Development Of Video As A Counseling Media That Supports The Provision Of A Balanced Nutrition Menu To Toddler Ages 2-5 Years With Lack Of Nutrition

Dwi Ratna Prima[1], Shinta Fauziah [2], Suri Nurharjanti Harun[3], Nealy Ulfa Khasanah[4], Eka Rahmawati[5]

[1,2]Program Studi Sarjana, STIK Budi Kemuliaan, Jakarta, Indonesia
[3]Program Studi Profesi Bidan, STIK Budi Kemuliaan, Jakarta, Indonesia
[4,5] Lembaga Kesehatan Budi Kemuliaan, Jakarta, Indonesia
Corresponding author: daneshaazrafb@gmail.com

ABSTRACT

Background: Toddlers are children aged 12 months to 59 months, where this period is a very crucial period for their growth and development, so it is called the golden period. Toddlers aged 2-5 years are the age group that is prone to health and nutrition problems. One of the efforts that can be done to help increase awareness and optimize the delivery of balanced nutrition messages to mothers is through nutritional counseling activities.

Objective : To determine the effect of counseling on the provision of a balanced nutrition menu to mothers who have under-five children aged 2-5 years on changes in nutritional status in the area of Rw 04, Benda District, Tangerang City for the period July 2022-August 2022.

Methods: This study uses quantitative analytical methods. The design of this research is Pre-Experiment: One-Group Pretest-Posttest Design. The sample is 10 mothers who have underweight children aged 2-4 years with total sampling technique. Data analysis used the dependent t test or independent t test for data with normal distribution and Wilcoxon test for abnormal data.

Result: There is an effect There is an effect of counseling giving a balanced nutrition menu to mothers who have under-fives aged 2-5 years on changes in nutritional status based on weight/height and changes in mother's level of knowledge obtained p-value ($p < 0.005$). The average value of nutritional status based on BB/TB before and after counseling was 6.7%. The average value of knowledge before and after counseling is 52.5%.

Conclusion: This study found the effect of counseling on the provision of a balanced nutrition menu on changes in nutritional status and mother's level of knowledge.

Keywords: Counseling On The Fulfillment Of Balanced Nutrition, Malnourished Toddlers, Nutritional Status.

1. INTRODUCTION

Nutrition is an important factor in the growth and development of toddlers. Toddlers aged 2-5 years are an age group that is vulnerable to health and nutritional problems. Children's nutritional needs are increasing because they are still in a period of rapid growth and increasing activity. The nutritional problems in toddlers include protein energy deficiency (KEP), vitamin A deficiency (KVA), iron deficiency anemia (AGB), disorders due to iodine deficiency (IDD), malnutrition, overnutrition and stunting. 2 Malnutrition is a condition where under-five nutrition is characterized by underweight, weight according to body length or height less than -2 to -3 standard deviations, or arm circumference of 11.5-12.5 cm in children aged 6-59 months.

The prevalence of malnutrition in children under five years of age in developing countries is still worrying. According to UNICEF 2019 nutritional problems in 2018, almost 3 in 10 children under five years old suffered from stunting or were too short for their age, while 1 in 10 were underweight or malnourished for their age. One fifth of primary school age children are overweight or obese.

The number of people suffering from malnutrition in the world reaches 104 million children under 5 years of age. WHO 2013 reported that 99 million children under the age of 5 suffer from malnutrition, of which 67% are in Asia and 29% in Africa. 5 Basic Health Research Results in 2013, the prevalence of malnutrition among children under five has decreased from 13.9% to 13.8 % in 2018.

Based on data from the Tangerang City Health Office, in 2020 cases of malnutrition in the Tangerang city area were 4,980 children (5.81%). This shows that the percentage of malnutrition is still quite high in the city of Tangerang. According to the Tangerang city health office in 2020, in the Benda sub-district, Tangerang City, there were around 2,829 toddlers who were weighed and showed a prevalence of overnutrition of 7.35%, good nutrition of 83.78%, undernutrition of 7.56%, and malnutrition of 1 .31%.

Malnutrition problems occur due to many factors, namely infectious diseases, improper feeding, socio-economics, education, knowledge and poor environmental sanitation8. Likewise, children can choose the foods they like, including

snacks. Therefore, the amount and variety of food must be paid attention to, especially by the mother or child's caregiver, especially in winning the child's choice of food. One solution to dealing with malnutrition is to provide food that is nutritionally balanced and as recommended.

Inappropriate feeding attitudes and practices will harm children for life. Due to lack of nutritional intake from vegetables, fruit, eggs, fish and meat that children need will have an impact on their early growth period. The short-term impact that occurs in malnourished children under five is that it has an impact on morbidity, even in developing countries, malnutrition is one of the factors causing death in children. In the long term, it will have an impact on chronic nutritional disorders or toddlers growing shorter (stunting) than children their age. This can have an impact on decreasing intelligence or cognitive ability, increasing morbidity and increasing the risk of non-communicable diseases (NCDs) in the future.

