



(RESEARCH ARTICLE)



Factors associated with stunting incidents in toddler in the working area of north wakorumba health center, North Buton District, Southeast Sulawesi Province, Indonesia, 2023

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Abstract

Background: The problem of children's nutritional health which is currently the government's main priority to be addressed immediately is child growth and development. One of the problems with children's growth and development that is often encountered is stunting. Indonesia is the fifth country with the highest prevalence of stunting in the world with a figure reaching 37%. Meanwhile, in the Southeast Asia region, Indonesia is ranked second with the highest prevalence of stunting compared to other countries in Southeast Asia. results of the 2022 Indonesian Nutrition Study the prevalence of stunting under five (TB/U) based on districts/cities in Southeast Sulawesi Province, namely Central Buton Regency, was ranked first (41.6%)

Objective: This study aims to determine factors related to the incidence of stunting among toddlers in the working area of the North Wakorumba Community Health Center, North Buton Regency in 2023.

Method: The type of research used in this research is observational analytics with a *case control* study approach. The sampling technique used is simple random sampling. The total sample was 150 respondents. The analysis used is the chi-square test.

Results: This research shows that there is a relationship between maternal knowledge (p-value = 0.000), family income (p-value = 0.048), exclusive breastfeeding (p-value = 0.001), maternal parenting style (p-value = 0.008) and not There is a relationship between history of infectious diseases (p-value = 0.158) with the incidence of stunting in toddlers in the North Wakorumba Health Center Working Area, North Buton Regency.

Conclusion: There is a relationship between maternal knowledge, family income, exclusive breastfeeding and maternal parenting patterns on the incidence of stunting in toddlers and there is no relationship between history of infectious disease and the incidence of stunting in toddlers in the working area of North Wakorumba Community Health Center, North Buton Regency in 2024. So that the Community Health Center It is necessary to increase the intensity of outreach to increase community knowledge and enthusiasm in managing family nutrition.

Keywords: Stunting; Toddlers; Knowledge; Income; Exclusive Breastfeeding; History of Infectious Diseases; Mother's Parenting Patterns.

1. Introduction

The problem of children's nutritional health which is currently the government's main priority to be addressed immediately is children's growth and development. One of the problems with children's growth and development that

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is often encountered is stunting. Stunting or often called dwarfism is a condition of failure to grow in children under five years old (toddlers) which is caused by chronic malnutrition and recurrent infections, especially in the first 1,000 days of life (HPK), namely from the fetus to the child aged 23 months. Stunting can be interpreted as a problem of malnutrition caused by a lack of adequate intake for a long time which can cause difficulties in achieving optimal physical and cognitive development in the future. Low nutritional consumption can be caused by low maternal knowledge, level of nutritional intake, history of illness and birth weight. Stunting is relatively short body height and can even be very short in terms of body height for age (PB/U) with a z-score value between -2 SD to $>+3$ SD, due to chronic malnutrition during growth and development early in life [1].

Based on analytical data published by UNICEF, WHO and the World Bank Group, Stunting is estimated to affect 22% or 149.2 million children under 5 years globally in 2020 [2]. As many as 21.3% of children under 5 years suffer from stunting globally, representing around 144 million children in 2020, more than half of the percent globally of children under 5 years experiencing stunting are in the Asian region with the highest rate of stunting cases at 53% which is next followed by the African Region with 41%. The largest cases were found in the Asian region, namely 79 million cases. Southeast Asia has the second highest ranking for stunting cases, namely 15.3 million, below South Asia which reaches 54.3 million cases. Indonesia is the second country with the highest stunting cases in the Southeast Asia region after Timor Leste. Indonesia is still included in the category of very high stunting cases with a percentage of 31.8% [1].

Indonesia is the fifth country with the highest prevalence of stunting in the world with a figure reaching 37%. Meanwhile, in the Southeast Asia region, Indonesia is ranked second with the highest prevalence of stunting compared to other countries in Southeast Asia. Based on the results of the Indonesian Nutrition Study (SSGI), in 2022 the prevalence of stunting under five (TB/U) based on provinces in Indonesia, namely East Nusa Tenggara, is in first place, namely (35.3%), West Sulawesi, the prevalence of stunting (35.0%), Papua. (34.6%), West Nusa Tenggara (32.7%), Aceh (31.2%), West Papua (30.0%), Central Sulawesi (28.2%), West Kalimantan (27.8%) and Southeast Sulawesi, the prevalence of stunting is ranked 9th (27.7%) out of 34 provinces [3].

