The Effect of Nutritional Counseling on Mother Measures in How to Give Children Stunting Eating in Kampar District Tapung

Yulia Febrianita¹, Ainil Fitri²
D III Nursing Programme Abdurrab University¹,²
Riau Ujung Street No.71,28292, Pekanbaru, Riau, Indonesia
Correspondence Email: yulia.febrianita@univrab.ac.id

ABSTRACT

The problem of developmental and nutritional growth disorders in children under five nationally and even the current global problem is stunting. This type of experimental research uses a quasi-experimental nonequivalent control group design research design. The sample of this study was 66 mothers. The results of this study were a comparison of changes in the mean actions of mothers in feeding children between the control and experimental groups was the mean of the control group 140.6 while the experimental group was 94.8 with a p value <α of 0.015. The conclusion of this study is that there is an influence of nutritional counseling on the actions of mothers in the way of feeding stunting children in the Kampar regency.

Keywords: Nutrition Counseling, Feeding, Stunting

INTRODUCTION

The need for more attention in growth and development at the age of toddlers is based on the fact that malnutrition that occurs during this golden period, is irreversible or cannot be recovered. The toddler period experienced a growth process that had cumulative results since the toddler was born. An important foundation for his future health is a state of good and healthy nutrition in infants (under five years old). Conditions that have the potential to interfere with the fulfillment of nutrients, especially energy and protein in children will cause growth problems (Amaliah, N., K. Sari., And B.Ch. Rosha, 2012).

The problem of developmental and nutritional growth disorders in children under five nationally and even the current global problem is stunting. This is evidenced by the number of children experiencing stunting in developing countries with 165 million children and around 80% of developing countries donating for stunting cases (MCA-INDONESIA, 2014). Stunting is caused by multidimensional factors so that the handling needs to be done by multiple sectors, such as poor parenting practices, limited health services including services (Ante natal care, Post Natal and quality early learning, lack of asking questions for nutritious food, and lack of access to clean water and sanitation (Kullu, VM, Yasnani., and H. Lestari, 2018).

The impact of stunting for families and the State is in terms of the economy, the potential economic loss every year is 2-3% of GDP, if Indonesia's GDP is Rp. 13,000 Trillion of potential losses of Rp. 260 -360 Trillion / year (Directorate of Community Nutrition, 2017). The potential economic benefit from stunting reduction investment in Indonesia is 48 times. Health impacts are failure to thrive, developmental barriers...
and metabolic disorders (Kusuma, K.E, 2013). In Indonesia the prevalence of stunting in children under two million nationally in 2013 was 32.9%, decreased in 2016 26.1%, but increased again in 2018 29.9%. And stunting prevalence in children under five in 2007 was 36.8%, 2010, 35.6%, in 2013, 37.2%, in 2016 33.6%, and in 2018 30.8% (RI Ministry of Health. 2013b).

The incidence of stunting under five is a major nutritional problem facing Indonesia. Based on monitoring data on nutritional status (PsG), short has the highest prevalence compared to other nutritional problems such as malnutrition, thinness, and fat. The prevalence of short toddlers has increased from 2016 which is 27.5% to 29.6% in 2017(Ministry of PDTT, 2017). Nutrient intake is obtained from breast milk and breast milk MP. Research shows that the duration of breastfeeding and exclusive breastfeeding is significantly related to the nutritional status of children, especially for z / TB score. The accuracy of breastfeeding MP can increase the height of children aged 6-24 months so as to reduce the risk of stunting (Lestari, W., A. Margawati, and M.Z. Rahfiludin, 2014).

Low nutritional intake is influenced by parenting, which is improper feeding behavior. Research shows that there is a real relationship between parenting and stunting. Toddler feeding behavior is influenced by mother's nutritional knowledge (Aridiyah, F.O., N. Rohmawati., And M. Ririanty, 2015). Knowledge is an effort to improve stunting by increasing knowledge so that it can improve feeding behavior in children, so children's food intake can also be improved, namely by nutritional counseling. Interaction between clients and counselors to identify nutritional problems that occur and find solutions to problems of knowledge, attitudes, and nutrition improvement practices, and can improve TB / U scores in children, this is called nutritional counseling (Ministry of Health RI, 2013a). Nutrition counseling can improve children's knowledge and parenting, especially regarding child feeding practices. Sofiyana and Noer's research (2013) shows that nutritional counseling 4 times a month for 30 -60 minutes with leaflet media affects an increase in knowledge (13.8%) and attitudes (15.3%) and maternal behavior being well indicated by most the mother implements the advice given by the counsellor.

