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# **Educational Level and Parenting Practices With Stunting Frequency Figures**

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## **Abstrak**

Tumbuh kembang yang paling optimal pada 1000 hari pertama kehidupan merupakan hal yang penting bagi setiap anak. Tingkat Pendidikan dan pola asuh anak yang diberikan orang tua menjadi faktor terjadinya stunting. Berdasarkan Data terbaru dari Survei Status Gizi Indonesia (SSGI) prevalensi angka stunting di Jawa Timur cukup tinggi yaitu mencapai 19,2%. Kabupaten Bangkalan menjadi kabupaten/kota dengan prevalensi angka stunting yang masih cukup tinggi yaitu 26,2%. Tujuan penelitian ini ialah untuk mengetahui bagaimana hubungan serta pengaruh dari Tingkat Pendidikan dan pola asuh anak terhadap kejadian stunting. Prevalensi angka stunting tertinggi di Kabupaten Bangkalan berada di Kecamatan Galis dengan jumlah 166 kasus. Teknik pengambilan sampel dalam penelitian ini menggunakan teknik Accidental Sampling, dan sampel yang digunakan berjumlah 33 sampel. Analisis yang digunakan dalam penelitian ini ialah analisis bivariat, multivariat dan uji F. Penelitian ini menggunakan pendekatan kuantitatif dengan metode pengumpulan data melalui kuesioner. Jenis data yang digunakan ialah data primer dan sekunder. Data primer ialah data yang didapatkan dari hasil kuesioner yang telah disebar, sedangkan data sekunder didapatkan dari berbagai macam literatur dan data yang ada di Dinas terkait. Hasil dari penelitian ini ialah: 1) Hasil uji chi-square menunjukkan bahwa terdapat hubungan Tingkat Pendidikan dengan kejadian stunting 2) Hasil uji chi-square juga menunjukkan bahwa terdapat hubungan Pola Asuh Anak dengan kejadian stuntin. 3) Hasil analisis multivariat dan Uji F juga menunjukkan bahwa Tingkat Pendidikan dan pola asuh anak secara simultan berpengaruh terhadap kejadian stunting.

Kata kunci: Tingkat Pendidikan, Pola Asuh Anak, Stunting

#### Abstract

Optimal growth and development in the first 1000 days of life is important for every child. The level of education and parenting practices provided by parents are factors in the occurrence of stunting. Based on the latest data from the Indonesian Nutrition Status Survey (SSGI), the prevalence of stunting in East Java is quite high, reaching 19.2%.Bangkalan Regency is a district/city with a stunting prevalence rate that is still quite high, namely 26.2%. The aim of this research is to find out the relationship and influence of the level of education and parenting practices on the incidence of stunting. The highest prevalence of stunting in Bangkalan Regency is in Galis District with 166 cases. The sampling technique in this research used the Accidental Sampling technique, and the samples used were 33 samples. The analysis used in this research is bivariate analysis, multivariate analysis and the F test. This research uses a quantitative approach with data collection methods through questionnaires. The types of data used are primary and secondary data. Primary data is data obtained from the results of questionnaires that have been distributed, while secondary data is obtained from various kinds of literature and data in the relevant departments. The results of this research are: 1)The results of the chi-square test show that there is a relationship between education level and the incidence of stunting, 2) The results of the chi-square test also show that there is relationship between parenting practices and the incidence of stunting. 3) The results of multivariate analysis and the F test also show that the level of education and parenting practices of children simultaneously influence the incidence of stunting.

Keywords: Education level, parenting practices, stunting Introduction

#### INTRODUCTION

Children under five years of age or children who are usually called toddlers are children who are vulnerable to experiencing delays in growth and development (Salsabila, 2021). This is because the toddler years require large amounts of nutritional intake to meet their growth and development needs (Susilowati, 2016). One of the nutritional problems that often occurs in toddlers is stunting, where children under the age of five cannot grow due to chronic malnutrition, making children shorter than normal children of the same age (Nirmalasari, 2020).

Data from the 2022 Indonesian Nutrition Status Survey (SSGI) shows that the prevalence of stunting in Indonesia has reached 21.6%. This has seen a decrease in stunting data from 24.4% in 2021. The prevalence of stunting in East Java can still be said to be quite high, namely 19.2%. Bangkalan Regency will reach 26.2% in 2022. Based on 2023 locus data dealing with stunting, among the 18 sub-districts in Bangkalan Regency, the highest stunting rate is in Galis Sub-district with 166 children experiencing growth and development delays.

