial prevalence rate of 7.7%. The Martapura Timur Health Center is the Health Center with the highest toddler wasting prevalence coverage rate in February 2023, which was 21.47%, in 2022 the wasting data at the Martapura Timur Health Center was 5.9%, this shows a fairly high increase[(1).]

One of the factors that influence the occurrence of wasting is Consumption patterns. Consumption pattern factors that are directly related to nutritional status in toddlers can be influenced by poor parenting patterns and food security conditions in households, therefore indirectly these two factors can affect the nutritional status of toddlers related to aspects of food availability, quality and quantity of food, and how to feed toddlers. The higher the availability of family food, the more the family's nutritional adequacy will increase.[(4)]. The main causes of wasting/malnutrition problems include: inadequate food security, inadequate maternal care and health services.[(5)].Wasting caused by a naturally occurring energy intake deficit is related to food insecurity and hunger and eating patterns are the variables that have the most influence on the occurrence of wasting.[(6)]. A total of 68% of respondents stated that there was an influence of family economic instability on the ability to buy nutritious food regularly and 72% of the level of education and knowledge about nutrition could influence decisions and behavior related to providing food.[(7)]. However, in contrast to the research by Lailatul M, 2015, the level of education, level of knowledge, and mother's parenting patterns did not contribute to the occurrence of wasting and stunting in toddlers from poor families in Balen District, Bojonegoro Regency.[(8).]

The causes of wasting in toddlers include food availability, children's consumption patterns and income from how mothers can apply good food to their children. The relationship between household income and access to nutritious food in urban areas, more how financial constraints influence food choices for children. However, starting from rural areas where access to nutritious food may not always be limited by household income, but due to lack of availability due to geographic isolation.

This study aims to analyze the relationship between income, food availability, food consumption patterns in wasting toddlers under 5 years old. The results of previous studies stated that food availability, food consumption patterns and income are statistically related to wasting toddlers.

2. METHODS

The type of research is an analytical survey using a cross-sectional design to analyze the relationship between income, food availability and consumption patterns in wasting toddlers aged 12-59 months. The study was conducted in the working area of the East Martapura Health Center from January to February 2024. The population in this study were 244 wasting toddlers aged 12-59 months in the East Martapura District, Banjar Regency, spread across Twenty (20) villages. The sample in this study was wasting toddlers obtained in the East Martapura District area with an easily accessible area. Purposive sampling was carried out according to the inclusion criteria and exclusion criteria, not with chronic diseases that require continuous care. The determination of the sample taken using the lemeshow formula according to Notoatmodjo (2020) amounted to 45 people.[(9)(10)].

The materials used as samples were mothers of toddlers and wasting toddlers who had KIA books. Income data using a questionnaire by asking about the monthly income of all family members. Food availability data using a food record form for one week by giving a score for each type of food (staple food, animal side dishes, vegetable side dishes, vegetables and fruits) to be fulfilled, 6x / week, 5x / week, 4x / week 3x / week, 2x / week, 1x / week, not fulfilled with scores of 7,6,5,4,3,2,1,0 respectively. Consumption Pattern Data using a food frequency form which includes the type, frequency and amount of food.

Measurement of toddler wasting using the BB/TB z score formula.

$$z - score\,\frac{\text{BB}}{\text{TB}} = \frac{\text{Nilai individu } - \text{Nilai median}}{\text{Nilai median } - \text{Nilai sp. Baku}}$$

Primary data collection includes child characteristics, namely age, gender and maternal characteristics including maternal age, education level and employment status by interviewing using a questionnaire. Income data using a questionnaire, food availability data using a food record food availability form and food consumption pattern data using a meal frequency form which includes the type of food and frequency and amount of consumption in grams. Measurement of wasting toddlers by measuring Height / Body Length and Body Weight with a microtoise measuring instrument and a digital foot scale.

2.6 Data processing and data analysis

Data on total income compared to Banjar district minimum wage dataThe income level is categorized from the 2023 Banjar Regency UMK, which is IDR 3,149,977, into: Low (< Banjar Regency UMK); High (≥ Banjar Regency UMK). Food availability category is obtained from the total score of each type of food compared to the average of all respondents' food types. The category results obtained: Sufficient, if the total score of food types ≥ the average score of all respondents' food types; Less, if the total score of food types < the average score of all respondents' food types.

