

Socio-Economic Analysis Of Households On The Likelihood Of Stunting In Kabupaten Bengkulu Tengah

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ABSTRACT

This research aims to observe the socio-economic factors of the family on the chance of stunting in toddlers in Central Bengkulu Regency in 2023. Stunting is part of one of the SDGs programs on the Sustainable Development Agenda. Economic growth is a strong predictor of nutritional performance, one of which is increased food production. Adequate nutritional intake will make nutrition fulfilled. In Indonesia, stunting is still a cause for concern, every year the prevalence of stunting has decreased and also increased. Bengkulu Province shows a prevalence of 4.8%. Namely the 3rd most on the island of Sumatra. This research is a causal study of the independent variables on the dependent variable in Central Bengkulu Regency. The data used is primary data, with a purposive sampling method with a total of 80 respondents. The data is analyzed using the Logistic Regression Analysis method. With the variables studied as many as seven independent variables and the incidence of stunting as the dependent variable. Based on the results of the analysis, there are three independent variables that have the opportunity to increase the incidence of stunting in Central Bengkulu, namely family income, maternal education level \leq SD and maternal nutrition during pregnancy. Odd ratio of family income \leq UMR has the opportunity to increase the incidence of stunting in toddlers 20.416 times compared to families whose income is $>$ UMR, mother's education level \leq SD has the opportunity to increase the incidence of stunting in toddlers 5.475 times compared to mothers with education $>$ SD and mother's low nutritional status during pregnancy has the opportunity to increase the incidence of stunting in toddlers 4,896 times compared to mothers with good nutritional status.

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1. Introduction

Human resource planning is a planning process related to the management and development of the workforce in an organization or country. This includes workforce planning, recruitment, selection, training, development, and retention of employees. While stunting is a condition of stunted child growth characterized by stunted growth due to chronic malnutrition in the age period of 0-5 years. Stunting can have long-term impacts on children's health and development, including declining brain function, weakened immune systems, and increased risk of chronic diseases in adulthood. The relationship between human resource planning and stunting lies in efforts to reduce the prevalence of stunting through HR-related strategies. Here are some aspects of human resource planning that can help address the problem of stunting. Human resource planning should include education and training of medical staff, including doctors, nurses, and other health workers. They must have the knowledge and skills needed to detect, prevent, and treat stunting. Human resource planning should focus on increasing community access to health services, especially in remote and isolated areas. This involves planning the number and distribution of sufficient medical staff to provide health care and regular monitoring of child development. Health is needed because health is one of the factors for increasing productivity which then provides opportunities for economic growth. One of the unsolved health problems today is stunting. Stunting is a condition of growth failure in toddlers (babies under five years old) due to chronic malnutrition so that the child is too short for his age. Malnutrition occurs since the baby is in the womb and in the early period after the baby is born, however, stunting conditions only appear after the baby is 2 years old. Short (stunted) and very short (severely stunted) toddlers are toddlers with a body length (pb/u) or height (tb/u) according to their age compared to the who-mgrs (multicentre growth reference study) standard. Meanwhile, the definition of stunting according to the Ministry of Health (Kemenkes) is a toddler with a z-score value of less than -2 standard deviations (stunted) and less than -3 standard deviations (severely stunted) 1. According to the World Health Organization (WHO) in 2020, stunting is defined as a condition when the height of a child under the age of five is shorter than the appropriate standard for their age. WHO uses a parameter of a child's height measurement that is normalized by age, known as the Z-score, to identify children who experience stunting. Children who have a height shorter than two standard deviations below the appropriate standard for their age are considered to be stunted. Stunting is part of one of the SDGs (Sustainable Development Goals) programs of the Sustainable Development Agenda. Stunting will cause short-term and long-term impacts. The short-term impacts are disturbances in brain development, intelligence, physical growth disorders and body metabolic disorders. While the long-term impacts are decreased cognitive function and learning achievement, <https://ejournal.unib.ac.id/conjuncture>

