Parents' Knowledge and Skills in Feeding, Children's Response to Feeding on the Nutritional Status of Toddlers with Malnutrition Problems

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ARTICLE INFO

Article history:
Received: 10th October 2023
Revised: 22nd November 2023
Accepted: 10th December 2023

Keywords:
Malnutrition
Parental feeding skill
Parental knowledge
Response of feeding
Stunted children

ABSTRACT

Malnutrition, notably stunting, significantly impacts children's health and development, particularly during the first 1000 days of life. The prevalence of stunting in Indonesia is notably high, affecting approximately 30% of children under five in 2019, with Kediri Regency reporting a prevalence rate of 10.23% in 2022. The aim of this research is to analyze the influence of parental knowledge and skills in improving nutritional status as well as children's responses to feeding on the nutritional status of children with malnutrition problems. The research design used in this research is a pre-experimental one group pre-test post-test design. The sampling technique was total sampling with respondents in this study being 22 underprivileged families with toddlers who had nutritional problems and stunting in the Gempolan Village area. The problem of malnutrition in toddlers is quite high with an average Z Score of -2.42 (BB/U), -2.46 (TB/U), and -1.53 (BB/TB). Pre-test data on parents' knowledge and ability to fulfill children's nutrition shows that 68% have fairly good knowledge and skills and only 9% have good knowledge and skills. In this study, 50% of respondents had a fairly good response to feeding. The data highlights a significant problem of malnutrition in toddlers, characterized by low Z-Scores indicating undernutrition and growth stunting. These low Z-Scores pose substantial health risks, including compromised growth, weakened immunity, and potential long-term health issues. Parental knowledge and skills in nutrition are crucial, with most parents having reasonable knowledge levels. However, feeding problems persist, contributing to food rejection by children, exacerbating malnutrition.

I. Introduction

Nutritional problems in infants and toddlers are still one of the main problems for children's health in developing countries, including Indonesia. Nutrition is the main indicator of the health of babies and children which determines growth and development, especially in the first 1000 days of life. One of the nutritional problems in children is stunting. Stunting or poor linear growth (height-for-age score) has become a global child health problem. At least 22% of the world's children (151 million) under the age of 5 experienced stunting in 2017. More than half of them came from Asia (Beal et al., 2018; GIYANINGTYAS et al., n.d.).

The prevalence of stunting in Indonesia itself is quite high, 30-30% of children under the age of 5 in Indonesia experienced stunting in 2019. The prevalence of stunting in Kediri Regency is still quite high. In 2022, the prevalence of stunting will be 10.23% of 7,752 children under five. Children with stunting will be at greater risk of increased morbidity, mortality, and suboptimal cognitive and motor development. The problem of stunting is

caused by various factors, one of which is chronic malnutrition during the first 1000 days of life, including malnutrition during pregnancy. The problem of stunting will have an impact on children's health in the future. Research shows that stunting will reduce cognitive and motor development and increase children's vulnerability to various diseases due to low immune systems (Giyaningtyas & Hamid, 2019; Laksono et al., 2022; Zaleha & Idris, 2022).

Factors causing stunting vary from socio-economic problems, maternal nutrition during pregnancy, and baby health problems to lack of nutrition in babies. These multiple factors are determinants of suboptimal growth which is followed by child development problems. The nutritional intake factor which is less than a child's daily nutritional needs coupled with infectious diseases which can easily attack children is the main factor in the emergence of malnutrition problems including stunting (Laksono et al., 2022; Vaivada et al., 2020).

The prevalence of stunting and malnutrition in Kediri Regency in 2022 is still quite high, amounting to 10.23% of 7,752 children under five. Nutritional problems, including stunting, are still one of the biggest problems among infants and toddlers. This condition will have a big impact on children's welfare due to problems with decreased cognitive and motor development and increasing children's vulnerability to various diseases due to low immune systems. The factors that cause nutritional problems and stunting vary, but economic problems are one of the biggest risk factors. The inability of families to provide nutritious food is one of the factors of nutritional problems in children. Apart from economic problems, cross-sectoral cooperation is urgently needed to accelerate the handling of nutrition and stunting problems. Monitoring the management of stunted children is less than optimal so accelerating the reduction of stunting is still experiencing problems. Apart from that, education and support systems are still very lacking, making mothers and their families feel like they are struggling alone (Beal et al., 2018; Laksono et al., 2022; Zaleha & Idris, 2022).

This problem can hamper the stunting management process due to the lack of optimal regular education received by mothers to overcome children's nutritional problems. Apart from that, stress from the caregiver also results in the mother's parenting patterns not being optimal. These various problems show that comprehensive efforts are needed to accelerate the reduction of stunting and other nutritional problems so that children's growth and development are more optimal (Darwis et al., 2021; Giyaningtyas & Hamid, 2019; Vaivada et al., 2020).

II. Methods

The research design used in this research is a pre-experimental one group pre-test post-test design . The sampling technique was total sampling with respondents in this study being 22 underprivileged families with toddlers who had nutritional problems and stunting in the Gempolan Village area.

