

THE INFLUENCE OF DIET, PARENTING, AND PHYSICAL ACTIVITY ON TODDLER NUTRITIONAL STATUS AT BUNGKU HEALTH CENTER

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ABSTRACT

The high incidence of malnutrition in toddlers is caused by an unbalanced diet, poor parenting, and a lack of physical activity, which has an impact on the suboptimal growth and development of toddlers. The purpose of this study was to determine the effect of diet, parenting, and physical activity on nutritional status in toddlers. This study used a correlational analytical design with a cross-sectional approach. The population consisted of 53 respondents with a sample of 47 respondents, selected using a simple random sampling technique. Data were collected through the use of questionnaires, and the analysis used multivariate regression statistical tests. The results showed that most respondents had a poor diet (70.2%), almost all applied democratic parenting (87.2%), most did toddler physical activities well (95.8%), and the majority had poor nutritional status (74.4%). There was a significant relationship between diet patterns and nutritional status of toddlers at the Bungku Health Center, Morowali Regency ($p = 0.001 < 0.05$). However, no significant relationship was found between parenting methods ($p = 0.434 > 0.05$) and toddler physical activity ($p = 0.682 > 0.05$) with the nutritional status of toddlers in the same location. Diet patterns, parenting methods, and physical activity are among the factors that influence nutritional status in toddlers, thus having an impact on child growth and development.

Keywords : Diet Pattern, Parenting, Physical Activity, Toddler Nutritional Status

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INTRODUCTION

Toddlers, or preschoolers, are children aged one to five years. They typically experience growth spurts, which are often accompanied by increased food intake and appetite (Sulistyoningsih, 2011). Growth and development during toddlerhood occur very rapidly so they require a sufficient supply of food and nutrition (Tarigan et al., 2021). Physical growth is commonly used to assess individual and population nutritional status, so parents should monitor their

toddlers' growth to understand their nutritional condition (Khomsan, 2003).

Childcare involves the family's support to ensure optimal child development. Caregiver behaviors, including affection, hygiene, feeding, and closeness, influence a child's physical, social, and mental growth (Rosmana, 2003). Childcare is closely linked to feeding, impacting children's nutritional status. Family feeding practices and eating habits significantly influence children's nutrition (Yusuf, 2012). Children often mimic the eating habits of parents

and siblings. A mother's nutritional knowledge and ability to prepare family meals according to taste and budget are essential (Ngaisyah, 2015).

The prevalence of malnutrition in toddlers in Indonesia according to the results of the 2015 Nutritional Status Monitoring (PSG) carried out by the Indonesian Ministry of Health, in 2015 was 4.7%, then in 2016 the malnutrition rate fell to 3.8%, and fell again in 2017 to 3.4% (Kementrian Kesehatan RI, 2017). Data from the Central Sulawesi Provincial Health Office in 2015, recorded the prevalence of toddlers with malnutrition at 1.2%, undernutrition at 12.3%, good nutrition at 82.2%, and overnutrition at 4.3%. From these data, it can be seen that in Central Sulawesi Province there are still many toddlers whose nutritional status is below the sufficient line (Dinas Kesehatan Propinsi Sulawesi Tengah, 2015).

Based on data from the Nutritional Status Monitoring (PSG) in 2015, shows that the number of toddlers in the Bungku Health Center area, Morowali Regency, was 1802 toddlers who were weighed, the results showed that 2% of toddlers were overweight, 77% of toddlers with good nutrition, 5% of toddlers with poor nutrition, and 16% of toddlers with undernutrition (Dinas Kesehatan Propinsi Sulawesi Tengah, 2015).

From the results of a preliminary study conducted by researchers in the Bungku Health Center area of Morowali Regency, data was obtained that of the 8 mothers who had toddlers with malnutrition, 4 of them were because the children were cared for by caregivers who were not parents, and the frequency of eating was 2x a day with the same food menu as a third of the adult portion, 1 toddler was cared for by his own parents but excessive physical activity (playing)

so that his diet pattern was irregular, while the other 3 children had a history of infectious diseases such as coughs, ARI and diarrhea (Nurjaman et al., 2024).