decreased immunity, high risk of disease, and suboptimal work quality which can result in low individual and state economic productivity (Ministry of Health, 2016). Because stunting occurs due to chronic malnutrition during the first 1000 days of a child's life, the damage that occurs will also result in irreversible child development and the child will never learn or get as much as he or she can, so that if short children are not immediately handled properly, it will become a widely accepted predictor of poor quality human resources, which will then reduce the nation's productivity in the future (Trihono, 2015). Stunting in toddlers can be caused by various multidimensional factors that are interrelated with each other. Factors that cause stunting are grouped into two, namely direct factors and indirect factors. Direct factors include nutritional intake, genetic factors (short height of parents), LBW (Low Birth Weight), infectious diseases, level of exclusive breastfeeding, and unavailability of food at home, while indirect factors are the level of cleanliness and suboptimal parenting patterns, low parental education, mothers with poor nutrition during pregnancy, and low socio-economic (Olsa, 2018). Various socio-economic aspects also have an impact on the incidence of stunting, including family income. Family income can provide opportunities for their access to varied and nutritious food. Families with low incomes may have difficulty in purchasing sufficient and varied food, which can lead to nutritional deficiencies and ultimately lead to stunting in children. The level of maternal education can affect the health of the mother herself. Mothers with low levels of education may have less knowledge. limited on reproductive health, prenatal care, and infant care. Poor maternal health can negatively impact fetal growth and the quality of breast milk (ASI), which in turn can increase the risk of stunting in children. Factors that cause stunting are grouped into 2, namely health factors and socio-economic factors. Health factors include nutritional intake, LBW (Low Birth Weight), exclusive breastfeeding, infectious diseases, and genetic factors, nutritional status in pregnant women, pregnancy check-ups. While socio-economic factors include family income, mother's education, father's education, number of family members, mother's working status. International experience and evidence show that stunting can hinder economic growth and reduce labor market productivity, resulting in a loss of 11% of GDP (Gross Domestic Products) and reducing adult workers' income by up to 20%. In addition, stunting can also contribute to widening inequality, reducing 10% of total lifetime income and also causing intergenerational poverty. Higher levels of education are often associated with better jobs and higher incomes. While fathers with higher education may have better access to the economic resources needed to purchase nutritious food and ensure good sanitation at home, families with larger numbers of members may have difficulty providing sufficient and nutritious food for each family member, especially if economic resources are limited . In addition, if there are many children in a family, the attention and care given

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to each child may be divided and not optimal, which can affect the quality of nutrition received by the children. and If a mother works full time or has long working hours, she may have less time to care for and give enough attention to her child. This can have a negative impact on the child's diet and care, which can trigger stunting. There are still several obstacles in efforts to reduce stunting rates in toddlers, including the problem of short children and the nutrition of pregnant women is not easy to see and know. Many parties still believe that nutritional status with a lack of food is a result of poverty, as well as genetic factors passed down from both parents. Women are not aware of the importance of nutrition during pregnancy, as many as 81% of pregnant women receive nutritional tablets but only 18% consume them for 90 days during pregnancy. Families who do not have knowledge about nutrition and health behavior. In addition, many pregnant women still believe in myths circulating in the community and their truth has not been proven (Trihono et al., 2015). Stunting is a problem currently being faced by the world, especially in poor and developing countries. The prevalence of stunting in the world is still relatively high. This can be seen from the percentage of stunting incidents in the world in 2017 which still reached 22.2%. Half of the number of children with stunting are in Asia (55%) and one third are in Africa (39%) (Unicef, 2018). This shows that the presentation is still above the standard set by WHO, which is 20% (Ministry of Health, 2016). In 2017, the number of stunted toddlers in Indonesia was ranked 4th in the world after Nigeria, Pakistan, and India (Unicef, 2017 in TNP2K, 2017). In Indonesia itself, stunting occurs and is still worrying, every year the prevalence of stunting has decreased and also increased. This is evident from the results of Riskesdas data in 2007 (36%), 2010 (35%), 2013 (37.2%), 2015 (29%), 2018 (30.8%) (Ministry of Health, 2019). While in 2021 the prevalence of stunting was at 24.4%, this data shows that the prevalence of stunting is still above the target to be achieved by the nation. Around 37% (almost 9 million) toddlers experience stunting (Basic Health Research/Riskesdas 2013) and worldwide, Indonesia is the country with the fifth largest prevalence of stunting. Toddlers who experience stunting will have a less than optimal level of intelligence, making children more susceptible to disease and in the future can be at risk of decreasing productivity levels. Ultimately, stunting will broadly inhibit economic growth, increase poverty and widen inequality. Based on data from the Bengkulu Provincial Health Office in 2022, the highest distribution of stunting cases in toddlers in Bengkulu Province was in North Bengkulu Regency with 1,910 cases (34.09%), in second place Muko-Muko Regency with 991 cases (17.69%) and in third place Central Bengkulu Regency with 392 cases (10.10%). Why is it interesting to choose Central Bengkulu as a research location because Central Bengkulu Regency is the youngest Regency in Bengkulu Province which directly borders Bengkulu City, Central Bengkulu Regency is a buffer Regency which is a crossing and tourist city in Bengkulu

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Province. The reach of health access is also adequate because it is passed by provincial roads throughout the area.

