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Mother's Activity, Less Nutritional Together Weight During Nutrition Implementation

Rahayu, Endah Sri^{1*}, Sirait, Rosmaida², Nuburi, Dorci³ & Suweni, Korinus

^{1,2,3,4}Department of Nutrition, Health Polytechnic of the Ministry of Health Jayapura, 99351 Jayapura, Papua, INDONESIA

*Corresponding Author: rahayuaque@gmail.com

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Abstract. Nutrition plays an important role in the human life cycle. Malnutrition in infants and toddlers will cause growth and development disorders. Growth or nutritional status of children is not only related to food consumption but is associated with behavior in this case parenting nutrition, and is influenced by the environment. To find out the activeness / participation of parents of toddlers and weight gain in under-nutrition children. This research is a pre-experimental research with the research design is one shot case design. The location of the study was at the Nauri Posyandu in the Hedam District of Jayapura City. The sample of this study was under nutrition toddlers aged 12-59 months. Sampling by purposive sampling based on inclusion and exclusion criteria. Of the 11 study samples that gained weight ≥ 200 g as many as 7 people (64%) were classified as good and the rest were classified as less while the participation / activeness of the study sample mothers 56% were classified as active, 33% were less active and 11.1% were inactive. The weight gain of the study sample is not only seen from the presence of the sample when the Hearth Implementation takes place but needs to be supported by the participation / activeness of the mother / parent.

Keywords: Toddler, Weight Loss, Nutrition Post, Liveliness

1 Introduction

Toddlers are children who have turned over the age of 1 year or more famously the age of children under five years old. At the age of a toddler, a child's growth is so rapid that it requires nutritional intake that suits his needs (Khomsan, 2012). Nutrition plays an important role in the human life cycle. Nutritional problems in toddlers are broadly the impact of an imbalance between intake and needs (nutritional imbalance), namely, intake that exceeds output or vice versa (Sharlin & Edelstein, 2010) can result in impaired growth and development (Basrowi et al., 2018). The growth and nutritional status of the child is not only related to the consumption of food but is associated with behavior in this case nutritional parenting, which is influenced by its environment (Pryer et al., 2003; Oninla et al., 2006). According to Ray (2019), the parenting environment of mother and child interaction greatly affects the growth and development of children.

Riskesdas data from Papua Province in 2010 the prevalence of malnutrition for weight according to age (BB /U) is known to be 10.0% (Balitbangkes, 2010) increased to 12.6% (Balitbangkes, 2013). Meanwhile, data from the Nutritional Status Monitoring (PSG) of the Jayapura City Health Office in 2014 found that the prevalence of undernourished toddlers was 10.4% (Mapandin, 2006).

The efforts made by the government to overcome nutritional problems so far are still oriented towards programs that lack leverage but are expensive, such as food subsidies

(supplementary feeding) to certain target groups which actually cause dependence rather than empowerment.

Nutrition Post activities encourage behavior change and empower mothers of toddlers or caregivers to take responsibility for the rehabilitation of their children using local knowledge and resources. In the Nutrition Post approach of the cadres, mothers of toddlers/caregivers of undernourished toddlers practice a variety of new behaviors in terms of cooking, feeding, hygiene, and upbringing of toddlers that have been shown to be successful in rehabilitating malnourished children. Health cadres actively engage mothers and children in rehabilitation and learning for families, with the intention of ensuring that they can maintain their child's already good status, after a series of training and learning (Mataram & Agustini, 2020). Solving nutrition problems with an approach through nutrition posts is an alternative that needs to be considered for development in Papua that emphasizes the principle of community mobilization and empowerment in overcoming the health problems faced (Ganaprakasam, 2018). Posyandu Nauru is one of the Posyandu in the working area of the Abepura health center with a large number of undernourished toddlers based on the results of weighing in November 2016, namely the number of malnourished toddlers as many as 16 people from 43 toddlers who attended the Posyandu.

Based on the background and phenomena that occurred, researchers were drawn to research the effect of the implementation of nutrition posts on the weight gain of undernourished toddlers at the Nauru Posyandu in Haram District, Jayapura City.

2 Method

This type of research is pre-experimental by providing treatment and its impact will be measured later. One-Shot Case Study research design. A group of subjects is subjected to a certain treatment (as a free variable) and then measurements are made against the free variable. The research location is at the Nauru Posyandu of the Abepura Health Center, Jayapura City.

The population is affordable for all toddlers aged 0–59 months at Posyandu Nauri in Hedam District, Jayapura City. The sample in the study total sampling of malnourished toddlers who met the inclusion criteria. The toddlers participating in the Nutrition Post at Posyandu Nauri totaled 11 people and had met several criteria such as being over 1 year old, already able to eat rice, not being sick, and not having a history of pulmonary TB disease, and worms with a statement from a doctor. Purposive sampling sample selection. Data collection is carried out by researchers assisted by enumerators.