In addition, Hidayah and Hidayanti research (2013) showed that nutrition counseling every 2 weeks in 2 boasting for 30 -60 minutes at Posyandu Nagrog Wargakerta Village Sukarame District Tasikmalaya District increased maternal knowledge (72.7%), energy intake 4.43% (from 86.47% to 90.90% RDA) and protein 17.05% (from 83.39%) to 100.44% RDA) and underweight children underweight increased 0.16 kg. Found 100 children with stunting in the village of Tapung, Kampar district, the number is found in the village of Tapung due to lack of health services in the area. Based on the description, the feeding of toddlers greatly influences the nutritional status and the incidence of stunting, so that researchers will identify "The effect of nutritional counseling on the actions of mothers in feeding toddlers with stunting in Tapung, Kampar Regency, Riau Province".

**RESEARCH METHOD**

The study was conducted in Tapung, Kampar Regency. This type of experimental research uses quasy experiment research design nonequivalent control group design The population in this study were all mothers who had children who were
stunted under two million in the village of Tapung Kampar. The sample in this study were all treatment and control groups.

The number of samples of this study were 66 mothers (33 respondents in the control group, 33 respondents in the experimental group), with established inclusion criteria (toddler with stunting aged 6-24 months, and mothers who were willing to become respondents). The sample technique used is accidental sampling. Differences in measures in child feeding were analyzed using dependent t-test.

The independent variable is nutritional counseling, while the dependent variable is the mother's actions in feeding. Data collected included age, education, occupation, number of family members, and income. The research instrument used was a questionnaire and leaflet. Differences in maternal actions in feeding stunting children were analyzed by different tests. Data with normal distribution (p> 0.05) were tested with dependent t test and independent t test, while data with abnormal distribution (p <0.05) were tested with Wilcoxon and Mann-whitney tests.

**RESULTS AND DISCUSSION**

The results of a study conducted in 2020 with 66 respondents (33 control groups and 33 experimental groups) in Tapung, Kampar Regency, Riau Province, concerning the effect of counseling on Mother's Action in Feeding Toddlers with Stunting in Tapung, Kampar District, Riau Province, can be seen in the table below:

a. **Univariate Analysis**

**Table 1. Characteristics of Respondents Based on Education in the Experimental Group**

| No | Education          | Frequency | Percentage (%) |
|----|--------------------|-----------|----------------|
| 1  | Elementary school  | 2         | 6%             |
| 2  | Middle School      | 7         | 21%            |
| 3  | High school        | 13        | 40%            |
| 4  | Diploma            | 6         | 18%            |
| 5  | Bachelor           | 5         | 15%            |
|    | **Total**          | **33**    | **100**        |

Based on table 1 above of the 33 experimental group respondents in Tapung, Kampar District, the highest distribution of respondents based on education was SMA with 13 respondents (40%).
Table 2. Characteristics of Respondents Based on Education in the Control Group

| No | Education             | Frequency | Percentage (%) |
|----|-----------------------|-----------|----------------|
| 1  | Elementary school     | 1         | 3%             |
| 2  | Middle School         | 5         | 15%            |
| 3  | High School           | 15        | 46%            |
| 4  | Diploma               | 4         | 12%            |
| 5  | Bachelor              | 8         | 24%            |
|    | Total                 | 33        | 100            |

Based on table 2 above of the 33 control group respondents in Tapung Kampar District, the highest distribution of respondents based on education was high school with 15 respondents (46%).

Table 3. Characteristics of Respondents Based on Work in the Experiment Group

| No | Profession     | Frequency | Percentage (%) |
|----|----------------|-----------|----------------|
| 1  | Teacher        | 4         | 12%            |
| 2  | Housewife      | 21        | 64%            |
| 3  | Trader         | 3         | 9%             |
| 4  | Employee       | 2         | 6%             |
| 5  | Entrepreneur   | 3         | 9%             |
|    | Total          | 33        | 100            |

Based on table 3 above of the 33 experimental group respondents in Tapung, Kampar Regency, the distribution of respondents based on the most work was IRT with 21 respondents (64%).

