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The Relationship Between Personal Factors of Mothers Under Five and The Incidence of Stuntinging in Toddlers (24-59 Months)

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Abstrak

Introduction: *Stunting is a chronic nutritional problem caused by multi-factorial and intergenerational with causative factors such as malnutrition experienced by mothers during pregnancy, poverty, underage maternal pregnancy, IUGR, premature or premature birth, and babies born with low birth weight.* ***Objective:*** *This study aims to determine the relationship between the history of Chronic Energy Deficiency (CED) and Anemia in mothers under five with the incidence of stunting in toddlers (24-59 Months) in Sungai Mengkuang Village, Bungo Regency in 2022.* ***Method:*** *The type of research is quantitative with a cross sectional design, with a population of all mothers under five in Sungai Mengkuang Village, with sampling techniques using Purposive sampling techniques. The data obtained were analyzed by the Chi-Square test.* ***Result and Discussion:*** *The Chi-square test shows that there is a relationship between the history of CED, Anemia, Knowledge, and Parenting in mothers under five with the incidence of stunting in toddlers (24-59 months) in Sungai Mengkuang Village in 2022 with P-Value values of 0.001, 0.006, 0.012 , 0.002 respectively and there is no relationship between the attitude of mothers under five towards CED and anemia with the incidence of stunting in toddlers (24-59 months) in Sungai Mengkuang Village in 2022 (P-Value 0.606).* ***Conclusion:*** *In this study, there is a relationship between CED, anemia, knowledge, and parenting with the incidence of stunting in toddlers (24-59 months) in Sungai Mengkuang Village in 2022, and attitudes are not related.*

Keywords: Stunting; CED History; Anemia History; Knowledge; Mother's Attitude; Parenting;

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Introduction

The first 1,000 Days of Life (HPK) period is a critical period from the beginning of a child's growth and development process, that is, from conception to two years of age. Children who experience chronic malnutrition from within 1,000 HPK can be at risk of suffering from Stuntinging (Kamba et al., 2019). Stuntinging or Stuntinging that occurs in toddlers reflects a condition of failure to thrive in children so that children become too short compared to their age (Harahap, 2023). Stuntinging is a chronic nutritional problem so that in the future children will experience difficulties in achieving optimal physical and cognitive development. Stuntinging receives special attention because the impacts arising from Stuntinging are irreversible and difficult to repair.

The incidence of Stuntinging has become one of the main nutritional problems in Indonesia. In 2015, the prevalence of Stuntinging in Indonesia was 29%. This figure has decreased in 2016 to 27.5%. However, the prevalence of Stuntinging under five increased again to 29.6% in 2017. Where the short category was 19.8% and very short 9.8%. The national Stuntinging rate showed improvement with a decreasing trend of 3.3% from 27.7 % in 2019 to 24.4% in 2021 and 21.6% in 2022.

Stuntinging is a chronic nutritional problem caused by multi-factorial and is intergenerational. Factors that cause Stuntinging are malnutrition experienced by mothers during pregnancy, poverty and underage maternal pregnancies, IUGR, preterm or premature births, and babies born with low birth weight (Santosa et al., 2022). It is clear that maternal malnutrition during pregnancy has an effect on fulfillment of fetal nutrition in the womb. Consumption of nutrients during pregnancy is needed by mothers during pregnancy. This is related to the risk of pregnant women experiencing nutritional problems, namely Chronic Energy Deficiency (CED), which in turn will affect the baby's weight and length when born. The growth of babies with short birth lengths can always be left behind compared to normal babies and away from the standard increase in baby length (Trihono et al., 2015)

Bungo Regency is one of the districts that has a high incidence of Stuntinging and is above the average for Jambi Province, where the average for Jambi Province is only 22.4%, while the Stuntinging Prevalence for Bungo Regency is 22.9%, Bungo Regency ranks seventh out of the of the 11 regencies/cities in Jambi Province, Bungo Regency is above Sarolangun but below Batanghari. In 2022 the prevalence of Stuntinging in Jambi province will drop to 21.6%, even though the incidence of Stuntinging is a major problem discussed in the world of health. This is based on data from the 2021 Indonesian Nutrition Status Study (SSGI).