2. Literature Review

Human Resource Planning

Human Resource Planning Human resource (HR) planning is a planning process that involves managing and developing the workforce in an organization or country. This includes planning for workforce needs, recruitment, selection, training, development, and retention of employees. Stunting, on the other hand, is a condition of growth failure in children characterized by stunted height due to chronic undernutrition in the period 0-5 years. Stunting can have long-term impacts on children's health and development, including reduced brain function, weakened immune system, and risk of chronic diseases in adulthood. The link between HR planning and stunting lies in reducing the prevalence of stunting through HR-related strategies. Here are some aspects of HR planning that can contribute to addressing stunting. HRH planning should include education and training for medical personnel, including doctors, nurses and other health workers. They need to be provided with the right knowledge and skills in detecting, preventing and treating stunting. Human resources trained in health counseling and health promotion can provide appropriate information to communities on the importance of balanced nutrition, exclusive breastfeeding, nutritious food and good childcare practices to prevent stunting. Improved access to health services: HRH planning should consider improving community access to health services, especially in remote areas. This involves planning for adequate numbers and deployment of health workers to provide health care and regular child growth monitoring.

Cross-sector collaboration, HRH planning can also involve collaboration between the health sector and other sectors, such as agriculture, education, and social sectors. This collaboration can help ensure that the human resources needed to tackle stunting are in the right place and working synergistically, and should include a monitoring and evaluation system to measure the effectiveness of measures taken to address stunting. The data and information obtained from this monitoring can help in making better planning decisions in the future. In order to overcome stunting, good human resource planning can be the basis for developing policies, programs, Stunting (shortness) is a form of growth faltering that occurs in children as a result of long-term malnutrition so that children become shorter than their age. Malnutrition in children does not occur directly and quickly. This malnutrition can occur from the mother's pregnancy until the child is born, and will begin to be seen from the age of 2 years (Djauhari, 2017). Stunted (short) and severely stunted (very short) are based on the index of height or length for age (TB / U or PB / U) which obtained low results. Children who

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are said to be stunted are in the measurement of nutritional status based on age and then compared with the standard standards from WHO, the z-score results are below normal. If the z-score is less than -2 standard deviations, the child is categorized as stunted (short) while if the z-score value, the child is categorThe main problem is not only height, but the period of spinal and brain cell growth occurs during pregnancy until the age of two years (Onis & Branca, 2016). A child who is stunted has a major impact on behavior, as well as low levels of intelligence and cognitive abilities. According to the World Bank, every one percent change in height will reduce economic productivity by 1.4% (World Bank, 2006). The occurrence of economic structural transformation means that there are groups of people in a business sector (primary, secondary, or tertiary) that have increased or decreased in the composition of an economy (Arsyad, 2010). An increasing group means that it has the opportunity to improve its consumption, due to an increase in purchasing power. Economic growth means an increase in production and income for the community as a whole. This means that there is also an increase in people's welfare (Todaro & Smith, 2011). Uneven economic growth will result in people who improve their economy and welfare, but there are others who do not change in line with economic development. Overall development will improve the economic, health and education levels of the people. This means increasing the HDI in a community. In previous studies, it has been found that the prevalence of stunting in Indonesia does not change in proportion to changes in the economy.

On an Indonesian scale, there is a study that found that GRDP per capita has an effect on the incidence of stunted (Ulfani et al., 2011). Sudiman's (2008) research concluded that stunting is a result of previous long-term socioeconomic disadvantage.

