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Relationship Between Maternal Knowledge and Attitudes Toward Nutritional Status of Toddlers in Biloro Health Center Area, South Buru Regency

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Abstract

Background: Poor nutritional status increases the risk of toddlers experiencing growth and developmental disorders in all body organ systems, which can have long-term effects. One of the main factors causing malnutrition and undernutrition is mother's knowledge, as mothers are the closest person to the child and play an important role in creating the child's nutritional status. Mother's attitude also greatly affects the quality and quantity of food consumed by the family, as mothers play an important role in household management. **Objective**: To determine the relationship between mother's knowledge and attitude with the incidence of undernutrition in toddlers in the working area of Puskesmas Biloro, Buru Selatan Regency. **Method**: This study used a quantitative method with a Cross-Sectional approach which was conducted on June 16-July 16, 2025 in the work area of the Biloro Community Health Center, South Buru Regency. The sample used was 71 respondents who had toddlers, with a Purposive sampling technique. This research instrument used a questionnaire. **Results**: The analysis results obtained from the knowledge questionnaire p-value 0.478> a 0.05 and the results of the attitude questionnaire obtained 0.337> a 0.05, which indicates that Ho is accepted and Ha is rejected meaning there is no relationship between the level of knowledge and attitudes of mothers with the incidence of malnutrition in toddlers. **Discussion**: Based on this research, it appears that a mother's attitude is not always related to a person's behavior in carrying out an action. Although the majority of respondents (52 respondents) had a positive attitude, the statistical results did not show a significant relationship. **Conclusion**: This study shows no relationship between the level of knowledge and attitudes of mothers with the incidence of malnutrition in toddlers in the working area of the Biloro Community Health Center, South Buru Regency.

Keywords: attitude, knowledge, malnutrition, maternal, toddler

INTRODUCTION

Malnutrition, including stunting, is a significant health problem in Ambon City [1]. The prevalence of stunting in Maluku, including Ambon City, has increased slightly in recent years [2]. In 2023, the prevalence of malnutrition in Ambon City and Maluku Province decreased slightly from 21.1% to 20.7% [3]. Malnutrition data in South Buru Regency decreased from 41.6% in 2020 to 35.5% in 2022 [4].

The problem of malnutrition and poor nutrition is complex [5]. Breaking the chain of malnutrition requires proper formulation to understand this problem [6]. One of the main factors causing malnutrition and poor nutrition is maternal knowledge, because mothers are the closest people to their children and play an important role in determining their

nutritional status [7, 8]. This explains the fact that in everyday life, it is often found that families have enough, but only consume limited amounts of food [9]. Malnutrition is not only found in families with low housing but also in families with relatively good (sufficient) income [10]. This situation shows that ignorance about the health benefits of food contributes to the poor nutritional quality of family food, especially for toddlers [11, 12].

Nutritional problems in toddlers are also influenced by the mother's attitude [13]. A mother's attitude greatly influences the quality and quantity of food consumed by the family, as mothers play a crucial role in household food management [14]. Mothers who have a positive attitude toward nutrition will ultimately improve the quantity and quality of nutrition consumed by the family [15].

The results of preliminary data collection indicate cases of malnutrition in the Biloro Community Health Center work area in the last three years, where in 2022-2023 the number of malnutrition sufferers was 22 people, while in 2024 the number of sufferers was 55 people. During interviews with 10 mothers with toddlers in the Biloro Community Health Center work area, it was found that 5 mothers had insufficient knowledge about the benefits of healthy food, nutritious food for toddlers. 5 mothers who did not know the proper way to manage food and the quality of nutrition consumed by toddlers.

METHOD

This study used a quantitative method with a Cross-Sectional approach which was conducted on June 16-July 16, 2025 in the work area of the Biloro Community Health Center, South Buru Regency. The population of this study were mothers who had toddlers in the Biloro Community Health Center Working Area totaling 246 toddlers. The sample used in this study was 71 samples. The sampling technique in this study was Purposive sampling technique, the instrument The instrument used in this study was by using a closed questionnaire, which means all answers are provided and respondents chose the existing answer by giving a mark in the right column of the statement. This questionnaire has been tested for validity and reliability with a result of 0.884 so that it is declared reliable or good reliability. Univariate analysis is to explain or describe the characteristics of each research variable.

This research was conducted in the Biloro Community Health Center Working Area on June 16-July 16, 2025, the population of this study were mothers who had toddlers in the Biloro Community Health Center Working Area totaling 246 toddlers. The sample used in this study was 71 samples. The sampling technique in this study was simple random sampling, the instrument The instrument used in this study was by using a closed questionnaire, which means all answers are provided and respondents chose the existing answer by giving a mark in the right column of the statement. This questionnaire has been tested for validity and reliability with a result of 0.884 so that it is declared reliable or good reliability. Univariate analysis is to explain or describe the characteristics of each research variable.