Based on the results of the Indonesian Nutrition Study (SSGI), in 2022 the prevalence of stunting under five (TB/U) based on districts/cities in Southeast Sulawesi Province, namely Central Buton Regency ranked first (41.6%), Bombana Regency (35.3%), Regency South Buton (32.6%), Buton Regency (32.6%), Konawe Islands Regency (32.3%), West Muna Regency (31.7%), Muna Regency (31.3%), North Buton Regency (31.2%), Wakatobi Regency (29.9%), South Konawe Regency (28.0%), Southeast Sulawesi (27.7%) [3].

Based on the results of the Indonesian Nutrition Study (SSGI), in 2022 the prevalence of stunted toddler nutritional status in North Buton Regency is 31.2% (3). Based on data from the North Buton District Health Service, stunting cases over the last four years, namely stunting data in 2020 was 291 cases, in 2021 it increased by 899 cases, in 2022 the number of stunted toddlers was 781 cases, then in 2023 stunting data was recorded at 936 cases of stunting toddlers [4].

The initial survey in North Buton Regency, the highest stunting incidence rate was in the work area of the North Wakorumba Community Health Center, where based on the results of secondary data collection carried out by researchers at the North Wakorumba Community Health Center, it was obtained that the stunting incidence rate in 2020 was 1.6% or 6 cases. Then in 2021 there were no cases of stunting under five, and in 2022 it was 22.2% or 4 cases, and experienced an increase in 2023 of 46.3% or 149 cases [4].

Referring to WHO standards, the maximum limit for stunting is 20% or one fifth of the total number of children under five according to WHO. Based on data from the North Buton District Health Service, the prevalence of stunting among toddlers in the North Wakorumba Community Health Center reached 46.3%. This is a problem because it does not comply with the standards set by WHO.

Based on the problems above, the researcher is pleased to conduct research related to "Factors Associated with the Incident of Stunting in Toddlers in the Working Area of the North Wakorumba Health Center, North Buton Regency in 2023".

2. Method

The type of research used is descriptive quantitative with a case control approach, namely looking for the relationship between the incidence of stunting in toddlers in the working area of the North Wakorumba Health Center, North Buton Regency. The number of samples in this research was 150 people. The sampling technique is simple random sampling. Data analysis consists of univariate analysis and bivariate analysis. Univariate analysis describes the characteristics of

each research variable. Meanwhile, Bivariate analysis was carried out on variables that were thought to be correlated using statistical tests, namely the chi-square test and Odd Ratio (OR).

3. Result and Discussion

3.1. Respondent Characteristic

Table 1 Distribution of Respondents based on Mother's Education, Mother's Occupation and Father's Occupation

Respondent Characteristic	Number	Percentage
Education		
Elementary school	8	5.3%
Junior High School	24	16.0%
Senior High School	87	58.0%
Diploma-3	3	2.0%
Bachelor degree	28	18.7%
Total	150	100
Mother Job		
Housewife	102	68.0%
Farmer	21	14.0%
Honorary	21	14.0%
Civil servants	6	4.0%
Total	150	100
Father Job		
Fisherman	59	39.3%
Farmer	28	18.7%
Self-employed	53	35.3%
Honorary	5	3.3%
Civil servants	5	3.3%
Total	150	100

Source: Primary Data, 2023

Based on table 1, out of a total of 150 respondents, the majority of respondents had a high school education level with 87 respondents (58.7%), a tertiary education with 28 respondents (18.7%), a junior high school education. as many as 24 respondents (16.0%) and Elementary School as many as 8 respondents (5.3%) and a small number of them had Diploma education as many as 3 respondents (2.0%). Most of the respondents worked as housewives with 102 respondents (68.0%), while the fewest jobs were civil servants with 6 respondents (4.0%). The highest occupation of toddlers' fathers was fishermen with 59 respondents (39.3%) and the lowest were honorary and civil servants with 5 respondents each (3.3%).

3.2. Univariate analysis

Table 2 shows that the majority of mothers have low knowledge, reaching 61.3%. Family income is still low at 56.7%. Most mothers of toddlers do not provide exclusive breastfeeding, reaching 63.3%. 14.0% of toddlers suffer from infectious diseases and 58% have poor parenting patterns.