There are many factors that contribute to delays in a child's development, including the mother's level of education and the parenting practices applied to her child. The objectives of this research are: 1) To find out the relationship between education level and the incidence of stunting. 2) Knowing the relationship between parenting practices and the incidence of stunting. 3) Find out whether the level of education and parenting practices of children influence the incidence of stunting.

Where the level of formal education plays an important role, especially for parents in educating and caring for their children. Education level can influence a person's ability to receive information. People with good education will find it easier to accept the information conveyed than people with less education. This is because the more education we get, the more information and learning we get. Mothers with a high level of education will find it easy to understand how to prevent stunting in their children (Mustamin, 2018). As we all know, the curriculum in Indonesia continues to change according to the times and educational needs.

Apart from education level, parenting practices are also related to the incidence of stunting. Bella's (2019) research shows that there is a relationship between parents' parenting practices and the incidence of growth and development delays in toddlers. This is because parental parenting plays an important role in children's nutritional status, children with good parenting have good nutritional status, while children with poor parenting tend to have poor nutritional status (Aramico, 2013).

The problem formulation in this research is: 1) Is the level of parental education related to the incidence of stunting in Paterongan Village? 2) Is the parenting practices implemented by parents related to the incidence of stunting in Paterongan Village? 3) Does the level of education and parenting practices influence the incidence of stunting in Paterongan Village? Based on this background, researchers are interested in examining the relationship between maternal education level and child rearing patterns with the incidence of stunting in toddlers aged 0 - 48 months in the Paterongan Village Area, Galis District, Bangkalan Regency, Madura.

#### Level of education

Education according to Hangestiningsih (2015) is a conscious effort that is organized and systematic, which is carried out by a person to influence that person to have characteristics and habits that are in accordance with the goals of education. One of the risk factors for stunting is the level of parental education. Formal education has several advantages compared to informal education. Where formal education has a systematic, clear and detailed written educational plan or curriculum.

The level of education can make it easier for someone to absorb information and apply it in everyday life (Astari, 2006). This was also confirmed by Mustamin (2018) who stated that mothers with a high level of education would find it easy to understand how to prevent stunting in their children. Knowledge about health greatly influences a person's healthy behavior because a person's healthy behavior is influenced by knowledge about health (Aditianti, 2016).

According to Riskesdas (2013), it shows that the incidence of stunting is largely influenced by low parental education, especially mothers. This is in line with research conducted in Mexico that the mother's education level is very important and is related to nutritional knowledge and nutritional fulfillment for the family, especially children, because mothers with low levels of education, among other things, will find it difficult to absorb nutritional information so that children are at risk of experiencing stunting. However, there is research from Mustajab (2023) where the results His research stated that there was no significant relationship between the mother's education level and the incidence of stunting. Even though the results of the research that has been conducted show that there is no relationship, the level of education is one of the risk factors for stunting in toddlers. Therefore, researchers are interested in examining the relationship between education level and the incidence of stunting in toddlers.

**Parenting practices** 

The parenting practices that parents apply to their children plays an important role in the occurrence of growth and development delays in toddlers. This is because the interaction between children and parents in childcare activities really helps children's growth and development. A child's nutritional status is influenced by the mother's ability to provide sufficient food, as well as family income, education, behavior and number of siblings (Adha, 2021).

According to Wicaksana & Rachman (2018), the indicators of parenting practices regarding the incidence of stunting are exclusive breastfeeding, providing nutritious food, good feeding practices, stimulation and interaction and health attention. In general, delays in growth and development are caused by poor parenting practices applied to children, thereby increasing the risk that children will experience stunting.

Apart from that, there are several things that must be considered when raising children, including nutritional intake and food quality. Mothers or parents need to know what nutrition and nutrients should be given to their children. Good parenting practices will influence nutritional status so that they are in good condition, conversely, if behavior related to inappropriate or bad parenting practices can also cause stunted child growth (Aramico, 2013). Based on research by S. Salsabila. (2022) shows that there is a relationship between parenting practices and the incidence of toddler stunting. This is because parenting practicess play an important role in the nutritional status of children, toddlers with good parenting practices have good nutritional status, while toddlers with poor parenting practices tend to experience poor nutritional status.

