

# Mother's Behavior in Controlling Stunting in Makassar City

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## ABSTRACT

The problem of malnutrition (Stunting) today is due to inadequate consumption. Furthermore, ecological issues are caused by insufficient food and specific nutrients and are also influenced by poverty. The limited social and economic level affects this. The potential for stunting is quite enormous because the purchasing power and ability of the family are minimal, so the fulfillment of nutritious food sources will also be limited. This study aims to see and analyze the linkages between social characteristics and economic characteristics of the control Stunting. The method in this study uses a *Cross-Sectional Study* approach, with a population of mothers who have children under five aged 0-24 months. The sample is *purposive sampling*, namely mothers of toddlers willing to be respondents as many as 74 toddlers who experience stunting. The results showed a significant relationship between social characteristics at the level of parental education with the incidence of stunting and economic aspects with stunting on total income. Based on the results, it can be concluded that the economic characteristics are significantly related to the incidence of stunting.

**Keywords:** Social Characteristics, Economic Characteristics, Stunting.

## 1. INTRODUCTION

Global population issues face health problems and the growth of children under five due to malnutrition, stunting, and wasting [1], [2]. Developing countries are constantly finding strategies to address these health problems. The problem of stunting lies in the food system that does not work and fails to provide children's food intake to grow healthily.

The undernutrition (Stunting) that exists today is caused by inadequate food consumption [3]. Furthermore, the problem of infant growth is also related to the ecological conditions of the settlement. [4] Many references revealed that the community's social and economic level was significantly associated with the Stunting case's potential. The financial situation affects the family's power and ability to fulfill the nutritional need of the family [5].

Failure to grow and develop optimally early in life also increases the risk of child mortality and affects cognitive and motor development. As a result, the population's quality decreases and reduces productivity in adulthood [6].

In 2008, WHO announced that children whose height is lower than the standard for their age are defined as stunting. The risk of stunting was carried out in children

less than two years of age. Furthermore, stunting is considered a failure of growth and development. This condition is regarded as a chronic nutritional event. Prevention needs to be done to reduce the risk of many stunting sufferers [7].

In 2017, WHO released that more than twenty percent of children under five years old have growth retardation and more than fifty percent cases in Asia. The failure of infant growth development is a severe problem because of their cognitive and future abilities. Therefore, the stunting problem needs the special attention of the government.

Stunting is caused by multifactor where the factors in question are education, knowledge, social, economic, and others. Locally, Makassar City is also experiencing the problem of stunting growth. The higher the number of poor people is thought to have an increased risk of stunting. Therefore, the researcher describes the relationship between stunting prevention behavior and the socioeconomic factors of the community. Data collection was carried out in the service area of the Community Health Center, with the highest number of stunting sufferers in Makassar City. Layang Village, Bontoala Sub-district, is the selected area in this study.

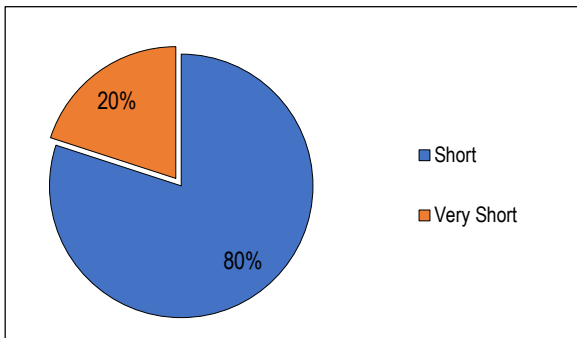
**2. METHOD**

The type of research is survey research with a cross-sectional. The variable analysis is social and economic characteristics of stunting control. The population in this study were mothers who had problems of stunting children aged 0-24 months. The number of samples was 74 people based on the Slovin formula obtained. The sampling technique used is purposive sampling. The research was carried out in October–November 2021. Researchers used the SPSS program to process the univariate and bivariate analysis.

