Relationship Of Risk Factors To Events Toddler Wasting In Blang Beurandang Village

[1]Dira Jasnita, [2]Enda Silvia Putri, [3]Sri Wahyuni Muhsin, [4]Wardah Iskandar

[1,2,3,4] Faculty of Public Health, Teuku Umar University, Indonesia
Corresponding author: Dira Jasnita, e-mail: jasnitadira76@gmail.com

Abstract

The factors of knowledge, parenting patterns, feeding patterns, personal hygiene and sanitation of the household environment are not good enough, so it is suspected that these factors contribute to the wasting problem in Blang Beurandang Village of 13 children under five. The aim of this research is to determine the relationship between knowledge factors, child care patterns, feeding patterns, maternal personal hygiene and household environmental sanitation with wasting incidents. The design and type of this research is quantitative with a cross-sectional approach. The population in this study were all toddlers aged 1-5 years in Blang Beurandang Village who met the criteria. Sampling was taken using a total sampling technique, namely 150 toddlers. Research results based on chi square test results show that there is a relationship between maternal knowledge and a p-value of 0.000; RP = 0.140 (021-0.31), Toddler Parenting Patterns with a p-value of 0.001; RP = 0.520 (0.048-5.629), Dietary Pattern p-value of 0.000; RP = 5,000 (0660-37,852), Personal Hygien with a p-value of 0.002; RP = 11,000 (0.220-35.662), Household environmental sanitation p-value is 0.000; RP = 5,000 (765-54,116). The conclusion of this study is that the results of the chi square test show that there is a relationship between Knowledge, Parenting Patterns, Eating Patterns, Personal Hygiene and Sanitation in the Household Environment with the incidence of wasting in children under five in Blang Beurandang Village. Suggestions for respondents (mothers) are to seek information about the latest factors that influence Wasting so that it will increase knowledge about the nutritional content of food and apply it to providing types of food to toddlers that can prevent wasting, knowledge related to nutritional content in feeding toddlers, maintaining personal hygiene mothers in raising children and keeping the household environment clean so as to prevent wasting.

Keywords: Diet; Hygiene; Knowledge; Parenting Patterns; Sanitation; Wasting

Introduction

Wasting has a big impact that can increase the risk of child morbidity and death. If poor nutritional conditions continue during the toddler years, it can reduce intelligence, productivity, creativity, and greatly affect the quality of human resources. WHO globally estimates the prevalence of under-five wasting at 8% (52 million under-fives) with the highest cases on the Asian continent, namely 35 million under-fives experiencing wasting in 2022.

Indonesia is one of the developing countries that has problems with malnutrition, including wasting. A critical public health concern is one with a prevalence of wasting of 15.0% or above, while a severe one is one with a prevalence of wasting between 10.0% and 14.0%. The countrywide incidence of wasting in children

under five was 11.1% in 2016, indicating that the issue of wasting remains a significant public health concern in Indonesia. Several variables contribute to the high incidence of wasting, including diet, poverty, family history of infectious illnesses, vaccination status, and the duration of nursing. According to research by Putri, et al (2010), factors that are directly related to the incidence of wasting are carbohydrate intake, energy intake, protein intake and fat intake. According to Afriyani, et al (2016), toddlers who have incomplete immunization status and have a history of infectious diseases are 3.512 times more likely to experience wasting.

West Aceh is one of the districts in Aceh Province. West Aceh Regency is also one of the areas where a lot of wasting occurs. The West Aceh area has a frequency of 24.7% of wasting, according to the 2022 Indonesian Nutrition Status Survey (SSGI). Wasting is also common in Samatiga District. Information gathered in 2023 from the Cot Seumeureung Community Health Center's operational area, it shows that the number of wasting cases in September was 41 cases, namely 3.32%.