Sungai Mengkuang Village is one of the villages in the working area of the Rimbo Tengah Health Center. Referring to data from the last three years, the number of Stuntinged toddlers at Rimbo Tengah Health Center counted from 2020 as many as 18 Stuntinged toddlers with a percentage of 1.34%, in 2021 there were 25 Stuntinged toddlers with a percentage of 2.40%, and in 2022 there were 26 Stuntinged toddlers with

percentage of 1.34%. (The data above is based on data from the E-PPGBM Electronic Community-Based Nutrition Recording and Reporting for 2020, 2021, 2022).

According to the Report on the Results of Measurement of Toddler Nutritional Status in Bungo Regency in 2021 and 2022, it is known that the spread of Stuntinging cases in Bungo Regency is quite even in 19 Public Health Center in the Bungo Regency area. However, based on case rankings, there are five Public Health Center with the highest number of cases of Stuntinging in 2021. The first is Tanah Sepenggal Health Center for 39 Stuntinged toddlers out of 2,183 toddlers with a Stuntinging percentage of 4.88%, the second Muara Health Center for 30 Stuntinged toddlers out of 877 toddlers with a Stuntinged percentage of 4.31%. , the third is Kuamang Kuning I Health Center 29 Stuntinged toddlers out of 1,655 toddlers with a Stuntinging percentage of 2.76%, the fourth Public Health Center Serving 29 Stuntinged toddlers out of 757 toddlers with a Stuntinged percentage of 7.54%, last fifth is Rimbo Tengah Public Health Center 25 Stuntinged toddlers out of 2,020 toddlers with a Stuntinged percentage 2.4%.

Data according to the Report on the Results of Measurement of Toddler Nutritional Status in Bungo Regency in 2022 namely. First, the Tanjung Agung Health Center 43 Stuntinged toddlers out of 1,348 toddlers with a Stuntinging percentage of 3.9%, the second Tanah Sepenggal Lintas Health Center 34 Stuntinged toddlers out of 2,183 toddlers with a Stuntinged percentage of 2.3%, the third Rantau Pandan Health Center 33 Stuntinged toddlers out of 850 toddlers with a Stuntinged percentage of 3 .38%, the four Tanah Grow Health Centers 28 Stuntinged toddlers out of 1,200 toddlers with a Stuntinging percentage of 2.6%, the fifth Kuamang Jaya Health Center 27 Stuntinged toddlers out of 1,589 toddlers with a Stuntinged percentage of 1.8%, the six Rimbo Tengah Health Centers 26 Stuntinged toddlers out of 2,020 toddlers with a Stuntinging percentage of 1.3%.

Data for 2021 and 2022 show that the number of Stuntinging cases in Sungai Mengkuang Village has increased where the number of Stuntinged children under five in 2021 is 14 out of 214 under five, increasing to 26 under five out of 615 under five in 2022. The data shows that the village has a The highest incidence of Stuntinging cases in 2022 is located in Sungai Mengkuang Village with a total of 26 cases of Stuntinging out of 615 toddlers, even though Sungai Mengkuang Village is an inner-city sub-district located in the Central Capital City of Bungo Regency, while Sungai Mengkuang Village is only ± 9 km from center of the capital city of Muara Bungo, of course this makes it easier for access to health and health services to the people in Sungai Mengkuang Village which of course can avoid Stuntinging and other health problems.

The above condition is an anomalous event, where Sungai Mengkuang Village, which is on the outskirts of Muara Bungo City, has the highest Stuntinging cases, apart from the ease of obtaining health services, it is also easy to obtain nutritious food, due to the proximity to the Muara Bungo market. In addition, due to the closeness to access to health services such as H. Hanafie General Hospital, Jabal Rahmah General Hospital, and

other health clinics, of course pregnant women in Sungai Mengkuang Village can check their health so that they are farthest from anemia and CED.

Sungai Mengkuang Village has a geographical presence which is still in the city environment, of course, you get more health information and counseling carried out by various agencies such as counseling from family planning cadres, counseling from the Subdistrict PKK regarding health and nutrition as well as counseling carried out directly by the Health Service through the nearest Public Health Center and village midwife in Sungai Mengkuang Village.