**3. RESULT**

**3.1 Characteristics of Stunting Babies**

Based on the characteristics of stunting infants in Table 1, it shows that children who experience stunting in the short category are 59 (80%). Very short children are 15 people (20%) (Figure 1).

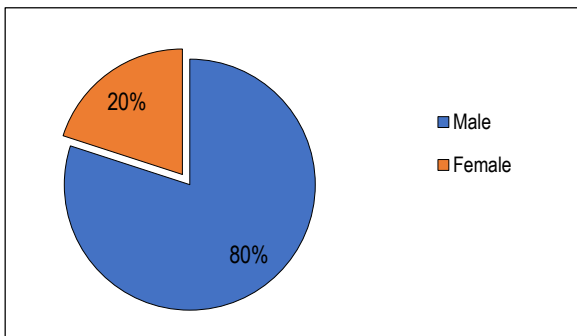


**Figure 1.** Characteristics Stunting

Based on the analysis results above, it shows that children under the age of two have a height in the short category with a value of 80%. These results indicate that stunting in children can be caused by a lack of children's nutritional needs and an unhealthy environment.

**3.2. Characteristics Respondent**

Figure 2 shows that children who suffered stunting in male as many as 33 people (45%) and the female's child stunting as many as 41 people (55%).

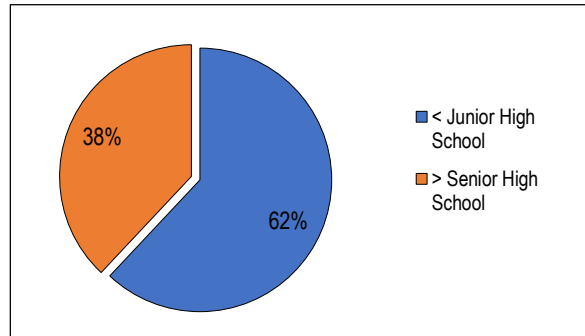


**Figure 2.** Gender of Stunting Patients

The above analysis results show that women dominate most stunting sufferers in Makassar City.

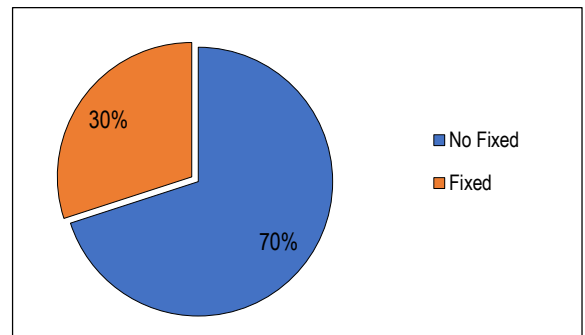
**3.3. Respondent's Social Characteristics**

Based on the results in Table 3, it shows that the mother's education is low (< Junior High school) as many as 49 people (62%). For the father's work, the results showed that the father's job was not permanent as many as 57 people (70%). Meanwhile, the mother's occupation showed 44 people (76%) from the results of the small number of children (only 1) as many as 27 people (64%).



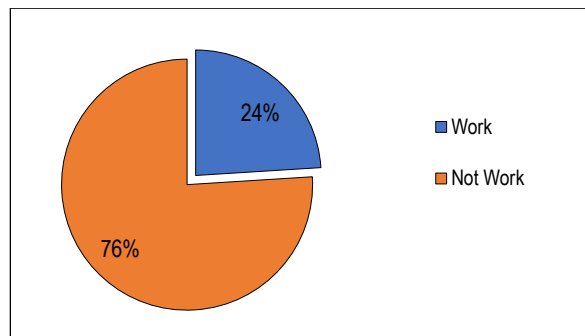
**Figure 3.** Respondent's Education Level

Based on the analysis results above, most mothers with stunting only took education up to junior high school. The low level of maternal education can be interpreted as a lack of understanding about the causes of stunting.