Primary data includes Child identity, Height/Length of body pre and post implementation of nutrition posts, parental Identity Data, education, number of children, Child attendance, Activeness/parental participation. Secondary data collected include: data on malnourished children under five in Posyandu Nauri, regional descriptions and boundaries, local demographics and topography, other health data taken from community Health centers (PUSKESMAS) and the Jayapura City Health Office.

The study was carried out for 11 days. The implementation of the Nutrition Post starts at 10.00 WIT. Undernourished toddlers with toddler mothers come to the place of Nutrition Post activities at Posyandu Nauri. After filling in attendance, the research sample was weighed in weight on the first day using the scale, then after weighing the body weight of the research sample was carried out, the toddler mother together with the enumerator carried out cooking practices and during the cooking practice, nutritional education was provided to the mother of the toddler in the form of recommended foodstuffs, how to prepare good vegetable processing, how to process and store iodized salt, how to cope with a child who has difficulty eating. While the mother of the toddler does the practice of cooking, the children play

together (socialize) with the help of an enumerator. After the cooking practice is completed, all food that will be given to undernourished toddlers is weighed according to a predetermined portion. At noon WIT the study sample ate together, but before eating the toddler washed his hands and prayed together. After the research sample is finished the food if there is food not spent, then the leftovers are weighed. The last activity carried out is washing kitchen utensils and dishes that are still dirty. On the 10th day, weight weighing was carried out to see if there was a change in the weight of undernourished toddlers after the Implementation of the Nutrition Post.

3 Results

The work of the sample father is divided into two categories, namely firstly civil servants, police, secondly private including workers, motorcycle taxi drivers, drivers, traders. Most of them were housewives as many as 7 people (77.78%) while the rest were daily sample mothers as vegetable and bakers. The education of parents lowest level of research sample is elementary school, and the highest is College. A total of 4 people (44.44%) of father's education is at the level of high school (SMA), and the lowest education of fathers is at the level of elementary school (SD) as much as 1 person (11.11%). The education level of most of the research sample mothers was senior high school (SMA) / economics senior high school (SMEA) many as 6 people (67%), the while lowest education of the research sample mothers was junior high school (junior high school) many as 2 people (22.22%). The research sample of the Implementation of Nutrition Posts was mostly female, namely 8 people (63.64%) while 3 people (36.36%) were men.

Weight weighing is carried out on the first day of the nutrition post before feeding and after the 10th day of implementation of the Nutrition Post. Weighing toddlers using digital scales that have been calibrated as many as 8 people (73%) experienced general weight gain ranging from 100 g - 800 g after participating in The Nutrition Post activity, while 2 people (18%) had a fixed weight gain, and 1 person (9%) experienced a weight loss of 200 g.

The participation of the sample parents based on the results of researchers' observations during the implementation of the nutrition post took place was categorized as active, less active and passive. It is known that 56% of mothers actively participate in the Implementation of Nutrition Posts from the time of preparing food ingredients until the tenth day of the Nutrition Post activities, while's 11% only deliver their children but do not accompany them during the nutrition post activities. The presence of samples based on attendance of arrival without looking at the involvement of mothers during the study until the tenth day of the Implementation of Nutrition Posts was seen that most or as many as 7 people (64%) were never absent while the sample who was present for less than 10 days because parents were not in place so they did not deliver their children to the Nutrition Post.

3.1 Participation / Activeness of Parents with Weight Gain

The activeness of parents/mothers at the time of the Implementation of Nutrition Posts in Posyandu Nauri compared to the weight gain of the sample after the 10th day of the Implementation of Nutrition Posts was seen in table 1 Mothers of active research samples showed that as many as 5 people (45.5%) samples experienced weight gain.

Table 1 Participation of parents with weight gain of the sample

Parental	Weight Gain			Total		
Participation	Good			Less		
	n	%	n	%	n	%
Active	5	45.5	1	9.1	6	54.5
Less active	1	9.1	2	18.2	3	27.3

Inactive	1	9.1	1	9.1	2	18.2
Total	7	63.6	4	36.4	11	100

The mother of the study sample who was inactive during the Implementation of Nutrition Post was only 1 person or as much as (9.1%) of the study sample who gained weight.

