

EDUCATION ON FEEDING INFANTS AND CHILDREN ON KNOWLEDGE AND BEHAVIOR OF MOTHERS

Retno Palupi Yonni Siwi¹, Heppy Indrawati², Miftakhur Rohmah³, Candra Wahyuni⁴, Intan Fazrin⁵, Riza Tsalatsatul Mufida⁶

^{1,2,3,4,5,6} Department of Midwifery, Faculty of Nursing and Midwifery, STRADA Indonesia Institute of Health Science, Indonesia

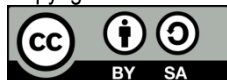
Corresponding author : palupi@strada.ac.id

ABSTRACT

The high incidence of wasting is caused by lack of nutrition in children, thus affecting the growth and development of children. The purpose to analyze feeding education in infants and children on the knowledge and behavior of mothers in feeding wasting children. The design of this study was pre-experimental with a *one group pretest posttest design* approach, the sample was mothers of wasting toddlers as many as 30 respondents, using purposive sampling techniques. The independent variable was infant and child feeding education and the dependent variable was knowledge and behavior, using extension event unit instruments, leaflets and questionnaires, data analysis using *Paired T-test*. The increase in knowledge was marked by a difference in the total mean value of 23.87 and maternal behavior and a total difference in the mean value of 21.7 after education. The results of statistical tests obtained p-values of $0.000 < 0.05$ and a fairly strong correlation of 0.568 knowledge variables and 0.413 on behavioral variables means that there is a strong enough influence between education on knowledge and behavior. Counseling activities can help mothers gain understanding and practical skills in infant and child feeding practices so as to prevent wasting.

Keywords: Behavior, education, knowledge, PMBA, wasting

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INTRODUCTION

Malnutrition is a major health problem in children under five because it can hinder the growth and development process as well contribute to child morbidity and mortality. In general Malnutrition in children is divided into wasting, stunting, and overweight (Prawesti et al., 2018). Currently, the focus of public health services at Community Health Centers is on the problem of wasting. Wasting is a condition where a toddler experiences acute malnutrition, namely the toddler's weight is not proportional to his height, namely the z-score value is $<-2SD$. WHO classifies wasting in children as severe or moderate based on weight for height (Nafista et al., 2023). According to WHO stunting is a developmental disorder in children caused by poor nutrition, terrecurring infections, or psychosocial stimulation that does not adequate, these causal factors are influenced by inappropriate parenting at 1000 HPK (Zakiah et al., 2023).

Based on data from the Ministry of Health through the Indonesian Nutritional Status Study (SSGI), the prevalence of wasting in Indonesia in 2022 will increase by 7.7% compared to the prevalence in 2021 of 7.1%. Apart from that, the prevalence of underweight also shows an increase from 2019 of 16.3% to 2022 of 17.1%. It is feared that this increase in prevalence will continue to increase and will not be able to achieve the target of reducing wasting in the world by 2025 by 5% (Rizkia et al., 2024). The prevalence of wasting in East Java Province is 7.2%, while the prevalence of wasting in Kediri Regency is 7.0% (Wulandari & Kumalasari, 2024).

The results of a preliminary study conducted by researchers in the Tarokan Community Health Center Working Area with interviews with 10 mothers of toddlers indicated wasting, where it was found that 7 (70%) mothers of wasting toddlers said that they did not know about the knowledge and practice of feeding babies and children correctly.

There are two factors that influence nutritional status, namely direct and indirect factors. Direct factors include the quality and quantity of food consumed and infectious diseases, while indirect factors consist of knowledge, environmental sanitation, socio-economics and income (Anugerah & Yusuf, 2023). If these indirect factors are not

immediately identified and addressed quickly, they will worsen nutritional status, which at first is just wasting and can lead to stunting (Nurlianih & Amir, 2023).

Toddlers aged 0-59 months are a vulnerable group for nutritional problems in Indonesia. This is because when toddlers enter this age they need nutritional intake in the right amount for growth and development. Mistakes in fulfilling nutritional intake will have a negative impact on growth and development as adults. The risks posed when toddlers are malnourished include a decrease in IQ and immunity, the emergence of mental and emotional health problems and failure to thrive (Fitri et al., 2024).