Method

This type of research is quantitative with a cross-sectional design, with a population of all mothers under five in Sungai Mengkuang Village, totaling 214 mothers under five and 101 respondents, with a sampling technique using purposive sampling technique. The data obtained were analyzed by Chi-Square test (Notoatmodjo, 2017)

Result and Discussion

Tabel 1

Distribution of Respondent Characteristics Based on Education Level

Characteristic	Total	Precentage %
Education Level		
Bachelor's Degree	10	9,9
ES	25	24,8
JHS	43	42.6
SHS	23	22,8
Total	101	100

Table 1 above shows the number of under-fives calculated based on the education level of their mothers, with a total of 101 under-five mothers. Based on the data above, there were 10 toddlers (9.9%) whose mothers had a bachelor's degree, 25 toddlers (24.8%) whose mothers had elementary school education, 43 toddlers (42.6%) whose mothers had junior high school education, and 23 toddlers (22 .8%) whose mothers have high school education. So it can be concluded that the majority of mothers under five in Sungai Mengkuang Village have education up to junior high school level.

Table 2

Distribution of Respondents' Characteristics by Age

Characteristic	Total	Precentage %
Age of Toddler Mother		
21 – 35 Year	60	59,4
36 – 45 Year	41	40,6
Total	101	100

Table 2 shows that the age distribution of mothers under five is categorized based on the age of marriage and age of childbirth. From these data can be seen majority of mothers under five who gave birth at the ideal age group have children aged 21-35 years

as many as 60 mothers under five (59.4%) and at vulnerable age of mothers under five who are at high risk from age 35-45 years as many as 41 mother's toddlers (40.6%)

Table 3

General Description of Respondents Based on CED History

Variable	Total	Precentage %
CED		
Normal	62	61,4
CED	39	38,6
Total	101	100

Table 3. illustrates the history of the nutritional status of mothers of toddlers who experience Stuntinging (failure to thrive) due to chronic malnutrition in the long term. It can be seen from the table, 61.4% of mothers under five have a history of normal CED, while 38.6% of mothers under five have a history of CED. This frequency distribution shows that most of the mothers with toddlers have normal CED status. This can be used as an indicator of the success of mother and child empowerment programs in gaining access to and fulfillment of adequate nutrition, so to be able to maintain their health and quality of life.

Table 4

Overview of Respondents Based on Anemia History

Variable	Total	Precentage %
Anemia		
Not Anemia	69	68,3
Anemia	32	31,7
Total	101	100

Table 4. From these data can be seen as many 69 people or 68.3% of the mothers under five did not have a history of anemia, while 32 people or 31.7% had a history of anemia. Total respondents in this data are 101 respondents. From these data it can be concluded that most of the mothers under five do not have a history of anemia.

Table 5

General Description of Respondents Based on CED Knowledge and Anemia

Variable	Total	Precentage %
Knowledge		
Good	67	66,3
Less	34	33,7
Total	101	100

Table 5. provides an overview of the distribution of the frequency of mothers under five based on knowledge of CED and anemia. There are two categories of knowledge, namely good and less. From the data, it is known that 67 respondents or 66.3% have good knowledge about CED and anemia, while 34 respondents or 33.7% have less knowledge about CED and anemia. Total respondents taken in the data is 101.

Table 6

General Description of Respondents Based on Attitudes CED and Anemia

Variable	Total	Precentage %
Attitude		
Good	16	15,8
Less	85	84,2
Total	101	100

Table 6. provides an overview of the mother's attitude towards CED and anemia. Based on these data, can be seen the majority respondents (84.2%) had an unfavorable attitude towards CED and anemia during pregnancy. Meanwhile, 15.8% of respondents had a good attitude towards CED and anemia during pregnancy. This shows that efforts are still needed to increase the knowledge and awareness of mothers with children under five regarding the importance of preventing CED and anemia during pregnancy.

Table 7

General Description of Respondents Based on Parenting Style

Variable	Total	Precentage %
Parenting		
Good	53	52,5
Less	48	47,5
Total	101	100

Table 7. provides an overview of the mother's parenting style for toddlers. Based on these data, it can be concluded that 52.5% of respondents had good parenting styles, while 47.5% of respondents had poor parenting styles. The total number of respondents observed was 101. Good parenting is very important in supporting the growth and development of toddlers, including avoiding the risk of Stuntinging. Therefore, it is necessary to make efforts to increase the understanding and knowledge of parents in carrying out good parenting for their toddlers.