One effort that can be made to help increase awareness and optimize the delivery of balanced nutrition messages to mothers is through nutritional counseling activities. Nutrition counseling is a two-way communication process between the counselor and the client to help the client recognize and overcome nutritional problems. 11 The efforts that have been made by the government include the revitalization of Posyandu in increasing the coverage of weighing toddlers, counseling and mentoring, providing additional food (PMT), increasing access, and community empowerment.

2. METHODS

This research uses quantitative analytical methods. The design of this research is Pre-Experiment: One-Group Pretest-Posttest Design where a group is measured and observed before and after treatment.

Figure 1 Pretest and posttest design
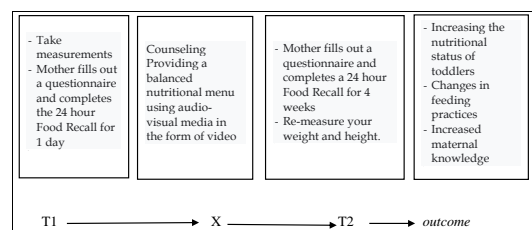
Information:

T1: Test before treatment or Pretest

X : Treatment providing counseling of balanced nutritional menu

T2 : : Test after treatment or Posttest

On the first day, researchers carried out measurements using a pretest on a group of mothers who had malnourished toddlers aged 2-5 years. The initial assessment measures the toddler's weight and height, after that the mother fills out a validated questionnaire aimed at finding out the mother's knowledge about balanced nutrition and the mother is advised to fill out a food recall form 24 hours a day before being given counseling treatment providing a balanced nutrition menu to the mother.

Next, on the second day, intervention was provided in the form of counseling related to providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years, carried out in two ways, namely practicing and providing videos on providing a balanced nutritional menu with meetings once every 4 weeks for a full time of ± 11 minutes. The video will be given to the mother so she can view it at any time. After counseling, the mother practices feeding according to the results of the counseling that has been delivered. Feeding

practices were recorded on the food recall form 24 that day as pretest data and on the following day the mother was given a Google link to the food recall form for the full 4 weeks. The 24 hour Food Recall that you have filled out will be evaluated via Google form every day. The food recall results that you fill out within 4 weeks will be analyzed using the NutriSurvey application and converted using gram units. After that, the average amount of macro substances and the frequency of toddlers' eating were taken as posttest data. This is to determine changes in feeding practices for toddlers.

After taking posttest measurements, the mother filled out a validated questionnaire aimed at determining changes in the mother's level of knowledge before and after being given counseling. Researchers re-measured whether there were changes in nutritional status based on increases in weight and height in malnourished children after counseling on providing a balanced nutritional menu to mothers. In this study, the population and samples taken were mothers who had malnourished toddlers aged 2-5 years in the RW 04 sub-district, Benda, Tangerang City for the period July 2022-August 2022, totaling 10 mothers who had malnourished toddlers.

3. RESULTS

Univariate analysis

Table 1 Distribution of characteristics of respondents who have malnourished toddlers

aged 2-5 years regarding changes in nutritional status in RW 04 area, Benda District, Tangerang City for the period July 2022-August 2022.

Research variable	F	%
Child Age		
2 – 3 years	2	20,0
3 – 4 years	5	50,0
4 – 5 years	3	30,0
Total	10	100%
Child's gender		
Man	3	30,0
Woman	7	70,0
Total	10	100%
Respondent's age		
< 20 years	0	0
21-30 years	4	40,0
31-40 years	4	40,0
41-50 years	2	20,0
Total	10	100%
Mother's Formal Education		
Didn't go to school/didn't graduate	0	0
Elementary school	0	0
Junior high school	4	40,0
Senior high school	6	60,0
College	0	0
Total	10	100%
Respondent's occupation		
Housewife	8	80,0
Civil Servants/TNI/POLRI	0	0
Private employees	0	0
Trader	2	20,0
Others	0	0
Total	10	100%
Family Income		
Less than UMR (< Rp. 4.285.000,-)	5	50,0
More than UMR or equal to UMR (>Rp. 4.285.000,-)	5	50,0
Total	10	100%
Resources		
Audio (Radio)	0	0
Visual (Magazines, Famplets, Books, Journals, Papers)	0	0
Audio Visual (Television, Cell Phone, Internet, Youtube, Seminar)	2	20,0
Friends or Neighbors	2	20,0
Health Workers (Doctors, Midwives, Nurses, Nutritionists, Cadres)	6	60,0
Others	0	0
Total	10	100%

Table 2 Frequency distribution based on nutritional status of toddlers based on BB/TB in RW 04, Benda District, Tangerang City

Research variable	Measurement			
	Before		After	
	f	%	f	%
Nutritional status based on body weight/height				
Malnutrition	10	100	2	20
Normal nutrition	0	0	8	80
Total	10	100	10	100