Feeding babies and children is knowledge and skills consisting of recommendations for good and appropriate food for pregnant women and toddlers, correct breastfeeding techniques and monitoring the child's growth and development process with an emphasis on the principles of adult education which are sought and aimed at increasing knowledge and community skills to be able to overcome nutritional problems independently (Rahmuniyati et al., 2021). Therefore, in connection with the above problems, researchers will conduct a nutritional education analysis to determine the relationship between parents' knowledge and behavior regarding the practice of feeding infants and children and wasting nutritional status in the Tarokan Community Health Center working area.

METHOD

The design of this research is pre-experimental with a one group pre-post test design approach. The population in this study was all mothers of toddlers, totaling 51 respondents, the total sample was 30 respondents using purposive sampling. The independent variable in this research is education on feeding infants and children. The dependent variables in this research are mother's knowledge and behavior. This research was carried out in Kaliboto village, Tarokan District, Kediri Regency. In this study, The questionnaire was adopted from previous research were given to mothers of toddlers in Kaliboto village, Tarokan Community Health Center working area, Tarokan District, twice, before and after being given counseling which aimed to

determine mothers' knowledge and behavior regarding the practice of feeding babies and children with wasting incidents. The data collection procedure carried out was as follows: identifying respondents according to the inclusion criteria; the researcher explains the research procedures, research objectives and provides an informed consent form; researchers distributed pre-test sheets to respondents; researchers provide counseling; researchers distributed post test sheets; after the data is collected, check and complete the data; processing and analyzing research results; then discuss and draw conclusions from the research results, data analysis using Paired T-test.

RESULTS

Table 1 Respondent Characteristics (n-30)

Characteristics of responden	n	%
Age		
< 20 years	20	66,7
20-35 years	9	30
> 35 years	1	3,3
Education		
Elementary school	2	6,7
Junior high school	9	30
Senior high school	18	60
College	1	3,3
Work		
Self-employed	13	43,3
Private sector employee	1	3,3
Housewife	16	53,4
Total	30	100

Based on table 1, the characteristics of the respondents show that the majority of respondents are < 20 years old (66.7 %), most have a senior high school education (60 %), most work as housewives (53,4 %).

Table 2 Variable Mother's Knowledge about Feeding Infant and Children (n-30)

Knowledge of respondent	Pre-test		Post-test	
	n	%	n	%
Good	4	13,3	27	90
Not good	26	86,7	3	10
Total	30	100	30	100
	Mean	1,13	Mean	1,9

Based on table 2, it shows that almost all respondents before being given education had knowledge in the not good category, namely 26 respondents (86,7%). After being given education, almost all respondents had knowledge in the good category, namely 27 respondents (90%).

Table 3 Variable Mother's Behavior about Feeding Infants and Children (n-30)

Behavior of respondent	Pre-test		Post-test	
	n	%	n	%
Appropriate	4	13,3	26	86,7
Inappropriate	26	86,7	4	13,3
Total	30	100	30	100
	Mean	1,13	Mean	1,87

Based on table 3, it shows that almost all respondents before being given education had behavior in the inappropriate category, namely 26 respondents (86,7%). After being given education, almost all respondents had behavior in the appropriate category, namely 26 respondents (86,7%).

Table 4 Paired T-Test of Differences in mothers' knowledge before and after being given education about feeding infants and children

Knowledge			
Pre Test (mean)	Post Test (mean)	Corellation	p-Value
60,56	84,43	0,568	0,000

Based on table 4, it can be concluded that the difference between the mean pre test and post test results is 23.87, so this indicates an increase in results after being given education on feeding babies and children. This data also has a correlation which is quite strong as proven by the corellation result of 0.568. Apart from that, the mother's knowledge before and after counseling was obtained with a p-value of 0.000 < 0.05 so it can be concluded that there is an influence of providing education on feeding babies and children on the mother's level of knowledge.

Table 5 Paired T-Test of Differences in mothers' behavior before and after being given education about feeding infants and children

Pre Test (mean)	Post Test (mean)	Behavior	
		Corellation	p-Value
57,56	79,26	0,413	0,000

Based on table 5, it can be concluded that the difference between the mean pre-test and post-test results is 21.7, so this indicates an increase in results after being given education on feeding babies and children. This data also has a fairly strong correlation as evidenced by the correlation result of 0.413. Apart from that, the mother's behavior before and after counseling was obtained with a p-value of $0.000 < 0.05$ so it can be concluded that there is an influence of providing education on feeding babies and children on the mother's level of behavior.

