

## THE LINKAGE BETWEEN MOTHER'S KNOWLEDGE AND STUNTING INCIDENCE IN COASTAL HOUSEHOLDS

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### Abstract

Socio-economic stratification, coastal communities are not a homogeneous society. Coastal communities are formed by diverse social groups. Viewed from the aspect of community interaction with the economic resources available in coastal areas. The malnutrition status of fishermen's families is 80% greater than that of farming families. The nutritional status of children under five depends on nutritional intake, mother's level of knowledge, family economic level, mother's education, parenting style and food security. Mother's knowledge has an important role because the mother is the first teacher for the child. The aim of the study was to determine the relationship between mother's knowledge and the incidence of stunting in Bengkulu province. The research design is descriptive analytic with a cross-sectional approach. The sample in this study were mothers who had children under five in the locus and no stunting locus on the coast of Bengkulu province, totaling 479. The data that had been collected was processed using the Statistical Package For the Social Science (SPSS) program, then this type of analysis was used for processing. square chi. The results of the study showed a significant relationship between mother's knowledge and the incidence of stunting in Bengkulu province. Increasing the knowledge of mothers in coastal households can be carried out by educating them by forming a community of mothers of toddlers in developing knowledge and insights about family feeding.

**Keywords:** Mother's knowledge, Stunting, Household, Coastal

### INTRODUCTION

Coastal areas have resources that can prosper the lives of coastal communities, but in reality most coastal communities' economies are at low economic levels in meeting the nutritional needs of families [1]. Perspective of socio-economic stratification, coastal communities are not homogeneous. Coastal communities are formed by diverse social groups. Viewed from the aspect of community interaction with the economic resources available in coastal areas. The malnutrition status of toddlers in fishing families is 80% greater than that of farming families [2]. Acute nutritional problems are related to mother's upbringing of their toddlers, mother's knowledge obtained from the educational process and the ability to access information that is implemented in daily life. The nutritional status of toddlers depends on nutritional intake,

mother's knowledge level, family economic level, mother's education, parenting style and food security [3].

Mothers play a role in preparing food needs before children are born into the world, starting from pre-marital life by paying attention to nutrition before pregnancy, prenatal and neonatal periods in breastfeeding, preparation of additional or complementary foods (solid food with more varied ingredients) and affection for children [4]. Knowledge is the most important characteristic of the family in ensuring resilience family food Family with knowledge huh Those who are better off will easily receive and understand information, including information about health such as improved nutrition and stunting in toddlers [5]. Research found a relationship between caregiver knowledge, environmental sanitation, history of infectious diseases, energy intake infectious diseases and the incidence of stunting in the coastal area of Brebes Regency [6].

Family level factors are the main drivers of child growth retardation in Rwanda. Interventions to improve the nutrition of pregnant and lactating women so as to prevent babies born with low birth weight, reduce poverty, promote girls' education and conduct early intervention in cases of malnutrition [7]. Socio-economic and sanitary conditions of residence are related to the occurrence of stunting. Economic conditions are closely related to ability to meet nutritious intake and health services for pregnant women and toddlers. While sanitation and food safety can increase the risk of infectious diseases. Knowledge has a role in minimizing stunting with limitations in other factors [8].

## **METHODS**

### **Research Design and Subject**

This study used a descriptive analytic research design with a cross-sectional approach. The sample in this study were mothers who had children under five in locus and not locus stunting on the coast of Bengkulu province. The sampling subjects for this study were carried out using the quota sampling technique, by selecting sample subjects based on the proportion of the number of coastal families with inclusion and exclusion criteria totaling 479. This research conducted in the coastal area of Bengkulu province with a period of 2 The research month starts from December 2021 to February 2022.

### **Instruments and Data Analysis Procedures**

Data was collected directly from respondents and research informants using a list of questions that had been prepared. Primary data was obtained from a sample of housewives in selected villages. Secondary data was obtained from data from the health office in each district. The data that has been collected is processed using the SPSS program, then in this processing it uses the type of chi square analysis. The research instrument used in this study was a questionnaire or questionnaire.

## FINDINGS

The direction of improving nutrition in Indonesia in accordance with Health Law number 36 of 2009 concerning Health is to improve the quality of individual and community nutrition through several strategies: improving consumption patterns with balanced nutrition; awareness behavior on nutrition, physical activity and health increasing access and quality of nutrition services in accordance with advances in science and technology as well as improving food and nutrition awareness systems. Mother is a figure who plays a role and is responsible and accepts a position in society.

### Mother Knowledge

Knowledge is the result of someone knowing through the learning process and can change previous behavior. Mother's knowledge of nutrition plays a role in optimizing children's nutritional status. The government organizes programs through counseling and others to help people overcome nutritional problems.

**Table 1. Knowledge Frequency Distribution of Toddler Mothers in Coastal Households in Bengkulu Province**

Variable	Locus		No Locus		Total	
	N	%	N	%	N	%
<b>Mother's Knowledge</b>						
Good	92	36,9	101	43,9	193	40,3
Not Good	157	63,1	129	56,1	286	59,7

Based on table 1, it shows that mothers in locus category areas mostly have poor knowledge, 157 people (63.1%), while in areas that do not have good locus knowledge, 129 people (56.7%).

### Incidence of Stunting in Toddlers

Nutritional status is a reflection of the measure of the fulfillment of nutritional needs obtained from the intake and use of nutrients by the body. Nutritional status in the study was determined by anthropometric measurements.

