Original Research Article

The Relationship Between Behavior and Maternal Education and the Prevalence of Wasti ng Toddlers in Meureubo and Kaway Xvi Districts, West Aceh Regency

Abstract

*Wasting*is a condition of acute malnutrition when there is an imbalance between body weight and height (BB/TB) and has a Z-score <-2 SD which is the term wasted (thin) and severely wasted (very thin). The problem in this research is the increasing prevalence of wasting over the last three years in West Aceh district, one of which is Meureubo and Kaway According to a direct survey conducted in the field by researchers, mothers' education is still relatively low, knowledge is still lacking regarding problems with attitudes that are still ignorant and not fulfilling the nutrition of their toddlers.The purpose of this study was to determine the relationship between maternal behavior and education with the prevalence of wasting in children under five years old in Meureubo and Kaway XVI sub-districts of West Aceh district. This study used a quantitative approach with a cross-sectional design, using univariate and bivariate analysis, followed by the application of the chi-square test. The total sampling used included the entire population so that a sample size of 41 respondents was obtained.The findings showed a statistically significant relationship between maternal knowledge and the prevalence of wasting in children under five (P value = 0.008 ≤ 0.05). In addition, there was a significant relationship between maternal attitudes and the prevalence of wasting in children under five (P value = 0.005 ≤ 0.05). In addition, there was a relationship between maternal actions and the prevalence of wasting in children under five (P value = 0.015 ≤ 0.05). In addition, there was a correlation between maternal education level and the prevalence of wasting in children under five (P value = 0.008 ≤ 0.05).In conclusion, the analysis showed a correlation between maternal knowledge, attitude, and action, as well as a relationship between maternal education level and the prevalence of wasting in children under five years old, as evidenced by a P value ≤ α 0.05. It is recommended that health workers and other relevant stakeholders intensify efforts to socialize and educate mothers to encourage positive behavioral changes in meeting the nutritional needs of toddlers. This initiative aims to improve the nutritional status of toddlers.

Keywords: Toddler Wasting, Knowledge, Attitude, Action, Education

Introduction

*Wasting*is a combination of wasted and severel wasted which is characterized by an index of weight according to height (BB/TB) and body weight according to body length (BB/PB) with a Z-score <-2 SD [28].Wasting is a major threat to the existence and development of toddlers, can cause stunting, and can cause long-term growth problems[6]. One of the causes of wasting in toddlers is an acute lack of intake, us ually due to insufficient food intake or a high incidence of infectious diseases. Wasting can result in impaired immune function and can result in susceptibility to infectious diseases and increase the risk of death [32]. The effects of wasting are reduced ability to explore the environment, reduced social interaction, reduced happiness and a tendency to be apathetic. Long-term effects include cognitive decline, decreased academic performance, behavioral problems,

and even increased risk of death [10].

Factors that can influence nutritional value, direct and indirect factors. Food shortages and infectious diseases are direct causes of nutritional problems. Food scarcity at the household level causes food scarcity. Maternal behavior or poor parenting, such as parents who prefer to wear jewelry rather than provide nutritious food, can also cause undereating. Mother's level of knowledge, number of family members, employment, family income and breastfeeding are indirect factors [27]

The World Health Organization (WHO) states that 69% of wasted children live in Asia and 27% in Africa. Indonesia is the fourth most wasting country in the world, with 2 million children under five wasting, half of whom are in NTT. According to UNICEF, the number of wasting children under five in Indonesia will increase 0.6 points from 7.1% in 2022 to 7.7% [33]. In 2020, Aceh was ranked fifth highest in wasting compared to other provinces in Indonesia, with prevalence of wasting is 6.9%. The results of the Indonesian nutritional status survey (SSGI) show that 7.1 percent of Indonesian toddlers experience wasting. However, the percentage of wasted toddlers will decrease to 0.9 percent and 4.0% in 2022, with a prevalence of wasted toddlers of 7.7% [36]. In 2022, the Health Service reported that 158 toddlers in West Aceh district experienced wasting, namely in Meureubo subdistrict, and 23 toddlers in Kawai XVI subdistrict (Profile of West Aceh District Health Service, 2022).