Table 2 Distribution of Respondents Based on Characteristics of Mother's Knowledge, Family Income, Exclusive Breastfeeding, History of Infectious Diseases and Mother's Parenting Patterns in the Working Area of North Wakorumba Health Center, North Buton Regency, 2023

Variable	Number (N)	Percentage (%)
Knowledge		
Good	58	38.7%
Not Good	92	61.3%
Total	150	100%
Family Income		
Enough	65	43.3%
Not Enough	85	56.7%
Total	150	100%
Exclusive breastfeeding		
Yes	55	36.7%
No	95	63.3%
Total	150	100%
Infectious Diseases		
Yes	21	14,0%
No	129	86.0%
Total	150	100%
parenting		
Good	63	42.0%
No Good	87	58.0%
Total	150	100%

Source: Primary Data, 2023.

3.3. Bivariate Analysis

Table 3 Relationship between maternal knowledge and incidence of stunting among toddlers in the working area of Wakorumba Health Center, North Buton Regency, 2023.

Mother Knowledge	Stunting				N	%	P-Value	OR(95% CI)
	Yes		No					
	n	%	n	%				
Good	9	12.0	49	65.3	58	38,7	0,000	0,072(0,031-0,168)
No good	66	88.0	26	34.7	92	61.3		
Total	75	100	75	100	150	100		

Source: Primary Data, 2023.

Table 3 shows that of the 58 respondents who had good knowledge, there were 9 (12.0%) respondents who experienced stunting and 49 (65.3%) respondents who were not stunted. Of the 92 (61.3%) respondents who had low maternal knowledge, there were 66 (88.0%) respondents who suffered from stunting and 26 (34.7%) who were not stunted. The results of the chi square test show that there is a significant relationship between maternal knowledge and the incidence of stunting with a value (P-Value 0.000). OR calculation results show that respondents whose maternal knowledge is

poor are 0.072 times more likely to experience stunting than those with good maternal knowledge (95%CI 0.031-0.168).

Maternal knowledge about nutrition is a significant risk factor for stunting. Knowledge about nutrition is the initial process in changing behavior to improve nutritional status, so knowledge is an internal factor that influences behavior change. Mother's knowledge about nutrition will determine mother's behavior in providing food for her child. Mothers with good nutritional knowledge can provide the right type and amount of food to support the growth and development of children under five (5).

Based on the results of statistical tests, a p-value of $0.000 < 0.05$ was obtained, which means that there is a relationship between the mother's level of knowledge and the incidence of stunting. In addition, the value obtained was $OR=0.072$, which means that mothers who have a low level of knowledge have a 0.072 chance of having children suffering from stunting, times greater than mothers who have a sufficient level of knowledge. From the research results, the majority of toddlers suffering from stunting have mothers with a low level of knowledge. Most respondents have heard the term stunting, but many of them, namely 61.3%, do not know the signs and symptoms of stunting in children. The same also happens in questions related to causal factors. The majority of respondents do not know the causes, prevention methods and impacts of stunting on toddlers. Mothers' lack of knowledge can be caused by a lack of information received by mothers regarding stunting. Information related to stunting can be obtained through various information media such as the internet, posters, leaflets and so on. Apart from through the media, information related to stunting can also be obtained by regularly attending posyandu every month.

These results are in line with the findings of research conducted by Wulandari and Muniroh (2020) which concluded that a high level of knowledge in mothers has the potential to reduce the risk of stunting in toddlers by 0.265 times lower than toddlers whose mothers have a low level of knowledge.

Proper feeding of infants and young children is closely related to maternal knowledge (5). Research conducted by Abebe et al. (2016) stated that mothers who have better knowledge about infant and toddler feeding practices can reduce the incidence of stunting ($P < 0.001$). Other findings state that without good knowledge about child care, resources tend not to be utilized optimally for children's health (7).

A person's knowledge plays a role in changing attitudes. Attitudes are obtained through the adoption of knowledge and can then influence the formation of behavior (8). Good knowledge will create good attitudes, which then if these attitudes are deemed appropriate, then good behavior will emerge (10) Based on the results of this research, the majority of mothers' knowledge is not good. This shows that mothers with poor knowledge tend to have stunted toddlers.

Table 4 Relationship between family income and incidence of stunting among children under five in the working area of Wakorumba Health Center, North Buton Regency, 2023.