Table 8

General Description of Respondents Based on Stuntinging Events

Variable	Total	Precentage %
Stunting		
Not Stunting	75	74,3
Stunting	26	25,7
Total	**101**	**100**

Table 8. provides an overview of the data on the incidence of Stuntinging under five in Sungai Mengkuang Village, there are 75 under five 74.3% who are not Stuntinged, and 26 under five 25.7% are Stuntinged. The total number of toddlers who were sampled was 101 toddlers.

The high percentage of Stuntinged children under five shows that there is still a problem of malnutrition among children under five in that area, so it is necessary to take action to prevent and overcome this problem. Stuntinging in toddlers occurs whentoddlers experience chronic growth disorders, due to malnutrition in the long term. This condition can cause toddlers to experience various health and development problems.

Bivariate analysis

Table 9

Bivariate analysis of Relationships with History of Chronic Energy Deficiency (CED) in Mothers Under Fives with Stuntinging Incidents in Toddlers

CED	Incident of Stunting				Total		p-value	OR (95%CI)
	Stunting		Not Stunting					
	n	%	n	%	n	%		
CED	17	43,6	22	56,4	39	100,0	0,001	4,551 (1,762-11,750)
Normal	9	14,5	53	85,5	62	100,0		
Total	**26**	**25,7**	**75**	**74,3**	**101**	**100,0**		

Table 9 above shows that there are two variables, namely CED (in the CED and normal categories) and Stuntinging events (in the Stuntinging and Not Stuntinging categories). Out of a total of 101 respondents, 39 respondents had a history of CED and 62 had a normal history of CED, with a total of 26 toddlers (25.7%) experiencing Stuntinging. In the group of respondents who had a history of CED, there were 17 toddlers (43.6%) who were Stuntinged, and 22 toddlers (56.4%) were not Stuntinged, while in the group of respondents with a normal history of CED, only 9 toddlers (14.5%) who were Stuntinged, and 53 toddlers (85.5%) were not Stuntinged. Based on these data, it can be concluded that there is a significant relationship between a history of CED in mothers under five and the incidence of Stuntinging in toddlers in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022 with a p-value of 0.001 which is less than 0.05.

In the analysis using the Odds Ratio (OR) test, an OR value of 4.551 was found with a 95% Confidence Interval (CI) between 1.762-11.750. The OR value indicates that toddlers who have mothers with a history of CED are 4.551 times more likely to experience Stuntinging compared to toddlers who have mothers without a history of CED. The 95% Confidence Interval indicates that the OR value obtained is statistically significant. This shows that mothers of toddlers who have a history of CED are more at risk of having toddlers who experience Stuntinging compared to mothers of toddlers who do not have a history of CED.

Table 10

Relationship with Anemia History in Toddler Mothers with Stuntinging Incidents in Toddlers

Anemia	Incident of Stunting	Total	p-value	OR (95%CI)

	Stunting		Not Stunting					
	n	%	n	%	n	%		
Anemia	14	43,8	18	56,3	32	100,0	0,006	3,694 (1,450-9,416)
Not Anemia	12	17,4	57	82,6	69	100,0		
Total	26	25,7	75	74,3	101	100,0		

Table 10 above shows that out of 101 respondents, 32 mothers had a history of anemia with 14 Stuntinged children (43.8%) and 18 toddlers who were not Stuntinged (56.3%). Whereas for mothers who were not anemic there were 69 mothers under five, with the number of children who were Stuntinged there were 12 under five (17.4%), and under five who were not Stuntinged as many as 57 under five (82.6%). The table above shows that the proportion of mothers who have experienced anemia is higher in the group of mothers who have experienced anemia compared to the group of mothers who do not have a history of anemia. In this case it can be concluded that there is a significant relationship between a history of anemia in mothers under five and the incidence of Stuntinging in toddlers in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022 with a p-value of 0.006 which is smaller than 0.05%. This study has an OR value for the anemia variable of 3.694 with a 95% confidence interval (CI) between 1.450-9.416. This means that mothers of children under five who suffer from anemia have a 3.694 times greater chance of experiencing Stuntinging in their children compared to mothers of children under five who do not have a history of anemia.