Table 3 Frequency distribution based on the number of macronutrients for toddlers in the RW 04 area, Benda District, Tangerang City

Research variable	Measurement			
	Before		After	
	F	%	f	%
Number of macronutrients				
1. Energy				
Not enough	8	80	3	30
Enough	1	10	6	60
More	1	10	1	10
Total	10	100	10	100
2. Proteins				
Not enough	1	10	0	0
Enough	0	0	0	0
More	9	90	10	100
Total	10	100	10	100
3. Fat				
Not enough	6	60	4	40
Enough	4	40	4	40
More	0	0	2	20
Total	10	100	10	100
4. Carbohydrate				
Not enough	7	70	7	70
Enough	1	10	2	20
More	2	20	1	10
Total	10	100	10	100

Table 4 Frequency distribution based on the frequency of toddlers eating, in the RW 04 area, Benda District, Tangerang City

Reasearch variable	Measurement			
	Before		After	
	f	%	F	%
Toddler feeding frequency				
Not enough (< 3 times per day)	3	30	1	10
Enough (3 times per day)	7	70	9	90
More (>3 times per day)	0	0	0	0
Total	10	100	10	100

Table 5 Frequency distribution based on mother's level of knowledge in RW 04, Benda District, Tangerang City

Research variable	Measurement			
	Before		After	
	F	%	F	%
Mother's level of knowledge				
Good, if the value is 80% - 100%	0	0	4	20
Enough, if the value 75%- 60%	1	10	4	40
Less, if the value is ≤ 60%	9	0	2	40
Total	10	100	10	100

Bivariate Test

Table 6. The effect of counseling on providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years on changes in nutritional status before and after counseling in the Rw 04 area, Benda District, Tangerang City for the period July 2022-August 2022

Variable	Measurement		p-value	% increase
	Before	After		
Nutritional status based on body weight/height				
Malnutrition	10	2		
Normal Nutrition	0	8	0,002*	
Min	9,0	10,0		11,1 %
Max	14,3	14,6		1,39%
Mean ± SD	11,8±1,7	12,6±2,0		6,7 %

Table 7 The influence of counseling on providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices based on the amount of macronutrients for toddlers before and after counseling in the Rw 04 area, Benda District, Tangerang City for the period July 2022-August 2022

Variable	Measurement		p-value	% increase
	Before	After		
Jumlah zat gizi makro balita				
1. Energys				
Min	576,8	811,2		40,6%
Max	668,5	1831,7	0,059**	174%
Mean ± SD	981,4±308,2	1150,7±7,1		17,2%
2. Protein				
Min	9,7	26,6		174%
Max	51,1	48,8	0,371**	-4,5%
Mean ± SD	29,6±12,6	36,1±7,1		21,9%
3. Fat				
Min	21,6	24,5		13,4%
Max	41,2	62,2	0,157**	50,9%
Mean ± SD	36,1±7,1	39,6±11,7		9,6%
4.Carbohydrate				
Min	66,5	114,5		72,1%
Max	286,6	293,3	0,705**	2,33%
Mean ± SD	157,6±70,5	169,6±51,1		7,6%

** Tested using Wilcoxon
% increase = 100 (posttest data – pretest data)/ pretest data

Table 8 The influence of counseling on providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices based on the frequency of toddlers eating before and after counseling in the Rw 04 area, Benda District, Tangerang City for the period July 2022-August 2022

Variable	Measurement		p-value	% increase
	Before	After		
Toddler feeding frequency				
Min	2	3		50%
Max	2	3	0,157**	50%
Mean ± SD	2,7±0,48	2,9±0,31		7,4%

** Tested using Wilcoxon
% increase = 100 (posttest data – pretest data)/ pretest data

Table 9 The effect of counseling on providing a balanced nutritional menu for mothers who have undernourished toddlers aged 2-5 years on changes in the mother's level of knowledge before and after counseling in the Rw 04 area, Benda District, Tangerang City for the period July 2022-August 2022

Variable	Measurement		P-value	% increase
	Before	Sesudah		
Mother's level of knowledge				
Min	20	50		150%
Max	75	95	0,009**	26,6%
Mean ± SD	48,5±14,15	74,0±18,22		52,5%

** Tested using Wilcoxon
% increase = 100 (posttest data – pretest data)/ pretest data

4. DISCUSSION

Univariate Analysis
Respondent Characteristics
Table 1 shows that the majority of respondents' occupations are Housewives (IRT) as many as 8 respondents (80%). This means that a mother's role is very large in providing food. According to Agus (2012), working mothers have less time for their children compared to mothers who do not work. Therefore, mothers who do not work will have a lot of time to pay attention to their children's food and nutrition. In this study, mothers who did not work but their children experienced malnutrition were caused by the mother's lack of knowledge regarding providing a balanced nutritional menu. If seen from table 4.5, the level of knowledge of mothers before counseling was mostly still in the poor category, with 9 respondents (90%).