**Figure 4.** Father's Type of Work

Based on the analysis results above, 70% of stunted fathers do not have a permanent job.



**Figure 5.** Mother's Occupation

The analysis results above show that 76% of mothers with stunting do not have jobs. This indicates that working or not working mothers with stunting is not a factor causing stunting.

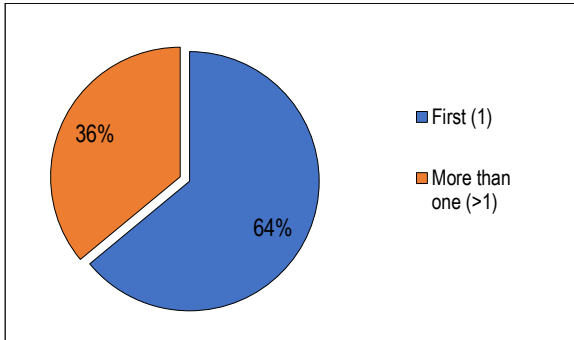


Figure 6. Number of Children

Based on the analysis results above, most of the respondents only have one child with a score of 64%. These results illustrate that many families are not a factor causing stunting.

Based on the results in Figures 7 and 8, income < Rp. 1,500,000 as many as 39 people (53%) and low food purchasing power < 50% as many as 51 people (69%).

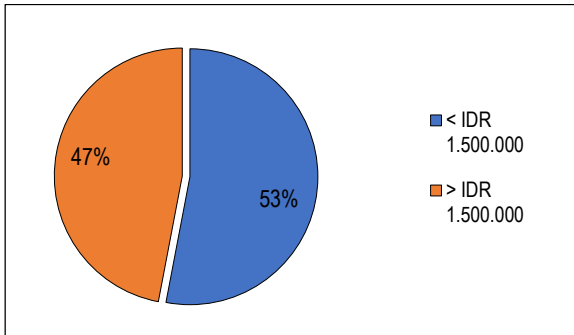


Figure 7. Income Respondent

The analysis results above show that the total income of families with stunting is less than 1.500.000 per month. This illustrates that the level of family income influences the incidence of stunting.

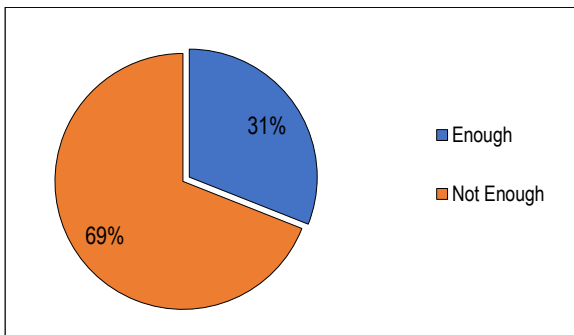


Figure 8. Food needs Respondent

The analysis results above show that the food needs for stunting sufferers have not been met. These results

illustrate that the non-fulfillment of daily food needs is one of the main factors for stunting.

### 3.4. Relationship of Social and Economic Characteristics to Stunting Control

The following are the results of Chi-Square analysis to see social and economic relationships, presented in Table 1.

Table 1. The Relationship between Social and Economic Characteristics of Respondents on Stunting Control

Variable	Stunting		p-value
	Short (%)	Very Short (%)	
<b>Mother's Education</b>			
< Junior High School	85.71	14.29	0.234
< Senior High School	76	24	
<b>Father's Occupation</b>			
No Fixed	84.21	15.79	0.341
Fixed	76.47	25.53	
<b>Mother's Job</b>			
Work	90	10	0.135
Does Not Work	77.27	22.73	
<b>Number of Children</b>			
More than one (>1)	81.48	18.52	0.554
First (1)	82.98	17.02	
<b>Income</b>			
< Rp. 1.500.000	74.36	25.64	0.051
≥ Rp. 1.500.000	91.43	8.57	
<b>Food Needs</b>			
Enough	69.57	30.43	0.055
Not Enough	88.24	11.76	