Table 11

Relationship between Knowledge of Underfive Mothers about CED and Anemia

Knowledge	Incident of Stunting				Total		p-value	OR (95%CI)
	Stunting		Not Stunting					
	n	%	n	%	n	%		
Less	14	41,2	20	58,8	34	100,0	0,012	3,208 (1,272-8,095)
Good	12	17,9	55	82,1	67	100,0		
Total	26	25,7	75	74,3	101	100,0		

Based on table 11, can seen of 101 respondents, 34 respondents had poor knowledge with 14 toddlers who were Stuntinged (41.2%), and toddlers who were not Stuntinged as many as 20 toddlers (58.8%). Whereas in good knowledge there were 67 mothers with toddlers with toddlers who were Stuntinged as many as 12 toddlers (17.9%) and toddlers who were not Stuntinged as many as 55 toddlers (82.1%).

Based on the results of statistical tests, it shows a p-value of 0.012, which means that the value is smaller than an alpha of 0.05. Therefore, it can be concluded that there is a significant relationship between mothers' knowledge about CED and anemia with the incidence of Stuntinging in toddlers. In this study, the OR value of the mother's knowledge variable was 3.208, which means that mothers who have good knowledge have a 3.208 times lower risk of having children with Stuntinging than mothers who have less knowledge. In addition, the 95% Confidence Interval value on the mother's knowledge variable is 1.272-8.095, which indicates that the result is quite valid. Thus, it

can be concluded that good mother's knowledge can be a protective factor in preventing Stuntinging in children.

Table 12

The relationship between the attitudes of toddler mothers about CED and anemia with Stuntinging in toddlers

Attitude	Incident of Stunting				Total		p-value	OR (95%CI)
	Stunting		Not Stunting					
	n	%	n	%	n	%		
Less	22	25,9	63	74,1	85	100,0	0,606	1,048 (0,306-3,589)
Good	4	25,0	12	75,0	16	100,0		
Total	26	25,7	75	74,3	101	100,0		

Based on table 12 can be seen of 101 respondents it was found that 85 respondents had unfavorable attitudes towards toddlers, and 16 respondents had good attitudes towards toddlers. The data shows that mothers with unfavorable attitudes had as many as 22 toddlers (25.9%) who were Stuntinged, and as many as 63 toddlers (74.1%) who were not Stuntinged. Meanwhile, the respondents who had a good attitude towards toddlers found that there were 4 toddlers (25%) who were Stuntinged and as many as 12 toddlers (75%) who were not Stuntinged.

Based on the results of statistical tests using the chi-square test, can be seen p-value is 0.606 greater than > 0.05, which means that there is no significant relationship between mothers' attitudes about CED and anemia with the incidence of Stuntinging in toddlers in Sungai Mengkuang Village, District Bungo Jambi Province in 2022. To analyze this relationship, an Odds Ratio (OR) value with a 95% Confidence Interval (CI) is used. The OR value in this study was 1.048, and the 95% CI value contained in the table is (0.306-3.589). If the OR value includes 1.0 or is not significant, then there is no relationship between the attitude variable and the incidence of Stuntinging in children.

In this study, the OR value includes the number 1.0, which is 1.048, and the P-value is 0.606, which means that the results of this study are not statistically significant. Therefore, it can be concluded that there is no significant relationship between attitude and the incidence of Stuntinging in children. This shows that the mother's attitude about CED and anemia is not a factor influencing the incidence of Stuntinging in toddlers in Sungai Mengkuang Village. However, it should be noted that the proportion of mothers with poor attitudes who have Stuntinged toddlers is greater than the proportion of mothers with good attitudes. Therefore, efforts need to be made to improve mothers' attitudes about CED and anemia as an important factor in preventing Stuntinging in toddlers.

Table 13

Relationship between mother-to-five parenting and Stuntinging in toddlers

Parenting	Incident of Stunting				Total		p-value	OR (95%CI)
	Stunting		Not Stunting					
	n	%	n	%	n	%		
Less	19	39,6	29	60,4	48	100,0	0,002	4,305 (1,611-11,510)
Good	7	13,2	46	86,8	53	100,0		

Total	26	25,7	75	74,3	101	100,0	

Based on table 13 above, can be seen the 101 respondents who had poor parenting patterns for toddlers, there were 48 respondents and 53 respondents who had good parenting patterns for toddlers. Based on these data, can be seen 19 toddlers (39.6%) were Stuntinged and 29 toddlers (60.4%) were not Stuntinged. Meanwhile, mothers with good parenting had as many as 7 toddlers (13.2%) Stuntinged toddlers and as many as 46 toddlers (86.8%) who were not Stuntinged.