3. Method, Data, and Analysis

This study aims to determine whether low family income, low parental education, large number of family members, working mothers, poor nutritional status of mothers during pregnancy and lack of pregnancy check-ups during pregnancy have the potential to increase the incidence of stunting in toddlers ? The research method is quantitative descriptive with the analysis tool using the Logistic Binary Regression Test. Logistic regression is a statistical method used to model the relationship between one or more independent variables (predictors) with a binary (dichotomous) dependent variable. The main purpose of logistic regression is to predict the probability that an event or incident will fall into one of two possible categories. The dependent variable in logistic regression is the binary variable, which is generally represented as 0 (does not occur) or 1 (occurs) Logistic regression uses the logistic (or sigmoid) function to model the probability that a binary event will occur. This sigmoid function maps the values of a linear combination of independent variables into the range (0, 1), so <https://ejournal.unib.ac.id/conjuncture>

that it can be interpreted as a probability (chance) between these variables, which empirically shows the impact of family income, mother's education, father's education, number of family members, mother's working status, maternal nutritional status during pregnancy and maternal examination during pregnancy which are independent variables (independent) while the incidence of stunting in toddlers is the dependent variable which is a tool for the incidence of stunting in toddlers in Central Bengkulu Regency. This study was conducted by testing the research variables by building an analysis model using statistical methods, after which an interpretation was taken as a basis for drawing conclusions. The classification of variables and operational definitions used are as follows: Table 3.1

Variables used in the analysis The data used in this study are primary data. Which is obtained from respondents' answers to the questionnaire. The data source is 40 children affected by stunting and 40 children who are not affected by stunting in Pondok Kelapa District, Central Bengkulu Regency, Bengkulu Province, Indonesia. The sample to be tested in this study uses the purposive sampling method, namely the method of selecting samples with several specific criteria (Sugiyono, 2006). The criteria used are mothers who have toddlers aged 1-5 years, are native residents of Central Bengkulu Regency which can be proven by the identification card (KTP) of parents and biological children. Based on the characteristics of the samples studied, out of 2,066 toddlers in Central Bengkulu Regency in 2022, 80 samples were considered to be the research sample consisting of 40 stunted toddlers, of which 10% of 392 stunted toddlers and 40 toddlers were not stunted. Sampling was carried out by researchers accompanied by local village midwives and representatives from the Central Bengkulu Regency Health Office by bringing questionnaires, then respondents were assisted by researchers to fill out the questionnaires. The analysis method using logistic regression is used to analyze the relationship between the response variable (y_i) which is on a binary scale with the category of success or failure with the independent variables (x_1, x_2, \dots, x_p) which is interval and/or categorical (Hosmer and Lemeshow, 1989). The logistic regression model uses the Maximum Likelihood method to estimate its parameters (Hosmer and Lemeshow, 1989). If response variable $y_i \sim \text{Bernoulli}(x)$ and are independent with $f(y_i) = \pi(x_i)^{y_i} [1 - \pi(x_i)]^{1-y_i}$ then the likelihood function of n observations. To find out whether each parameter individually has a chance of the model, a Wald test needs to be carried out, the method used in this partial parameter test is Enter. Odds ratio is a measure that shows the ratio of experiencing a certain event between a part of the population with certain characteristics and the part of the population that does not have certain characteristics (Hosmer and Lemeshow, 1989). independent variables that are suspected of influencing the dependent variable, a logistic regression model will be obtained with the following logit equation: $g(\chi) = \beta_0 + \beta_1 \chi_1 + \dots + \beta_j \chi_j$

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4. Result and Discussion

Data Description

Data description shows that Bengkulu Tengah Regency is a regency in Bengkulu Province, Indonesia. Its capital is Karang Tinggi District. The regency was formed based on Law Number 24 In 2008, it was part of North Bengkulu Regency. In 2020, the population of Central Bengkulu Regency was 116,706 people with a density of 95 people/km². Central Bengkulu Regency borders Kepahiang Regency and Rejang Lebong Regency to the east, Seluma Regency to the south, Bengkulu City and the Indian Ocean to the west, and North Bengkulu Regency to the north. Central Bengkulu Regency was formed based on Law No. 24 of 2008. The population of Central Bengkulu Regency can be seen in the following table: **Table 1** Population of Central Bengkulu

o		a		h	
1	District	5853	2.9	55507	2.7
	The Great	6	2		7
u Middle					

BPS Source: Central Bengkulu in Figures

With the average human development index (HDI) as follows:

Table 2 Human Development Index

IPM Components	Human Development Index and its Components		
	2018	2019	2020
Life Expectancy at Birth (Years)	67.82	68.12	68.19
Expected Years of Schooling (Years)	12.97	13.02	13.03
Average Length of Schooling (Years)	7.14	7.22	7.47
Adjusted Per Capita Expenditure (Rp)	9.102	9.435	9,392
Human Development Index	66.65	67.30	67.61
Human Development Index Growth	1.29	0.98	0.31

BPS Source: Central Bengkulu in Figures

The income of the people of Central Bengkulu can be seen in the following table.