## **Stunting**

Stunting is one of the nutritional problems faced in the world, especially in developing countries (UNICEF, 2013). Stunting is a condition where toddlers are less tall than children their age. Stunting will also be the biggest threat to children's quality of life in the future because it inhibits physical growth and brain development in children, reduces the quality of learning and productivity in adulthood, and increases the threat of infectious diseases. Toddlers who do not consume enough nutrition, especially protein, energy, vitamins and minerals, are at higher risk of experiencing growth and development delays. Lack of these nutrients inhibits the growth of cells and body tissues.

Indonesia is a developing country, where delays in children's growth are still common. Data from the 2022 Indonesian Nutrition Status Survey (SSGI) shows that the prevalence of stunting in Indonesia has reached 21.6%. This has seen a decrease in stunting data from 24.4% in 2021. The prevalence of stunting in East Java can still be said to be quite high, namely 19.2%. Bangkalan Regency is ranked first out

of 38 districts/cities in East Java with the highest stunting rate in 2021, reaching 38.9%, then decreasing to 26.2% in 2022. Bangkalan Regency is the district with the highest stunting prevalence rate compared to the three districts in question. is on the island of Madura. Based on 2023 locus data dealing with stunting, among the 18 sub-districts in Bangkalan Regency, the highest stunting rate is in Galis Sub-district with the number of children experiencing growth and development delays of 166 cases.

Stunting in toddlers must receive special attention, this is because it can cause delays in physical growth, mental development and health status in children. Children who experience stunting have a vulnerability to suffering from certain diseases, both infectious diseases, as well as an increased risk of long-term overweight and obesity which can increase the risk of degenerative disease (Husnaniyah, 2020).

## **METHODS**

The type of research used in this research is descriptive quantitative research. This research was conducted in Paterongan Village which is under the Galis Community Health Center Working Area, Bangkalan Madura Regency. The population in this study was all mothers with toddlers in Paterongan Village, totaling 130 people. The sampling technique in this research used Accidental Sampling, and the samples used were 33 samples. Where the data used is primary data and secondary data. Where primary data was obtained from the results of questionnaires that had been distributed to respondents and secondary data was obtained from various existing literature and data from related departments. The analysis used is bivariate analysis, multivariate analysis and the F test using IBM statistics SPSS 29. Bivariate analysis using the chisquare test, multivariate analysis and to confirm the results of the multivariate analysis the researcher also used the F test to determine the influence of the variables of education level and parenting practices. simultaneously with the incidence of stunting.

#### RESULT AND DISCUSSION

This session presents the study's results, which were elaborated with the discussion. Respondents are required to provide accurate information for the purpose of the data that will subsequently be tested.

Table 1. Distribution of Characteristics of Respondents studied

Respondent Characteristics	N	%
Mother's Age		
20 – 35 Years	22	67
36 – 50 Years	11	33
Total	33	100

Toddler Gender		
Man	18	55
Woman	15	45
Total	33	100
Toddler Age		
0-24 Months	21	64
25 – 48 Months	12	36
Total	33	100
Level of education		
Base	8	24.2
Intermediate	21	63.7
Tall	4	12.1
Total	33	100
Parenting practices		
Good	20	60.6
Enough	13	39.4
Total	33	100
Stunting		
Normal	20	60.1
Stunting	13	39.4
Total	33	100

Source: Data processed (2023)

Based on table 1, the characteristics of respondents based on mother's age show mothers aged 20 - 35 years with a percentage of 67% consisting of 22 mothers, then the percentage of mothers aged 36 - 50 years is 33% consisting of 11 mothers. Based on the gender of the toddlers, the majority were male with a percentage of 55% consisting of 18 toddlers, while the percentage of respondents who were female was 45% consisting of 15 toddlers. Based on the age characteristics of toddlers, the highest percentage of toddlers was obtained, namely toddlers aged 0 - 24 months with a percentage of 64% consisting of 21 toddlers, then the percentage of toddlers aged 25 - 48 months was 36% consisting of 12 toddlers. Characteristics of respondents based on mother's education level obtained the highest percentage of respondents, namely respondents who had a secondary education level with a percentage of 64% consisting of 21 people, then respondents who had a basic education level with a percentage of 24% consisting of 8 people, while the rest were respondents who have a high level of education with a percentage of 12% consisting of 4 people.