Based on data obtained from Johan Pahlawan Community Health Center, West Aceh Regency, the number of toddlers affected by stunting, in 2022 is 46 toddlers or 3.6 percent of the number of toddlers in the research location who experience stunting, while for wasting in 2022 there will be 54 toddlers or 5.7 percent of the number of children under five, then the number of children under five affected by malnutrition over the last three years has decreased and the number of cases of malnutrition has increased, namely in 2020, there were only 8 cases of malnutrition, in 2021 there were 12 children under five who experienced malnutrition, namely 8 males and 4 females under five, in 2022 there are 3 cases of malnutrition, a decrease compared to 2020 (Monthly Report of the Johan Pahlawan Care Community Health Center 2023).

Methods

To characterize the association, this study used quantitative methodologies and a cross-sectional methodology, and it was performed via observation. One hundred fifty toddlers from Blang Beurandang Village made up the study's population. Children from Blang Beurandang Village, ranging in age from one to five, made up the sample for this research. A complete sampling strategy was used to collect samples from 150 toddlers. Respondents are parents or caregivers of toddlers. The instrument used to obtain primary data in this research was a questionnaire. The aim of the univariate test is to explain or describe the characteristics of each research variable. Bivariate tests were carried out to determine the relationship between independent variables and related variables, known by carrying out the chi square test with CI: 95%.

Results

Univariat Analysis

In this research, the frequency distribution of respondent characteristics was identified which is presented in Table 1.

Table 1. Frequency Distribution Of Respondents' Characteristics At The Johan Pahlawan Community Health Center, Blang Beurandang Village

Variable	f	%
Mother's education level		
Low (Elementary, Middle School)	43	28,67
Intermediate (SMA/MA)	98	65,33
High (D3, SI, S2)	9	6,00
Toddler Age		
0-1 Years	78	52,00
2-3 Years	34	22,67
4- 5 Years	38	25,33
Gender		
Male	84	56,00
Female	66	44,00
Mother's Job		
House Wife	102	68,00
Civil servants/private employees	48	32,00
Total	**150**	**100 %**

(Source: Primary Data, 2024)

Based on table 1. It is known that all respondents' gender is female. Based on the above, it is known that the majority of respondents had a secondary education level (SMA/MA) as many as 98 respondents (65%) while the lowest education was higher education (D3, Bachelor's and Master's degrees) as many as 9 respondents (6%), the majority of toddlers encountered by babies. There were 78 toddlers aged 0-1 years (52%), 34 toddlers aged 2-3 years (22.67%), while 38 toddlers aged 4-6 years (25.33%).

Based on the table above, it is known that the majority of respondents who work as housewives are 102 respondents (68%), while the respondents who work as civil servants/private employees are 42 respondents (32%).

Table 2. Frequency Distribution Based On Knowledge Factors in Blang Beurandang Village

Knowledge Factor	F	%
Good	83	55,3
Not Good	67	66,7
Total	**150**	**100**

(Source: Primary Data, 2024)

Table 2 displays the results from Blang Beurandang Village, where 83 respondents (55.3%) were found to have strong understanding, while the respondents who had poor knowledge were 67 respondents (44.7%). This shows that the knowledge factor has a big impact on the risk of wasting at the research location.

Table 3. Frequency Distribution Based On Parenting Patterns in Blang Beurandang Village

Parenting	F	%
Good	135	90,0
Not Good	15	10,0
Total	**150**	**100**

(Source: Primary Data, 2024)

According to table 3, the majority of respondents (135) had positive parenting styles respondents and poor parenting patterns are 15 (10%) respondents.

Table 4. Frequency Distribution Based On Eating Patterns In Blang Beurandang Village

Dietary habit	F	%
Good	121	80, 7
Not Good	29	19, 3
Total	**150**	**100**

(Source: Primary Data, 2024)

Based on the data obtained in Blang Beurandang Village as seen in table 4, it shows that the highest respondents' eating patterns were in the good category with 121 (80.7%) respondents and poor eating patterns with 15 (19.3%) respondents.