3.2 The Presence of Samples with Weight Gain

The presence of research samples is very important when the implementation of nutrition posts takes place, Table 2 shows that the sample present is 100% and the weight has increased in the good category of 4 people (36.4%) while as many as 1 people (9.1%) attendances is 80% and experienced an increase in body weight

Table 2 Presence of Samples with weight gain of the sample

Sample	Weight Gain				Total	
Presence	Good			Less	•	
	n	%	n	%	n	%
10 Day	4	36.4	3	27.3	7	63.6
9 Day	2	18.2	1	9,1	3	27.3
8 Day	1	9.1	0	0	1	9.1
Total	7	63.6	4	36.4	11	100

4 Discussion

At the beginning of the study, the number of malnourished toddlers in Posyandu Nauri was 16 people, the data was obtained based on data from weighing results at posyandu. Based on this data, researchers together with toddler mothers and Posyandu cadres conducted deliberations to determine the time and availability of parents of toddlers to participate in the Implementation of Nutrition Posts. A total of 9 families stated that they were willing to participate in the activity with a total of 11 toddlers according to the inclusion criteria, namely 11 toddlers.

Interviews with research sample mothers found that most of the parents of the sample were educated after high school, the father's occupation was mostly private, and the research sample mother did not work. Education is an important aspect in supporting human quality, as implied in the Human Development Index (HDI) (Appoh & Krekling, 2005). The results of Persulessy et al. (2016) study show that practical maternal knowledge of nutrition is more important than the mother's formal education for the nutritional status of the child. The research sample that participated in the implementation of the Nutrition Post was 8 people (63.64%) who were female while 3 people (36.36%) were male. The study Meshram et al. (2012) concluded that malnutrition in toddlers is related to maternal health problems and health status in Indian tribal children.

Sukandar et al. research (2015) weight change is the state of a person's body caused by the consumption, absorption, and use of food nutrients. Hidayat & Prasetyo (2018) mentioned that the benefits of nutrition in the body can help the process of growth and development of children, as well as prevent the occurrence of various diseases due to malnutrition in the body such as lack of energy and protein can inhibit children's growth and development. The results showed that there was a higher level of weight change compared to before participating in the implementation of the nutrition post. Of the 11 study samples that experienced weight gain as many as 8 people (73%) ranged from 100 – 800 g. This is in line with research Nahak et al. (2022) showing the influence of weight changes shows that there is a significant difference (p<0.05) between the treatment group and the control group after being given supplementary food. Meanwhile, the weight gain is in accordance with what is

expected in the implementation of the Nutrition Post, namely ≥ 200 g as many as 7 people (64%). The weight gain of the oddlers who gain can be influenced by the acceptability of the supplementary food given both and the presence of a sample of 7 people (64%) never absent.

The results of this study are in line with research conducted by Aulia (2010) said that there was a difference in the average body weight of undernourished toddlers before and after the Nutrition Post activities for 10 days as many as 7 toddlers (46.6%) in Pondok Jaya Village, south District, Tangerang Regency. Research by Dar et al. (2014) stated that there was a difference in the average body weight of undernourished toddlers before and after Supplementary Feeding (PMT) for 10 days in Dairi Regency, North Sumatra where as many as 6 toddlers (50%) experienced weight gain.

Toddler weight gain can be caused because toddlers are always present as many as 7 people (64%) for 10 days of good food intake at home because from the results of the 24-hour recall carried out, it was found that the level of consumption was good when compared to needs, in addition to the child's activities that were not too excessive because they always took naps and rarely played outside the home according to the recognition of parents of toddlers.

The weight of the toddler who does not increase or does not change is influenced by the acceptability of the additional food given less, then it can also be caused because the toddler is not present continuously for 10 of the results of the 24-hour recall, it is found that the level ofconsumption of the toddler is less when compared to the needs, and according to the toddler's parents' confession that their child often does not take naps and plays more outside the home.

Anis et al. research (2017) showed that there was a change in the behavior of respondents (parents) of undernourished toddlers at home during the Nutrition Post activities in Bojonegoro Regency, namely parents began to prioritize their children to eat first in the family, and respondents (fathers) began to help the work of respondents (mothers) in terms of paying attention to eating their children to feed their children so that they could finish the food given.

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5 Conclusion

Most mothers of toddlers who actively participate during the nutrition post last for 10 days their toddlers have gained weight.

References

- Appoh, L. Y., & Krekling, S. (2005). Maternal nutritional knowledge and child nutritional status in the Volta region of Ghana. *Maternal & child nutrition*, 1(2), 100-110.
- Anis, S. G., Labib, H. A. E., Ibrahim, S. F., & Koraa, A. E. D. A. E. (2017). Comparative study between enteral and intradialytic parenteral nutrition in hemodialysis patients. *Ain-Shams Journal of Anaesthesiology*, 10(1), 68.
- Aulia, N. M. (2010). Penilaian Kebermanfaatan Program Pos Gizi di Desa Pondok Jaya Kecamatan Sepatan Kabupaten Tangerang Tahun 2010.
- Basrowi, R. W., Sastroasmoro, S., Sulistomo, A. W., Bardosono, S., Hendarto, A., Soemarko, D. S., ... & Vandenplas, Y. (2018). Challenges and supports of breastfeeding at workplace in Indonesia. *Pediatric gastroenterology, hepatology & nutrition*, 21(4), 248-256.