Calculation Results

With the logit regression method, several tests were carried out, namely the overall fit test and partial test (wald test). The overall model test was carried out with several test models, namely X^2 , classification result, omnibus test, Pseudo R Square, and Hosmer and Lemeshow test. While the

partial test used the wald test. In testing the overall model, the first test performed is to compare the value of $-2\log$ likelihood with χ^2 . The model is considered fit if the value of $-2\log$ likelihood $< \chi^2$ table. In this study Next, in the Classification results test, the number of stunting incidents was 5 and those not affected by stunting were 35. The classification results had a significant influence on in the model. Then continued with the Hosmer & Lemeshow test.

HO in the Hosmer & Lemeshow test. shows a difference between the model and observation. With χ^2 of 10.042 at $\alpha = 5\%$, it is said that HO is not rejected, so the model is not different from the observation. Thus, the resulting model is a good model (fit) The next overall model test is Pseudo R^2 based on the Nagelkerke R^2 value = 0.692, it can be said that the model's ability is only 69.2% in explaining stunting events. Of all the model tests that have been carried out, only Pseudo R^2 shows poor results. However, in general the logit regression model in this study is fit and can be continued with partial testing. Partial test is done with wald test by looking at z statistic based on its significance level. Of the 7 characters of stunting causes studied, there are three variables that significantly affect stunting at $\alpha = 5\%$, some have a negative chance, some are the opposite. Variables that are significant have a positive chance of stunting occurrence, meaning that this variable increases the chance of stunting. The first variable, family income size, has a regression coefficient of 3.016 with a significance of 0.000. Another variable, namely mother's education \leq elementary school, has a regression coefficient of 1.700 with a significance of 0.000. 0.0028 and the third variable, namely maternal nutrition during pregnancy, has a regression coefficient of 1.583 and is significant at 0.0039 if maternal nutrition is lacking or consuming blood-boosting vitamins is less than 30 tablets or in other words, a variable that increases the chance of occurrence. Stunting is low family income, low maternal education and maternal nutrition during pregnancy. Furthermore, with the logit regression method, model interpretation is carried out by exponentially analyzing the regression coefficient, namely $\exp(\beta)$ which is referred to as the odds ratio. For significant variables shown in table 4.5. Three significant variables have a positive chance of stunting with an odds ratio of 20.416. Based on this odds ratio, the chance of stunting is 20.416 times if income is below the minimum wage. Another variable, namely mother's education \leq elementary school, has 5.475, the chance of stunting if the mother's education is low, the highest is elementary school. Another variable, namely maternal nutrition during pregnancy, has an odd ratio of 4.869, which means that if the mother's nutrition is lacking, consuming less than 30 blood-boosting vitamins during pregnancy has the potential to increase the incidence of stunting by 4.869 times compared to those who diligently consume blood-boosting tablets.

Discussion

After conducting logistic regression testing, it can be concluded that the independent variables, namely family income, mother's elementary school education and maternal nutritional status during pregnancy, influence the independent variable or have a significant opportunity for stunting in Central Bengkulu Regency. This can be seen in the table. 4.5 where the p-value of each variable is $< \alpha$ (0.05).