The characteristics of respondents based on child rearing patterns obtained the highest percentage of child rearing patterns, namely in the good category with a percentage of 61% consisting of 20 people, while in the fair child rearing pattern category the percentage was 39% consisting of 12 people. Then the characteristics based on stunting obtained the highest category percentage, namely in the normal category with a percentage of 61% consisting of 20 children under five, while in the stunting category the percentage was 39% consisting of 13 people.

Table 2. Relationship between education level and parenting practices with the incidence of stunting

T amal of		Stunting Total		Stunting		ъ.	
Level of education	Normal Stunti		nting			P Value	
education	n	%	n	%	N	%	value
Base	1	3	7	21.2	8	24.2	
Medium	15	45.5	6	18.2	21	63.7	0.00
High	4	12.1	0	0	4	12.1	3
Total	20	60.6	13	39.4	33	100	3
						%	

Source: Data Processed (2023)

Based on the results of the chi-square test between education level and the incidence of stunting, it was found that respondents who had a basic education level in the normal category were 3% and stunting was 21.2%. Respondents with secondary education levels were in the normal category at 45.5% and stunting at 18.2%. Meanwhile, 12.1% of respondents with a high education level were in the normal category and none in the stunting category.

Based on the chi-square test results table, it shows that the relationship between the level of education and the incidence of stunting is obtained by a p value of 0.003, where this value is smaller than the significance level of  $\alpha$  0.05, so it can be concluded that there is a significant relationship between the level of education and the incidence of stunting.

Table 3. Relationship between parenting practicess and the incidence of stunting

		Stun	ting		Total		Р	
Parenting practices	Normal		Stu	Stunting Total		Value		
practices	N	%	n	%	N	%	vaiue	
Good	20	60.6	0	0	20	60.6		
Enough	0	0	13	39.4	13	39.4	< 0.001	
Total	20	60.6	13	39.4	33	100%		

Source: Data processed (2023)

Based on the results of the chi-square test between parenting practices and the incidence of stunting, it was found that 60.6% of respondents had good parenting practices in the normal category and none experienced stunting. Respondents who had adequate parenting were in the normal category, none and stunting were 39.4%.

Based on the results of the chi-square test, it shows that the relationship between parenting practices and the incidence of stunting is obtained by a p value of <0.001, where this value is smaller than the significance level  $\alpha$  0.05, so it can be concluded that there is a significant relationship between parenting practices and the incidence of stunting.

Table 4. Influence of education level and parenting practices on the incidence of stunting

		Ci-square	df	Sig
Step 1	Step	41.479	2	0.000
	Block	41.479	2	0.000
	Model	41.479	2	0.000

Source: Data processed (2023)

Based on the table above, the x2 value is 41,479 with a model significance value of 0.000, where this value is smaller than  $\alpha$  0.05, so it is decided that the level of education and parenting practices of children simultaneously influence the incidence of stunting.

Table 5. F test of the influence of education level and child rearing patterns on the incidence of stunting

		df	Mean Square	F	Sig.
Regression	6.183	2	3.091	54.674	<.001
Residual	1.696	30	.057		
Total	7.879	32			

Source: Data processed (2023)

It is known that the significance value of the influence of the level of education and parenting practices simultaneously is 0.001 < 0.05 and the calculated f value is 54,674 > F table 3.30, so it can be concluded that the variables of educational level and parenting practices have a simultaneous influence (together) on the incidence of stunting.

## CONCLUSION

Based on the results of the analysis and hypothesis testing after incorporating control variables in this study, the following conclusions can be drawn:

- 1. From the results of the chi-square test, it shows that the p value is 0.003, where this value is smaller than the significance level of  $\alpha$  0.05, so it can be concluded that there is a significant relationship between the level of education and the incidence of stunting.
- 2. From the results of the ci-square test, it shows that the p value is <0.001, where this value is smaller than the significance level  $\alpha$  0.05, so it can be concluded that there is a significant relationship between parenting practices and the incidence of stunting.
- 3. From the results of the binary logistic regression test above, an x2 value of 41,479 was obtained with a model significance value of 0.000, where this value is smaller than  $\alpha$  0.05, so it was decided that the level of education and parenting practices of children simultaneously influence the incidence of stunting. And to confirm the

results of the multivariate analysis, the researcher also used the F test where the significance value of the influence of the level of education and parenting practices simultaneously was <0.001, where the value was <0.05 and the calculated f value was 54,674 > F table 3.30, so it can be concluded that the level variable education and parenting practices influence simultaneously (together) on the incidence of stunting.

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