# Family Economical Strategy and The Nutrition Fulfillment for Children Under Five: Improving Community Understanding

## Irena Larashati<sup>1</sup>, Sana Sholihah<sup>2</sup>, Imelda Megawati<sup>3</sup>, Arsylia Khoirunnisa Azzahra<sup>4</sup>, Hamdan An Naisaburi<sup>5</sup>, Merry Pramashela<sup>6</sup>

Sekolah Tinggi Ilmu Ekonomi Pasundan <sup>1,2,3,4,5,6</sup> Email: irenalarashati@gmail.com<sup>1</sup>, sana@stiepas.ac.id<sup>2</sup>, imelda@stiepas.ac.id<sup>3</sup> arsyliaka@gmail.com<sup>4</sup>, hamdannaisaburi@gmail.com<sup>5</sup>, merryalinda72@gmail.com<sup>6</sup>

#### ABSTRACT

As the next generation of the nation, toddlers need healthy food for optimal growth and development, as well as to reduce the risk of developing chronic diseases as adults. However, there are several things that prevent toddlers from getting balanced nutrition. One of them is low economic problems, lack of supporting facilities, and lack of public awareness of the fulfillment of nutrition in toddlers.

The purpose of this program is to increase public awareness of toddler health as well as family economic management by providing counseling on how to make nutritious food for toddlers. In addition, this program also seeks to optimize the ability of related support systems, namely the role of posyandu, as a community empowerment function. The service method used is Participatory Action Research (PAR) with five main steps, namely identifying partners and analyzing needs, counseling on the fulfillment of toddler nutrition and cooking demonstrations, mentoring and monitoring, providing raw materials and equipment, as well as evaluation and further development.

The output of community service activities is an increase in community understanding, implementation of raw material management, providing education on healthy food consumption habits. In addition, the results of this service are also the material for published articles. Based on the community service activities carried out, the understanding of the community shown by the understanding of the mothers increased based on the comparison of the results of the pre and post tests conducted. The desire to implement knowledge from the counseling results is also quite high. Education related to healthy food habits is also carried out during counseling and other educational media.

Keywords: Community understanding, Toddlers, Nutritional balance, Family Economic Resilience

### INTRODUCTION

Toddlers are one of the human age periods after infants with an age range from two to five years, or the usual calculation of months is used, namely the age of 24-60 months. This age period is also known as preschool age. At this age, mothers need to be extra careful about daily feeding and nutritional input needed for the growth and development of toddlers. Based on data from the Bandung City Health Office (Dinas Kesehatan kota Bandung, 2020; Smith et al., 2005), the presentation of stunted toddlers in Bandung city has an upward trend since 2014 to 8.93% in 2020, which is the second highest percentage after the percentage in 2015 which was 8.96%. The problem of stunting in toddlers itself is mainly caused by a lack of nutritional intake for a long time, causing growth to not occur optimally. In research (Husna & Izzah, 2021; Utami & Mubasyiroh, 2019), malnutrition in toddlers that causes stunting can affect the cognitive abilities of individuals in the future or even cause death in toddlers.

Nutritional intake is mainly obtained from food. Healthy food is food that contains various nutrients needed by the body. The human body needs various nutrients to keep the body healthy and growth can run optimally, especially in toddlers. Therefore, one of the efforts in improving the nutritional status of toddlers is the diversity of food consumed. Food diversity is one aspect that affects the nutritional status of children under five. (Sardjoko, 2016; Utami & Mubasyiroh, 2020) However, in its implementation, economic and cultural disparities are still the cause of less than optimal nutrition for children under five. (Fuada et al., 2011; Ross et al., 2023) Parents, especially mothers in the target area, still face various obstacles to providing nutritious food. The high cost of buying healthy food due to the spike in food prices makes nutritional fulfillment even more difficult to achieve. (Dirjen Gizi, 2015; Marimbi, 2010) In addition, the understanding of mothers regarding the process of selecting food ingredients and how to cook is also an obstacle in the process of fulfilling nutrition. (Hendrawati & Zidni, 2017; Inggit Dwi Lestari, 2012; Lembong et al., 2018)