These results show that mothers with poor parenting styles have more children who are Stuntinged compared to mothers with good parenting styles, fewer toddlers are Stuntinged. Therefore, it can be concluded that there is a significant relationship between maternal parenting and the incidence of Stuntinging in toddlers in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022 with a p-value = 0.002 with a value (95% CI) 1.611-11.510, which means that of the 95% of the study showed a degree of confidence of 1.611-11.510.

The OR value is a measure of the magnitude of the probability of an event (Stuntinging) in the exposure group (less parenting) compared to the non-exposure group (good parenting). The OR value in this study was 4.305, which indicates that children with poor parenting styles are 4.305 times more likely to experience Stuntinging than children with good parenting styles.

Discussion

1. Relationship between History of Chronic Energy Deficiency (CED) in Under-five Mothers and Stuntinging Incidents in Toddlers (24-59 Months) in Sungai Mengkuang Village, Bungo Regency, Jambi Province in 2022.

Based on the results of this analysis there are several factors that influence it, namely economic factors, work and mother's education toddler. Based on the facts that the researchers encountered during the research, several mothers of toddlers in Sungai Mengkuang Hamlet faced problems in obtaining quality food. This is due to financial limitations to buy nutritious food. The economic conditions in Sungai Mengkuang Hamlet are still fragile, with most of the population depending on agricultural products or unstable jobs. This condition affects their access to adequate nutritious food and causes CED in mothers under five. In family incomes that are still lacking in meeting daily needs can cause mothers to be malnourished, thus causing the babies they contain not to get enough nutrition during pregnancy. This can have an impact on the growth and development of the baby after birth, including the occurrence of Stuntinging. In this case, of course, a history of CED in the mother can be a risk factor for Stuntinging in toddlers. Therefore, efforts are needed to prevent and treat CED in mothers and Stuntinging in toddlers, such as providing nutrition education and nutritious food for mothers and toddlers, as well as providing health support to high-risk families.

This finding is in line with several previous theories and studies. According to the World Health Organization (WHO), CED can interfere with the growth and development of children born to mothers who suffer from CED. Mothers who suffer from CED tend to have a higher risk of giving birth to babies with low birth weight (LBW) and children who are more susceptible to Stuntinging. In a study conducted by Bhutta et al. (2013) also found that CED in mothers can increase the risk of Stuntinging in children (Bhutta et al., 2013)

The results of research conducted by Vinny Ismawati1 and Fitri Dian Kurniati (2021) regarding the incidence of Stuntinging in toddlers is influenced by a history of chronic energy deficiency in pregnant women, where the results of the study show that there is a relationship between a history of CED in pregnant women and the incidence of Stuntinging in toddlers aged 24- 59 months in Umbulrejo Village, Ponjong District, Gunung Kidul Regency (Ismawati et al., 2021)

2. Correlation between history of anemia in toddler mothers and Stuntinging in toddlers (24-59 months) in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022.

The results of this study indicate that there is a significant relationship between the history of anemia in toddler mothers and the incidence of Stuntinging in toddlers in Sungai Mengkuang Village, Bungo Regency, Jambi Province in 2022. This condition is influenced by several factors such as socioeconomic status, education of the mother of the toddler, and the age of the mother of the toddler. The socio-economic factors of the people in Sungai Mengkuang Hamlet, although it is close to the city, are still in rural areas, with generally low economic conditions, so access to nutritious food is limited. Many mothers of toddlers in Sungai Mengkuang Hamlet eat food that is less nutritious and unbalanced. Daily diets are often dominated by simple carbohydrates and low in fibre, with insufficient intake of protein, vitamin and essential minerals such as iron. The husband's mediocre income makes mothers during pregnancy have limitations in consuming a variety of foods.