Research[18] states that maternal knowledge about nutritional status greatly influences the prevalence of wasting in toddlers. Apart from knowledge, attitudes, actions and education also have a relationship with the prevalence of wasting in toddlers [28].The results of the initial survey conducted by the author by interviewing mothers of wasting toddlers showed that the author found problems related to education, lack of knowledge, mothers felt indifferent in improving their toddlers' nutrition, and mothers did not provide nutritious food to their toddlers.

1.1 Formulation of the problem

HowRelationship between Maternal Behavior and Education and the Prevalence of Wasting Toddlers in Meureubo and Kaway XVI Districts, West Aceh Regency?

1.2 Objective

The aim of this research is to analyze the relationship between maternal behavior and edu cation and the prevalence of toddler wasting in Meureubo and Kaway XVI districts, West Aceh district.

1.3 Hypothesis

There is a relationship between education, knowledge, attitudes and actions and the prevalence of wasting under five in Meureubo and Kaway XVI sub-districts, West Aceh Regency.

1. Education: the level of maternal education is related to the prevalence of wasting in toddlers because mothers with low education are less able to receive understanding, which affects their ability to receive information, it could be that mothers think that wasting is not very important.
2. Knowledge: lack of maternal knowledge about nutritional status and how to choose food can be one of the causes of the prevalence of wasting in toddlers. If the mother does not have an understanding of nutrition, the mother does not realize that her child is wasting.
3. Attitude: attitude is related to the prevalence of wasting toddlers where mothers who have a negative attitude may not care about how their toddler grows
4. Action: practices that do not support improving toddler nutrition can be related to the

high prevalence of wasting toddlers.

Thus, the hypothesis proposed is that low levels of education, knowledge, attitudes and actions are related to the increasing prevalence of wasting toddlers

2. METHOD

The type of research used is an analytical survey with a Cross-Sectional Survey approach which aims to analyze the relationship between maternal behavior and education and the prevalence of wasting toddlers in Meureubo District and Kaway XVI District, West Aceh Regency. This research was carried out in July 2023 in Meureubo sub-district and Kaway XVI sub-district, West Aceh Regency. The research population was all mothers who had wasting toddlers. Sampling was taken using the total sampling method, namely all pollution was sampled by 41 respondents. Next, the data was analyzed using univariate and bivariate, then tested using the chi square test.

2.1 Research Design and Timing

The type of research currently used is an analytical survey with a Cross-Sectional Survey approach carried out in Meureubo and Kawai XVI Districts, West Aceh Regency

2.2 Research location

Meureubo and Kaway last year compared to other sub-districts in West Aceh Regency.

2.3 Study Participants

All types of basic health services are available in Meureubo District and Kaway XVI District, there is a Government Community Health Center Unit which meets all basic service needs for the community in its working area.

2.4 Sample Size

The sample size in this study used the total sampling method, namely the entire population sampled was 41 respondents

2.5 Sampling Procedure

Total sampling is the entire sample interviewed using the questionnaire that has been provided, where all samples meet the predetermined sample criteria, namely all wasting mothers of toddlers in Meureubo and Kaway XVI Districts, West Aceh Regency.

2.6 Data collection

This paper-based questionnaire is administered andis semi-structured and consists of three parts: Knowledge about wasting toddlers, attitudes about wasting toddlers, actions that mothers take in managing food for wasting toddlers and maternal education about wasting toddlers. The questions in the questionnaire were prepared taking into account the recommended criteria according to previous research. The questions are arranged in an understandable order.

2.7 Research variable

The level of maternal education with the prevalence of wasting in toddlers, wasting is a condition where the child's weight does not correspond to height z-score <-2 SD, maternal education influences a mother's ability to receive nutritional information.