**Table 2. Frequency Distribution of Toddler Nutritional Status based on indicators of height/age in coastal households in Bengkulu Province**

Variable	Locus		No Locus		Total	
	N	%	N	%	N	%
<b>Indicator of Height/Age</b>						
Height	13	5,2	3	1,3	16	3,3
Age	220	88,4	203	88,3	423	88,3
Short	0	0	4	1,7	4	0,8
Very short	16	6,4	20	8,7	36	7,6

Based on the table above, the nutritional indicators for height/age show that there are 16 people (6.4%) with normal nutritional status and 233 people with normal nutritional status (93.5%) with areas that are categorized as loci. The nutritional indicators for weight/height showed that there were 12 children under five with poor nutritional status (4.8%) and 237 people with normal nutritional status (95.1%) in areas categorized as loci.

**Table 3. Relationship between Mother's Knowledge and Stunting Incidence in Coastal Households in Bengkulu Province**

Mother's Knowledge	Stunting		Normal		P	OR (CI95%)
	N	%	N	%		
Not Good	26	65	216	49,2	0,080	1,917 (0,975-3,770)
Good	14	35	223	50,8		

The results of the analysis of the relationship between mother's knowledge and the incidence of stunting found that toddlers who experienced stunting and had good mother's knowledge were 50.8%, while toddlers who were not stunted and had bad mother's knowledge were 49.2%. The statistical test results obtained a p-value of 0.010, which means that it can be concluded that there is a relationship between maternal knowledge and the incidence of stunting. The chance of stunting is 1.917 times (95% CI 0.975-3.770) in toddlers who have bad knowledge compared to toddlers with good mother's knowledge.

## **DISCUSSION**

Balanced nutrition is a daily food composition that contains nutrients in the type and amount according to the body's needs, taking into account the principles of food diversity, clean living behavior and maintaining normal body weight to prevent nutritional problems and carry out physical activity [9]. Balanced nutrition for toddlers is fully regulated by the mother so that it is based on the mother's knowledge in processing and preparing food menus for toddlers according to their needs. Mother's knowledge about balanced nutrition also influences the nutritional status of toddlers. Mothers are the determinants of food consumed by toddlers, the lack of knowledge of mothers about balanced nutrition can be a cause of nutritional problems in toddlers. It cannot be denied that the mother factor plays an important role in providing and serving nutritious food in the family, thus affecting the nutritional status of children [10].

One's knowledge of a certain object also contains two aspects, namely positive and negative aspects. Balanced Nutrition is food that is consumed by various individuals on a daily basis and fulfills the 5 groups of nutrients in sufficient quantities, not excessive and not lacking. A balanced menu is the consumption of food to meet the body's need for nutrients. Nutritional deficiencies in one food by providing a balanced menu can be fulfilled by other foods. For this reason, providing a balanced menu with a variety of foods is needed to meet nutritional adequacy [11]. Knowledge is very closely related to education where it is hoped that someone with higher education, then that person will also have a wider knowledge. However, it should be emphasized that a person with low education does not necessarily mean that he has low knowledge. Increased knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education. The level of knowledge of mothers in fulfilling balanced nutrition in toddlers is in the low category in terms of knowledge of nutritional functions and only a few mothers know how to process vegetables properly. The level of knowledge of mothers about nutrition in stunted children under five who are in the village is mostly lacking with a percentage of 64.5% (20 mothers of children under five), while for urban areas most of them are sufficient level of knowledge which is equal to 86.7% [13].

The factors that affect the nutritional status of toddlers aged 2-5 years are mother's knowledge, duration of breastfeeding, mother's education, parenting, and diet given to children. Ignorance of mothers about children's nutritional needs can result in nutritional intake in children not being met properly, so the child's growth and development process will be hampered, children can experience malnutrition [14]. Research shows that there are still 8 mothers who have children under five with abnormal nutritional status, this is because some mothers only know about balanced nutrition but do not apply it in their daily lives. The reason is due to insufficient economic factors to buy food ingredients to supplement nutrition for children under five and there are also some mothers whose children under five do not want to eat prepared food, such as vegetables, very few children under five want to eat vegetables. without being created. Mothers with bad knowledge, 9 of whom have toddlers with abnormal nutritional status, this is in line with the theory put forward that the mother's lack of knowledge about balanced nutrition can be a cause of nutritional problems in toddlers [12]. It is undeniable that the mother factor plays an important role in providing and serving nutritious food in the family, thus affecting the nutritional status of the child. The child's nutritional status is served as it is, but the child's frequency of eating can be 3-4 times a day so that his nutritional status is normal. conducting counseling about nutrition-aware families and providing supplementary food for 3 months to toddlers with low energy and protein intake and collaborating with cross-sectors is a form of education in increasing mother's knowledge [14].

Knowledge of good nutrition will cause a person to be able to prepare a good food menu for consumption. The more mother's knowledge increases, the more she understands the type and amount of food consumed by all family members, including toddlers. A good eating pattern for toddlers is supported by good mother's nutritional knowledge. A good level of maternal nutritional knowledge will encourage mothers to choose foods that contain the nutrients their children need. The more knowledge the mother has, the higher the mother's ability to choose and plan food with the right variety and combination in accordance with the recommended nutritional requirements. This research is in line with the results of research which found that there is a relationship between mother's knowledge about fulfilling balanced nutrition for children and the nutritional status of children aged 1-3 years. This research is also in line with the results of research showed there is a relationship between mother's behavior regarding balanced nutrition and children's nutritional status, which means that the less knowledge the mother has about balanced nutrition, the less nutritional status the child will have.

## **CONCLUSION AND SUGGESTION**

There is a significant relationship between mother's knowledge and the incidence of stunting in Bengkulu province. Increasing the knowledge of mothers in coastal households can be carried out by educating them by forming a community of mothers of toddlers in developing knowledge and insight into family feeding in preventing and reducing stunting in coastal communities.

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