Table 5. Frequency Distribution Based on Personal Hygiene

Personal Hygiene	F	%
Good	114	76,0
Not Good	36	24,0
Total		**100**

(Source: Primary Data, 2024)

Table 5 displays the results from the Blang Beurandang Village survey, which indicate that 114 (or 76% of the total) respondents rated their personal hygiene as satisfactory or very good and poor personal hygiene with 36 (24%) respondents.

Table 6. Frequency Distribution Based on Household Environmental Sanitation

Household environmental sanitation		%
Good	42	28,0
Not Good	108	72,0
Total		**100 %**

(Source: Primary Data, 2024)

Table 6 displays the results from Blang Beurandang Village, and it reveals that 42 (28%) of the respondents had satisfactory environmental and home cleanliness and personal environmental and household sanitation is less good totaling 108 (72%) respondents.

Table 7. Frequency Distribution of Wasting Incidents in Blang Beurandang Village

Wasting Incident	F	%
No Wasting	137	91,3
Wasting	13	8,7
Total		**100**

(Source: Primary Data, 2024)

Based on the data obtained in Blang Beurandang Village as seen in table 7, it is known that in cases there were 13 respondents, while in controls there were 137 respondents. This shows that there is a risk of Wasting, even though it is only 8.7%, therefore these factors are very closely related to the incidence of Wasting.

Bivariat Analysisi

Based on table 8, above regarding the relationship between maternal knowledge regarding wasting and wasting incidents, it is known that 137 (91.3%) respondents had good knowledge and 13 (8.7%) respondents had poor knowledge. We may infer that there is a significant association between maternal knowledge and the occurrence of wasting in toddlers based on the findings of the chi-square test, which indicates a p-value of 0.000 (p<0.05). But the value of the ratio An incidence rate of 0.140 (<1) was determined, so the risk of a relationship between knowledge and wasting among toddlers in Blang Beurandang Village is likely to be very low.

Table 8. Relationship Between Knowledge And Wasting Incidents

Variable	Wasting		Not Wasting		Total		P Value	RP Ci 95% Range
	n	%	n	%	N	%		
Good	0	0,0	67	100	67	100	0,000	0,140 (0,21 -0,431)
Not Good	13	15,7	70	84,3	83	100		
Total	**13**	**8,7**	**137**	**91,3**	**150**	**100**		

(Source: Primary Data, 2024)

The following information is derived from table 9, which deals with the correlation between maternal parenting styles and the occurrence of wasting: 137 mothers (91.3%) had good parenting styles, while 13 (8.7%) had poor parenting styles, concerning the nutritional status of their children who wasted. We may infer that there is a significant association between mother parenting methods and the incidence of Wasting in toddlers based on the findings of the chi-square test, which indicates a p-value of 0.001 (p<0.05). However, the ratio value The prevalence was found to be 0.520 (<1), so the risk of a relationship between parenting styles and wasting in Blang Beurandang Village is likely to be very low.

Table 9. Relationship Between Mother's Parenting Style And The Incidence Of Wasting

Variable	Wasting		No Wasting		Total		P Value	RP Ci 95% Range
	N	%	n	%	N	%		
Good	0	0,0	15	100	15	100	0,001	0,520 (0,048 –5,629)
Not Good	13	9,6	122	90,4	135	100		
Total	**13**	**8,7**	**137**	**91,3**	**150**	**100**		

(Source: Primary Data, 2024)

Based on table 10, above regarding the relationship between eating patterns and the incidence of wasting, it is known that eating patterns that Eighty-nine percent of respondents rated the nutritional quality of Wasting children as excellent, while thirteen percent rated it as poor, based on their eating habits. It may be inferred from the chi-square test findings that there is a substantial correlation between toddlers' eating habits and the occurrence of wasting, since the statistical analysis yielded a p-value of 0.000 (p<0.05).