Consumption pattern data includes the type and frequency of use of food ingredients including types of carbohydrate sources, animal side dishes, vegetable side dishes, vegetables and fruits with a frequency of >1x/day, 1x/day, 4-6x/week, 1-3x/week, 1x/month and never; by giving a score of 5,4,3,2,1 and 0 respectively. The amount of food consumed using Household Size converted in grams and given a score of 2 if it is more than the standard for each type of carbohydrate >300 grams/day, animal side dishes >100 grams/day, vegetable side dishes >150 grams/day, vegetables >200 grams/day and fruits >300 grams/day. And given a score of 1 if it is less than the standard for each type of food ingredient(11). The value of each group is summed from all samples then the average score of the consumption pattern is obtained, then comparing the total score of each individual with the average score and categorized: Good (if ≥ average/mean) and less good (if <average/mean). The z-score calculation data is compared with the standard anthropometric table and categorized as Severely wasting (z-score <-3SD): with code 1 and Wasting (z-score -3SD to <-2SD): with code 2. Univariate data analysis with frequency distribution tables and bivariate using the Spearman Rank correlation test with a 95% confidence level.

3. RESULTS AND DISCUSSION

This study has obtained a research permit from the Ethics Commission of the Banjarmasin Ministry of Health Polytechnic with the number No.840/KEPK-PKB/2024. The East Martapura Health Center in East Martapura District, Banjar Regency. is divided into 20 villages with a population in the working area of the East Martapura Health Center of 15,779 men and 13,605 women. The livelihoods of most of the population are traders. Early childhood education facilities to secondary schools total 60 schools and health facilities at the East Martapura Health Center include 4 assistant health centers (pustu), 6 village health posts (poskesdes), 7 village maternity huts (polindes), 31 toddler posyandu, 20 usila posyandu and 20 ponbindu. Ambulance facilities total 2 units.

Table 1 shows that the majority of mothers are aged <20 years and >35 years, which are at higher risk for pregnancy. Those aged <20 years are still in the growth stage, so pregnancy can cause anemia in the mother and impaired fetal growth and development, while those aged over 35 years experience decreased body function such as osteoporosis and narrowed blood vessels, which raises concerns about the mother's inability to give birth normally due to reduced energy and the risk of hypertension and increased blood sugar during pregnancy.

Physiologically, mothers under 20 years old are still in the process of growth, both in height and weight. This condition does not support a mother to enter pregnancy because she is in the period of her own body growth while supporting the growth of her fetus. This process will cause competition between the mother and her fetus. As for mothers over 35 years old, they are considered no longer able to accept pregnancy because their physical condition is considered old for pregnancy and weak in accepting the burden of pregnancy.[12].

The highest mother's education is junior high school/equivalent, indicating that mothers do not complete the nine-year compulsory education, this is due to low family support, lack of understanding that education is important, environmental factors that also only graduate from elementary school and lack of funds, many of their parents think that finding work and earning money is much more important than school, low family economy and expensive school fees while needs are still lacking[13].

The role of a mother is very important in the health and growth of her child. A child from a mother who has a high educational background will get the opportunity to live and grow and easily receive broader insights

about nutrition.[5]. This is in line withUtaminingtyas Utaminingtyas (2020)that highly educated mothers also have a good mindset in receiving or absorbing information, whether delivered through health education or from TV, radio or newspapers, so that highly educated respondents care more about the health of their toddlers than those with low education.[14].

The results of the study proved that most housewives who do not work at the age of <20 years and >35 years are 20 people (54.05%). This can also affect mothers in implementing parenting patterns for children. Unemployed mothers should have more time to care for children, but if they have a low level of education, they tend to have difficulty in understanding nutritional information and are less able to apply the knowledge gained in parenting patterns including feeding children.

Mothers who are highly educated will be better able to understand nutritional information and apply it in their child care and feeding patterns, even if they have limited time.[15].According to Kurnia Prawesti (2022), although mothers who do not work have unlimited time to care for their children, if their education is low, it is likely that it will be difficult to receive nutritional information and, in addition, if the family income is low, it will be difficult or even impossible to apply it in the practice of providing food and work is also an important factor in the level of family income, thus determining the quality and quantity of food at home.[16].

Parents' occupation is also related to family income, so a person's type of occupation can also affect how well they eat. According to Fadila (2018), low-income households will have difficulty getting nutritious and varied food, while high-income families have the opportunity to buy food in sufficient quantities and of high quality.[17].

The age of the toddlers is mostly 36-59 months with the most male gender. Boys are more active so their food intake needs are more than girls. At this age, handling is needed because it is a vulnerable period, the need for mothers to be aware of monitoring the development of their toddlers by taking them to the integrated health post, good eating parenting patterns, namely being given balanced nutritious food, good health parenting patterns, such as infectious diseases must be considered and handled properly. This is done so that the immune system of children at this age can avoid various diseases and not experience wasting, because at that age children are susceptible to disease.