Mothers' knowledge of the prevalence of wasting in toddlers, increasing mothers' understanding of nutrition and the nutritional status of toddlers can make toddlers grow healthily.

The mother's attitude regarding the prevalence of wasting in toddlers, the mother's attitude in dealing with toddler nutrition problems has an influence on toddler nutrition

Maternal actions regarding the prevalence of wasting in toddlers, maternal practices in processing and providing food to toddlers can influence the incidence of wasting.

2.8 Statistic analysis

In this study, the chi-square test was used with a P-value $<\alpha 0.05$, AnalysisUnivariate is an analysis that involves a variable in research carried out either through questionnaires or interviews to determine the frequency distribution and distribution value of the variable [7]. Univariate data analysis can be done using statistical tests*Chi Square*used to test a hypothesis by determining the relationship between independent variables(Education, Knowledge, Attitudes and Actions) with the dependent variable (prevalence of wasting toddlers)

3. RESULTS

3.1 LevelEducation of wasting mothers of toddlers

Based on the results of questionnaire analysis from 41 respondents, it shows that 32 respondents (78%) had higher education, and 9 respondents (22%) had low education.

3.2 Knowledge of wasting mothers of toddlers

Based on the results of the questionnaire analysis, 32 respondents (78%) had good knowledge, and 9 respondents (22%) had poor knowledge.

3.3 The attitude of mothers of wasting toddlers

Based on the results of the questionnaire analysis, based on the respondents' answers, it is known that the respondents have an attitudepositivethat is33person(80.5%),whereas8person(19.5%)ownattitudenegative

3.4 The action of a wasting mother of a toddler

According to the questionnaire data, the results of the answers that researchers obtained from respondents. Where is the respondent?the action is carried outas much30person(73.2%),whereasWhichdoactionit wasn't doneas much11person(26.8%).

3.5 Wasting

According to questionnaire data from the results of respondents' answers fromtotal41respondent,majorityWhichthe action is carried outas much30person(73.2%),whereasWhichdoactionit wasn't doneas much11person(26.8%).

Table 1 Frequency distribution of education, knowledge, attitudes and actions on the prevalence of wasting toddlers

Category	N	%
Education		
Low	9	22
Tall	32	78
Knowledge		
Good	32	78
Not good	9	22
Attitude		
Positive	33	80.5
negative	8	19.5
Action		
Done	30	73.2
Are not done	11	26.8
Wasting		
Thin	38	93
Very thin	3	7

Table 2 results of chi square test analysis

Variables	Fisher's Exact Test < 0.05
Education	0.008
Knowledge	0.008
Attitude	0.005
Action	0.015

4. DISCUSSION

4.1 Analysis The Relationship between Maternal Education and the Prevalence of Wasting in Toddlers

Based onresultsanalysisstatisticswithusetest*chi-square*betweenleveleducationwithnumberwastingontoddlergot itmarkPvalue=0.008< 0.05There isconnectionbetweenleveleducationMotherwithprevalence of toddlers*wasting*inMeureubo and Kaway XVI Districts.The mother's education level also influences the ability to receive information, people with higher education understand nutritional information better than people with low education. Mothers who are highly educated better understand and apply nutritional health knowledge to their children, including nutrition [29]. This is in accordance with research [25]
showing that there is a relationship between parental education level and the prevalence of wasti ng. Based on the results of the chi-square test, the P value was obtained (0.001). Based on the results of the chi-
square test, the P value was obtained (0.001). Research conducted [15] shows that there is a sign ificant relationship between the level of parental education and the prevalence of wasting, namel

y Pvalue = 0.001 and OR 4.750, meaning that parents with low education are 4 times more likely to have a wasting toddler. In line with research [19] which states that there is a relationship between maternal education level and the prevalence of wasting, the Pvalue α = 0.000