DISCUSSION

Knowledge of Mothers of Toddler Wasting

From the results of research on univariate analysis of the knowledge variable, it is known that when the pre-test was carried out there were only less than 20% of people who answered the questions correctly. After being given education on feeding babies and children, there was an increase in knowledge as evidenced by 27 (90%) respondents have answered the post test correctly and have a score above the specified average.

The results of this outreach activity are: the result was an increase in knowledge significantly from 30% to 78%. Besides that there was also a marked increase in maternal understanding with the mother actively asking in-depth questions about the material presented includes alternative proteins animal products that are easy and cheap, what's the technique good and safe cooking, whatever the menu is recommended and easy to make, regarding eating problems in children are movement shut up. Extension activities in Juwangi sub-district amounting to 14 targets. On target before counseling is carried out and there are results pretest by 30%, and after counseling, posttest obtained as much as possible 78%. From these results can be concluded to have occurred

increasing the knowledge of mothers of toddlers Stunting-Wasting significantly after getting counseling on the theme of what's on my plate for children aged 2- 5 year (Ramadhani et al., 2023). Parental knowledge plays an important role in fulfillment of nutrition for toddlers, because at this time children not yet able to choose and determine food independently. Research on toddlers in the city of Surabaya shows stunting closely related to the level of nutritional knowledge mother. Good nutritional knowledge will make this happen fulfilling the nutritional needs of toddlers in order improve nutritional status. Less and limited nutritional knowledge impact on low nutritional quality consumed by the family, especially the quality of the food toddler (Gunawan et al., 2022).

This is also in line with research by (Firlianty et al., 2023) which states that before the feeding babies and children class, 9 people (37.5%) had considerable understanding, while after the feeding babies and children class, the number of knowledgeable individuals increased to 19 people (79.2%). The level of education plays an important role in the acquisition of knowledge. The level of knowledge can be influenced by the mother's level of education because a person's level of education influences their ability to understand and respond to various objects or subjects. It is important to note that having a low level of education does not necessarily mean having a lack of knowledge. Knowledge can be obtained not only through formal education but also through non-formal education.

The fact that researchers found when conducting observations was that they still found discussion situations between respondents during the pre-test about how to provide appropriate and correct food to toddlers. So researchers provide education regarding the correct feeding of babies and children. This increase was due to the fact that before being given education, respondents did not know about feeding children and babies properly.

However, there are still 3 respondents whose scores do not meet the high criteria, but compared to the previous scores, these 3 respondents have experienced an increase in their knowledge. This is because during education, there were 2 toddlers who were fussy and 1 mother's educational background was low, which affected the mother's

grasping power. Apart from that, it can be seen from the cross tabulation table that those who still do not meet the criteria for having a good answer are mothers who are less than 25 years old, have an educational background that has not completed elementary school or primary school and work everyday just as a housewife. The findings show a significant relationship between education level and knowledge level, with a p - value of 0.000 (< 0.05).

Behavior of Wasting Mothers of Toddlers

From the results of the univariate analysis of behavioral variables, it can be concluded that when the pre-test was carried out there were only less than 20% of people who answered the questions correctly, after being given education on feeding babies and children there was an increase behavior that is proven by more than 50% of respondents having answered the post test correctly and having a score above the predetermined average.

The cultural background of the community or area where a person lives greatly influences how babies and toddlers are usually fed. Recommendations for implementing appropriate and correct feeding methods are very necessary in the current situation. Infant and child feeding practices can be influenced by the eating habits of people in local communities (Idawati et al., 2023).

Things that must be considered when feeding babies and children include the age of the child, frequency of feeding in a day, number of feedings or portions for one meal, food texture, variety of food, giving food actively/responsively to the child and always taking care cleanliness (Cinu et al., 2024).

Feeding practices for infants and children can be influenced by the eating habits of people in local communities. From the results of the questionnaire analysis, there are still many respondents who do not understand about varying foods and giving 2 different types of animal protein. Apart from that, there is still a lack of discipline among mothers to get used to their children's eating schedule regularly, this is proven by the fact that most of the answers regarding determining children's eating schedules still depend on the child's wishes. On the other hand, mothers rarely involve their children in planning their meal menu.