To overcome these problems, efforts need to be made to increase public understanding of the importance of fulfilling the nutrition of children under five, especially for mothers who are the determinants of the process. In addition, other parties also need to have adequate capabilities and facilities to become a support system in this process. One that plays a fairly active role is Posyandu, which has a work program related to monitoring the growth and development of toddlers. This idea is also based on research (Husen et al., 2022; Mauliza et al., 2022; Sinaga et al., 2022), which explains that education for parents, especially mothers, both in terms of understanding stunting, nutritional needs, and diet is one of the effective efforts to improve the achievement of nutritional fulfillment of toddlers. In this community service activity, the partners that we will empower are groups of parents, especially mothers who have toddlers in the RW 11 area of Turangga Village, Bandung City, West Java Province. This group of mothers has great potential in improving nutrition understanding, but they face various obstacles in providing healthy food to toddlers.

Based on field observations, this group of parents (mothers) generally has a low income, a lack of understanding about balanced nutritional health, and a lack of sensitivity to children's health. In addition, the frequency of toddler visits to the posyandu decreases according to the increasing age of the child. The group of mothers we will empower consists of 30 people who have toddlers ranging in age from two to five years old. From the partner profiles we collected, we found that these mothers are curious about the importance of improved nutrition in the toddler years if they are given the right understanding. However, they need help in terms of improving their skills in making healthy food at a cost that suits their income.

The real research results that can support community service to increase public understanding of the fulfillment of toddler nutrition are as follows:

- 1. Research conducted by Padjajaran University (Unpad) in 2017 on "Overview of Fish Consumption in Families and PAUD Children RW 07 Cipacing Village". The results showed that children are still very dependent on their parents. Whatever food is given by parents, that is what children will eat. If parents never introduce or accustom children to consume fish or similar proteins from the beginning, then until adulthood, children's attitudes or lifestyles are formed without consumption of fish or similar proteins.
- 2. Research conducted by Padjajaran University (Unpad) in 2018 on "Assessment of the Nutritional Status of Toddlers and Pregnant Women RW 01 Cileles Village Jatinangor District Sumedang Regency". The results showed that the growth of a child is not just a picture of changes in body size, but also provides an overview of the balance between intake and nutritional needs so that growth is a good indicator of the development of a child's nutritional status.
- 3. Research conducted by Dhayana Pura University (Undhira) Bali in 2021 on "Balanced Nutrition for Early Childhood at Angel Hearts Kindergarten Denpasar". The results showed that good nutritional status occurs when the body gets enough nutrients that are used efficiently to enable physical growth, brain development, work ability and general health. To maintain good nutritional status, children should be given nutritionally balanced food, apply clean living behavior, and get good parenting and health services.

From the research results above, it can be concluded that increasing community understanding through toddler nutrition programs can have a significant impact on increasing awareness of understanding the nutritional needs of toddlers. Therefore, community service programs that aim to improve healthy lifestyles through toddler nutrition programs can be developed by considering these research results as a strong basis.

The purpose of this community service activity is to increase knowledge and awareness of the importance of nutritional fulfillment in toddlers through socialization of a variety of balanced nutritious foods. This activity has a connection to the posyandu mission, which is to help underprivileged community groups through community empowerment efforts. Overall, this community service aims to increase public awareness, especially parents (mothers) who have toddlers, of the nutrition of daily food, and is closely related to the mission of the posyandu, to empower the community.

