

Early Childhood Nutrition Education Mentoring for Parents and Teachers at PAUD Samratulangi in Manado City

Alpinia Shinta Pondagitan^{a)}, Rakhmawati Agustina

Program Studi Gizi Fakultas Ilmu Kesehatan Universitas Muhammadiyah Manado

^{a)} Corresponding Author: aspondagitan@gmail.com

Abstract

Balanced nutrition in early childhood is very important in achieving optimal growth and development, because in this period children begin to learn what, when and how to eat either through direct experience or seeing other people which will have an impact on their developmental health. Increased in health problems on children mainly caused by various factors including parent economic status, parenting patterns, and the level of knowledge and awareness of healthy and nutritious food on children. This will potentially lead to new health problems and will have an impact on children's growth and development which will affect their productivity in the future. The purpose of this community service is to carry out mentoring for early childhood nutrition education for parents and teachers at PAUD Samratulangi in Manado City. The targets are parents and teachers at PAUD Samratulangi in Manado City. The activity was held on June 11th, 2022 with several stages including preparation stage, implementation stage, and evaluation stage. The preparation stage is carried out by conducting survey location and obtaining permits at the activity site. Implementation is carried out by providing balanced nutrition assistance to parents and teachers. Evaluation is carried out by collecting data from the implementation activities, in this case by providing a knowledge questionnaire about balanced nutrition for early childhood. The result of this activity is the implementation of balanced nutrition assistance to parents and teachers. The implementers of this community service activities are lecturers and undergraduate students from the Nutrition Program, Faculty of Health Sciences, University of Muhammadiyah Manado.

Keywords: Community Service, Balanced Nutrition, Early Childhood

INTRODUCTION

Early childhood can be interpreted as children who are in the age between 0 month to 6 years old, where at this stage is usually called the golden age because all childhood development aspects will grow and develop rapidly (Sari, Maryani & Rusdiyani, 2022). It is known that there are three pillars that can improve the quality of child development, including adequate nutritional intake, health and care services, as well as educational psychosocial stimulation. Therefore at this time parents and teachers need to provide targeted stimulants such as nutritional adequacy and educational stimulation, in order that children will have good and strong personalities in further development (Pirunika, Suherman & Indrawati, 2022). Balanced nutrition in early childhood is very important in achieving optimal growth and development (Schwarzenberg, Georgieff & Committee on Nutrition, 2018), because in this period children begin to learn what, when and how to eat either through direct experience or seeing other people which will have an impact on their developmental health (Omand et al., 2021).

Nutrients have an important role in cell proliferation, DNA synthesis, metabolism of neurotransmitters and hormones as well as enzyme systems, all of which have an impact on brain development (Nyaradi et al., 2013). Furthermore, regardless of the function of the nutrients themselves, the experience of eating can provide opportunities for children to learn things that can affect their psychosocial and emotional development (Omand et al., 2021). A systematic review conducted by Tandon et al., in 2016 reported that a balanced nutritional intake in early childhood is associated with positive cognitive achievement when children enter the next life cycle period. One of the effects of child growth and development is the fulfillment of nutrition.

Nutrition is the main support for children's growth and development so that they can develop according to age and have good maturation of body functions, therefore parents should facilitate balanced nutrition for their children (Pratiwi & Setyawati, 2013).

UNICEF reports that the increasing number of health problems that occur in children mainly caused by various factors such as parents economic factors, parenting patterns, and the level of knowledge and awareness of children on healthy and nutritious food. If this situation continues, it is feared that it will potentially cause new health problems and have an impact on children's growth and development which will affect work productivity in the future. The relationship between parents and children is important because it affects the growth and development of children. Parents who have good parenting patterns, including feeding practices are closely related to the child's Body Mass Index (BMI), this is because parents are agents of change for children who directly choose healthy or unhealthy foods for children (Larsen et al., 2015). Schools has become places for early childhood to do their activities besides at home, therefore schools also play a main role in children's growth and development. Nutrition education is a part of communication, information and nutrition education from a person to the community, including institutions in the formation and attitude towards nutrition fulfilment (Departemen Gizi dan Kesehatan Masyarakat UI, 2014). Providing nutrition education not only as a learning process, but also as a form of health service as a step in optimizing the potential growth and development of children (Rakhmawati et al., 2021).