Table 1: Family income is partly included in the category of less than minimum wage (<Rp. 4,285,000) for 5 respondents (50%). According to Agus (2012) Income The higher the family income, the better the child's nutritional status. The lower the family income, the less likely the mother is to be able to meet the family's nutritional needs.

Table 1 shows that most sources of information came from health workers (doctors, midwives, nurses, nutritionists, female cadres) as many as 6 respondents (60%). According to Aryni S (2018) Information sources are one of the factors that can influence nutritional status. Information influences knowledge, even if you are not educated. Information can be obtained from various media such as TV, radio, newspapers, social media (Facebook, Instagram, etc.) and health workers. Then you will be able to expand your own knowledge. The presence of information sources makes it possible to expand knowledge about the child's diet, which gives the mother a better understanding of his nutritional needs.

The results of this research mostly obtained information from health workers. This is possibly because the information sources provided by mothers of toddlers do not support good feeding practices so that adequate nutrition for toddlers is not achieved. So there is a need for evaluation from health workers who provide information about nutrition. So that the information that mothers get can support balanced feeding practices for toddlers.

Table 2 shows that the nutritional status of toddlers based on BW/TB was in the poor category before counseling as many as 10 toddlers (100%), after counseling there were 8 toddlers (80%) in the normal nutrition category. However, after being given counseling there were still 2 toddlers experiencing malnutrition (20%). This is because one toddler was sick for a week, resulting in a lack of appetite resulting in weight loss. According to Muhammad (2018) infectious diseases can cause children not to feel hungry and not want to eat. This disease also uses up a number of proteins and calories that should be used for growth. while another toddler at the time of the first measurement or before counseling for the toddler's nutritional status was almost close to the -3 SD line (poor nutrition). However, within one month of observation there was an increase in body weight of 500 grams. Although it is not yet meaningful to change nutritional status to normal.

Table 3. Number of macronutrients in protein intake for 9 toddlers (90%). More protein intake can reduce weight. According to him, high protein is one of the main focuses for reducing weight in obese sufferers. This is reinforced by the statement by Partai & Samuel (2014) that losing weight is one of the effects of the mechanism of secretion of digestive hormones which is triggered by high levels of protein.

Table 4: The majority of toddlers' eating frequency before counseling was in the adequate category, 7 toddlers (70%). Because apart from adequate meal frequency, a balanced meal composition with appropriate calories must be followed. In research, it was found that most of the calorie intake did not correspond to nutritional adequacy figures.

Bivariate Analysis
The effect of counseling to fulfill balanced nutrition for mothers who have malnourished toddlers aged 2-5 years on changes in nutritional status based on body weight/height.
From the research results, it was found that the number of toddlers who experienced malnutrition before counseling was 10 toddlers (10%), after counseling there were 2 toddlers (20%) who experienced malnutrition. There are 8 toddlers who experience normal nutrition (80%). Based on the results of research using the Wilcoxon test, it shows that there is an influence of counseling on the fulfillment of balanced nutrition for mothers who have malnourished toddlers aged 2-5 years on changes in nutritional

status in the RW 04 area, Benda District, Tangerang City for the period July 2022-August 2022, with a value of 0.002 (p < 0.005).). The measurement results after counseling, the average increase in body weight before and after counseling was 5.9%.

This research is in line with Yusuf's (2012) research, after nutritional intervention, there was a change in the nutritional status of the experimental group which increased more than the control group, namely the experimental group had 7 toddlers (70%) while the control group had 5 toddlers (50%). This can also be proven statistically (Mc Nemar test) that there is an effect of nutritional counseling for mothers of malnourished toddlers on changes in the nutritional status of malnourished toddlers towards good nutrition which is very significant because p < 0.001 (< 0.005).

Strengthened by research by Ani K (2012) entitled Counseling Interventions on Increasing the Weight of Malnourished Toddlers. Shows that there was an increase in average body weight after providing counseling. The average body weight after counseling was higher, namely 11.04 kg, compared to the average body weight before counseling, namely 10.88 kg. The results of the analysis using the Paired T-Test statistical test showed that there was a difference in body weight before and after counseling with p = 0.015 (p value < 0.005).

The influence of counseling on the fulfillment of balanced nutrition for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices based on the amount of macronutrients in toddlers.

The effect of counseling on fulfilling balanced nutrition based on the number of macronutrients for toddlers, where this counseling is given in one meeting, increases consumption attainment, and changes in feeding practices for all nutritional intake such as energy, protein, fat and carbohydrates. Malnourished toddlers tend to have poor eating patterns so that their food intake does not comply with the recommendations for balanced nutrition guidelines. Nutritional intake is one of the direct causes that can influence the nutritional status of toddlers. Nutrient intake is obtained from macronutrients such as energy, protein, fat and carbohydrates. Large amounts of macronutrients are needed by the body to provide energy.

