

The Behavior and Knowledge Contribution on Preventing Lack of Nutrition in Babies

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Abstract

Based on WHO data in 2019, approximately 7.7% (52 million) of children under 5 years of age are malnourished. Indonesia is one of the countries in the world with a high rate of child malnutrition. In 2021, malnutrition among children reached 21.6%, while in East Kalimantan it reached 10.80% in children aged 0 to 23 months and 14.7% in children aged 0 to 59 months. There was a program from the health center to resolve this case, but in 2022, 92 children out of 742 children measured by weight per age (BB/U) were found to be malnourished. This study aims to analyze the relationship between knowledge and behavior as risks of malnutrition. This study was descriptive research using a cross-sectional design. This study was conducted in Manunggal Jaya Village, Kutai Kertanegara, East Kalimantan, involving 86 children (12-59 months) who were sorted by accidental sampling.

The results of this study showed that 31 children out of 86 were malnourished. The bivariate analysis showed that there was a significant value with a p-value of 0.000 for behavior and knowledge in malnourished children. Low maternal behavior carries a 1.2 times risk of malnutrition in children, while low maternal knowledge carries a 5.2 times risk of malnutrition in children.

The knowledge and behavior of mothers are very important in preventing malnutrition in children. Mothers who have good knowledge are not enough because knowledge does not work without action. Mothers who have good knowledge must apply that knowledge to make good food for their children.

Keywords: *Malnutrition, Knowledge, Behavior*

INTRODUCTION

Malnutrition is one of the trending problems that needs to be resolved because malnutrition in children has a high risk of decreasing national welfare. The World Health Organization records that 7.7% (52 million) of children under 5 years of age suffer from malnutrition. In Indonesia, child malnutrition reaches 21.6%, while in East Kalimantan it reaches 10.8% of children aged 0-23 months and 14.7% of children aged 0-59 months (

East Kalimantan has a high rate of child malnutrition. In 2019, it reached 3.29%, increasing to 3.80% in 2020 (Dinkes Kabupaten Kalimantan Timur, 2020) .

Malnutrition in toddlers affects many aspects of children. Children with malnutrition have a negative impact on physical growth and development. Based on studies, malnutrition causes disability, intelligence problems, and mental failure. Children with malnutrition must be handled properly to prevent a high risk of illness and even death in children (Dipasquale et al., 2020; Saunders & Smith, 2010)

Previous studies have shown that there are many risk factors for malnutrition in children, including the mother's knowledge of nutrition and feeding rules, education, salary, and environmental sanitation. There has been debate regarding the results of studies on knowledge, with some studies saying that there is no relationship between the mother's knowledge and malnutrition, but there is a high risk of behavior related to malnutrition. Therefore, researchers want to analyze the relationship between the mother's knowledge and behavior on malnutrition .

MATERIALS AND METHODS

This study was descriptive correlation with cross-sectional design. The purpose of this study was to analyze the relationship between behavior and knowledge on malnutrition in babies (12-59 months) in Manunggal Jaya Village in 2023. The population of this study consisted of all mothers who had babies aged 12 to 59 months in January-February 2023. The sample technique used was

accidental sampling, involving 86 children. The researcher used a questionnaire to measure the behavior and knowledge of the mothers.

RESULTS

Univariate Results

Table 1.1
Frequency Distribution of Respondent Characteristics

Variable		Total	Percentage
Behavior	Good	46	53.3
	Bad	40	46.5
Knowledge	Good	29	33.7
	Medium	22	25.6
	Poor	35	40.7
Malnutrition			
	Yes	31	36.0
	No	55	64.0
Total		86	100

From the table, mothers with good behavior account for approximately 53.3% and mothers with poor knowledge account for approximately 40.7%, with a total of 64% of children suffering from malnutrition.

