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The effect of providing a variety of food menus on increasing toddler weight at preschool harapan bangsa north labuhan batu regency in 2020

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ABSTRACT

Media Leaflets are an idea that goes straight to the point and describes how to take action in a short and concise manner. Leaflets are very effective in conveying short and concise messages. like posters, they are also easy to carry and distribute. Even because of the compact size, the amount carried can be more than the poster. This kind of study is called a quasi-experimental (quasi-experiment), in which experimental activities are carried out with the goal of identifying a symptom that develops as a consequence of a certain treatment or experiment. A group pre-test and post-test design strategy was used in this study. All participants in this study were toddlers at Harapan Bangsa PAUD, North Labuhanbatu Regency in 2020. totaling 20 PAUD toddlers. The number of samples used was 20 PAUD toddlers obtained by using non-probablity sampling technique, namely by purposive sampling (one of the non-random sampling techniques). The data analysis technique used simple paired t-test. The results of the univariate analysis showed that the provision of media was low regarding dietary variations and low toddler weight. The results of the Bivariate analysis showed that there was an effect of giving food variety media on the weight gain of toddlers in PAUD Harapan Bangsa, Labuhanbatu Utara Regency in 2020. There is an effect of giving food variety leaflets on the weight gain of toddlers in Harapan Bangsa PAUD, North Labuhanbatu district in 2020.

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INTRODUCTION

By the age of two, the diet is fully integrated into the family diet. Young children grow and develop more rapidly as they age, so they need nutritious food while their appetites are diminishing and their immune systems are still vulnerable. The menu is a means of health education messages to make it easier for the public to receive health messages (Bardosono, S. 2016).

According to data on the prevalence of violence against children less than five years of age collected by the World Health Organization (WHO), Indonesia is one of three countries that face

and abuse children under the age of five. From the results of the 2018 Ministry of Health Health Survey (Riskesdas), it was explained that 17.7% of children -5 years old (toddlers) still had eating problems. This figure includes children under five who are in poor health condition, amounting to 3.9% and poor, amounting to 13.8%.

In 2017, malnutrition affected 22.2% or 150.8 million children under five worldwide. However, this number has decreased from the 2000 data of 32.6%. In 2017, more than half of the world's malnourished children under five came from Asia (55%), but more than a third (39%) were in Africa. (Ministry of Health RI 2018). The prevalence of the nutritional status of children under five in Indonesia in 2017 based on the weight/age index, the results show: 3.8% of children under five have poor nutritional status and 14.0% of children under five have undernourished status. The percentage of underweight / underweight / undernourished (malnutrition + undernutrition) for the under five group (17.8%) and data from the provinces with the highest poor nutritional status, namely in East Nusa Tengara (NTT) amounting to 7.4% and while the lowest malnutrition status was in the province of Bali at 2.0%. The nutritional status of toddlers based on the height/age index shows the following results: 9.8% of toddlers have very short nutritional status and 19.8% of toddlers have short nutritional status. And data from the province with the highest malnutrition status for toddlers is in East Nusa Tenggara at 18.0% and while the lowest malnutrition status is in the Riau Islands province at 4.7%.

The weight/height index for nutritional status of children under five shows that 6.7% of children under five are underweight and 2.8% are underweight. In the toddler group, the wasting rate was 9.5% (very thin+thin) and the provincial data for the highest poor nutritional status of children under five was in East Nusa Tenggara (NTT) at 6.0% and while the lowest malnutrition status was in South Sulawesi province. 1.7% (Ministry of Health, 2017). Data from the 2015 Basic Health Research explained that 12.1% of children felt wasted or thin, 19.6% felt underweight or underweight and 11.9% of children felt obese. In 2015 there were 19 cases of malnutrition experiencing a decrease in 2016 of 17 cases but in 2017 there was an increase of 19 cases with a percentage of 0.03% of the total number of children under five. This figure when compared with the World Health Organization (WHO) standard of 0.1%, in Labuhanbatu Regency the percentage of malnutrition is still below the maximum limit of the World Health Organization (WHO) standard. (Health profile of Labuhanbatu District 2017).

From the results of Furi Kamalia Fitriani's research (2015), there was an increase in toddler weight after carrying out nutrition counseling using flipchart media connected to tracking children's development and nutritional status. The average score of malnourished toddlers before and after counseling using nutrition flipchart media increased by 66.9%, according to these findings.

Both direct and indirect factors can affect nutritional status. The direct factors that have the greatest influence on nutritional status are the food eaten and the infectious diseases experienced. Lower-than-average weight relative to children their age may be due to low food intake due to reduced appetite or accompanying viral disorders. Nutrition counseling activities are one of the techniques to help spread awareness and information related to maternal nutrition. the use of media in counseling is needed in practice.