Nutritional intake in this research was obtained from the results of a 24 hour food recall analyzed using the nutrisurvey and facsecret applications so that the results of this study showed that the amount of nutritional intake in malnourished toddlers increased in average consumption attainment over a month, namely energy intake before and after counseling increased by 17.2. %, protein intake before and after counseling increased by 21.9%, fat intake before and after counseling increased by 9.6%, and carbohydrate intake before and after counseling increased by 7.6%. However, based on statistical tests using the Wilxocon test, it shows that there is no effect of counseling on the fulfillment of balanced nutrition for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices based on the amount of macronutrients for toddlers in the RW 04 sub-district of Benda, Tangerang City for the period July 2022- August 2022 obtained a value (p> 0.005).

This research is in line with research by Kusumaningrum, Rinda (2018) entitled nutritional counseling on nutritional knowledge and attitudes of mothers, eating patterns and levels of energy and protein consumption of malnourished toddlers. The level of energy consumption increased by 9.4% and protein by 15.2%, but based on the results of the Paired T-Test analysis at the 95% confidence level it was not significant (p = 0.111 and p = 0.272).

The results of research according to the journal S. Chandrasekhar (2020) with the title the effect of audio-visual based nutritional counseling on knowledge, attitudes and actions in meeting the nutritional needs of malnourished toddlers in the Bengkulu City area in 2020. Average fat intake decreased by 11.8% Based on statistical tests, the p value was 0.147 (p> 0.005), which shows that there is no effect on fat intake after being given the intervention. Carbohydrate intake decreased by 151.8%, obtained by statistical tests using the Man Whitney u test which showed a p value of 0.172 (p> 0.05) which showed that there was no effect on carbohydrate intake after being given the intervention.

These results are not in line with research conducted by Henry Imbar which stated that the average value of energy intake before being given counseling was 2445 kcal with a standard deviation of 1.8 after being given counseling the average value of energy intake was 2342 kcal with a standard deviation 1.9. The average value of protein intake was 69.3 grams with a standard deviation of 6.9, then after being given counseling the average value of protein intake

was 62.5 grams and a standard deviation of 7.9. The average value for fat intake was 87.7 grams with a standard deviation of 4.8 and after being given counseling the average value for fat intake was 78.8 and a standard deviation of 8.2. The average value of carbohydrate intake was 381 grams with a standard deviation of 4.6, then after being given counseling the average value was 331 grams and a standard deviation of 5.2. There was a significant effect of counseling on food intake before and after it was done.

The influence of counseling to fulfill balanced nutrition for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices based on the toddler's eating frequency.

Based on the Wilcoxon test analysis, the frequency of eating for toddlers showed an insignificant difference with a p value of 0.157 (p> 0.005) which shows that there is no significant influence between counseling on providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices. eating based on the frequency of eating for toddlers in the RW 04 subdistrict of Benda, Tangerang City for the period July 2022-August 2022. However, in this study there was an increase in the average frequency of eating for toddlers before and after maternal counseling by 7.4%.

According to research by Agustime Ramie (2017) entitled eating patterns of children aged 3-5 years who experience malnutrition, it is said that there are children who have enough time/frequency to eat 3 times a day but still experience malnutrition. This is because children are not given good nutritious snacks between meals, and the amount of food they eat is not in accordance with balanced nutrition.

Herianto's research (2016) explains that efforts to solve this serious nutritional problem are important by properly implementing food frequency and eating habits. This is to help solve nutritional problems because of the importance of children's growth and development so that good nutritional status can be achieved.

According to N Utami's theory (2020), when toddlers feel hungry there is an increase in the frequency of eating so that the energy intake of toddlers with malnutrition is met properly so that there is an influence of eating frequency, energy and protein intake on the nutritional status of toddlers.

The effect of counseling to fulfill balanced nutrition for mothers who have malnourished toddlers aged 2-5 years on changes in nutritional status based on the mother's level of knowledge. Mothers' knowledge regarding providing balanced nutrition for toddlers is very important. Good knowledge can direct mothers to monitor the growth and development of toddlers by providing balanced nutritious food according to recommendations. This will create a normal nutritional status for toddlers.

Based on the Wilcoxon test analysis, the level of knowledge of mothers in providing balanced nutrition menu counseling for mothers who have malnourished toddlers aged 2-5 shows a significant difference, with a p value of 0.009 (p < 0.005) which shows that there is a significant influence between counseling on providing a balanced nutrition menu. in mothers who have malnourished toddlers aged 2-5 years on the mother's knowledge level in the RW 04 sub-district, Benda, Tangerang City for the period July 2022-August 2022. In this study, the average increase in knowledge scores before and after maternal counseling was 52.5% .