The results above are in line with the results of a study conducted by Handayani S, Gunarmi G, Agusman F (2022) with the results of the study showing that majority of mothers with anemia were Stuntinging, namely 71.4% and those who were not anemic, the majority were not Stuntinged, namely 87.1%. The results of the analysis obtained a p value of 0.021 <0.05, so it can be concluded that there is a relationship between hemoglobin levels in pregnant women and the incidence of Stuntinging and OR 3.478, with anemia in pregnant women at risk of 3.478 times greater experiencing Stuntinging in children than pregnant women who are not anemic (Handayani et al., 2022). The research conducted by Anggraini ND 2019 is also in line with this study with the results showing that anemia is a risk factor for Stuntinging in children (p=0.001). Anemia increases the risk of Stuntinging in children aged 12-59 months (OR= 2.199; 95% CI: 1.469-3.291) in West Nusa Tenggara (Anggraini, 2019)

3. Relationship between Mother's Knowledge about CED and Anemia with Stuntinging Incidence in Toddlers (24-59 Months) in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022.

The results of the analysis show that there is a relationship between mother's knowledge about CED and anemia with the incidence of Stuntinging in toddlers aged 24-59 months in Sungai Mengkuang Village. This is of course inseparable from several factors that influence the occurrence of this relationship including the mother's education, beliefs and culture, the mother's inability to understand terms in the world of health and the level of awareness that is still low.

The results of this study indicate that mother's knowledge about CED and anemia plays an important role in preventing Stuntinging in toddlers in Sungai Mengkuang Village. Conditions are influenced by many factors, including educational factors, where most of the mothers under five in Sungai Mengkuang Hamlet have a low level of education. This can affect their ability to understand information about CED and complex anemia.

Based on the results of filling out the questionnaire and interviewing several questions, it was found that the mothers of toddlers in Sungai Mengkuang Village had a high level of knowledge, but this knowledge of mothers of toddlers could be related to the incidence of Stuntinging because the number of mothers who had a low level of knowledge was more have a Stuntinged toddler. This low level of knowledge is motivated by the fact that majority of mothers' recent education is only junior high school, which can be measured through a questionnaire with a value less than <75%.

Beliefs and cultural factors in Sungai Mengkuang Village are also factors that influence this incident. Some certain cultural beliefs and practices in Sungai Mengkuang Hamlet influence the understanding of mothers under five about CED and anemia. For example, the belief that blood deficiency or anemia is part of the natural condition and does not need concern.

The factor of the inability of mothers under five to understand information conveyed by health workers is also a factor in the results of research on the knowledge that mothers under five in Sungai Mengkuang Village have a relationship to the incidence of Stuntinging. On average, mothers of children under five who answered the questions in the questionnaire answered "don't know" which resulted in a low score.

In this case, it is in line with the results of research conducted by Amalia ID, Lubis DPU, Khoeriyah SM (2021) with the results of the analysis test showing a value of p = 0.00 (<0.05), so it can be concluded that there is a relationship between mother's knowledge about nutrition and the incidence of Stuntinging in toddlers in Planjan Village, the working area of the Saptosari Health Center, Gunung Kidul Regency (Amalia et al., 2021). This is also supported by the results of a study conducted by Aghadiati F et al. also shows the results of the study are in line with the results of the study, it can be concluded that there is a relationship between maternal knowledge and the incidence of Stuntinging

in toddlers aged 24-60 months in the working area of the Suhaid Health Center, with a value of p = 0.001 (Aghadiati et al., 2023)

4. Relationship between Mother's Attitudes about CED and Anemia with Stuntinging Incidents in Toddlers (24-59 Months) in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022

The results of this study indicate that there is no significant relationship between mothers' attitudes about CED and anemia with the incidence of Stuntinging in toddlers in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022.

In this study, the factors that influence this do not have a significant relationship. Based on the results obtained during the research, it shows that there are several things that make this have no relationship, namely factors of economic conditions, number of family members, and family support. Based on the results of filling out the questionnaire and interviewing with several questions, information was obtained that some respondents had a good attitude towards CED and anemia. It was seen that the respondents were able to answer the questions in the questionnaire correctly and on average had a total value of >75%. The number of family members in one house is also a factor for toddler mothers and other family members to provide a variety of foods. Family support is also the next factor that supports the absence of a significant relationship between the attitude of mothers under five towards CED and anemia with the incidence of Stuntinging. Where even though some respondents agreed to marry over the age of 20, in due to circumstances, conditions, customs/traditions, economy and family support, WUS who were only in their early teens had to marry at a young age.