Table 1 shows that from the results of the Chi-Square Test for Social Characteristics in mothers' education with stunting control, the p-value = 0.234 ( $p > 0.05$ ) and the father's occupation with stunting control the p-value = 0.341 ( $p > 0.05$ ), then on the work of mothers with stunting control,  $p = 0.135$  ( $p > 0.05$ ). In the number of children with control, p-value = 0.554 ( $p > 0.05$ ). Thus, H1 is rejected, and H0 is accepted, indicating no significant relationship between Social Characteristics and Stunting control at the Layang Health Center Makassar City. At the same time, on the Economic Characteristics, based on the results of the Chi-Square Test, it is found that there is a relationship between income with stunting control with p-value = 0.051. There is a relationship between food purchasing power and stunting control where p-value = 0.055. This means that H1 is accepted. H0 is rejected, which indicates a relationship between economic characteristics and stunting control.

## 4. DISCUSSION

### 4.1. Social Characteristics

#### 4.1.1. Mother's Education

In this study, the number of children experiencing stunting, both short and very short, of course, requires attention from the mother so that their child can live a healthy life. Mothers must give attention and care to their children to grow and develop and children other. Mothers who have higher education will be oriented to preventive action. They know more about health problems understand nutrition and health knowledge. High maternal education is also related to awareness in utilizing health facilities [8].

#### 4.1.2. Father's Job and Mother's Job

This study shows no significant relationship between the husband's work ( $p = 0.341$ ) and the mother's ( $p = 0.135$ ) on stunting control efforts. Field facts show economic conditions that cause stunting. As the head of the household who does not have a job, a father certainly cannot meet the family's needs. Ability limitations result in fulfilling the nutritional needs of children, likewise for mothers, who should do activities by working to increase the need for food in their daily lives.

#### 4.1.3 Number of Children

The Chi-Square test also shows no relationship between the number of children and stunting control ( $p = 0.554$ ). The number of children in a family is less fortunate from an economic point of view. Therefore, the adequacy and availability of food sources are generally few and cause the inequality of food fulfillment for children. The number of children is very related to the costs and expenses. Of course, the mother will have difficulty implementing good parenting patterns because of many children [9].

The Chi-Square test results show no relationship between the number of families and the control of stunting  $p = 0.221$  ( $p > 0.05$ ). This is in line with the research conducted by Chang released [10] that the number of families is not significant with stunting control. Families that exceed the number of families are certainly very influential on the pattern of parenting, compassion, and origin in the family environment of the toddler.

### 4.2. Economic Characteristics

#### 4.2.1. Income

The study results showed that there was a relationship between income and stunting control based on the Chi-Square test ( $p = 0.051$ ). These results indicate that a decent opinion has a role in improving nutrition in a family. Minimal income affects the fulfillment of

nutritional needs for children due to providing food for children, which will eventually lead to stunting. The level of family income, the higher the possibility of getting adequate and better nutritional intake so that the number of malnutrition will decrease. High family income can certainly meet all the needs of children and families. Thus, adequate income and the fulfillment of food needs will certainly affect the quality of food consumption for toddlers and families, which reflects good nutritional behavior [11].

#### 4.2.2 Income

Further research indicates a relationship between food purchasing power and stunting control with the Chi-Square test value ( $p = 0.05$ ). The number of incomes will increase the opportunity to buy better quality and quantity food. By having the purchasing power of quality food, the nutritional needs of children will be fulfilled, which we hope can grow and develop rapidly according to their age of growth and improve their quality of life through affordable nutrition. So good income will undoubtedly affect the availability of quality food. However, if the income does not match, it can affect purchasing power [12].

## 5. CONCLUSION

From the research results above, it can be concluded that there is no relationship between social characteristics and stunting control in maternal education, father's occupation, mother's occupation, number of children, and number of families. In contrast, economic characteristics have a relationship with stunting control on family income and purchasing power.

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