In accordance with research by Risna, R (2017) that there is a significant influence by providing health education through nutritional counseling. This is very important in improving feeding practices because nutritional counseling is a two-way/interpersonal communication process that is used to help individuals regarding nutritional problems that arise. faced, and motivate towards behavior change. This shows that nutritional counseling can influence the knowledge of mothers of toddlers in preventing malnutrition before and after attending nutritional counseling using booklet media.

This is also in line with research by Nugrahaeni DE (2018) with the title prevention of malnutrition for children under five through counseling on nutrition feedback sheets. The statistical test results show a p value (0.000) (p<0.005), which means there is a difference in the level of knowledge of mothers of toddlers before and after counseling using nutrition feedback sheets. The value of increasing knowledge in the good category increased from 16 mothers (23.9%) to 39 mothers (58.2%).

This research is in line with research by Syaugy (2021) entitled the effect of providing education and nutritional counseling on changes in knowledge and food intake in non-health students at Diponogoro University. Based on the

Wilcoxon statistical test, the p value of the pre-post test knowledge results obtained was a p value of <0.005, so it was known that there was a difference in knowledge between before and after the program was carried out. It can be concluded that providing education and counseling influences changes in knowledge.

5. CONCLUSION

Based on the results of research on the effect of counseling on providing a balanced nutritional menu to mothers who have malnourished toddlers aged 2-5 years on changes in nutritional status in the RW 04 area, Benda District, Tangerang City for the period July 2022-August 2022, several conclusions can be drawn, including:

1. There is an influence of counseling on providing a balanced nutritional menu to mothers who have malnourished toddlers aged 2-5 years on changes in nutritional status based on body weight/height, with a p value of 0.002 (p < 0.005). The average value before and after counseling was 6.7%.

2. There was no influence of counseling on providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices based on the amount of macronutrients for toddlers, the result was p > 0.005. However, there was an increase in macronutrient intake before and after counseling, namely energy increased by 17.2%, protein increased by 21.9%, fat increased by 9.6%, and carbohydrates increased by 7.6%.

3. There was no effect of counseling on providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years on changes in feeding practices based on the toddler's eating frequency, the result was p > 0.157. However, there was an increase in eating frequency before and after counseling by 7.4%.

4. There is an influence of counseling on providing a balanced nutritional menu for mothers who have malnourished toddlers aged 2-5 years on the mother's level of knowledge, with a p value of 0.009 (p <0.005). The average value of knowledge before and after counseling is 52.5%

6. ACKNOWLEDGMENTS

7. REFERENCES

Aditianti PH. Pengetahuan, Sikap dan Perilaku Individu Tentang Makanan Beraneka Ragam sebagai Salah Satu Indikator Keluarga Sadar Gizi (KADARZI). Bul Penelit Kesehat. 2016;44(2):117–26.

Agus U. Hubungan antara karakteristik ibu dengan status Gizi. J kesmasindo. 2012;5(2):halm. 121-135.

Alamsyah D, Mexitalia M, Margawati A, Hadisaputro S, Setyawan H. Beberapa Faktor Risiko Gizi Kurang dan Gizi Buruk pada Balita 12-59 Bulan (Studi Kasus di Kota Pontianak). J Epidemiol Kesehat Komunitas. 2017;2(1):46.

Aryni S, Agustina S. Analisis Tingkat Pengetahuan Ibu Tentang Gizi Balita di Desa Tonjong Kecamatan Palabuhan Ratu Kabupaten Sukabumi Tahun 2017. J Bid Ilmu Kesehat [Internet]. 2018;11(1):736–44. Tersedia pada: www.urindo.ac.id

Auliya C. Profil Status Gizi Balita Ditinjau Dari Topografi Wilayah Tempat Tinggal (Studi Di Wilayah Pantai Dan Wilayah Punggung Bukit Kabupaten Jepara). Unnes J Public Heal. 2015;4(2):108–16.
balita gizi kurang. Bina Gener ; J Kesehat [Internet]. 2020;2:11–7. Tersedia pada: https://ejurnal.biges.ac.id/index.php/kesehatan/article/view/171/115
Buku Ajar Konseling Gizi. Vol. 148, Jakarta: PPSDMK Badan engembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan. 2018. 1–358 hal.

Darmiati D. Konseling pada ibu yang memiliki

Darsini, Fahrurrozi F, Cahyono EA.
dengan Status Gizi Pada Balita. J ava Heal J [Internet]. 2015;2(1):1–8. Tersedia pada:http://jhj.fik-unik.ac.id/index.php/JHJ/article/view/25/22
Dianjurkan Untuk Masyarakat Indonesia. 2019;52(1):1–5.

Elbadiansyah. Manajemen Sumber Daya Manusia. Purwokerto: CV IRDH. 2019.