The menu serves as an educational tool to spread health messages and encourage public acceptance of the teachings. However, until now only leaflets are the only media used. Adequate nutritional intake is important because nutritional status affects physical development as well as psychomotor, cerebral and social development. Children under five years of age (toddlers) are part of a vulnerable group whose nutritional health is very sensitive during infancy (critical period). If malnutrition is not handled properly, it can affect the level of intelligence and productivity of adults in addition to causing physical illness (Ratna, 2015).

The nutritional status of toddlers can be monitored and evaluated in several ways. One of them is the assessment of the nutritional status of toddlers which is then translated into a standard

value (Z-Score) using toddler anthropometric standards. Three indices of anthropometric factors are shown in the Z-Score: Weight/Height (BB/TB), Height/Age (TB/A), and Weight/Age (BB/U) (Ministry of Health RI, 2017).

From infancy, nutritional consumption has a significant impact on child growth. A healthy diet influences not only development but also immunity, encouraging thought and emotional development. Toddler nutritional needs must be met from every food they eat. Consumption of nutrients is needed for the growth and development of healthy children (Supariasa, 2015). Media is needed as a tool in the process of nutrition education. Extension procedures are nothing new to the media. With the help of the media, informational materials that are difficult to understand can be communicated more effectively and simply to the target audience. Leaflet media in the form of folded sheets was chosen as a supporting medium for the nutrition education process. (Supariasa 2015).

Therefore, related to efforts to reduce and overcome the incidence of malnutrition or malnutrition, the government then developed legislation, one of which is the distribution of additional food which is expected to improve nutrition in toddler feeding. (Supariasa. 2015).

RESEARCH METHOD

The research design carried out was quasi-experimental. This research was carried out using the pretest posttest one group design approach. The population in this study consisted of 30 toddlers in Harapan Bangsa PAUD. The research sample was all toddlers who received leaflet media information, the number of research samples was 20 toddlers. Sampling technique with purposive sampling. Data analysis with Shapiro-Wilk test.

RESULTS AND DISCUSSIONS

Univariate Analysis Results

a. Food Variety Leaflet Media Observation Sheet

Table 1 Respondents' scores before being given the Media Leaflet

Food Variety Leaflet Media Observation Sheet	N	Presentation (%)
Very often	9	45.0
Often	10	50.0
Almost never	1	5.0
Amount	20	100

Table 1 shows that the majority in the category is often 10 people (50%). While the research results obtained an average value of 1.60. The median value obtained is 2.00. The standard deviation or standard deviation obtained is 0.598. The lowest value is 1 and the highest value is 10.

b. Weight before being given the Media Leaflet

Table 2. Weight before being given Media Leaflet

Body Weight Before Given Leaflet Media	N	Percentage (%)
14.10 kgs	2	10.0
14.20 kgs	1	5.0
15.20 kgs	1	5.0
15.25 kgs	1	5.0
15.30 kgs	1	5.0
15.40 kgs	1	5.0
15.60 kgs	1	10.0

15.70 kgs	2	10.0
16.10 kgs	2	10.0
16.20 kgs	2	10.0
17.15 kgs	1	5.0
17.30 kgs	1	5.0
18.10 kgs	1	5.0
18.30 kgs	1	5.0
18.50 kgs	1	5.0
20.50 kgs	1	5.0
Amount	20	100

From table 2, it is obtained that most of the body weight before being given leaflet media is seen from the observation sheet of 20 respondents to the results of the study before being given leaflet media on body weight, the average value was 16.2500, the median value obtained after sorting was 15.9000, standard deviation or standard deviation the result is 1.63699. The lowest weight is 14.10 kg and the highest weight is 20.50 kg.

c. Body Weight After being given Media Leaflet

Table 3.Body Weight After being given Media Leaflet

Weight after being given leaflet media	N	Percentage (%)
14.20 kgs	1	5.0
14.40 kgs	2	10.0
15.35 kgs	1	5.0
15.40 kgs	1	5.0
15.50 kgs	1	5.0
15.60 kgs	1	5.0
15.80 kgs	1	5.0
15.85 kgs	2	10.0
16.25 kgs	2	10.0
16.40 kgs	2	10.0
17.30 kgs	1	5.0
17.45 kgs	1	5.0
18.15 kgs	1	5.0
18.55 kgs	1	5.0
18.70 kgs	1	5.0
20.65 kgs	1	5.0
Amount	20	100

Based on table 3, it can be seen that most of the body weight after being given leaflet media can be seen from the observation sheet of 20 respondents to the results of the study after being given leaflet media, the average value was 16.4225, the median value obtained after sorting was 16.0500, standard deviation or standard deviation the result is 1.62776. The smallest weight is 14.20 kg and the largest weight is 20.65 kg.