## METHOD

The implementation method that will be carried out to overcome partner problems related to community service "Increasing Community Understanding of Toddler Nutrition Fulfillment" using Participatory Action Research (PAR) will include the following steps:

- 1. Partner Identification and Needs Analysis: The team will identify partners who have the potential and drive to create a healthy life and analyze the needs needed by partners in increasing understanding of toddler nutrition.
- 2. Counseling on Balanced Nutrition and Cooking Demonstration: The team will provide counseling on balanced nutrition for toddlers to partners which includes the needs of energy, protein, fat, carbohydrates, fiber, and water. Demonstrations will be conducted through lectures, group discussions, simulations, and direct cooking practices in the field.
- 3. Mentoring and Monitoring: The team will provide assistance and monitoring to partners during the counseling process on balanced nutrition, starting from understanding the importance of knowing the nutritional content of food consumed by toddlers, distributing healthy food menus for toddlers, procuring raw materials, and processing raw materials into varied and nutritionally balanced food. This aims to ensure that partners can gain a good understanding, have a high awareness of the fulfillment of toddler nutrition, and achieve the targets that have been set.
- 4. Provision of Raw Materials and Equipment: The team will provide raw materials and equipment to partners to support the fulfillment of toddler nutrition. Raw material assistance can be in the form of vegetables, fruits, spices, and others. While equipment assistance can be in the form of cooking tools for demonstration aids such as posters on balanced nutrition, as well as tools for monitoring toddler growth such as scales, height measuring tools, and others.
- 5. Evaluation and Further Development: The team will evaluate the results of the community's understanding of the fulfillment of toddler nutrition and conduct further counseling if necessary. The evaluation will be conducted periodically and the results will be used as material to improve the quality of future counseling.

These steps will be implemented by taking into account the different conditions and needs of the partners. The team will coordinate with partners in every stage of implementation to ensure that the objectives of fulfilling toddler nutrition can be achieved properly.

## **RESULT AND DISCUSSION**

This community service program seeks to produce solutions to the problems faced by partners and targets of service activities. The problems that are the focus of this activity are also determined based on the results of preliminary observations that have been carried out previously. Of the various problems that exist, the following are some of the problems that

are the focus to be able to increase community understanding of the fulfillment of toddler nutrition:

- 1. Limited Budget, Equipment and Resources: This issue is a top priority that must be addressed immediately. One of the solutions we can offer is to provide training in making the best use of existing resources. In addition, we will facilitate this group of mothers to know the growth and development of toddlers with health equipment that we will provide. From the partner side, we also strive to provide adequate equipment to support the community empowerment functions carried out.
- 2. Lack of Skills in Making Healthy Food: Lack of skills in making healthy food is also a major problem that must be addressed. We will provide intensive training and mentoring in terms of processing raw materials into varied and nutritious foods so that this group of mothers has adequate knowledge and skills in developing toddler food menus.
- 3. Lack of Habitual Consumption of Healthy Food from an Early Age: The middle class has a habit of consuming instant foods, foods containing high fat, and hard textured foods. The habit of giving instant snacks to toddlers should be avoided by mothers. Therefore, we facilitate this group of mothers in providing a healthy snack menu that can improve toddler growth and development and nutritional adequacy.

The identification of the main problems that are used as the basis for this community service activity is the result of the observation activities carried out. In addition, the determination of the problem is also the result of discussions with the partners of this activity, namely the Flamboyant Posyandu Management RW 11 Turangga Village, Bandung City.

With these problems, the service program carried out as an effort to solve these problems is in the form of counseling for mothers' groups in the RW 11 area of Turangga village and providing tools for the Flamboyan posyandu RW 11 Turangga Village.

Counseling activities related to increasing public understanding of the fulfillment of toddler nutrition were carried out on Thursday, September 21, 2023 at 08.00 to 12.00 WIB. The series of activities began with the opening, remarks then continued with counseling and cooking demonstrations. The event was then closed with the handover of assets as an innovation which will then be implemented at Posyandu Flamboyan RW. 11 Turangga Village, Bandung City. The audience who attended this activity were 30 residents (mothers) who had toddlers in the neighborhood of RW 11 Turangga Village, Bandung City and Posyandu Flamboyan RW 11 Turangga Village cadres.

Based on audience data collection, it is known that the group of mothers who have toddlers in the RW 11 Turangga Village, Bandung City who attended the counseling activities were 29 people. Of all the mothers who have toddlers who attended the counseling event, the majority were aged 30 to 35 years with a percentage of 47%. In addition, the majority of family income per month is around one to three million rupiah. And of all the toddlers who are supervised by Posyandu Flamboyan RW 11 Kelurahan Turangga Bandung, 36% are under one year old (0 to 12 months), 55% are one to three years old, and 45% are three to five years old.