Fitria. Manajeman Data untuk Survey Gizi [Internet]. CV Media Sains Indonesia; 2021. Tersedia pada: https://www.google.co.id/books/edition/Manajemen_Data_Untuk_Survei_Gizi/oddVEAAAQBAJ?hl=id&gbpv=1&dq=uji+shapiro+wilk+dan+uji+wilcoxon&pg=PA80&printsec=frontcover

Gizi Terhadap Pengetahuan Gizi Dan Sikap Ibu, Pola Makan Serta Tingkat Konsumsi Energi Dan Protein Balita Gizi Kurang. J Inf Kesehat Indones. 2018;4(1):53.

Heryana A. Hipotesis Penelitian. Kesmas Univ Esa Unggul [Internet]. 2020;(June):1–16. Tersedia pada: https://www.researchgate.net/publication/341895079_HIPOTESIS_PENELITIAN

IDAI. Kurva Pertumbuhan WHO [Internet]. Tersedia pada: https://www.idai.or.id/professional-resources/kurva-pertumbuhan/kurva-pertumbuhan-who

Indonesia Nomor 41 Tahun 2014 Tentang Pedoman Gizi Seimbang.

Irianti B. Faktor- Faktor Yang Menyebabkan Jakarta, Penebar Swadaya Grup. 2010. Jakarta; 2017.

Jayani I. Hubungan Antara Penyakit Infeksi

Kemenkes RI. Hasil Riset Kesehatan Dasar kementerian kesehatan RI. 2017. Keperawatan. Medika S, editor.

Khasanah NA, Sulistyawati W. Karakteristik Ibu dengan Kejadian Gizi Kurang pada Balita 6-24 Bulan di Kecamatan Selat , Kapuas Tahun 2016. Str J Ilm Kesehat. 2018;7(1):1–8.

Kota Tangerang Tahun 2020. 2020;

Kurang Pada Balita [Internet]. Cv Budi Utama : yogyakarta. 2021. Tersedia pada:https://www.google.co.id/books/edition/Strategi_Menurunkan_Prevalensi_Gizi_Kura/bwhSEAAAQBAJ?hl=id&gbpv=1&dq=balita+adalah&printsec=frontcover

Kusumaningrum R, Pudjirahaju A. Konseling

Laswati DT. Masalah Gizi Dan Peran Gizi Masalah Gizi Bagi Anak Akibat Negri Aluddin Makassar.

Notoatmodjo. Metode Penelitian Kesehatan. Jakarta : Rineka Cipta. 2012.

Notoatmodjo. Metode Penelitian Kesehatan. Jakarta : Rineka Cipta. 2018.

Nurain S. Konsep Dasar Ilmi gizi. Univ Islam

Nursalam. Metodologi Penelitian Ilmu

Nursalam. Metodologi Penelitian Ilmu Keperawatan Pendekatan Praktis. Edisi : 4. Jakarta : Salemba Medika. 2016.

Pelengkap Kesehatan Keluarga. Jakarta; penerbit Buku Kompas. 2009.

Pengetahuan Sikap dan Perilaku

Manusia. Cet. 2. Yogyakarta: Nuha Medika; 2011.

Pengetahuan; Artikel Review. J Keperawatan [Internet]. 2019;12(1):13. Tersedia pada: https://e-journal.lppmdianhusada.ac.id/index.php/jk/article/view/96

Penyakit.

Peraturan Menteri Kesehatan Republik

Peraturan Menteri Kesehatan Republik Indonesia Nomor 2 Tahun 2020 Tentang Standar Antropometri Anak.

Persatuan Ahli Gizi Indonesia. Kamus Gizi

Persatuan Ahli Gizi Indonesia. Konseling Gizi.

PMK No 29 Tahun 2019 tentang Penanggulangan

PMK Nomor 28 Tahun 2019 Tentang Gizi yang

Pritasari D. Gizi Dalam Daur Kehidupan.

Profil Kesda Kota Tangerang. Dinas Kesehat

Santoso B dk. Kementrian Kesehatan RI, Pokok-Pokok Hasil Riskesdas Provinsi Jawa Tengah 2013. Jakarta Lemb Pnb Badan Litbangkes. 2013;1–325.

Seimbang. Agrotech J Ilm Teknol Pertan. 2019;2(1):69–73.

Status Gizi Kurang Pada Balita Di Wilayah Kerja Puskesmas Sail Pekanbaru Tahun 2016. Midwifery J J Kebidanan UM Mataram. 2018;3(2):95.

Sugiyono. Metode Penelitian Kuantitatif, Kualitatif R&D. Bandung: Alfabeta. 2016. 38 hal.

Sugiyono. Metode Penelitian Kuantitatif, Kualitatif R&D. Bandung: Alfabeta. 2019.

Sugiyono. Metode Penelitian Kuantitatif, Kualitatif R&D. Bandung: Alfabeta. 2014. 124 hal.

Sugiyono. Metode Penelitian Kuantitatif, Kualitatif R&D. Bandung: Alfabeta. 2018.