Family Income

With a p-value of 0.000. The family income variable has a significant chance of affecting the stunting incidence variable in Central Bengkulu or the chance of being affected by significant stunting from a small family income for the occurrence of stunting is 20,426 times compared to families with large/high incomes. The results of the analysis in this study are in accordance with research conducted by Rikawati Yusuf (2018), Sahla Delia Azzahra (2022), Agnes Monika Tay (2020), Rizwiki Oktavia (2021) Hairil Akbar (2022) where the family income variable has a significant chance of stunting. in toddlers. According to (Julia M et al, 2004) found that poverty is the cause of the high stunting problem in children under five. In addition to income, poverty is also one of the parameters of family economic capacity. Several research results have found that poverty is the cause of high stunting problems in toddlers (Julia M et al., 2004). According to Kleynhans (2006) that families who have economic limitations will find it very difficult to fulfill food needs in the household, this if it continues for a long time will have an impact on child growth so that they are stunted. Based on the researcher's findings when collecting family income data affects the diversity of available foods, families with high incomes tend to be able to buy nutritious foods needed for children's growth and development. Conversely, families with low incomes may experience limitations in meeting their children's nutritional needs so that children only eat foods that their mothers can buy. Sometimes children are lazy to eat the same food every day, this also makes children not consume nutrition. The phenomenon that occurred in the field when the research was conducted was that the majority of respondents whose children were stunted had an income $<$ minimum wage and the majority had non-permanent jobs such as casual laborers, low-income construction workers and casual laborers. Family income can also affect a family's access to health services. Families with low incomes may face limitations in accessing medical care, including routine health checks and nutritional interventions. These limited health services can lead to growth problems in children going undetected or untreated. Family income can also affect the level of education and nutritional awareness of parents. Low-income families may have lower levels of education and less awareness of the importance of good nutrition for child development. As a result, poor nutritional practices such as providing unbalanced

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and inadequate food for children have become more common. Field findings can also reflect the effects of government programs and policies in addressing stunting in low-income families. Additional feeding programs, health assistance, and nutrition education aimed at low-income families can help reduce the incidence of stunting in children. In order to reduce the incidence of stunting, low family income needs to be considered by the government and related stakeholders. Expansion of social welfare programs, increasing access to health and nutrition services, and efforts to increase nutritional awareness among low-income families are some steps that can help overcome this problem. Thus, it is hoped that the level of stunting in children can be reduced and the quality of life of future generations can be improved.

Mother's Education Elementary School

With a p-value of 0.001. The variable of low maternal education, the highest of which is only an elementary school diploma, has a significant chance of affecting the variable of stunting incidence in Central Bengkulu. Or the chance of being affected by stunting is significant from the low level of maternal education, namely the highest of which is an elementary school diploma, which has the chance of influencing the incidence of stunting in toddlers by 5,475 times. This low maternal education variable is in accordance with research conducted by Rikawati Yusuf (2018), Rizwiki Oktavia (2021), Nurfarida Rahmawati Mauliadi Ramli (2022). According to (Torlesse: 2016) the incidence of stunting is higher in children whose mothers have not completed primary education (43.4%) or completed primary education (31.0%) compared to children whose mothers have completed secondary school (23.0%). The phenomenon that occurred in the field when the research was conducted was that the majority of Rospenden whose children were affected by stunting had a low level of education < primary school. This low level of education makes children at risk of stunting due to limited knowledge about stunting so that for them children who don't want to eat is not an important problem for children's health. For mothers with education less than elementary school, the most important thing is that the child is healthy without paying attention to the nutritional intake that the child consumes. The mother's limited education means that the child's growth, both during pregnancy and growth, is neglected. Mothers' education level can influence their knowledge and understanding of the importance of good nutrition and healthy child-rearing practices. Mothers with low education levels may be less aware of the importance of providing nutritious food to their children, and may not understand how to provide proper care and stimulation for their children's growth and development. Education plays an important role in changing a person's behavior and mindset. If mothers have a higher level of education, they tend to be more open to positive behavioral changes, such as increasing nutritional awareness, adopting healthy parenting practices,

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and following medical advice better. Findings during the study showed that low maternal education can also affect their access to health information and services. They tend to be lazy to bring their children to the integrated health post to obtain additional food also because they are confused about their children who are small and short compared to children of the same age and also have limitations in understanding health information delivered by health workers, as well as difficulties in accessing health services needed to monitor child growth and development. Health education programs that are targeted and adapted to the low level of education of mothers can help raise awareness about the importance of good nutrition and proper child care. In addition, a cross-sectoral approach involving government, non-governmental organizations, and the private sector can help improve access for low-educated mothers to the information and health services needed to address stunting and improve the health of future generations.