Table 4. Characteristics of Respondents Based on Work in the Control Group

| No | Profession    | Frequency | Percentage (%) |
|----|---------------|-----------|----------------|
| 1  | Teacher       | -         | 0%             |
| 2  | Housewife     | 17        | 52%            |
| 3  | Trader        | 9         | 27%            |
| 4  | Employee      | 3         | 9%             |
| 5  | Entrepreneur  | 4         | 12%            |
|    | Total         | 33        | 100            |

Based on table 4 above of the 33 control group respondents in Tapung Kampar District, the distribution of respondents based on the most work was IRT with 17 respondents (52%).
Table 5. Characteristics of Respondents Based on Monthly Earnings in the Experiment Group

| No | Monthly Earnings | Frequency | Percentage (%) |
|----|------------------|-----------|----------------|
| 1  | <Rp.3,000,000    | 23        | 70%            |
| 2  | >Rp.3,000,000    | 10        | 30%            |
| Total |           | 33        | 100            |

Based on table 5 above of the 33 experimental group respondents in Tapung, Kampar District, the distribution of respondents based on the highest monthly income is <Rp. 3,000,000 with 23 respondents (70%).

Table 6. Characteristics of Respondents Based on Monthly Earnings in the Control Group

| No | Monthly Earnings | Frequency | Percentage (%) |
|----|------------------|-----------|----------------|
| 1  | <Rp.3,000,000    | 18        | 55%            |
| 2  | >Rp.3,000,000    | 15        | 45%            |
| Total |           | 33        | 100            |

Based on table 6 above of 33 experimental group respondents in Tapung, Kampar District, the distribution of respondents based on the highest monthly income is <Rp. 3,000,000 with a total of 18 respondents (55%).

Table 7. Maternal Actions in Feeding Children Stunting Before Counseling (Control Group)

| No | Variable | Frequency | Percentage (%) |
|----|----------|-----------|----------------|
| 1  | Well     | 6         | 18%            |
| 2  | Enough   | 17        | 51%            |
| 3  | Less     | 10        | 31%            |
| Total |           | 33        | 100            |

Based on table 7 above of the 33 respondents of the control group in Tapung Kampar Regency, the distribution of respondents based on the actions of mothers in feeding children before counseling the most is enough with the number of 17 respondents (51%).

Table 8. Mothers' Actions In Feeding Stunting Children Before Counseling (Experimental Group)

| No | Variable | Frequency | Percentage (%) |
|----|----------|-----------|----------------|
| 1  | Well     | 3         | 9%             |
| 2  | Enough   | 16        | 48%            |
| 3  | Less     | 14        | 43%            |
| Total |           | 33        | 100            |
Based on the above table of 33 experimental group respondents in Tapung Kampar Regency, the distribution of respondents based on the actions of mothers in feeding children before counseling the most is enough with the number of 16 respondents (48%).

Table 9. Maternal Actions in Feeding Stunting Children after Counseling (Control Group)

| No | Variable | Frequency | Percentage (%) |
|----|----------|-----------|----------------|
| 1  | Well     | 8         | 24%            |
| 2  | Enough   | 19        | 57%            |
| 3  | Less     | 6         | 19%            |
|    | Total    | 33        | 100            |

Based on the table above from 33 respondents of the control group in Tapung Kampar District, the distribution of respondents based on the actions of mothers in feeding children after counseling the most is enough with the number of 19 respondents (57%).

Table 10. Maternal Actions in Feeding Stunting Children after Counseling (Experimental Group)

| No | Variable | Frequency | Percentage (%) |
|----|----------|-----------|----------------|
| 1  | Well     | 15        | 45%            |
| 2  | Enough   | 12        | 36%            |
| 3  | Less     | 6         | 19%            |
|    | Total    | 33        | 100            |

Based on the table above from 33 respondents of the experimental group in Tapung Kampar District, the distribution of respondents based on the actions of mothers in feeding children after counseling the most is good with the number of 15 respondents (45%).

b. Bivariate Analysis

Table 11. Comparison of mean changes Mother's actions in feeding children between the control and experimental groups

| VARIABLE                  | CONTROL          | EXPERIMENTAL    | P Value |
|---------------------------|------------------|-----------------|---------|
| Mother's actions in feeding | 140,6 +/-66,48   | 94,8 +/-45,65   | 0,015   |

Based on table 11 above, a comparison of mean changes in the mother's actions in feeding the child between the control and experimental groups was the mean of the
control group 140.6 while the experimental group was 94.8. the value of p value <α is 0.015

Table 12. Differences in Mother’s Actions in Feeding Children at the Beginning and End of Research in the Control and Experiment Groups

| VARIABLE                      | CONTROL AVERAGE +/- STANDARD DEVIATION | P Value | EXPERIMENTAL AVERAGE +/- STANDARD DEVIATION | P Value |
|-------------------------------|----------------------------------------|---------|---------------------------------------------|---------|
|                               | BEFORE TREATMENT                        |         | AFTER TREATMENT                             |         |
| Mother’s actions in feeding   | 140,6 +/- 66,5                         | 0,763   | 138,2 +/- 43,9                             | 0,000   |
|                               | AFTER TREATMENT                         |         |                                             |         |
|                               | 94,7 +/- 45,6                          |         | 174,5 +/- 52,4                             |         |

Based on table 12 above, it is found that differences in maternal actions in feeding children before and after the study in the control group p value > α is 0.763 and experiments with p value <α is 0.000.