Balanced nutrition education is one of the important efforts in increasing knowledge and attitudes in fulfilling nutrition. A research conducted in Malang proofed that it is necessary to provide nutrition education to schools and longer nutrition interventions can increase the knowledge and attitudes towards fulfilling good nutrition (Silalahi et al., 2018). Based on the background are the reasons for researches to do community service by providing early childhood nutrition education mentoring for parents and teachers at PAUD Samratulangi in Manado City.

The aims of this community service are :

1. Improving the knowledge and attitudes of parents and teachers towards early childhood nutrition
2. increasing knowledge of the attitudes of parents and teachers in preparing a balanced menu for early childhood
3. increasing the knowledge of the attitudes of parents and teachers in monitoring the nutritional status of early childhood

METHODS

The implementation methods of this community service are :

1. survey stage
The first stage in this community service is to survey the targeted location of the implementation of this activity.
2. Partnership agreement
The second stage is making an agreement with the PAUD Samratulangi and asking for their willingness to be a partner in order to participate in the implementation of this community service. In addition, the schedule of this community service is also carried out according to school activities so that it would not interfere with the learning process.
3. Implementation
The next stage is the implementation of this main activities including providing education about balanced nutrition in early childhood, demonstration of preparing a balanced menu, and demonstration of measuring nutritional status in early childhood. Before and after mentoring, the targeted audience were given questionnaires regarding knowledge of balanced nutrition for early childhood with the aim of knowing whether there was an excalation in understanding of balanced nutrition before and after mentoring.

RESULTS

The early childhood education mentoring activity was carried out on Saturday, June 11th 2022, which was attended by 10 parents and teachers of PAUD Samratulangi Manado. Mentoring begins with the distribution of a pretest questionnaire on parental knowledge of balanced nutrition in early childhood which aims to determine the initial understanding of parents and teachers. After filling out the questionnaire, the activity continued with the provision of material on balanced nutrition in early childhood, demonstration of the preparation of a balanced menu and demonstration of measuring the nutritional status of children carried out by a team of lecturers and assisted by students of the Nutrition Program, Faculty of Health Sciences, Muhammadiyah University Manado. The next activity was a discussion and distribution of a post test questionnaire on parental knowledge of balanced nutrition in early childhood which aims to measure the increase in understanding of parents and teachers about balanced nutrition. Result of the pre test and post test of parents and teachers at PAUD Samratulangi can be seen in Table 1 below.

Table 1. Pre Test and Post Test Result

Pre Test	Post Test
Lowest score = 62,5	Lowest score = 75
Highest score = 93,8	Highest score = 100
Average score = 79,3	Average score = 88,7

Based on the result above, it can be seen that there is an increase in the knowledge of parents and teachers before being given mentoring and after being given mentoring which can be seen from the increase score.

DISCUSSIONS

Balanced nutrition education is defined as a combination of any educational strategy with support from the environment, designed to facilitate voluntary food choices for health and well-being (Contento, 2016). Parental involvement in balanced nutrition is an important factor in the success of the intervention. Most of the successful interventions were carried out using the face-to-face method compared to only sending information to parents (Murimi et al., 2018). Research results conducted by Muros et al., (2015) reported that interventions carried out on parents through nutrition classes obtained positive results. The same result was also reported by Dewi, Novyriana & Sulastri (2022) where there was an increase in knowledge before and after being given education. This result inversely proportional to interventions carried out on parents through websites, giving parents practice assignments at home, or sending intervention materials such as newsletters or tabloids (Murimi et al., 2018).

CONCLUSION AND RECOMMENDATIONS

Mentoring activities for early childhood nutrition education for parents and teachers carried out at PAUD Samratulangi went smoothly. The activities carried out are :

1. Providing education on balanced nutrition for early childhood to parents and teachers
2. Demonstration of a balanced nutrition menu for early childhood
3. Demonstration of measuring nutritional status correctly

Apart from the activities that ran smoothly, the enthusiasm of parents who were still low was one of the weaknesses of this activity, so that in the future the participation of parents was highly expected for further activities.