The mother's education and nutritional knowledge greatly influence childcare patterns. Malnutrition can often be prevented if mothers have adequate nutrition knowledge (Ridwan, 2010). The minimum knowledge that a mother must know is about nutritional needs, how to feed, and the schedule for feeding toddlers so that it will ensure that the child can grow and develop optimally. In families with low levels of education and knowledge of the mother, children often have to be satisfied with whatever food is available that does not meet the nutritional needs of toddlers (Supariasa et al., 2013)

The impacts caused by malnutrition in toddlers include low immunity so that the body is easily attacked by infectious diseases, suboptimal growth and development of toddlers, physical and cognitive limitations, and decreased intelligence levels (Linda Dwijayanthi, 2022). Efforts made to reduce malnutrition include providing counseling on toddler nutrition, in addition, it is hoped that parents can participate and realize the Nutrition Aware Family (KADARZI) through socialization of healthy and balanced nutrition and providing good parenting methods. Seeing the phenomena and background above, researchers are interested in researching the influence of diet patterns, parenting methods, and physical activity on nutritional status in toddlers at the Bungku Health Center, Morowali Regency.

METHODS

This research employs correlational analysis with a cross-sectional design. The population consists of 53

respondents, with a sample of 47 selected randomly. Data was gathered using questionnaires and analyzed using Multivariate Regression tests (Notoatmodjo, 2022).

RESULT

a. Diet Patterns in Toddlers

Table 1 Respondent Characteristics Based on Toddler Diet Patterns at Bungku Health Center, Morowali Regency

No	Diet pattern	Frequency	Percentage (%)
1	Good	14	29,8
2	Not enough	33	70,2
Amount		47	100

The results of the study showed that the majority of respondents had poor dietary patterns, namely 33 respondents (70.2%).

b. How to care for toddlers

Table 2 Respondent Characteristics Based on Toddler Parenting Patterns at Bungku Health Center, Morowali Regency

No	How to raise a toddler	Frequency	Percentage (%)
1	Democratic	41	87,2
2	Authoritarian	2	4,2
3	Pamper	4	8,6
4	Abandoner	0	0
Amount		47	100

The study's findings indicated that nearly all 47 respondents employed democratic parenting styles, with 41 respondents (87.2%) using this approach.

c. Toddler physical activity

Table 3 Respondent Characteristics Based on Toddler Physical

Activity at Bungku Health Center, Morowali Regency.

No	Physical activity	Frequency	Percentage (%)
1	Good	45	95,8
2	Not enough	2	4,2
Amount		47	100

The study results indicated that 45 out of 47 respondents (95.8%) reported good physical activity in toddlers.

d. Nutritional Status of Toddlers

Table 4 Respondent Characteristics Based on Toddler Nutritional Status at Bungku Health Center, Morowali Regency

No	Nutritional status	Frequency	Percentage (%)
1	Not enough	35	74,4
2	Good	12	25,6
3	More	0	0
Amount		47	100

The study found that among 47 respondents, most had inadequate nutritional status, with 35 respondents (74.4%).

Table 5 Statistical Test Results

Coefficients ^a					
Unstandardized Coefficients					
Standardized Coefficients					
t					
Sig.					
Model					
B					
Std. Error					
Beta					
1	(Constant)	2.401	.358	6.709	.000
	Diet Pattern	-.553	.119	-.580	.000
	Parenting Method	-.073	.093	-.098	.434
	Physical activity	-.111	.269	-.051	.682

a. Dependent Variable: Nutritional status

Based on the multivariate regression statistical test using SPSS, the results showed that there was an influence of diet patterns on the nutritional status of toddlers at the Bungku Health Center, Morowali Regency, with a p-value smaller than $\alpha 0.05$ ($0.001 < 0.05$). While the influence of parenting methods on the nutritional status of toddlers at the Bungku Health Center, Morowali Regency did not influence with a p-value greater than $\alpha 0.05$ ($0.434 > 0.05$), and the influence of toddler physical activity on the nutritional status of toddlers at the Bungku Health Center, Morowali Regency also did not influence with a p-value greater than $\alpha 0.05$ ($0.682 > 0.05$).