III. Results and Discussion

Table 1. Characteristics of Toddlers

Characteristic		N	%
Age	24-36 month	6	27%
	36-48 month	7	32%
	48-60 month	9	41%
Sex	Male	15	68%
	Female	7	32%

Table 2. Pre-Test Anthropometric Data for Toddlers

Item		N	Mean	Min	Max
Weight		22	11,21	9,0	12,7
Height		22	89,23	79,7	99
Z Score	W/A	22	-2,42	-3,0	-2
	H/A	22	-2,46	-3,4	-1,2
	W/H	22	-1,53	-2,6	-7

Table 3. Pre-Test Data on Parental Knowledge & Ability and Child's Response to Feeding

Item		N	%
Parents' Knowledge & Ability in Feeding	Very Good	0	0%
	Good	2	9%
	Enough	15	68%
	Less	5	23%
Feeding Response	Very Good	0	0%
	Good	4	18%
	Enough	11	50%
	Less	7	32%

The data above shows that the problem of malnutrition in toddlers is quite high with an average Z Score of -2.42 (BB/U), -2.46 (TB/U), and -1.53 (BB/TB). A low Z-Score value is a strong indicator of child health problems. This could reflect undernutrition, stunted growth, or other nutritional problems that have the potential to threaten children's health and development. A low Z-Score value, especially in the categories of weight for age (WW/U), height for age (TB/U), or weight for height (WW/TB), indicates that the child is far below normal growth limits. A low Z-Score value is a signal that the child is at risk of experiencing a number of serious health problems. Malnutrition in children can hinder physical growth and cognitive development, weaken the immune system, and increase the risk of infectious diseases and chronic diseases in adulthood. This condition can disrupt a child's quality of life and cause long-term health burdens. Parents and society have an important role in dealing with the problem of low Z-Scores in children. They need to support childcare efforts and ensure that children's nutritional intake is adequate. Education about the importance of balanced nutrition, regular growth monitoring, and access to quality health services are key in dealing with this problem(Bari et al., 2019; Haque et al., 2022; Olsen et al., 2020).

Pre-test data on parents' knowledge and ability to fulfill children's nutrition shows that 68% have fairly good knowledge and skills and only 9% have good knowledge and skills. This shows a very significant relationship between knowledge and skills in fulfilling children's nutrition in pre-prosperous families. This influences the child's current nutritional status beyond the family's economic problems. The nutritional knowledge possessed by parents has a significant impact on children's nutritional status. This is a major factor in maintaining children's growth and development, especially in underprivileged families where resources may be limited. Parents' nutritional knowledge influences decisions about the type of food served to children, family eating patterns, and understanding of the importance of nutrition in children's growth and development. Parental nutritional knowledge is an important factor in maintaining children's nutritional status, especially in underprivileged families. Increasing nutritional knowledge in the family involves appropriate nutritional education, which can involve a comprehensive nutritional education program which is very

necessary (Ghosh, 2020; Lindberg et al., 2022; Maharani et al., 2020; Raji et al., 2020).

The problem of feeding children is also one of the inhibiting factors in fulfilling children's daily nutrition. This problem can include the child's internal and external problems such as illnesses suffered by the child or other complaints such as a decrease in appetite to the point that the child refuses to eat. In this study, 50% of respondents had a fairly good response to feeding. So there are still feeding problems that make it difficult for respondents to achieve balanced nutritional status. Children with poor nutritional status often have a rejection of food, especially healthy and nutritious food. This can be caused by a variety of factors, including appetite disorders, physical discomfort, or feelings of stress. Refusal of food by children with poor nutritional status can lead to poor eating patterns, with insufficient nutritional intake. This exacerbates the problem of malnutrition and hinders recovery. Food refusal by children can also be a psychological challenge for parents. They may feel anxious or frustrated in trying to help their child get adequate nutrition. In handling malnutrition status, collaboration with health professionals, a patient approach, and nutritional education are important steps. With proper attention and care, children with poor nutritional status have a chance for a better recovery and a brighter future. In this regard, collaborative efforts between the government, community organizations, and the health sector are essential to achieving this goal (Jumiatun, 2019; Listiana et al., 2020; A. Rahmawati et al., 2020; S. Rahmawati, 2020; Rudhiati et al., 2020).

IV. Conclusion

The data highlights a significant problem of malnutrition in toddlers, characterized by low Z-Scores indicating undernutrition and growth stunting. These low Z-Scores pose substantial health risks, including compromised growth, weakened immunity, and potential long-term health issues. Parental knowledge and skills in nutrition are crucial, with most parents having reasonable knowledge levels. However, feeding problems persist, contributing to food rejection by children, exacerbating malnutrition. Addressing these challenges requires collaboration with healthcare professionals, patient-centered approaches, and effective nutritional education. Achieving better outcomes for children with poor nutritional status necessitates collective efforts involving governments, community organizations, and the healthcare sector.

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