Table 10. Relationship Between Eating Patterns And Wasting Events

Variable	Wasting		No Wasting		Total		P Value	RP Ci 95% Range
	n	%	N	%	N	%		
Good	0	0,0	29	100	29	100	0,000	5,000 (0,660 – 37,852)
Not Good	13	10,7	108	89,3	121	100		
Total	**13**	**8,7**	**137**	**91,3**	**150**	**100**		

(Source: Primary Data, 2024)

Based on table 11. above regarding Personal Hygiene with Wasting Incidents, it is known that Personal Hygiene in the good category is 101 (88.6%) respondents, Personal Hygiene in the Poor category is 13 (11.4%) respondents. The findings of the chi-square test indicate a p-value of 0.002 (p<0.05), which means that there is a significant association between personal cleanliness and wasting episodes in toddlers, according to the statistical analysis.

Table 11. Relationship Between Personal Hygiene And Wasting Incidents

Variable	Wasting		No Wasting		Total		P Value	RP Ci 95% Range
	n	%	N	%	N	%		
Good	0	0,0	36	100	36	100	0,002	11,000 (0,220 – 35,662)
Not Good	13	11,4	101	88,6	114	100		
Total	**13**	**8,7**	**137**	**91,3**	**150**	**100**		

(Source: Primary Data, 2024)

The statistical test findings in table 12 reveal a significant value of 0.000 (p < 0.05), hence Ha is accepted. The favorable environmental category for waste accounts for 66% of the total, while the unfavorable environment accounts for 88%. The results of the chi-square test indicate a p-value of 0.000 (p<0.05), which means that there is a significant relationship between environmental factors, household sanitation, and wasting incidents in Blang Beurandang Village, according to the statistical analysis.

Table 12. Relationship Between Mother's Parenting Style And The Incidence Of Wasting

Variable	Wasting		No Wasting		Total		P Value	RP Ci 95% Range
	n	%	n	%	N	%		
Good	13	12,0	95	88,0	108	100	0,000	5,000 (0,765 – 54,116)
Not Good	0	0,0	42	100	42	100		
Total	**13**	**8,7**	**137**	**91,3**	**150**	**100**		

(Source: Primary Data, 2024)

Discussion

The Relationship between Knowledge and Wasting Incidents in Blang Beurandang Village

There is a statistically significant correlation between mothers' awareness of wasting and its prevalence, according to the table's data. Thirteen point seven percent of moms are known to have inadequate knowledge, whereas one hundred thirty-three point nine percent have adequate understanding. The findings of the chi-square test indicate a p-value of 0.000 (p<0.05), which means that there is a substantial association between maternal awareness and wasting events in toddlers, according to the statistical analysis.

The findings of this study are consistent with those of Langi et al. (2019), which found a strong correlation between mothers' awareness of waste events at the Kawangkoan Community Health Center, Minahasa, and a p-value of 0.01 ($p < 0.05$). Consistent with this study, Rosliana et al. (2020) found a correlation between mothers' knowledge and wasting episodes.

The way women raise their children is affected by their level of nutritional understanding. Mothers who lack proper nutrition education are more prone to neglect their children's food intake, increasing the risk of malnutrition and wasted childhood. The study conducted by Yuni and colleagues in 2020.

The Relationship between Parenting Patterns and Wasting Incidents in Blang Beurandang Village

Research findings indicate a correlation between stunting rates and mother parenting styles, as seen in the table. It is known that 137 participants, or 91.3% of the total, have children with high nutritional status, whereas 13 participants, or 8.7% of the total, have moms with poor nutritional status.

The chi-square test yielded a p-value of 0.001 ($p<0.05$), indicating a substantial association between mother parenting practices and the incidence of Wasting in toddlers, according to the statistical study. This study's findings that a correlation between stunting rates and mothers' parenting styles exists ($p = 0.000$) are consistent with those of Bella et al. (2020).

Consistent with this study, Rosliana et al. (2020) found a significant correlation ($p=0.000$) between mother parenting styles and the occurrence of wasting. The incidence of wasting is significantly related to parental styles of feeding, according to research by Bella et al. (2020). The p-value is 0.000, and the risk is 8.8 times higher.