Bivariate Results

Table 1.2
The Relationship Between Behavior and Knowledge on Malnutrition

Variable	Malnutrition				N	%	p Value	OR
	Yes	%	No	%				
Behavior								
Good	5	5.8	41	47.7	46	53.5	0.000	1.228
Bad	26	30.2	14	16.3	40	46.5		
Knowledge								
Good	9	10.5	20	23.3	29	33.7		
Medium	16	18.6	6	7.0	22	25.6	0.000	5.225
Bad	6	7.0	29	33.7	35	40.0		
Total	31	36.0	55	64.0	86	100		

Based on the table data, there were 26 (30.2%) malnourished babies from 40 babies with mothers who had bad behavior and 5 malnourished babies from 46 babies with mothers who had good behavior, with a p-value of 0.000 and an OR of 1.228, meaning that there was a significant value of maternal behavior with malnourished babies and that bad behavior had a 1.2 times greater risk of having a malnourished baby.

There were 9 malnourished babies out of 29 babies with mothers who had good knowledge, 16 malnourished babies out of 22 babies with mothers who had medium knowledge, and 6 malnourished babies out of 35 babies with mothers who had poor knowledge. There was a significant relationship between knowledge and malnourished babies with a p-value of 0.000 and an OR of 5.2, meaning that knowledge has a 5 times higher risk of babies being malnourished.

DISCUSSION

This study showed that mothers with poor knowledge, out of 35 mothers, only 6 babies were malnourished, while mothers with moderate knowledge had more malnourished babies. Out of 86 mothers, only 46 mothers had good behavior. This means that mothers with good knowledge did not have good behavior. This result supports previous research which said that knowledge has no relationship with babies' nutrition .

Good behavior does not come solely from good knowledge; good behavior can be influenced by many factors such as culture, education, and social environment. Good knowledge without good behavior does not resolve infant malnutrition.

CONCLUSION

Malnutrition can be resolved not only through good knowledge but also good behavior. Mothers who have good knowledge should apply their knowledge in daily life to make the best food for their babies.

SUGGESTIONS

From this study, the researcher hopes that these results can be used as a reference for future studies.

REFERENCE

Al-Shookri, A., Al-Shukaily, L., Hassan, F., Al-Sheraji, S., & Al-Tobi, S. (2011). Effect of Mothers Nutritional Knowledge and Attitudes on Omani Children's Dietary Intake. *Oman Medical Journal*, 26

East Kalimantan District Health Office. (2020). *Health Profile of East Kutai District in 2020*.

Dipasquale, V., Cucinotta, U., & Romano, C. (2020). Acute Malnutrition in Children: Pathophysiology, Clinical Effects and Treatment. *Nutrients*, 12 (8). <https://doi.org/10.3390/nu12082413>

Kisac, I. (2014). The Effects of Mother's Nutritional Knowledge on Attitudes and Behaviors of Children about Nutrition. *Pro-Soc. Behav. Sci*, 116.

Mutingah, Z., & Rokhaidah, R. (2021). *The relationship between mothers' knowledge and attitudes and stunting prevention behaviors in toddlers*. *Jurnal Keperawatan Widya Gantari Indonesia*, 5(2), 49-57. 5(2), 49–57.

Prasetyo, Y. B., Permatasari, P., & Susanti, H. D. (2023). The effect of mothers' nutritional education and knowledge on children's nutritional status: a systematic review. *International Journal of Child Care and Education Policy*, 17 (1

RI, K. K. (2019). *Indonesia Health Profile 2019*.

Sahroni, Y. A., Trusda, S. A. D., & Romadhona, N. (2020). Mothers' Knowledge Level about Nutritional Intake is Not Related to the Degree of Stunting in Toddlers. *Journal of Health & Science Integration*, 2 (2), 145–149. <https://doi.org/10.29313/jiks.v2i2.5870>

Saunders, J., & Smith, T. (2010). Malnutrition: causes and consequences. *Clinical Medicine (London, England)*, 10 (6), 624–627. <https://doi.org/10.7861/clinmedicine.10-6-624>

Sukandar, D., Khomsan, A., Anwar, F., Riyadi, H., & Mudjajanto, E. S. (2015). Nutrition Knowledge, Attitude, and Practice of Mothers and Children Nutritional Status Improved after Five Months Nutrition Education Intervention. *International Journal of Sciences: Basic and Applied Research (IJSBAR) International Journal of Sciences: Basic and Applied Research*, 23 (2