According to Prawesti (2018) who stated that at preschool age 3-5 years, children experience stable growth, development occurs with increased physical activity and increased skills and thinking processes. This slowing growth rate is reflected in a decrease in appetite, even though during this period children need adequate calories and nutrients to meet their nutritional needs.[16].

Gender has an influence on the incidence of nutritional problems in toddlers because gender determines the extent of a person's nutritional needs.[18]. The amount of nutritional needs is influenced by the differences in body composition between men and women. Male toddlers are 1.5 times more at risk of being wasted than female toddlers.[19]. Gender has an influence on the incidence of nutritional problems in toddlers because gender determines the extent of nutritional needs for a person.[18]**.**Boys grow faster than girls, so if rapid growth is not balanced with good nutritional intake, boys will be at greater risk of experiencing nutritional problems. In addition, boys are biologically more vulnerable to morbidity, so gender inequalities in childhood malnutrition are more likely to be observed in hostile environments such as disease and exposure to environmental pollutants.[20]. According to Apriluana (2018) who stated that the differences between women and men are biological since a person is born. In the next development/prenatal, namely gender will affect the differences in the physical and psychological development of boys and girls. Boys also tend to be more active than girls[21]. Gender is an internal factor that affects the body composition and distribution of subcutaneous fat between boys and girls. Girls store more fat, while boys have more muscle and bone mass.[12.19].

Table 1. Characteristics of respondents and mothers

Characteristics	Number of subjects	Percentage (%)
Mother's age		
< 20 years and > 35 years	24	53.3
20-35 years	21	46.7
Level of education		
Elementary School/Equivalent	10	22.2
Junior High School/Equivalent	19	42.2
High School/Equivalent	13	28.9
Work		
Doesn't work	37	82.2
Work	8	17.8
Toddler Age		

12 - 35 months	20	44.4
36 - 59 months	25	55.6
Toddler gender		
Man	26	57.8
Woman	19	42.2
TOTAL	45	100

Primary data

Table 2. Analysis of Wasting, Family Income, Food Availability and Consumption Patterns

Characteristics	Number of subjects	Percentage (%)
Waste		
Severely Wasting	8	17.8
Waste	37	82.2
Family Income		
Low	32	71.1
Tall	13	28.9
Food Availability		
Not enough	23	51.1
Enough	22	48.9
Consumption Patterns		
Not good	29	64.4
Good	16	35.6
TOTAL	45	100

Primary data

In Table 2, the toddlers with the most nutritional status are wasting, as many as 17.8% have entered the severely wasting level. The influence ofinappropriate parenting behavior, poor intake and often suffering from repeated infectious diseases such as diarrhea and/or ARI, the impact of poor sanitation and low maternal knowledge where the majority of mothers who experience wasting are low educated, so that this will affect the provision and selection of food for toddlers which is closely related to the nutritional intake of toddlers with 1000 HPK which can cause toddlers to be wasted and can even lead to severe wasting.

According toAsiah et al. (2018) and Tambunan (2019)that wasting is a nutritional problem that is acute in nature as a result of events that occur in a short period of time. For example, such as the occurrence of disease outbreaks and lack of food (starvation) which causes children to become thin.[22,23].

The highest family income is low family income, because only the average head of the family works and the mother does not work. Problems faced by families with low incomes include low quality of life, limited sufficiency and quality of food and children's food intake, so this has an impact on toddlers at risk of wasting.

According toAsrimaidaliza et al (2022) families with low economic status are at risk of having toddlers with malnutrition. This is related to the family's ability to meet the need for food so that the availability of food becomes limited and then has an impact on food intake and the family's nutritional status. Children are the group most at risk of experiencing nutritional problems related to unmet food intake[24].

Families with low incomes tend to provide food based on economic value rather than the nutritional value of the food, which results in the family members' nutritional needs, including toddlers, not being met, which can lead to wasting.[25].

The availability of family food that has the largest proportion in the East Martapura District is the insufficient category based on the frequency of food types in a week. This study found that many families routinely consume foods that are sources of carbohydrates and animal protein, but the frequency and amount of consumption of other foods such as vegetable protein, vegetables, and fruits are still not met. This is partly due to the uneven distribution of staple food assistance and animals, vegetables, and fruits in the community, such as the absence of vegetable traders who reach the village where they live, plus access to the market is not close and requires transportation and is supported by low economic conditions in the family. In fact, there are still families with children who only consume rice, oil, and salt.

Efforts to achieve good or optimal community nutritional status begin with the provision of sufficient food. Sufficient food availability is obtained through domestic food production through agricultural efforts in producing staple foods, side dishes, vegetables and fruits.