DISCUSSION

Based on the multivariate regression statistical test using SPSS, the results showed that there was an influence of diet patterns on the nutritional status of toddlers at the Bungku Health Center, Morowali Regency, with a p-value smaller than $\alpha 0.05$ ($0.001 < 0.05$). While the influence of parenting methods on the nutritional status of toddlers at the Bungku Health Center, Morowali Regency did not influence with a p-value greater than $\alpha 0.05$ ($0.434 > 0.05$), and the influence of toddler physical activity on the nutritional status of toddlers at the Bungku Health Center, Morowali Regency also did not influence with a p-value greater than $\alpha 0.05$ ($0.682 > 0.05$).

The definition of dietary patterns according to (Handajani et al., 2010) The behavior of individuals or groups in selecting food encompasses their attitudes, beliefs, and choices. Suhardjo defines dietary patterns as the methods by which individuals or groups select and consume food influenced by physiological, psychological, cultural, and social factors. Additionally, parenting

refers to how parents educate and nurture their children, shaped by various influences, including cultural aspects, religion, habits, beliefs, and the personalities of the parents or caregivers (Ayun, 2017). Nutritional status reflects a balanced state represented by specific variables. (Lanoh et al., 2015).

The study findings indicated that inadequate dietary habits can influence toddlers' nutritional status, which stems from limited parental knowledge, as evidenced by the fact that most respondents have only elementary school education. Although the respondents' parenting methods are good, they do not know how to provide a good and balanced diet pattern will affect the nutritional status of toddlers. This is in line with the research of (SA Siwi, 2015) that there is no relationship between parenting methods and nutritional status in toddlers aged 2-5 years at Posyandu Abadi 9, Gonilan Village, Surakarta. According to (Supariasa et al., 2013), several things affect nutritional status directly or indirectly. Directly are nutrient intake and infectious diseases. In addition, indirectly, there are several other factors, namely sufficient food supplies, maternal education, knowledge of nutrition and health and health services, family income level, or socio-economic status (Indah Iswanti et al., 2023). The minimum knowledge that a mother must know is about nutritional needs, how to feed, and feeding schedules for toddlers so that it will ensure that children can grow and develop optimally (Lestari & YK, 2014).

The results of the study showed that good physical activity and poor nutritional status were due to the lack of an unbalanced diet; high physical activity but not supported by a good diet will cause poor nutritional status in toddlers; in addition, other factors directly affect

nutritional status, namely infection. Some toddlers have a history of infectious diseases such as coughs, diarrhea, and ARI. As a result of the disease, nutritional intake is reduced. We all know that the need for calories in the body when someone is infected with a disease increases, while the supply of food from outside the body is hampered. Even though a toddler gets enough food, and good physical activity toddlers but often gets infectious diseases such as diarrhea, which can have fatal consequences, namely a lack of protein energy.

Therefore, it is expected that mothers of toddlers pay attention to the intake of nutrients in toddlers so that there is no nutritional deficiency. For officers, especially midwives, it is expected that they can be more active in providing counseling and health education about the nutritional status of toddlers (Santoso & Ranti, 2009).

CONCLUSION

Most of the respondents at the Bungku Health Center, Morowali Regency, Central Sulawesi Province, had a poor diet (70.2%), implemented democratic parenting methods (87.2%), reported good physical activity among toddlers (95.8%) and had poor nutritional status (74.4%).

There is an influence between dietary patterns on the nutritional status of toddlers but there is no influence of parenting methods on the nutritional status of toddlers and there is no influence of toddler physical activity on the nutritional status of toddlers.

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