The results showed that nutritional counseling affected the actions of mothers in the way of feeding stunting children with p value: 0.015. And there is a significant difference in the actions of mothers in feeding stunting children before being given nutritional counseling and after being given nutritional counseling, p value: 0.000 is obtained.

Even though most of the characteristics of maternal education are high school, but there is a change in the actions of mothers after being given nutritional counseling, because mothers listen to information and are open so that knowledge is better. In addition, the most work status of mothers is housewives (IRT), it is also very supportive to receive counseling well, because mothers have plenty of time to receive and understand information from counseling. By providing information through counseling can increase the mother's knowledge about good nutrition, especially in the correct feeding of children under the age of two years.

Good knowledge about nutrition will have a positive impact on the way mothers feed their children. Knowledge of nutrition in a variety of food ingredients and how to present it well (Afita, 2013). The results of other studies also concluded that there were differences in maternal behavior before and after nutritional counseling. In her research, prior to counseling, most mothers' knowledge and attitudes were sufficient so that after nutritional counseling behavior change would be easy to occur (Sofiyaan, 2012).

**CONCLUSIONS**

The results of this study indicate a comparison of mean changes in maternal actions in child feeding between the control and experimental groups is the mean of the control group 140.6 while the experimental group is 94.8 with a p value <α of 0.015 and the difference in maternal actions in child feeding before and after research in the control group p value > α is 0.763 and experiments with p value <α is 0.000.
REFERENCES

Amaliah, N., K. Sari., And B.Ch. Rosha. 2012. Short Body Height Status Risks to Menarche Age Delay in Adolescent Girls Age 10-15 Years. 2012 Nutrition Panel, 35 (2): 150-158.

Aridiyah, F.O., N. Rohmawati., And M. Ririanty. 2015. Factors Affecting Stunting in Toddlers in Rural and Urban Areas (The Factors Affecting Stunting on Toddlers in Rural and Urban Areas). Health Library E-journal, 3 (1): 163-170.

Directorate of Community Nutrition. 2017. Results of Nutrition Status Monitoring (PSG) and Explanation for 2016. Ministry of Health Republic of Indonesia. Jakarta.

Hidayah, AK and Hidayanti, L. (2013). Counseling interventions for weight gain in malnourished children. Journal of Siliwangi University: Faculty of Health Sciences

Kullu, V.M., Yasnani., And H. Lestari. 2018. Factors Related to Stunting in Toddlers Age 24-59 Months in Wawatu Village, Moramo Utara District, Konawe Selatan District 2017. The Scientific Journal of Public Health Students, Vol. 3 (2): 1-11.

Kusuma, K.E. 2013. Risk Factors for Stunting Incidence in Children Aged 2-3 Years (Study in East Semarang District). Diponegoro University. Essay.

Lestari, W., A. Margawati, and M.Z. Rahfiludin. 2014. Stunting Risk Factors in Children Aged 6-24 Months in Penanggalan Subulussalam City, Aceh Province. Indonesian Nutrition Journal (ISSN: 1858-4942), 3 (1): 37-4.

Ministry of PDTT. 2017. The Village Pocket Book in Handling Stunting. Jakarta: Ministry of Villages, Disadvantaged Regions and Transmigration. Millenium Challenga Account Indonesia. 2014. Stunting and the Future of Indonesia. Obtained from www.mca-indonesia.go.id

RI Ministry of Health. 2013a. Basic Health Research (RISKESDAS) 2013. Health Research and Development Agency Ministry of Health Republic of Indonesia. Jakarta.

RI Ministry of Health. 2013b. 2013 RISKESDAS INDONESIA Highlights. Health Research and Development Agency Ministry of Health Republic of Indonesia. Jakarta.

Sofiyana, D. (2012). Differences in knowledge, attitudes and behaviors before and after nutritional counseling in infants with malnutrition. 20-25