Before the counseling activity began, a pre-test was also conducted to the audience. This pretest was carried out with the aim of knowing the initial understanding of the audience

before the counseling. Then the counseling began with material related to the importance of fulfilling toddler nutrition which is a task especially for mothers. This material was delivered by a team of lecturers implementing community service activities. But in reality, it is realized that the process is often constrained by limited income and lack of ability to manage household income. So in the delivery of this material, mothers are educated to be able to make household expenditure allocations in accordance with their income and refer to various related references, one of which refers to the household expenditure distribution system from the Financial Services Authority (OJK) of the Republic of Indonesia. In this presentation, mothers are educated to be able to manage their household finances more efficiently and planned, including the allocation of food needs at home. With the allocation of food provision at home, it is hoped that mothers can better plan the procurement of food from home for their toddlers who pay more attention to nutritional adequacy in accordance with the education carried out. Mothers were also given case examples of household funds allocation to be implemented in their respective homes.



Figure 1. Implementation of Counseling Activities to Improve Community Understanding of Toddler Nutrition Fulfillment

Before the counseling activity began, a pre-test was also conducted to the audience. This pretest was carried out with the aim of knowing the initial understanding of the audience before the counseling. Then the counseling began with material related to the importance of fulfilling toddler nutrition which is a task especially for mothers. This material was delivered by a team of lecturers implementing community service activities. But in reality, it is realized that the process is often constrained by limited income and lack of ability to manage household income. So, in the delivery of this material, mothers are educated to be able to make household expenditure allocations in accordance with their income and refer to various related references, one of which refers to the household expenditure distribution system from the Financial Services Authority (OJK) of the Republic of Indonesia. In this presentation, mothers are educated to be able to manage their household finances more efficiently and planned, including the allocation of food needs at home. With the allocation of food provision at home, it is hoped that mothers can better plan the procurement of food from home for their toddlers who pay more attention to nutritional adequacy in accordance with the education carried out.

Mothers were also given case examples of household funds allocation to be implemented in their respective homes.

Furthermore, the material was delivered by resource persons who are midwife practitioners. In this second material, mothers were given education about complementary foods and nutritional needs during the golden period of children from the womb to the age of five years. Mothers were also educated on what food sources could be utilized to meet the nutritional needs of their toddlers at an affordable cost. There was also a cooking demonstration that explained how to make oil from chicken skin. Based on the explanation from the resource person, the content of the oil produced from chicken skin has fat nutrients needed for children's brain development, with prices that tend to be affordable and with materials and equipment that are affordable by mothers in the RW 11 neighborhood of Turangga Village, Bandung City.

This community service event then ended with the signing of the minutes of the handover of assets donated to Posyandu Flamboyan RW 11 Turangga Village, Bandung City to be used in the process of supervision and community empowerment related to the fulfillment of toddler nutrition in their environment.

	Pretest	Post test
Mean Score	66.8	97.6

 Table 1. Pretest and Post test Result

After the whole series of activities were carried out, a post test was conducted with the aim of seeing the extent of the impact of the material presented on the understanding of the audience, namely the mothers who attended. Based on the post test results obtained, there is an increase in understanding as indicated by the average score which tends to increase from the entire audience present as shown in table 1.

This community service activity is expected to be able to contribute and present solutions to previously identified problems such as the following:

1. Limited Budget, Equipment, and Resources

To support the ability of partners to carry out their functions in community empowerment, in this activity various innovative equipment is delivered. In addition to the equipment delivered to strengthen the Posyandu's ability to monitor the growth and development of toddlers, a number of food raw materials were also distributed to the mothers so that they could immediately practice the knowledge gained during the counseling in their respective homes.