Family Income	Stunting				N	%	P-Value	OR(95% CI)
	Yes		No					
	n	%	n	%				
Enough	26	34.7	39	52.0	65	43.3	0.048	0.490(0,254-0,945)
Not enough	49	65.3	36	48.0	85	56.7		
Total	75	100	75	100	150	100		

Source: Primary Data, 2023

Table 5 shows that 65 (43.3%) respondents had sufficient family income, consisting of 26 (34.7%) in the stunting group (cases) and 39 (52.0%) in the non-stunting (control) group. Then the respondents who had low income status were 85 (56.7%) consisting of 49 (65.3%) of the stunting group (cases) and 36 (48.0%) of the non-stunting (control) group. The results of the chi square test show that there is a significant relationship between family income and the incidence of stunting with a value (P-Value 0.048). OR calculation results show that respondents whose family income is poor are at risk of experiencing stunting 0.490 times compared to those with sufficient family income (95%CI 0.254- 0.945).

The incidence of stunting is influenced by various factors, one of which is family income. Income is one indicator that determines economic status. Family income is related to the household's ability to meet primary, secondary and tertiary

living needs. A high family income makes it easier to meet life's needs, whereas a low family income makes it more difficult to meet life's needs. Low income will affect the quality and quantity of food consumed by the family. The food that is obtained will usually be less varied and small in quantity, especially food that functions as a source of protein, vitamins and minerals for children's growth, thereby increasing the risk of malnutrition. These limitations will increase the risk of a toddler experiencing stunting (7).

Based on the results of statistical tests, the p-value was obtained at $0.048 < 0.05$, which means that there is a relationship between family income and the incidence of stunting. In addition, the OR value = 0.490, which means that families with lower income levels have a 0.490 chance of having children suffering from stunting, greater than that of families who have a sufficient level of income. From the research results, the majority of toddlers suffering from stunting have a lower family income, 56.7%, this is due to a lack of employment which results in low levels of income and weakening purchasing power.

This research is in line with other research which shows that family income or economic status is related to stunting (10). Family income or household socio-economic conditions are related to the nutritional status of family members. This condition especially concerns toddler nutrition. Poverty is the most common cause of malnutrition both in Indonesia and in the world. Family income is an important factor in determining the quality and quantity of food in the family. An increase in family income is related to improved child nutrition. Parents with adequate family income will have the ability to meet the family's primary and secondary needs and have access to better health services (10).

Based on the research results and theory above, family income is an important factor in determining the nutritional status of a family, especially children under five. Families with low incomes will experience difficulties in meeting the nutritional needs of their families, especially toddlers, due to their lack of food purchasing power. The most important thing for families is not to experience hunger even though they do not pay attention to the nutritional status and nutritional balance of toddlers. Insufficient nutrition for a long time will cause stunting (11).

Table 5 Relationship between Exclusive Breastfeeding with Stunting Incidents in Toddlers in the Working Area of Wakorumba Community Health Center, North Buton Regency, 2023

Exclusive breastfeeding	Stunting				N	%	P-Value	OR(95% CI)
	Yes		No					
	n	%	n	%				
Yes	17	22.7	38	50.7	55	36.7	0,001	0.285(0,141-0,578)
No	58	77.3	37	49.3	95	63.3		
Total	75	100	75	100	150	100		

Source: Primary Data, 2023

Table 5 shows that of the 55 mothers of toddlers who gave exclusive breastfeeding, there were 17 (22.7%) who suffered from stunting and 38 (50.7%) who were not stunted. Meanwhile, 95 (63.3%) of the respondents had a history of not being exclusively breastfed, there were 58 (77.3%) stunted babies and 37 (49.3%) who were not stunted. The results of the chi square test show that there is a significant relationship between exclusive breastfeeding and the incidence of stunting with a value (P-Value 0.001). OR calculation results show that respondents who are not exclusively breastfed are at 0.285 times the risk of experiencing stunting compared to exclusively breastfed people (95%CI 0.141-0.578).

Exclusive breastfeeding is the provision of only breast milk to babies from birth to 6 months of age. However, the process of fulfilling nutrition for children does not stop there. According to Hndrawati (2018), exclusive breastfeeding provides various benefits for mothers and babies, where breast milk is a natural food that is good for babies, practical, economical, easy to digest, has an ideal nutritional composition according to the baby's digestive needs and abilities and breast milk supports growth. Babies are especially tall because breast milk calcium is absorbed more efficiently than breast milk substitutes (12).

Based on the results of statistical tests, the p-value was obtained at $0.001 < 0.05$, which means there is a relationship between exclusive breastfeeding and the incidence of stunting. In addition, the OR value = 0.285, which means that children who are not exclusively breastfed have a 0.285 times greater chance of having a child suffering from stunting, compared to exclusively breastfed children. Based on what was obtained in the field, from all toddlers who experienced

stunting/cases and mothers who did not give exclusive breast milk to their babies, the majority (50%) of mothers gave food or drinks other than breast milk in the form of formula milk.

