



RELATIONSHIP BETWEEN MOTHER'S ATTITUDE AND SOCIO-CULTURE WITH THE INCIDENCE OF LACK NUTRITION IN UNDER-FREE (12-59 MONTHS)

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ABSTRACT	Keywords
<p>Nutrition is crucial for supporting the growth and development of toddlers. The government program aimed at preventing undernutrition is the Supplementary Feeding Program (SFP). The nutritional status can be determined through laboratory tests and anthropometric measurements. The rapid developmental stage of children aged 1-5 years makes them vulnerable to undernutrition if not supported by balanced nutrition. The objective of this study was to examine the relationship between maternal attitudes, socio-cultural factors, and the occurrence of undernutrition in toddlers (12-59 months) in the village of Karangany Seberang. This research employed a descriptive correlational survey design with a cross-sectional approach. The total population of toddlers aged 12-59 months was 100 individuals, with a sample size of 86. The sampling technique used was accidental sampling. The univariate analysis revealed that 31 (36%) respondents experienced undernutrition, while 55 (64.0%) respondents did not. The bivariate analysis using the chi-square test showed a p-value of $0.000 < \alpha$ value of 0.05, indicating a significant relationship between maternal attitudes, parental education, economic factors, and parental knowledge with undernutrition in toddlers (12-59 months) in the village of Karangany Seberang. There is a significant relationship between maternal attitudes, parental education, economic factors, and parental knowledge with undernutrition in toddlers (12-59 months) in the village of Karangany Seberang. Close collaboration among the government, healthcare institutions, education sector, and the community is needed to address the issue of undernutrition in children. Effective coordination and synergy between these sectors can help enhance awareness, knowledge, and effective actions in combating undernutrition.</p>	<p>Exclusive Breastfeeding, Stunting, Toddlers</p>

INTRODUCTION

The correct, complete, and balanced nutrition in toddlers (children under five years old) plays a crucial role in influencing their overall growth and development. Adequate nutrition closely contributes to a child's health and intelligence, making nutrition one of the determining factors in

the quality of human resources (Ministry of Health of the Republic of Indonesia, 2018).

According to data from the World Health Organization (WHO) in 2019, approximately 7.7% or 52 million children under the age of five worldwide suffered from malnutrition. The highest percentage of malnourished toddlers was found in Southern Asia at 15.4%, Oceania at 9.4%,

Southeast Asia at 8.9%, and West Africa at 8.5%. Meanwhile, the lowest percentage of children under five with malnutrition was in North America, at 0.5% (WHO, 2019).

Indonesia, as one of the developing countries, also faces complex nutrition issues. Data from the Central Statistics Agency showed that in 2018, the prevalence of malnutrition among toddlers in East Kalimantan Province reached 10.80% in children aged 0-23 months and 14.70% in children aged 0-59 months (Ministry of Health of the Republic of Indonesia, 2019).

The incidence of inadequate nutrition in toddlers in East Kalimantan Province remains relatively high. Based on data from the East Kalimantan Provincial Health Office, cases of severe malnutrition in 2019 reached 3.29%, while cases of mild malnutrition were as high as 18.03%. In 2020, severe malnutrition cases increased to 3.80%, and mild malnutrition cases decreased to 15.73%. In 2021, cases of mild malnutrition decreased further to 13.4%, but it still indicates that malnutrition in East Kalimantan Province remains a serious issue (East Kalimantan Provincial Health Office, 2021).

This situation highlights that the problem of malnutrition in toddlers in this region still needs serious attention. Therefore, the government has implemented various programs, such as the Supplementary Feeding Program (PMT), as an effort to prevent malnutrition. This program is an intervention to improve the nutritional status of undernourished children and meet their nutritional needs to achieve the appropriate nutritional status (Ministry of Health of the Republic of Indonesia, 2017).

Previous research has revealed that the risk factors for malnutrition in toddlers are related to maternal knowledge. Additionally, feeding practices and birth weight also influence the occurrence of malnutrition in toddlers. However, economic status is not considered a risk factor associated with malnutrition in toddlers (Pibriyanti, 2022). The link between nutrition and sociocultural factors is also very strong, where eating habits,

consumption patterns, and beliefs about food can affect nutrition issues (Pibriyanti, 2022).

In the context of healthcare services in the area, it is a fact that the number of children aged 12-59 months in the work area of Karangany Health Center, Karangany District, Kutai Timur Regency in 2022 reached 1,249 individuals, but only around 642 toddlers (51.4%) received healthcare services at Posyandu (Integrated Health Post). Among the toddlers weighed for their body weight, 92 toddlers (12.39%) were identified as malnourished based on the BB/U index. Meanwhile, among the children whose height and length were measured, 72 toddlers (9.7%) were classified as stunted based on the TB/U index, and out of the toddlers measured for BMI, 53 toddlers (7.14%) were classified as underweight based on the BB/TB index (Kutai District Health Office, 2022).