2. Lack of Skills in Making Healthy Food

The problem of lack of skills in making healthy food was identified because of the mothers' lack of understanding of raw materials with high nutritional value, the composition of nutrients that need to be consumed by toddlers to the processing of the raw materials they have. Therefore, the delivery of the material focused on education related to raw materials that can be utilized and tend to be affordable. In addition, the nutritional composition was also explained compared to the nutritional needs of toddlers, starting from the need for protein, fat, carbohydrates and other nutrients. To improve the

skills of mothers in providing nutritious food from home, education is also carried out in the form of cooking demonstrations using materials and tools that tend to be affordable so that it can be understood that food preparation that meets the nutritional needs of toddlers can be achieved with the skills of mothers in preparing food.



Figure 2. Cooking Demo to Improve Mothers' Skills

3. Lack of Habitual Consumption of Healthy Food from an Early Age

The middle class has a habit of consuming instant foods, foods containing high fat, and hard textured foods. The habit of giving instant snacks to toddlers should be avoided by mothers. Therefore, we facilitate this group of mothers in providing a healthy snack menu that can improve toddler growth and development and nutritional adequacy. In an effort to familiarize healthy food consumption from an early age, several educational media were also delivered, including posters that communicated several important points in maintaining toddler nutrition.

## CONCLUSION

The community service activity held in a village outside the urban area is an enlightening experience for both mothers and the local Posyandu. The primary focus of this effort revolves around the stated issues, namely the deficiency in skills about the provision of nutritious meals and the prevalent practice of consuming convenience food within the middle-class demographic.

To augment the efficacy of Posyandu in community empowerment, a range of creative resources are made available, such as provisions of food ingredients for mothers. The primary objective is to enhance Posyandu's monitoring capacity in assessing the growth and development of young children. Furthermore, moms are provided with knowledge regarding high-nutrient raw materials, the requisite nutrient composition for toddlers, and the processing techniques employed for these raw materials.

Mothers' need for culinary proficiency in nutritious meals poses a significant obstacle. Consequently, a targeted educational program is implemented, encompassing instructional content about cost-effective raw materials sources and appropriate nutritional compositions for young children. In order to ensure the practical application of acquired knowledge, cooking demonstration sessions featuring economical ingredients are held. These sessions aim to provide mothers with practical skills in preparing nutritious meals for their children.

The consumption patterns of the middle-class community in their daily lives, characterized by a preference for rapid food, high-fat foods, and hard-textured foods, pose a significant issue. Mothers within this cohort are provided with assistance in formulating a nutritious snack menu that can enhance young children's physical and cognitive development. Educational media, such as posters, serve as a means to effectively communicate crucial information about toddler nutrition and the significance of refraining from the consumption of quick foods.

These endeavors aim to facilitate a constructive impact on young children's health and nutritional well-being in the local community through community service activities. Implementing robust nutrition education programs, the cultivation of culinary proficiency, the advocacy for a health-conscious way of life, and diligent oversight of progress are anticipated to establish a solid framework for favorable transformations in dietary patterns and the community's overall well-being.

#### ACKNOWLEDGMENTS

This Community Services was funded by: KEMDIKBUDRISTEK, grant number : 061/SP2H/PPM/B2/LL4/2023.

#### REFERENCES

- Dinas Kesehatan kota Bandung. (2020). *Profil Kesehatan Kota Bandung 2020*. Dinas Kesehatan Kota Bandung.
- Dirjen Gizi. (2015). Kesehatan dalam Kerangka SDGS. Kemenkes RI.
- Fuada, N., Muljati, S., & Hidayat, T. S. (2011). karakteristik Anak Balita dengan Status Gizi Akut dan Kronis Diperkotaan dan Perdesaan di Indonesia. *Jurnal Ekologi Kesehatan*, 10(3), 174.
- Hendrawati, S., & Zidni, I. (2017). GAMBARAN KONSUMSI IKAN PADA KELUARGA DAN ANAK PAUD RW 07 DESA CIPACING. Jurnal Pengabdian Kepada Masyarakat, 1(2), 101–106.
- Husen, A. H., Angelia, S. F., Putri, J. A., Panjaitan, M. N., Shofir, A. F., & Fahrudin, T. M. (2022). Efektivitas Sosialisasi dan Pemberian PMT Sebagai Upaya Perbaikan Gizi Guna Menurunkan Angka Risiko Stunting Pada Anak di Desa Kembangsri. Jurnal Pengabdian Kepada Masyarakat, 1(2), 30–35.
- Husna, L. N., & Izzah, N. (2021). Prosiding Seminar Nasional Kesehatan 2021. *Gambaran Status Gizi Pada Balita*, 385–392.
- Inggit Dwi Lestari. (2012). Upaya Pembiasaan Mengkonsumsi Makanan Sehat Melalui