Sukraniti, Desak Putu., Taufiqurrahman. SSI.

Supariasa IDN. Pendidikan dan Konsultasi Gizi.

Syamsidar. Strategi Menurunkan Pravelensi Gizi Tahun 2018. Kementrian Kesehat RI. 2018;53(9):1689–99.

Terbitan pertama; Jakarta: Penerbit Buku Kedokteran. 2012.

Thamaria N. Penilaian Status Gizi. Jakarta: PPSDMK Badan engembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan. 2017. 1–286 hal.

UNICEF. Status anak dunia. 2019.

Wawan, Dwi. Teori dan Pengukuran

Widya Karya Pangan Dan Gizi. Jakarta: LIPI;

William, Hita. Mengukur Tingkat Pemahaman Pelatihan PowerPoint Menggunakan Quasi-Experiment One-Group Pretest-Posttest. JSM STMIK Mikroskil. 2019;20(1):71–80.

Muhammad NAAS. Penyakit Infeksi Dan Pola Makan Dengan Kejadian Status Gizi Kurang Berdasarkan Bb/U Pada Balita Usia 6-24 Bulan Di Wilayah Kerja Puskesmas Tanah Sepenggal. Kementeri PPN/Bappenas. 2018;7(1):66.

French.W. et al. A High-protein diet reduces weight gain, decress food intake, decress liver fat depositin, and improves markers of muscle metabolism in obese Zucker rats, nutrien. 2017;9:(6). Tersedia pada: https://pubmed.ncbi.nlm.nih.gov/28594375/

Pesta DH, Samuel VT. A high-protein diet for reducing body fat: Mechanisms and possible caveats. Nutr Metab. 2014;11(1):1–8.

Yusuf, Drs H M Kes, M Marson, Jont Dewi R. Pengaruh Konseling Gizi pada Ibu Batita Gizi Kurang Terhadap Perubahan Status Gizi Batita di Wilayah Kerja Puskesmas Dempo Kecamatan Ilir Timur I Kota Palembang Tahun 2012. 2012;

Ani K. Intervensi Konseling Terhadap Peningkatan Berat Badan Balita Gizi Kurang. 2012;

UNICEF. The State Of The World's Children 2016. 2016.

S. Chandrasekhar FRS, Laily Noor Ikhsanto jurusan teknik mesin. Pengaruh konseling gizi berbasis audio visual terhadap pengetahuan, sikap dan tindakan dalam pemenuhan kebutuhan gizi pada balita gizi kurang di wilayah Kota Bengkulu Tahun 2020. Liq Cryst. 2020;21(1):1–17.

Imbar HS, Sineke J, Rugian C. Pengaruh Konseling Gizi Pada Asupan Makan Remaja Obesitas Di Smp Kristen Woloan Kota Tomohon. J GIZIDO. 2019;11(01):23–7.

Ramie A. Pola Makan Anak Umur 3-5 Tahiun yang Mengalami Gizi Kurang. Semin dan Work Nas Keperawatan "Implikasi Perawatan Paliat pada Bid Kesehatan." 2017;01:218–22.

Farhat, Yasir D. Perubahan Pola Makan dan Berat Badan Anak yang Mengalami Masalah Gizi. Perubahan Pola Makan Dan Berat Badan Anak-Anak Yang Mengalami Maslaah Gizi. 2015;6(1).

Herianto. Hubungan Antara Frekuensi Makan Dan Kebiasaan Makan Dengan Kejadian (Stunting) Di Sdn 08 Angata Kabupaten Konawe Selatan. 2016;3(2):1–11.

Utami NW, Rahmawati D, Muhammad Abdillah F, Astria Paramashanti B. Frekuensi Makan, Asupan Energi Dan Protein Terhadap Status Gizi Pada Balita Di Puskesmas Minggir Sleman. INVOLUSI J Ilmu Kebidanan [Internet]. 2020;2(2):156–63. Tersedia pada: http://dx.doi.org/10.30867/action.v5i2.313

Risna R, sakka A, yunawati I. Pengaruh Konseling Gizi Dengan Media Booklet Terhadap Peningkatan Pengetahuan, Sikap, Dan Tindakan Ibu Dalam Upaya Pencegahan Gizi Buruk Balita Di Wilayah Kerja Puskesmas Puuwatu Kota Kendari Tahun 2017. J Ilm Mhs Kesehat Masy Unsyiah. 2017;2(6):198377.

Nugrahaeni DE. Pencegahan Balita Gizi Kurang Melalui Penyuluhan Media Lembar Balik Gizi. Amerta Nutr. 2018;2(1):113.

Syauqy A, Hisanah R, Anggriani P, Rana AF, Nafiola F. Pengaruh Pemberian Edukasi dan Konseling Gizi Terhadap Perubahan Pengetahuan dan Asupan Makan pada Mahasiswa Non Kesehatan Universitas Diponegoro. 2022;1(1):23–9.