4.2.Analysis of the Relationship between Mother's Knowledge and the Prevalence of Wasting in Toddlers

Results analysis statisticswithtestchi-squarebetweenknowledgeMotherwithprevalence of wastingobtainedPvalue=0.008<0.05There isconnectionbetweenknowledgeMotherwithprevalence of wasting toddlersinMeureubo and Kaway XVI Districts.Knowledge is the result of a person's senses or the fact that a person knows [17] an object through his senses. All of these senses can produce information that is influenced by the intensity of attention and perception of the object. Most information comes from hearing and sight. His knowledge of the hands that used to work.[18].This is in accordance with research [30] where there is a relationship between knowledge and education about children's nutritional status and the results of analysis of two variables using the chi-square test, obtained Pvalue = 0.034. This research is also in line with research [22] where the statistical test of this research obtained a P value = 0.003.

4.3Analysis of the Relationship between Maternal Attitudes and the Prevalence of Wasting in Toddlers

Resultsanalysisstatisticswithusetestchi-squarebetweenattitudeMotherwith the prevalence of wastingobtainedPvalue=0.005<0.05There isconnectionbetweenattitudeMotherwithprevalence of wasting toddlersinMeureubo and Kaway XVI Districts.The factors that influence nutritional problems are related to one another, one of the factors is the attitude of mothers who still lack awareness regarding the nutrition of toddlers. This is because mothers do not know the importance of nutrition for life, so that in their lives they do not strive for healthy and nutritious food [1].ResultsteststatisticsshowthatThere isconnectionWhichsignificantin a waystatisticsbetweenattitudeMotherwithstatusnutritionchildPvalue=0,000,OR=4.83Motherwithattitude Goodhas a possibility5timemorebigForownstatusnutritionWhichGoodto his soncompared towithMotherWhichberattitudebad [29].
in line with research [27] which shows a relationship between attitudes and nutritional status. [4] there is a relationship between the mother's attitude towards the nutritional status of toddlers with a P value = 0.000.

4.4 Analysis of the Relationship between Maternal Actions and the Prevelnence of Wasting Toddlers

The results of statistical analysis using the chi-square test between maternal activity and the prevalence of wasting with a P value of 0.015 < 0,05

There is a relationship between maternal actions and the prevalence of wasting under five in Meureubo and Kaway XVI Districts.According to [2] parents have an important role as models or examples for their children in terms of behavior in improving nutritional status and in terms of choosing food for toddlers.This research is in line withstudy[5],The results of statistical tests using the Chi-Square test provide a P-value =
0.021 to understand statistically that there is a relationship between maternal behavior and the nutritional status of underweight children under

5 years of age. In order for a mother to do something or not, it depends on whether she knows what she is going to do or what she is facing [32]. In line with research [5] there is a relationship between actions and the nutritional status of toddlers with a P value = 0.000.

5. CONCLUSION

There is a relationshipWhichsignificantin a waystatisticsbetweenleveleducation with values (P-value=0.008<0.05) knowledge value (P-value 0.008 < 0.05), attitude value (P-value 0.005 < 0.05) and action value (P-value 0.015 < 0.05) on the prevalence of wasting in toddlers.The results of the analysis show that knowledge, attitudes and actions as well as maternal education are related to the prevalence of wasting in toddlers. To increase knowledge, attitudes and actions, it is necessary to conduct socialization about selecting and how to manage and process food properly and correctly as well as education about nutritional problems for toddlers.

6. ADVICE

There needs to be socialization and education by relevant officers in terms of knowledge of mothers' attitudes and actions regarding the prevalence of wasting toddlers so that mothers understand that wasting is a nutritional problem for children so that mothers can improve mothers' knowledge, attitudes and actions in caring for toddlers.

PERMISSION

FKM-UTU Health Research Ethics Committee with number.
01562311051111320231113000001

ETHICAL APPROVAL

As per international standards or university standards, written ethical approval has been coll ected and retained by the authors.

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