*Variasi Kudapan Sehat Pada Anak di Paygroup Milas*. Universitas Negeri Yogyakarta. Lembong, E., Utama, G. L., & Ardiansah, I. (2018). PENILAIAN STATUS GIZI BALITA

- DAN IBU HAMIL RW 01 DESA CILELES KECAMATAN JATINANGOR KABUPATEN SUMEDANG. Jurnal Pengabdian Kepada Masyarakat, 2(8).
- Marimbi, H. (2010). *Tumbuh Kembang, Status Gizi dan Imunisasi Dasar Pada Balita*. Nuha Offset.
- Mauliza, M., Ula, M., Fitri, Z., Sakinah, T. R., & Zainal, M. R. (2022). PENYULUHAN PENTINGNYA STATUS GIZI ANAK DAN STUNTING DI DESA UTEUNKOT KECAMATAN MUARA DUA KOTA LHOKSEUMAWE. *RAMBIDEUN : Jurnal Pengabdian Kepada Masyarakat*, 5(3), 271–280. https://doi.org/10.51179/pkm.v5i3.1471
- Ross, H., Kruger, R., & Wham, C. (2023). Prevalence of nutrition risk and associated risk factors among New Zealand pre-school children. *Journal of Paediatrics and Child Health*, 59(1), 100–106. https://doi.org/10.1111/jpc.16253
- Sardjoko, S. (2016). Pelaksanaan Pengentasan kelaparan serta Konsumsi & Produksi Berkelanjutan dalam Tujuan Pembangunan Berkelanjutan (SDGs) di Indonesia. Kementrian PPN/Bappenas.
- Sinaga, M., Sakke Tira, D., & Regaletha, T. A. L. (2022). EDUKASI PENTINGNYA PEMENUHAN GIZI PADA 1000 HPK DALAM UPAYA PENCEGAHAN STUNTING. Jurnal Pengabdian Pada Masyarakat Kepulauan Lahan Kering, 3(2), 72– 81. https://doi.org/10.51556/jpkmkelaker.v3i2.203
- Smith, L. C., Ruel, M. T., & Ndiaye, A. (2005). Why Is Child Malnutrition Lower in Urban Than in Rural Areas? Evidence from 36 Developing Countries. World Development, 33(8), 1285–1305. https://doi.org/10.1016/j.worlddev.2005.03.002
- Utami, N. H., & Mubasyiroh, R. (2019). MASALAH GIZI BALITA DAN HUBUNGANNYA DENGAN INDEKS PEMBANGUNAN KESEHATAN MASYARAKAT. *Penelitian Gizi Dan Makanan (The Journal of Nutrition and Food Research)*, 42(1), 1–10. https://doi.org/10.22435/pgm.v42i1.2416
- Utami, N. H., & Mubasyiroh, R. (2020). KERAGAMAN MAKANAN DAN HUBUNGANNYA DENGAN STATUS GIZI BALITA: ANALISIS SURVEI KONSUMSI MAKANAN INDIVIDU (SKMI). *GIZI INDONESIA*, 43(1), 37. https://doi.org/10.36457/gizindo.v43i1.467

# 080

**EXAMPLE 1** © 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC Attribution-NonCommercial-ShareAlike 4.0) license (https://creativecommons.org/licenses/by-nc-sa/4.0/).