The fact that researchers found when conducting observations was that they still found discussion situations between respondents during the pre-test regarding the methods and things that need to be considered in providing appropriate and correct food to toddlers. So researchers provide education regarding the correct feeding of babies and children. This increase was due to the fact that before being given education, respondents did not know about the correct behavior of feeding children and babies, how many portions, texture and variety of food are appropriate for the child's age (Agustiningsih et al., 2022). However, there are still 4 respondents whose scores do not meet the high criteria, but compared to the previous scores, these 4 respondents have experienced improved behavior. This is because during education, there was 1 toddler who was fussy, 1 toddler's mother who was not careful when reading the questions and answer choices and 1 mother's educational background was low, which affected the mother's comprehension ability.

The Influence of Education on the Knowledge and Behavior of Mothers of Wasting Toddlers

Based on the data from the Paired T test, it can be concluded that the difference between the mean pre-test and post-test is 23.87, so this indicates an increase in results after being given education on feeding babies and children. This data also has a correlation which is quite strong as proven by the correlation result of 0.568. Apart from that, the mother's knowledge before and after counseling was obtained with a p -value of $0.000 < 0.05$ so it can be concluded that there is an influence of providing education on feeding babies and children on the mother's level of knowledge.

Based on the data from the Paired T test, it can be concluded that the difference between the mean pre-test and post-test is 21.7, so this indicates an increase in results after being given education on feeding babies and children. This data also has a fairly strong correlation as evidenced by the correlation result of 0.413. Apart from that, the mother's behavior before and after the counseling was obtained with a p -value of $0.000 < 0.05$ so it can be concluded that there is an influence of providing education on feeding babies and children on the mother's level of behavior.

Meanwhile, from the results of the bivariate analysis, the difference between the pre-test and post-test scores was 21.7, so this indicates an increase in results after being given education on feeding infants and children. This data also has a fairly strong correlation as evidenced by the correlation result of 0.413. Apart from that, the mother's behavior before and after counseling was obtained with a p-value of $0.000 < 0.05$ so it can be concluded that there is an influence of providing education on the mother's level of behavior.

This is in line with research conducted by (Wiyono et al., 2023) which stated that providing health education has a significant effect on increasing maternal knowledge. Apart from that, research by (Firlianty et al., 2023) stated that there was an increase in the knowledge of mothers in the group who were given the booklet intervention on feeding babies and children.

This is also in line with research from (Widiyanty et al., 2021) that providing health counseling has a significant impact on maternal behavior in the practice of providing breast milk and complementary foods for breast milk, before and after providing counseling.

Infant and Child Feeding Education can help respondents gain practical understanding and skills in child feeding practices. This is important to ensure the strength and health of children who are the nation's next generation (Indira & Rahman, 2023).

Respondents felt that there were many benefits from getting the right information regarding feeding children and babies, which can be seen from the increase in respondents' results which had quite a strong influence. The respondents' condition before receiving counseling still did not fully understand, especially since they live in a rural environment where people still have taboos such as not being allowed to eat fish because they are afraid that their skin will become scaly like fish. On the other hand, at this age children really need a variety of nutritional intake and the right type of food.

It is very important to provide education about feeding babies and children through small groups because it has an effect on increasing mothers' knowledge and behavior. Because if education is provided through small groups, the delivery of

knowledge is more effective in the level of acceptance to respondents. By providing this education, it can also help reduce taboos related to feeding children. Children's nutritional needs can be met and they can develop and grow according to their age and the end result can reduce the risk of wasting in the future.

There are no obstacles in this research. The research went smoothly, the research site was very helpful and all respondents were cooperative.

CONCLUSION

The increase in knowledge was marked by a difference in the total mean value of 23.87 and maternal behavior and a total difference in the mean value of 21.7 after education. The results of statistical tests obtained p-values of $0.000 < 0.05$ and a fairly strong correlation of 0.568 knowledge variables and 0.413 on behavioral variables means that there is a strong enough influence between education on knowledge and behavior.

Education about feeding infants and children must be followed and applied not only to mothers or families who are pregnant, but also aimed at the community, especially starting from women of childbearing age.

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