REFERENCES

- Antwi, J., Ohemeng, A., Quaidoo, E., Bannerman, B. (2020). Primary School-based Nutrition Education Intervention on Nutrition Knowledge, Attitude and Practices among School-age Children in Ghana. *Global Health Promotion*, 0(0), 1-9

- Contento, I. R. (2016). *Nutrition Education: Linking Research, Theory, and Practice 3rd Edition*. Burlington, Jones & Bartlett Learning
- Dewi, A. P. S., Novyriana, E., & Sulastri, E. (2022). Whatsapp Groups as a Place in the Covid-19 Pandemic Era. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 5(1), 1843-1847. <https://doi.org/10.35568/abdimas.v5i1.1868>
- Kleinman, R. E., Greer, F. R. (2019). *Pediatric Nutrition 8th edition*. United States of America, American Academy of Pediatrics
- Kunin-Batson, A. S., Seburg, E. M., Crain, A. L., Jaka, M. M., Langer, S. L., et al. (2015). Household Factors, Family Behavior Patterns, and Adherence to Dietary and Physical Activity Guidelines Among Children at Risk for Obesity. *J Nutr Educ Behav*, 47(3), 206-15
- Larsen, J. K., Hermans, R. C. J., Sleddens, E. F. C., Engels, R. C. M. E., Fisher, J. O., & Kremers, S. S. P. J. (2015). How Parental Dietary Behavior and Food Parenting Practices affects Children's Dietary Behavior, Interacting Sources of Influence. *Appetite*, 89, 246-257
- Muros, J. J., Zabala, M., Oliveras-lopez, M. J., Bouzas, P. R., Knox, E. et al. (2016). Effect of Physical Activity, Nutritional Education, and Consumption of Extra Virgin Olive Oil on Lipid, Physiological, and Anthropometric Profiles in a Pediatric Population. *J Phys Act Health*, 12(9), 1245-52
- Nyaradi, A., Li, J., Hickling, S., Foster, J., Oddy, W. H. (2013). The Role of Nutrition in Children's Neurocognitive Development, from Pregnancy through Childhood. *Front Hum neurosci*, 7, 97
- Omand, J. A., Janus, M., Maguire, J. L., Parkin, P. C., Simpson, J. R., et al. (2021). Nutritional Risk in Early Childhood and Parent-Reported School Concerns. *Public Health Nutrition*, 24(18), 6169-6177
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 41 Tahun 2014 Tentang Pedoman Gizi Seimbang
- Pirunika, S., Suherman, W. S., Indrawati. (2022). Dampak Pandemi Covid-19 Terhadap Status Gizi Pada Anak Usia Dini. *Jurnal Obsesi*, 6(4), 3024-3033
- Pratiwi, H. L., Setyawati, V. A. V. (2013). Hubungan Asupan Energi dan Protein dengan Status Gizi Anak 1-5 Tahun di Posyandu Lestari IV Desa Kalipucangwetan Kecamatan Welehan Kabupaten Jepara Tahun 2014. *Journal of Chemical Information and Modeling*, 53(9), 1689-1688
- Rakhmawati, N. D., Muzakki, N. Z., Rachyadi, B., Alfarisi, S., Yuningsih, S. (2021). Edukasi Gizi Anak Usia Dini Dengan Metode Belajar dan Bermain Kepada Murid TK Islam Yayasan Darul Adzkiyya. *Prosiding Seminar Nasional Pengabdian Masyarakat LPPM UMJ*
- Sari, H. N., Maryani, K., Rusdiyani, I. 2022. Pola Asupan Gizi Anak Usia Dini Pada Masa Pandemi Covid-19. *Jurnal Pendidikan Anak Usia Dini As-Sibyan*, 7(1), 51-64
- Schwarzenberg, S. J., Georgieff, M. K., Committee on Nutrition. (2018). Advocacy for Improving Nutrition in The First 1000 Days to Support Childhood Development and Adult Health. *Pediatrics*, 141(2), e20173716
- Silalahi, V., Putri, R. M., & Ariani, N. L. (2018). Peranan Pendidikan Gizi pada Guru dalam Meningkatkan Asupan Sayur dan Buah Anak Sekolah. *J. Ilm. Ilmu Kesehatan*, 6, 253-266
- Tandon, P. S., Tovar, A., Jayasuriya, A. T., Welker, E., Schober, D. J., et al. (2016). The Relationship Between Physical Activity and Diet and Young Children's Cognitive Development: A Systematic Review. *Prev Med Rep*, 3, 379-90

APPENDIX



Figure 1. Mentoring session



Figure 2. Certificate submission to PAUD Samratulangi as a community service partnership



Figure 3. Group photo with lecturers, parents, and teachers