Breast milk is the most appropriate food for babies because breast milk contains the right nutritional composition. According to WHO (2016), breast milk is the provision of breast milk alone without the addition of other fluids, whether formula milk, water or other additional foods. Breastfeeding has many health benefits, especially in terms of child development. Breast milk is useful for increasing a child's immunity against disease (13). This research is in line with research by Al-Rahmad et al., (2013) which states that the incidence of stunting in toddlers is caused by non-exclusive breastfeeding. Based on the research results and theories above, exclusive breastfeeding has many benefits for the growth and development of toddlers, so quality breast milk is needed, giving exclusive breast milk but not paying attention to the quality of the breast milk is the same as giving food without paying attention to the nutrients in the food. This will have an impact on nutritional deficiencies in babies so that it can lead to malnutrition, namely stunting (11)

Table 6 Relationship between history of infectious disease with incidence of stunting among children under five in the working area of Wakorumba Health Center, North Buton Regency, 2023.

Infectious Diseases	Stunting				N	%	P-Value	OR(95% CI)
	Yes		No					
	n	%	n	%				
Yes	14	18.7	7	9.3	21	14.0	0.158	2.230(0,844-5,887)
No	61	81.3	68	90.7	129	86.0		
Total	75	100	75	100	150	100		

Source: Primary Data, 2023

Table 6 shows that 21 (14.0%) respondents suffered from infectious diseases, 14 (18.7%) toddlers were stunted and 7 (9.3%) toddlers were not stunted. Meanwhile, of the 129 (86.0%) respondents, 61 (81.3%) of the toddlers were stunted and 68 (90.7%) of the toddlers were not stunted. The results of the chi square test showed that there was no significant relationship between the history of infectious diseases and the incidence of stunting with a value (P-Value 0.158). The OR calculation results show that respondents who suffer from infectious diseases are 2,230 times more likely to experience stunting than those who do not suffer from infectious diseases (95%CI 0.844-5.887).

Infectious diseases are one of the direct causes of stunting. The link between infectious diseases and fulfilling nutritional intake cannot be separated. The presence of infectious diseases will make the situation worse if there is a lack of nutritional intake. Children under five who are malnourished are more susceptible to infectious diseases. For this reason, treating infectious diseases as early as possible will help improve nutrition by balancing the provision of intake according to the needs of children under five (5).

Based on the results of statistical tests, a p-value of $0.158 > 0.05$ was obtained, which means that there is no relationship between a history of infectious disease and the incidence of stunting. Apart from that, an OR=2.230 value was obtained, which means that in this study a history of infectious disease has no risk of causing stunting in toddlers. in the North Wakorumba health center working area in 2023 and toddlers with a history of suffering from infectious diseases are at risk of suffering from stunting of 1,410. From the research results obtained, there were only 14% of toddlers with stunting/cases of toddlers with a history of infectious diseases.

According to research by Anisa (2012), the results of the study did not show a significant relationship between the duration of diarrhea and ARI with a p value of 0.158, which means there is no significant relationship. Infectious diseases are one of the factors that trigger problems in the nutritional status of toddlers apart from food intake. The history of infectious diseases studied was diarrhea and ARI. Most toddlers suffer from infectious diseases, especially those that often occur in children under five, namely diarrhea and ARI. The variables studied included duration of illness and frequency of illness so that there was duration of diarrhea, frequency of diarrhea, and frequency of acute respiratory infections (8).

These results are in accordance with Efendhi's research which states that the frequency of infectious diseases (diarrhea and acute respiratory infections) has no significant relationship with stunting because the incidence of stunting is not influenced only by the frequency of infectious diseases, but can also occur due to other factors such as adequate nutrition. before, during, and after experiencing illness (9).

Table 7 Relationship between maternal parenting patterns and incidence of stunting among toddlers in the Wakorumba Community Health Center working area, North Buton Regency, 2023.