Presentation in the form of distribution and presentation of variables. In the frequency distribution study includes: Respondent identity, toddler identity, number of respondents, education, occupation. Bivariate analysis was conducted on two suspected or correlated variables. In this study, bivariate analysis was conducted to determine the relationship

between maternal knowledge and attitudes with the incidence of malnutrition in toddlers in the Biloro Community Health Center work area. Processing this bivariate analysis was done using the SPSS type 23 application. Statistical tests used to test the variables of knowledge, maternal attitude variables, and malnutrition variables to determine the relationship between the two using the chi-square statistical test with $\alpha = 0.05$.

RESULTS AND DISCUSSION

The univariate analysis in this study aims to provide an overview of the characteristics of the study respondents. The characteristics collected included respondent age, education, occupation, address, toddler age, toddler gender, birth weight, exclusive breastfeeding, knowledge, maternal attitudes, and incidence of malnutrition.

Table 1. Respondent Characteristics (n = 71)

Variable	Frequency (n)	Percentage (%)
Age		
Early Adulthood: 18-35 Years	70	98.6
Middle Adulthood: 36-45 Years	1	1.4
Education		
Elementary School	15	21,1
Middle School	27	28,0
High School	17	23,9
Bachelor's Degree	12	16,9
Occupation		
Housewife	67	94,4
Honorary	2	2,8
Civil Servant	2	2,8
Mother's Knowledge		
Good	67	94,4
Enough	2	2,8
Not enough	2	2,8
Mother's Attitude		
Positive	52	73.2
Negative	19	26.8

The majority of mothers were in the Early Adulthood age range: 18-35 years (98.6%). The highest maternal education level was junior high school (28.0%). The majority of mothers worked as housewives (94.4%), and the majority of mothers had good knowledge (94.4%) and positive attitudes (73.2%)(Table 1).

Table 2. Toddler Characteristics (n= 71)

Variable	Frequency (n)	Percentage (%)
Toddler Age		
0-11 Months	13	18.3
12-23 Months	20	28.2
24-35 Months	20	28.2
36-47 Months	12	16.9
48-59 Months	6	8.5
Toddler Gender		
Boy	56	78.9
Girl	15	21.1
Toddler Birth Weight		
Low Birth Weight	42	59.2
Normal Birth Weight	24	33.8
High Birth Weight	5	7.0
Exclusive Breastfeeding		
Yes	70	98.6
No	1	1.4
Toddler Nutritional Status		
Malnutrition	42	59.2
Normal	29	40.8

The majority of toddlers were aged 12 – 23 months (28.2%) and 24 – 35 months (28.2%). The majority of toddlers were male (78.9%). The highest birth weight was in the Low Birth Weight category (59.2%). The majority of toddlers were breastfed (98.6%). The nutritional status of toddlers was in the undernourished category (59.2%) (Table 2).

Table 3. Relationship between knowledge and malnutrition (n= 71)

Knowledge Level	Nutritional status				Total		*p- Value*
	Normal		Malnutrition				
	n	%	n	%	n	%	
Good	29	43.3	38	56.7	67	100.0	0.478
Sufficient	0	0.0	2	100.0	2	100.0	
Poor	1	50.0	1	50.0	2	100.0	
Total	**30**	**42.3**	**41**	**57.**	**71**	**100.0**	

The majority of parents use democratic parenting patterns (69.0%). Based on bivariate analysis using the Chi-Square test, a p-value of 0.489 was obtained. This indicates that there

is no significant relationship between parenting patterns and the incidence of stunting in toddlers (Table 4).

Table 4. Relationship Between Mothers' Attitudes and Malnutrition (n= 71)

Attitude	Nutritional status				Total		*p- Value*
	Normal		Malnutrition				
	n	%	n	%	n	%	
Positive	23	44.2	29	55.8	52	100.0	0.337
Negative	6	31.6	13	68.4	19	100.0	
Total	**29**	**40.8**	**42**	**59.2**	**71**	**100.0**	

The Relationship Between Parenting Patterns and the Incidence of Stunting. Based on bivariate analysis using the Chi-Square test, a p-value of 0.489 was obtained. This indicates that there is no significant relationship between parenting patterns and the incidence of stunting in toddlers ($p < 0.05$). According to [8], parenting is an indirect cause that is practiced directly by caregivers such as mothers, fathers, grandmothers, or other people in providing food, maintaining health, providing stimulation and emotional support that children need for growth and development. Most of the primary caregivers are mothers, both in normal children and children stunting. The husband is quite instrumental in replacing parenting if the mother is absent from a normal child compared to a child stunting [9].