Economic factors that affect food availability in East Martapura District include poverty and low income. The main job of the respondents is as pukaha craft entrepreneurs who only rely on the results of processing and selling. However, there are some craftsmen who work part-time to meet household needs.

According to Nurmalasari 2020 in her research on the Relationship between Family Income, Feeding Patterns, and Mother's Knowledge of Nutrition with the Incidence of Stunting in the Bangkingan Health Center Work Area, families with low incomes have more difficulty in meeting their living needs. Low income will affect the quality and quantity of food consumed by the family.[26].

The most common consumption pattern is in the less than good category, namely most of the types of food consumed are less diverse, the frequency and amount consumed do not comply with balanced nutrition guidelines. Every day, the types and kinds of food consumed by children are almost the same, this causes most children to get bored and eventually find it difficult or even refuse to eat. Children are also often bought instant food if they do not want to eat such as noodles and sausages. This is because most mothers who have toddlers only provide food that their children like and mothers do not persuade their children to consume other foods that they do not like, so the provision of nutritious food is lacking.

The types of carbohydrate sources that are often consumed by children are rice and noodles with a frequency of 1-3 times/day, but in terms of quantity, most are less than 150 grams, while the types of carbohydrate sources that are rarely consumed are cassava and sweet potatoes because children are not introduced to carbohydrate sources other than rice and noodles.

Animal protein sources that are often consumed by toddlers are eggs with a frequency of 1x/day and in terms of less than 50 grams. Toddlers tend to be less fond of consuming fish, chicken and meat only 1x/week. Whereas animal protein sources are very important as an effort to overcome wasting and severely wasting problems. Animal protein has a more complete essential amino acid content than vegetable protein.

For the type of vegetable protein source food that is often consumed by toddlers with poor consumption patterns is tofu with a frequency of 1-3x/week with an amount of less than 40 grams. Vegetable source food that is rarely consumed is green beans, because it is rarely introduced other than tofu and tempeh.

The types of vegetable sources of food that are often consumed by toddlers with poor consumption patterns are pumpkin with a frequency of 1-3 times/week and in terms of the amount of less than 30 grams. For the types of fruit sources of food that are often consumed by toddlers with poor consumption patterns are bananas and papaya with a frequency of 1-3 times/week and in terms of the amount of less than 30 grams.

Most toddlers do not consume vegetables and fruits. The factor that caused the lack of fruit and vegetable consumption in this study was due to the low level of awareness of respondents to provide fruits and vegetables. In order to avoid or reduce the risk of wastingor severely wasting, then consumption should be sources of carbohydrates >300 grams/day, animal side dishes >100 grams/day, vegetable side dishes >150 grams/day, vegetables >200 grams/day and fruits >300 grams/day[27].

This research is in line with(28) namely most parents provide food that is less than the child's needs. This is because parents follow the child's wishes when the child no longer wants to eat the food given by the parents to stop feeding, so that the child's intake has not been met according to needs.[28].

Eating patterns in toddlers play a very important role in the growth process in toddlers. Feeding patterns are very important to pay attention to. If eating patterns are not achieved properly in toddlers, then toddler growth will be disrupted. Good eating patterns need to be formed as an effort to meet nutritional needs and inappropriate eating patterns will cause excessive nutritional intake or vice versa, lack of nutrition.[29].

Table 3. Relationship between Income, Food Availability and Consumption Patterns with Wasting in Toddlers

Variables	**Waste**				P	r
	Severely wasting		**Waste**			
	n	**%**	**n**	**%**		
Income						
Low	8	25	24	75	0.048	0.296
Tall	0	0	13	100		
Food Availability						
Not enough	8	34.8	15	65.2	0.002	0.455
Enough	0	0	22	100		

Consumption Patterns						
Not good	8	27.6	21	72.4	0.020	0.345
Good	0	0	16	100		

Primary data

Table 3 The results of the Spearman rank correlation test obtained a p value = 0.048 <0.05 which states that there is a significant relationship between family income and toddler wasting with a correlation coefficient of 0.296* which means that the strength of the relationship between family income and toddler wasting is moderate. Toddlers with high family incomes, the better the nutritional status of the child, conversely toddlers with low family incomes, the worse the nutritional status of the child.

Family income is mostly low because on average only the head of the family works and the mother does not work. Problems faced by families with low incomes include low quality of life, limited sufficiency and quality of food and nutrition for children, so that this has an impact on toddlers at risk of wasting. It can even lead to severe wasting, such as children's nutritional needs not being met, in contrast to families with high incomes, who can provide quality food and better health services for their toddlers.