These results are in line with research conducted by Fitriani F, Darmawi D (2022) with the results of an analysis of the relationship between maternal attitudes and the incidence of Stuntinging and found that there were 17 respondents (94.4%) mothers who had a negative attitude about having children who were not Stuntinged. Meanwhile, among mothers who had a positive attitude, there were 16 mothers (94.0%) whose children were not Stuntinged. The results of the Chi-square test obtained a P-value = 0.967. This shows that there is no relationship between the mother's attitude and the incidence of Stuntinging toddlers in Arongan Village, Kuala Pesisir District, Nagan Raya Regency (Sartina & Husna, 2022)

Based on the results of other studies, this is not in line with the research conducted by Septamarini et al. 2019 with the results of the study there is a relationship between the attitude of RF mothers and the incidence of Stuntinging aged 6-24 months in the Working Area of the Bandarharjo Health Center, North Semarang (p = 0.003). Based on the Odds Ratio (OR) value, mothers with unsuitable RF attitudes have a 5.6 times greater risk of their children experiencing Stuntinging compared to mothers with sufficient RF attitudes (Septamarini et al., 2019). This is also supported by research conducted by Sakinah U et al. 2021 showing the conclusion of the results that there is a significant relationship

between the attitude of mothers under five and the incidence of Stuntinging in toddlers 24-59 months with a p-value of 0.017 (Sakinah et al., 2023)

Based on this study, it can be concluded that there is a relationship between clean water sources, toilet facilities, hand washing behavior and mother's knowledge of the incidence of diarrhea in toddlers in the working area of the Pamenang Health Center, Merangin Regency in 2022 and there is no relationship between garbage dumps and the incidence of diarrhea in toddlers in the working area of the Pamenang Health Center, Merangin Regency, in 2022. Then there is the risk factor that has the most influence on the incidence of diarrhea in toddlers in the working area of the Pamenang Health Center, Merangin Regency, in 2022, namely hand washing behavior.

It is hoped that the community can improve the quality of their health by maintaining a healthy environment, especially in the water sources used, family latrine facilities, and landfills. Then by increasing knowledge about

infectious diseases, especially those with great potential for their children. The behavior of washing hands using running water and soap also needs to be applied properly to prevent contamination of the body with bacteria attached to the hands or skin so that bacteria that cause diarrheal disease do not grow.

5. The Relationship between Maternal Parenting and Stuntinging Incidents in Toddlers (24-59 Months) in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022

The results of this study indicate that there is a significant relationship between maternal parenting and the incidence of Stuntinging in toddlers in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022. The causative factors that make a relationship between maternal parenting and Stuntinging in toddlers in Sungai Mengkuang Village are habits of toddler mothers, economic factors, and the role of the husband. The factor of toddler mothers who have a habit of leaving their toddlers with other families and neighbors is the most frequent factor that makes parenting for toddlers inappropriate. Relatively long working hours make them rarely pay attention to their toddlers so that the condition of the food provided and consumed by their toddlers is not a concern. The results of this study are in line with research conducted by Syafei A, Afriyani R (2023) with statistical test results obtained p-value = 0.020 <0.05, it can be concluded that there is a significant relationship between feeding parenting and Stuntinging. The OR value obtained was 6,643, which means that mothers who have parenting styles in the unfavorable category are 6,643 times more likely to have Stuntinging toddlers (Syafei & Afriyani, 2023).

This research is also in line with research conducted by Wibowo DP et al 2023 with the results showing that parenting styles of mothers and their children are lacking. suffered from Stuntinging as much as 64%, while those who were not Stuntinged were as much as 36%. A p-value of 0.045 was obtained, so there was a significant relationship between maternal parenting and the incidence of Stuntinging. The POR analysis found

that it was 2.9, which means that mothers who have poor parenting styles for toddlers have a 2.9 times chance of having Stuntinged toddlers (Wibowo et al., 2023)

Conclusion

Based on this study, it can be concluded that there is a relationship between history of CED, anemia, knowledge of mothers under five, and parenting styles of mothers under five with the incidence of Stuntinging in toddlers (24-59 months) in Sungai Mengkuang Village, Bungo Regency, Jambi Province in 2022. And there is no relationship between mother's attitude toddlers with Stuntinging in toddlers (24-59 months) in Sungai Mengkuang Village, Bungo District, Jambi Province in 2022.

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