Results of Bivariate Analysis

a. The difference before and after the observation of toddler's weight to prevent malnutrition status.

Before the statistical test was carried out, there were differences before and after the intervention in toddlers to prevent malnutrition status, the data normality test was carried out first, for example in table 4.

Table 4. Shapiro-Wilk Normality Test

	Shapiro-Wilk		
Variables	**Statistics**	**Df**	**Sig**
Prior Weight	0.918	20	0.091
Weight After	0.922	20	0.109

From table 4 it describes the normality test of the Shapiro-Wilk obtained sig. The body weight before being given the media leaflet was 0.091 > 0.05. This could mean that the weight before and after receiving the media leaflet was distributed regularly because the weight after receiving the media leaflet was 0.109 > 0.05.

Furthermore, the analysis of differences in body weight to prevent malnutrition before and after distribution of leaflet media uses the Paired t-test as described in table 5.

Table 5. Simple Paired Sample t-test

Variables	Means	Std. Deviation	Sig. (2-tailed)
Pre Test	16.25000	1.63699	0.000
Posttest	16.4225	1.62776	

From table 5, it was found that the analysis of research results through the Paired t-test obtained a p-value of 0.000 < (0.05) to the conclusion that there is a significant difference in children's weight to prevent malnutrition before and after giving leaflet media with a variety of foods.

Discussion

Providing Food Variety Leaflet Media

One of the planning efforts implemented to improve the nutritional status of children under five is a change in behavior from food preparation, food production and prevention of malnutrition and child care (WHO). One of the influences that can support this change is providing education through the use of leaflets, where leaflet media is a way to convey a very short, clear message to someone who receives the message (Supariasa, 2015).

The results of this study indicate that food variations are carried out in the category often by 10 people (50%) and the category very often by 9 people (45%) and almost never by 1 person (5%). And the average score of the pattern of providing leaflet media with a variety of food is 1.60. This means that there is an increase in toddler eating patterns related to the media of food variety leaflets after being given leaflet media of food variations.

The results of this study are relevant to research from Tervam Dahki (2018) regarding "The Influence of Providing Nutrition Education Through Media Leaflets Related to Vegetables and Fruits to Students of Public Elementary School 105349 Paluh Kemiri" Before receiving nutrition counseling through leaflet media the average value was 14.84; after receiving nutritional counseling from the leaflet media the average value was 19.20. This explains that after receiving nutrition counseling through the use of leaflets there was an increase in the habit of eating fruits and vegetables. This study found that elementary school students had never received nutrition counseling, so they had never read pamphlets related to fruits and vegetables.

Weight Increase Before and After Administration of Food Variety Leaflet Media

The results of this study indicate that the average score of BB before giving leaflet media with a variety of foods is 16.2500. And the average score of body weight after being given leaflet media with a variety of food is 16.4225. This means that there is an increase in body weight after being given a variety of food leaflet media.

In addition, these findings are relevant to research in 2018 by Aprianti regarding "The Effect of Nutritional Assistance on the Diet and Weight of Toddlers with Nutritional Problems (On the Riverside of Banjarmasin City)". the average value of body weight before being given leaflet media was 66.7% and the increase in body weight after being given leaflet media was 93.3%. This means that leaflet media can increase toddlers' weight gain

CONCLUSION

Based on the results of research related to the effect of providing various food leaflet media on increasing toddler weight in Harapan Bangsa PAUD, North Labuhanbatu Regency in 2020, the conclusions are: From the results of the research, the frequency distribution of observation sheets for giving leaflet media for food variations in the frequent category is 10 people (50%), and the very frequent category is 9 people (45%), and the almost never category is 1 person (5%). From the observation results, it was found that the weight before the intervention was carried out and the lowest weight was 14.10 kg for 2 people (10%) and the highest weight was 20.50 kg for 1 person (5%). From the results of observations of body weight after the intervention, the lowest weight was 14.20 kg for 1 person (5%) and the highest weight after the intervention was 20.65 for 1 person (5%). From the results of the paired sample t-test statistic, it was found that the p-value was 0.000 < (0.05) it can be interpreted that there is an effect of providing leaflet media with a variety of foods on increasing toddler weight in PAUD Harapan Bangsa North Labuhanbatu Regency in 2020.

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