Mother's Parenting Patterns	Stunting				N	%	P-Value	OR(95% CI)
	Yes		No					
	n	%	n	%				
Good	23	30.7	40	53.3	63	42.0	0.008	0.387(0,198 -0.755)
Not good	52	69.3	35	46.7	87	58.0		
Total	75	100	75	100	150	100		

Source: Primary Data, 2023

Table 7 shows that of the 63 (42.0%) respondents who had good parenting patterns, there were 23 (30.7%) toddlers who suffered from stunting and 40 (53.3%) toddlers who were not stunted. Meanwhile, of the 87 (58.0%) mothers whose parenting patterns were poor, there were 52 (69.3%) stunted toddlers and 35 (46.7%) non-stunting toddlers. The chi square test results show that there is a significant relationship between maternal parenting patterns and the incidence of stunting with a value (P-Value 0.008). OR calculation results show that respondents whose maternal parenting patterns are poor have a risk of experiencing stunting 0.285 times compared to good maternal parenting patterns (95% CI 0.198-0.755).

Parenting patterns have an important role in the incidence of stunting in toddlers. The interaction between children and parents during parenting activities greatly contributes to children's growth and development. (16) Factors that are not good parenting patterns in the family are one of the causes of nutritional problems. Parenting patterns include the family's ability to provide time, attention and support in meeting the physical, mental and social needs of children who are growing in the family. Parenting patterns for children are manifested in several ways in the form of providing breast milk and complementary foods, psychosocial stimulation, cleanliness/hygiene practices and environmental sanitation. , caring for children when they are sick takes the form of health practices at home and patterns of seeking health services. 14 Habits that exist within the family in the form of feeding practices, psychosocial stimulation, cleanliness/hygiene practices, environmental sanitation and use of health services have a significant relationship with the incidence of stunting in children. 24 – 59 months(7)

Based on the results of statistical tests, a p-value of 0.008 <0.05 was obtained, which means that there is a relationship between maternal parenting and the incidence of stunting. In addition, an OR value of 0.285 was obtained, which means that children with poor maternal parenting have a chance of having children suffering from stunting of 0.285. times greater than children with good mothering. Based on what was obtained in the field, the number of children under five who experienced stunting/cases where the mother provided poor parenting was large (58.0%). This was due to other factors such as the father's low income. Low levels of income make it possible to overcome eating habits in certain ways that prevent nutritional improvements that are ineffective, especially for toddlers.

Mother's parenting style has a significant relationship with the incidence of stunting in toddlers. This is in line with research conducted by (8). Which states that permissive maternal parenting can cause stunting. The cause of the stunting problem is not only due to food consumption that is less than required or the occurrence of recurrent infectious diseases, but is also influenced by indirect causes, namely household food availability, health services and environmental health, as well as maternal parenting patterns. If a household has good consumption patterns and maternal parenting, it can produce toddlers with good nutritional status. Good child care will lead children to develop into adults with good lifestyles.

Thus, nutritional knowledge and maternal parenting patterns are very important to form toddlers who are healthy and free from stunting. This is proven by data obtained by researchers that mothers who have permissive parenting styles with stunted children mostly have permissive parenting patterns which greatly influence the incidence of stunting. It was found that 3 respondents (9%) implemented democratic parenting patterns, it was found that 8 respondents (25%) apply an authoritarian parenting style but their toddlers still experience stunting. (15)

Poor parenting factors can cause problems with a child's growth and development, this is because the mother does not understand the correct way of parenting, as well as economic conditions. To overcome this problem, several solutions can be carried out, such as providing education and health information regarding appropriate parenting patterns (16).

4. Conclusion

There is a relationship between maternal knowledge and the incidence of stunting in toddlers with a value of OR=0.275, which means that mothers who have a low level of knowledge are 3 times more likely to have stunting in toddlers compared to mothers who have a sufficient level of knowledge. There is a relationship between family income and the incidence of stunting in toddlers with a value of OR=0.490, which means that low income levels are 5 times more likely than families who have sufficient income levels. There is a relationship between exclusive breastfeeding and the incidence of stunting in toddlers with a value of OR=0.285, which means that toddlers who do not receive exclusive breastfeeding are 3 times more likely to suffer from stunting than exclusively breastfed toddlers. There is a relationship between maternal parenting patterns and the incidence of stunting in toddlers with a value of OR=0.285, which means that families that have a poor level of maternal parenting have a 5 times greater chance of having children suffering from stunting compared to families that have a good level of maternal parenting. Meanwhile, there is no relationship between a history of infectious disease and the incidence of stunting in toddlers and there is a relationship between maternal parenting patterns and the incidence of stunting in toddlers in the working area of the North Wakorumba Community Health Center, North Buton Regency in 2023. So that the Community Health Center It is necessary to increase the intensity of outreach to increase community knowledge and enthusiasm in managing family nutrition.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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