Income changes can affect food consumption in toddlers. Increased income means increasing opportunities to buy food with better quality and quantity and conversely a decrease in income will cause a decrease in quality and a decrease in the quantity of food purchased. This is because families with low incomes tend to have poor levels of toddler food consumption patterns.[30].

Food availability for wasting toddlers has a significant relationship with p = 0.0002 < 0.05 with r = 0.0455 meaning the strength of the relationship between food availability and wasting toddlers is moderate. Wasting toddlers are more common in the category of insufficient family food availability. The lack of food availability is because the average family in the East Martapura District only consumes staple foods and animal side dishes in small amounts every day. The lack of food availability is due to the lack of consumption of vegetable side dishes, vegetables and fruits in a week. In addition, the provision of raskin to village communities is not evenly distributed, so that many families still have difficulty in meeting their daily food needs. The results of this study are in line with Rafika Pratiwi (2016) who stated that the raskin program in Sukoharjo District has not been implemented properly[31]. Low food availability or low food and nutrition consumption can increase the risk of acute and chronic nutritional problems in vulnerable groups such as infants and toddlers, adolescent girls, pregnant women, and breastfeeding mothers.

This is in line with Dewi's 2020 presentation that food availability is the first activity that determines food consumption. Therefore, efforts to achieve good or optimal community nutritional status begin with the provision of sufficient food. Sufficient food availability is obtained through domestic food production through agricultural efforts in producing staple foods, side dishes, vegetables and fruits. [32].

The decreasing availability of food will greatly affect people's consumption patterns. People who previously could eat three times a day under normal conditions may reduce their eating frequency to only once or twice a day due to a lack of food supplies. People who previously always consumed complete meals consisting of staple foods, animal and vegetable side dishes, vegetables and fruits may eliminate one of these types of food from each menu, such as vegetable side dishes which will only be consumed 4 times a week, etc.

Changes in people's consumption patterns can cause an imbalance in the nutrients consumed with the nutrients needed by the body, especially in the intake of macronutrients such as energy, carbohydrates, protein and fat. People can be at risk of experiencing protein deficiency but instead experience excess fat or other nutrients. If this imbalance persists for a long time, some of the people or family members in the household will experience nutritional problems.[33].

Related to consumption patterns, there is a significant relationship with wasting in toddlers p = 0.020 < 0.05 with a moderate correlation of 0.345. Good and optimal consumption patterns according to nutritional adequacy can have a good effect on the nutritional status of toddlers. Based on interviews with questionnaires, the results showed that most types of food consumed were less diverse, the frequency and amount consumed by wasting and severely wasting toddlers did not comply with balanced nutrition guidelines. Every day, the types and kinds of food consumed by children are almost the same, this causes most children to get bored and eventually find it difficult or even refuse to eat. Children are also often bought instant food if they don't want to eat such as noodles and sausages. Most mothers who have toddlers only give food that their children like and mothers do not persuade their children to consume other foods that they don't like, so that the provision of nutritious food is lacking. Causing children to not get enough balanced nutrition in their bodies, this habit is feared to be carried over into adulthood which then has a bad impact on health. Consumption patterns are

factors that are directly related to nutritional status so that consuming low-nutrient foods results in wasting and severely wasting[34].

Toddlers who eat good food, but often suffer from infectious diseases eventually become malnourished. Nutritional intake in children plays an important role in maximizing growth and development in children. Insufficient nutritional intake will result in poor health and developmental disorders.[35].

Researchers assume that the impact of consumption patterns that do not meet their needs can cause toddlers to become weak, making them susceptible to infectious diseases. If toddlers experience infectious diseases and are left untreated, it can lead to severe wasting. This condition will later have negative implications for the child's growth.

4. CONCLUSION

Family income, food availability and consumption patterns are related to wasting in toddlers, with moderate strength. Food availability has the largest moderate strength value as a cause of wasting in toddlers. The health center creates an attractive program for mothers to come to the integrated health post such as providing a variety of PMT (Supplementary Food Provision) packages to introduce food ingredients for toddlers and nutritionists always provide information related to nutritional problems and child growth and development to increase knowledge so that mothers can maintain their children's health.

Mothers of toddlers are more creative in providing food to their children from food ingredients with types, frequencies and amounts of carbohydrate sources, animal side dishes, vegetable side dishes, vegetables and fruits that are appropriate for their age, getting used to processing food creatively so that children like it, teaching children to wash their hands properly, mothers actively participate in activities at the integrated health post, and can utilize the yard to meet the needs of vegetables and fruits to meet children's nutritional needs without having to buy them so that the availability of food in the family can be met.

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