Knowledge about nutrition and feeding practices among mothers, as well as sociocultural factors, have the potential to be significant factors in addressing malnutrition problems in toddlers. Therefore, this research will further explore the relationship between maternal attitudes and sociocultural factors with the occurrence of malnutrition in children aged 12-59 months in Karangany Seberang Village, Karangany District, Kutai Timur Regency.

METHOD

This research employs a descriptive correlational survey design with a Cross-Sectional approach. The study analyzes the Relationship Between Maternal Attitudes and Sociocultural Factors with the Incidence of Malnutrition in Toddlers (Aged 12-59 Months) in Karangany Seberang Village in January-February 2023. The population in this study comprises all mothers who have toddlers aged 12-59 months, with a total of 100 individuals. The sampling technique used is accidental sampling, resulting in 86 respondents who meet the inclusion criteria, which include toddlers aged 12-59 months, toddlers in Karangany Seberang Village, mothers of toddlers willing to be respondents, and exclusion criteria, such as infants aged <12 months, toddlers with a history of hereditary diseases (autism, Down

syndrome, albinism), and mothers of toddlers unwilling to be respondents. Data is collected using questionnaires to assess Maternal Attitudes, Sociocultural factors, and the Incidence of Malnutrition. The dependent variable is the Incidence of Malnutrition, and the independent variables are Maternal Attitudes and Sociocultural factors. Data is analyzed univariately to describe the characteristics of each research variable. Bivariate data analysis is conducted to determine the influence of both variables. Univariate data analysis in this

Variable	Incidence of Malnutrition				N	%	p Value	OR
	Yes		No					
	n	%	n	%				
Mother's Attitude	5	5.8	4	47.6	4	53.6	0.00	1.228
Mother's Education	2	30.3	1	16.7	4	46.6		
Mother's Education	6	2.2	4	3.3	0	0.5		
Mother's Education	0	0	4	53.6	4	53.6	0.00	3.771
Mother's Education	3	36.4	9	10.5	4	46.6		
Mother's Economic Status	9	10.5	4	51.2	5	61.6	0.00	22.255
Mother's Economic Status	2	25.6	1	12.8	3	38.4		
Mother's Knowledge	9	10.5	2	23.3	2	33.3		
Mother's Knowledge	1	18.6	6	70.2	2	25.6	0.00	5.225
Mother's Knowledge	6	70.9	2	33.3	3	40.0		
Total	3	36.4	5	64.0	8	100.0		

study employs frequency and percentage, while bivariate data analysis uses the chi-square test with a 2x2 table at a significance level of $\alpha: 0.05$.

RESULTS

Table 1. Frequency Distribution of Respondents in Karangas Seberang Village

Variable	Category	Frequency	Percent (%)
Mother's Attitude	Good	46	53.3
	Poor	40	46.5
	High	26	30.2
Mother's Education	Medium	20	23.3
	Elementary	40	46.5
	Sufficient	53	61.6
Mother's Economic Status	Insufficient	33	38.4
	Good	29	33.7
Mother's Knowledge	Sufficient	22	25.6
	Poor	35	40.7
Incidence of Malnutrition	Yes	31	36.0
	No	55	64.0
Total		86	100

Source: Primary Data

Based on Table 1, it can be observed that out of 86 respondents, the dominant maternal attitude is categorized as "good," with 46 (53.3%) respondents. In terms of maternal education, 40 (46.5%) have elementary education. Regarding the economic status of mothers, 53 (61.6%) respondents have sufficient economic status. In relation to maternal knowledge, 35 (40.7%) respondents have poor knowledge. Lastly, concerning the incidence of malnutrition, 55 (64.0%) respondents did not experience malnutrition.

Table 2. The Relationship Between Maternal Attitude, Education, Economic Status, and Knowledge with the Incidence of Malnutrition in Toddlers (Aged 12-59 Months) in Karangas Seberang Village

Source: Primary Data

Based on Table 2, the research results indicate a significant relationship between maternal attitude, maternal education level, economic factors, and maternal knowledge with the incidence of malnutrition in toddlers aged 12-59 months in Karangas Seberang Village. According to the analysis of Table 2, out of the 86 respondents with a good maternal attitude, 5.8% experienced

malnutrition in their children, while among respondents with a poor attitude, 30.3% experienced malnutrition in their children. The statistical chi-square test results confirm a significant relationship between maternal attitude and the incidence of malnutrition in toddlers (p value = 0.000, $\alpha < 0.05$), with an odds ratio (OR) of 1.228, indicating a 1-time higher risk in mothers with a poor attitude in causing malnutrition in children.