The Relationship between Dietary Patterns and Wasting Incidents in Blang Beurandang Village

The study findings indicate a correlation between eating habits and the frequency of waste, as shown in the table. According to 108 respondents (89.3%), the dietary habits that affect the nutritional health of Wasting children are positive. Thirteen people (10.7%) thought it was bad. We may infer that there is a significant association between eating behaviors and the occurrence of wasting in toddlers based on the findings of the chi-square test, which indicates a p-value of 0.000 ($p<0.05$). Male toddlers are more likely to suffer from malnutrition or wasting (Damayanti, 2019) because their bodies need more protein for energy.

The Relationship between Personal Hygiene and Wasting Incidents in Blang Beurandang Village

With 101 (88.6%) respondents rating their personal hygiene as excellent and 13 (11.4%) rating it as poor, the data in the table clearly shows that there is a correlation between the two variables and the occurrence of wasting incidents. We may infer that there is a significant association between personal cleanliness and wasting episodes in toddlers based on the findings of the chi-square test, which indicates a p-value of 0.002 ($p<0.05$).

As a kind of self-care, personal hygiene helps individuals keep their minds and bodies in good shape. A person's health and mental well-being are impacted by their level of cleanliness, thus it is crucial to pay attention to cleanliness in daily life. Personal beliefs and practices have a significant impact on cleanliness. If

someone is sick, hygiene issues are usually not paid enough attention, this happens because we consider hygiene issues to be trivial, even though if they are allowed to continue they can affect general health (Hidayat, 2018)

Based on Hidayat's statement, (2018) Toddlers who experience wasting can increase the risk of child morbidity and death. Children who are wasted are very susceptible to infectious diseases. If malnutrition continues during the toddler years, it can affect intellectual performance, work capacity and health conditions in later life. Based on research conducted by Hendrayati (2013), infectious diseases such as diarrhea and Upper Respiratory Tract Infections (ARI), which are caused by poor food and environmental sanitation, are associated with wasting.

Relationship between household environmental sanitation and wasting incidents in Blang Beurandang Village

The table shows that the study findings in Blang Beurandang Village relate environmental and home cleanliness to waste events. The results of the statistical test showed a significant value of 0.000 ($p < 0.05$), which means that Ha is accepted. The environmental category that is favorable for wasting accounts for 66% of the total, while the unfavorable environment accounts for 88%.. It can be inferred from the chi-square test results that there is a significant relationship between environmental and household sanitation and wasting incidents in Blang Beurandang Village, as the statistical analysis yielded a p-value of 0.000 ($p<0.05$).

Notoatmojo (2017) states that for an environment to be considered environmentally healthy, it must be in an ideal state that promotes optimal health. Housing, excrement disposal, water supply, garbage disposal, sewage disposal, animal housing, etc. all fall under the umbrella of environmental health.

Conclusion

Research on factors related to the incidence of wasting in children under five can be concluded that The results of statistical tests show that there is a relationship between maternal knowledge and the incidence of wasting in toddlers in Blang Beurandang Village with a p-value of 0.000; RP = 0.140 (021-0.31). However, the prevalence ratio value was found to be 0.140 (<1), so the risk of a relationship between knowledge and wasting among toddlers in Blang Beurandang Village is likely to be very low. The results of statistical tests show that there is a relationship between parenting styles and the incidence of wasting in children under five in Blang Beurandang Village, with a p-value of 0.001; RP = 0.520 (0.048-5.629). However, the prevalence ratio value was found to be 0.520 (<1), so the risk of a relationship between parenting styles and wasting in Blang Beurandang Village is likely to be very low. The results of statistical tests show that there is a relationship between eating patterns and the incidence of wasting in children under five in Blang Beurandang Village, with a p-value of 0, 000; RP = 5,000 (0660-37,852). The results of statistical tests show that there is a relationship between Personal Hygien and the incidence of wasting in children under five in Blang Beurandang Village, with a p-value of 0.002; RP = 11,000 (0.220-35.662). The results of statistical tests show

that there is a relationship between environmental and household sanitation and the incidence of wasting in children under five in Blang Beurandang Village, with a p-value of 0.000; RP = 5,000 (765-54,116).

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