According to [10], parenting is a method used in an effort to help children grow and develop by caring for, guiding, and educating them so that children achieve independence. Essentially, parenting is an attitude and practice that involves feeding, stimulating, and providing affection to children so they can grow and develop properly. Khon defines parenting as the attitude parents have toward their children's interactions. The method parents use to educate and raise their children is called parenting. Every parent has their own unique approach to parenting, such as how they interact with each other to educate, care for, and guide their children. A child, especially one with special needs, requires good care in the form of nurturing and treatment from their parents. According to [11], some children with special needs cannot live independently and require additional care and attention, including supervision.

This research aligns with research conducted [12], which found no significant relationship between parenting patterns and stunting in toddlers. This is due to other factors, such as knowledge and economic factors (income), which influence parenting patterns. A family's economic status, which includes income and education levels, can influence the way parents interact with their children, including the parenting style they apply. For family parenting patterns, most were in the good category (58.5%). There was a relationship between maternal education and the incidence of stunting (p-value = 0.029) [13].

This research also aligns with research conducted [14], which stated that there is no relationship between maternal parenting patterns and the incidence of stunting in toddlers. This is caused by other factors, namely a lack of knowledge and information received by

parents. Lack of parental knowledge and information can negatively impact child development, particularly in education, health, and character development. Not all parents have access to accurate and reliable information about stunting. Incorrect or incomplete information can mislead parents and exacerbate the problem.

Based on bivariate analysis using the Chi-Square test, a p-value of 0.489 was obtained [16]. This indicates that there is no significant relationship between the knowledge and attitudes of mothers who have malnourished toddlers ($p < 0.05$). According to [17], poor maternal knowledge and attitudes regarding the provision of complementary foods are associated with high levels of malnutrition and overnutrition. It is necessary to provide good and nutritious complementary foods, as well as continuous monitoring of children's nutritional status. Improved maternal behavior after nutritional counseling is shown by the majority of mothers implementing the recommendations given by the counsellor [18, 19]. There is a difference between maternal knowledge and attitudes and behavior before and after nutritional counselling [20].

According to [21], based on research conducted in the Community Health Center work area, it was found that there was no relationship between the mother's attitude and nutritional status. Based on this research, there was a relationship between the knowledge and attitude of mothers of toddlers regarding providing additional food and the incidence of toddlers at risk of wasting at the integrated health post.

In addition to knowledge factors, mothers' attitudes in providing additional food with the risk of wasting toddlers can also influence. This can occur because attitudes are closely related to the process of mothers' actions in caring for toddlers on a daily basis [22]. Many sources of information are obtained, for example television, radio and so on and mothers are also diligent in attending counseling on toddler nutrition provided by health workers, so they get a lot of information. This study is also in line with other studies, mothers who have less good attitudes are caused by the majority of respondents having low education, so they lack the knowledge to take their toddlers to Posyandu [23].

Respondents with good or sufficient knowledge and their toddler's nutritional status can be caused because even though they know that their toddler must consume sufficient food intake according to the body's needs, it can be caused by the child's appetite being good or because the child is less active, so that the toddler's nutritional status becomes more [24]. Respondents who have a negative attitude, their toddler's nutritional status can be caused by the mother's lack of awareness causing the mother to let the child consume food in excessive amounts or certain types of food that are actually less needed by the child's body such as sweet foods, high fat content, causing the toddler to have more nutritional status. Although democratic parenting patterns are beneficial, families with low economic status may have difficulty providing nutritious and balanced food for their children [25].

Researchers assume that democratic parenting, characterized by open communication and child participation in decision-making, can contribute to a reduction in stunting. However, if stunting remains high despite democratic parenting, this could be due to other dominant factors, including economic factors. Although democratic parenting is beneficial, families

with low economic status may struggle to provide a balanced, nutritious diet for their children.

CONCLUSION

There is no significant relationship between maternal knowledge and attitudes and the nutritional status of toddlers. The Biloro Community Health Center in Pekanbaru is encouraged to continue disseminating information regarding child nutrition programs through health promotion activities, as well as to provide training for healthcare workers on effective strategies for educating caregivers about malnutrition in toddlers and its prevention. These efforts are expected to improve caregivers' understanding of appropriate methods for preparing nutritious food for toddlers.

RECOMENDATION

For future researchers interested in investigating the same topic, it is recommended to increase the sample size in order to minimize selection bias. Additionally, data collection should not be limited to recent months but should encompass a longer period, such as the past year, to ensure more comprehensive findings. It is also advisable that respondents be directly interviewed during questionnaire completion rather than relying solely on self-administered questionnaires.

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