- Balitbangkes (Health Research and Development Agency), Ministry of Health of the Republic of Indonesia. (2010). Basic Health Research (Riskesdas) 2010.
- Balitbangkes (Health Research and Development Agency), Ministry of Health of the Republic of Indonesia (2013). Basic Health Research (Riskesdas) 2013.
- Dar, T. I., Tyagi, V., Pahwa, M., Chada, S., Jauhari, H., & Sharma, N. (2014). A study to evaluate the effect of ratio of donor kidney weight to recipient body weight on renal graft function. *Urology Annals*, 6(2), 139.
- Ganaprakasam, C. (2018). Emotional intelligence on suicidal ideation and mental health. *Muallim Journal of Social Sciences and Humanities*, 2(3), 185-195. Retrieved from https://mjsshonline.com/index.php/journal/article/view/62
- Hidayat, A. A. A., & Prasetyo, E. (2018). Research Article Predictors of Malnutrition in Children Aged Less than 5 Years in Surabaya, Indonesia. *Pakistan Journal of Nutrition*, 17(12), 641-646.
- Khomsan, A., Anwar, F., Sukandar, D., Riyadi, H., & Mudjajanto, E. S. (2006). Studi tentang pengetahuan gizi ibu dan kebiasaan makan pada rumah tangga di daerah dataran tinggi dan pantai [Studies on maternal nutritional knowledge and eating habits in households in the highlands and the coast]. *Jurnal Gizi dan Pangan*, *1*(1), 23-28.
- Mapandin, W. Y. (2006). Stunting Status of New Children Enter Elementary School Between Urban and Rural Areas in Jayapura City, Papua. *Indian Journal of Public Health*, 10(11), 2275.
- Mataram, I., & Agustini, N. P. (2020). Molatisu implementation increasing integrated health post cadre skills under five years old related balance menu preparation. *International Journal of Health Sciences*, *4*(1), 8-17.
- Meshram, I. I., Arlappa, N., Balakrishna, N., Rao, K. M., Laxmaiah, A., & Brahmam, G. N. V. (2012). Trends in the prevalence of undernutrition, nutrient and food intake and predictors of undernutrition among under five year tribal children in India. *Asia Pacific journal of clinical nutrition*, 21(4), 568-576.
- Nahak, M. P. M., Naibili, M. J. E., Isu, Y. K., & Loe, M. G. (2022). Pendidikan Kesehatan Tentang Pencegahan Anemia Melalui Kombinasi Metode Ceramah Dan Leaflet Pada Remaja Putri Di Sman 3 Atambua [Health Education About Anemia Prevention Through A Combination of Lecture and Leaflet Methods to Young Women at Public Senior High School No. 3 Atambua]. *Abdimas Galuh*, 4(1), 554-562.
- Oninla, S. O., Owa, J. A., Onayade, A. A., & Taiwo, O. (2007). Comparative study of nutritional status of urban and rural Nigerian school children. *Journal of Tropical Pediatrics*, *53*(1), 39-43.
- Persulessy, V., Mursyid, A., & Wijanarka, A. (2016). Tingkat pendapatan dan pola makan berhubungan dengan status gizi balita di Daerah Nelayan Distrik Jayapura Utara Kota Jayapura. *Jurnal Gizi dan Dietetik Indonesia (Indonesian Journal of Nutrition and Dietetics)*, 1(3), 143-150.
- Pryer, J. A., Rogers, S., & Rahman, A. (2004). The epidemiology of good nutritional status among children from a population with a high prevalence of malnutrition. *Public health nutrition*, 7(2), 311-317.
- Ray, D. C. (2019). Culturally and linguistically responsive play therapy: Adapting child-centered play therapy for deaf children. *International Journal of Play Therapy*, 28(2), 79.
- Sharlin, J., & Edelstein, S. (2010). Essentials of life cycle nutrition. Jones & Bartlett Publishers.
- Sukandar, D., Khomsan, A., Anwar, F., Riyadi, H., & Mudjajanto, E. S. (2015). Nutrition knowledge, attitude, and practice of mothers and children nutritional status improved after five months nutrition education intervention. *Int J Sci Basic Appl Res*, 23(2), 424-42.