Nutrition for Mothers During Pregnancy

With a p-value of 0.001. The variable of vitamin intake during pregnancy (Consumption of Iron Supplement Tablets) has a significant impact on the variable of stunting events in Central Bengkulu. Or the chance of getting stunting is significant from the lack of vitamin intake during pregnancy, making the chance of stunting events 4,869 times greater. Maternal Nutrition Variables during pregnancy according to research by Farida Rahmawati (2020) During pregnancy, mothers who do not meet the needs of the wrong nutritional intake pattern are likely to experience stunting in their children (Briawan & Drajat Martianto, 2014). What happened in the field when the research was conducted, the majority of pregnant women did not get nutrition, or even did not consume iron tablets, and did not pay attention to vitamin intake which is useful for fetal growth during pregnancy. Several factors that cause pregnant women not to get enough nutrition are because they are busy taking care of the household so that vitamin consumption is neglected, the tradition of not having a check-up if they do not have a serious illness. Being lazy to check their pregnancy regularly is also a factor because pregnant women don't get vitamins if they don't check their pregnancy. Nutritional intake during pregnancy is not a priority for preventing stunting in toddlers. Many studies have found a significant relationship between maternal nutritional status during pregnancy and the risk of stunting in children. Poor nutrition or lack of nutrition during pregnancy can cause the fetus to not grow and develop properly in the womb, which has an impact on the child's physical and cognitive growth later in life. Studies have also shown that mothers who experience nutritional deficiencies, such as iron, calcium, vitamin A, and protein during pregnancy, tend to have a higher risk of giving birth to children with stunting. Adequate and balanced nutrition during pregnancy is very important to support the growth and development of the fetus. Nutrients such as protein, fat, carbohydrates,

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vitamins, and minerals are important components in the formation of fetal tissues and organs. If the mother experiences nutritional deficiencies during pregnancy, the fetus will experience limitations in getting the intake needed to grow properly. The quality and quantity of maternal food intake during pregnancy greatly affects the nutritional status of the fetus. Mothers who consume highly nutritious foods during pregnancy tend to have a lower risk of giving birth to children with stunting. Conversely, mothers who experience hunger or malnutrition during pregnancy are at higher risk of giving birth to children with stunting. Maternal nutrition during pregnancy can also have long-term effects on a child's development. Undernutrition during this period can affect a child's growth, lead to early stunting, and increase the risk of health and developmental problems later in life. Findings in the field show that it is important to provide support and health education to pregnant women about the importance of nutrition during pregnancy. Comprehensive maternal health and prenatal care programs can help ensure that mothers receive adequate and balanced nutrition during pregnancy. Based on these findings, serious attention to maternal nutrition during pregnancy is needed to prevent stunting in children. Efforts such as increasing access and education about good nutrition during pregnancy, nutrition campaigns for pregnant women, and providing supplements and additional food for pregnant women in need can help reduce the risk of stunting in children. In addition, support from the government and health institutions in ensuring the availability of adequate resources and health services for pregnant women is also very important in efforts to prevent stunting in children.

5. Conclusion and Suggestion

Based on the research results, it can be concluded:

- a) There are three significant variables that have the potential to increase the incidence of stunting in toddlers in Central Bengkulu Regency, namely family income, maternal education level and maternal nutritional status during pregnancy.
- b) Family income < UMR has the potential to increase the incidence of stunting in toddlers by 20,416 times compared to families with income > UMR, maternal education level < elementary school has the potential to increase the incidence of stunting in toddlers by 5,475 times compared to mothers with education > elementary school and low maternal nutritional status during pregnancy has the potential to increase the incidence of stunting in toddlers by 4,896 times compared to mothers with good nutritional status.

Based on the analysis and considerations that have been made, here are some suggestions. The Central Bengkulu Regency Government is expected to have various efforts to increase community income so that economic welfare and community living standards can be improved so that the <https://ejournal.unib.ac.id/conjuncture>

incidence of stunting can be suppressed. Some steps that can be taken by the government: Efforts to increase community economic income. By creating an increase in capital assistance programs for small businesses, building tourist areas, so that it can increase the income of people around tourist attractions, building farm roads to facilitate access to agricultural products and encouraging small and medium-sized MSMEs economic training. In the education sector, it is hoped that the government can promote a nine-year compulsory program, providing general knowledge in the form of socialization about the importance of maternal education, the dangers of early marriage, and easily accessible scholarships for improving education . Health Education for Pregnant Women. The government is expected to be able to launch a health education program (counseling) for pregnant women and expectant mothers. This program can include information on healthy eating patterns, healthy living habits, the importance of pregnancy check-ups, childbirth preparation, and newborn care, increasing the availability of nutrition and supplements, and conducting house-to-house check-ups for people who really need it and have difficulty accessing health care.

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