Furthermore, out of the 86 respondents with a high level of education, 36.0% experienced malnutrition in their children, while among respondents with a low level of education, 10.5% experienced malnutrition in their children. The chi-square test results also show a significant relationship between maternal education and the incidence of malnutrition in toddlers (p value = 0.000, $\alpha < 0.05$), with an OR of 3.771, indicating a 3-time higher risk in mothers with a low level of education in causing malnutrition in children. Additionally, the analysis indicates that economic factors are also related to the incidence of malnutrition in children, with an OR of 22.551, indicating a 22.551-time higher risk in families with insufficient economic resources in causing malnutrition in children. Similarly, maternal knowledge also plays a significant role, with an OR of 5.225, signifying a 5.225-time higher risk in mothers with poor knowledge in causing malnutrition in children. These findings underscore the importance of improving maternal attitudes, education, economic factors, and knowledge in efforts to prevent malnutrition in toddlers.

DISCUSSION

Stunting is a significant nutritional issue in Indonesia, particularly among children aged 24-60 months. Stunting has long-term impacts on children's health and development, including disruptions in physical and cognitive growth. This study explores the relationship between exclusive breastfeeding history and stunting incidence in children aged 24-60 months in the working area of Telen Community Health Center. In this study, the respondents were toddlers aged 24-60 months. Based on the percentage data, it's evident that toddlers aged 24-35 months have a higher stunting

incidence rate (57%) compared to toddlers aged 48-60 months (19.4%). Mzumara et al. (2018) supports this finding by stating that age is linked to stunting, where toddlers are at a higher risk of stunting compared to children above five years old. Furthermore, the study also found that male children experience stunting more (55.6%) compared to female children (44.4%). This is consistent with the research conducted by Larasati & Wahyuningsih (2018), stating that gender determines the nutritional requirements of an individual, where males need more energy and protein than females.

Exclusive breastfeeding is a critical factor in preventing stunting in toddlers. However, the research results show that out of 72 respondents, only 35 respondents (48.6%) provided exclusive breastfeeding, while 37 respondents (51.4%) did not. This indicates that the achievement of exclusive breastfeeding in the research area has not yet reached the expected national target (80%) according to the Indonesian Ministry of Health in 2015. Exclusive breastfeeding brings various benefits for both mothers and infants. Breast milk is a natural and ideal source of nutrition for infants due to its composition that suits their needs. Additionally, breast milk can support infant growth, especially in terms of height, as the calcium in breast milk is more efficiently absorbed compared to formula milk. Factors influencing exclusive breastfeeding include maternal knowledge of exclusive breastfeeding and obstacles like maternal employment. Previous studies by Setyawati (2012) and Arifin (2012) also indicate that maternal knowledge of exclusive breastfeeding is related to actual practice. Stunting occurrence in children aged 24-60 months is the main focus of this study. The research results indicate that 36 children experienced stunting. A child's nutritional status is a result of their consumed food, and prolonged nutritional deficiency can lead to stunting. Apart from exclusive breastfeeding history, other factors influencing stunting include maternal nutritional status during pregnancy, birth weight, and birth length. Maternal nutritional status during pregnancy affects the nutrition received by the fetus,

and infants born with low birth weight are at a higher risk of stunting.

The analysis results demonstrate a significant relationship between exclusive breastfeeding history and stunting incidence in children aged 24-60 months in the working area of Telen Community Health Center. Toddlers who receive exclusive breastfeeding have a lower risk of stunting compared to those who don't. Exclusive breastfeeding provides appropriate nutrition for infants and supports their growth, especially in terms of height. Thus, with exclusive breastfeeding, toddlers have the potential to grow normally and avoid the risk of stunting. However, stunting occurrence isn't solely influenced by exclusive breastfeeding; other factors like environmental hygiene and sanitation also play a role. Infections caused by an unclean environment can hinder nutrient absorption and lead to stunting.

CONCLUSIONS

The research results indicate that there is a relationship between maternal education, economic factors, and maternal knowledge with the incidence of malnutrition in toddlers (aged 12-59 months) in Karangany Seberang Village. In the analysis using the chi-square statistical test, it was found that the p value for each variable is 0.000, which is smaller than the α (alpha) value of 0.05. This means that the results show a significant relationship between maternal education, economic factors, and maternal knowledge with the occurrence of malnutrition cases in toddlers. Therefore, a high level of education, sufficient economic conditions, and good knowledge of nutrition among mothers can play a crucial role in preventing malnutrition problems in children in Karangany Seberang Village.

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