

## The “Kakek Nenek Asuh” Program increases Community Knowledge about Stunting and Nutrition for Children under five in Sengon Village.

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### Abstract

The high number of stunted children in Indonesia is still a severe problem that can impact the quality of human resources. The foster grandparent's program is one of the ways that servants do to overcome these problems. This service activity aims to increase the productive community's knowledge about stunting and improve the nutrition of children under five in Sengon Village. This service is aimed at 110 respondents who participate in Posbindu in Sengon Village, Bendungan District, Trenggalek Regency, as a foster grandparents program. The activity begins with providing education about stunting to increase public knowledge. The instruments used were leaflets, booklets about stunting, and power points delivered using an LCD and projector screen. After education is given, the knowledge of the elderly will be measured again. Furthermore, the elderly will be allowed to apply their knowledge to educate their families and surroundings who have children under five with poor nutritional status and stunting. The toddler's weight will be measured again one month later. The data will be analyzed using the Wilcoxon Sign Rank Test. The service results showed that the foster grandparent's program affected the knowledge of the elderly about stunting and under-five nutrition with  $p=0.00$ . So it is recommended that the foster grandparent's program continue to be carried out so that the nutrition of children under five is increased and the number of stunted children under five decreases. The target of the "Kakek Nenek Asuh" program can be developed for teenagers and prospective married couples so that education about stunting prevention can be given as early as possible

**Keywords:** Stunting; Grandparents; Toddler Nutrition

### Abstrak

Tingginya angka anak balita pendek (stunting) di Indonesia masih menjadi permasalahan serius yang dapat berdampak terhadap kualitas sumber daya manusia. Program kakek nenek asuh merupakan salah satu cara yang dilakukan pengabdian untuk mengatasi permasalahan tersebut. Tujuan dari kegiatan pengabdian ini adalah untuk meningkatkan pengetahuan masyarakat yang masih produktif tentang stunting dan meningkatkan gizi balita di Desa Sengon. Pengabdian ini ditujukan kepada 110 responden yang mengikuti Posbindu di Desa Sengon Kecamatan Bendungan Kabupaten Trenggalek dalam bentuk program kakek nenek asuh. Kegiatan diawali dengan pemberian edukasi tentang stunting sebagai upaya untuk meningkatkan pengetahuan masyarakat. Instrumen yang digunakan adalah leaflet dan booklet tentang stunting dan power point yang disampaikan menggunakan LCD dan layar proyektor. Setelah edukasi diberikan pengetahuan lansia akan diukur kembali. Selanjutnya lansia akan diberikan kesempatan untuk mengaplikasikan pengetahuan yang dimiliki untuk mengedukasi keluarga dan sekitarnya yang memiliki balita dengan status gizi kurang dan stunting. Berat badan balita akan diukur lagi satu bulan berikutnya. Data akan dianalisis menggunakan Wilcoxon Sign Rank Test. Hasil pengabdian menunjukkan bahwa Program kakek nenek asuh berpengaruh terhadap pengetahuan lansia tentang stunting dan gizi balita dengan hasil  $p=0,00$ . Sehingga disarankan program kakek nenek asuh tetap dijalankan agar gizi balita lebih meningkat dan jumlah balita stunting menurun. sasaran pada program “kakek nenek asuh “ ini dapat dikembangkan pada remaja dan calon pasangan suami istri sehingga pendidikan tentang pencegahan stunting ini dapat diberikan sedini mungkin.

**Keywords:** stunting, kakek nenek asuh, gizi balita

## INTRODUCTION

Indonesia is still facing nutritional problems that severely impact the quality of Human Resources, namely the high number of stunted children. More than 1/3 of children under five years old in Indonesia are below the average height, with a z-score of less than -2SD/standard deviation (stunted) and less than -3SD (severely stunted). Stunting is a failure condition. Grows in infants under 5 (five) years due to chronic malnutrition, so children are too short for their age (Tim Nasional Percepatan Penanggulangan Kemiskinan, 2017). Data on the prevalence of stunting under five collected by the World Health Organization (WHO), Indonesia is included in the third country with the highest prevalence in the Southeast Asia/South-East Asia Regional (SEAR) region. The average prevalence of stunting under five in Indonesia from 2005-2017 was 36.4% (Pusdatin, 2018). Meanwhile, based on the results of the Indonesian Nutritional Status Study (SSGI), in East Java Province in 2021, there are 23.5% of children under five experience stunting. (Kusnandar, 2022).

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The causes of stunting are divided into direct causes and indirect causes. The direct causes of stunting include food intake, diarrhoea in children under five, and complete immunization. This direct cause is strongly influenced by indirect causes such as families not having proper sanitation, food insecurity conditions in the population, and under-fives growth is not monitored regularly. (Khairani, 2020). Based on the study's results, several factors related to stunting include a history of infectious diseases, completeness of immunization, complementary feeding, and exclusive breastfeeding (Noorhasanah et al., 2020). The results of other studies indicate that the factors associated with the incidence of stunting are driving factors (mother's knowledge, exclusive breastfeeding), enabling factors (availability of funds, availability of family food), and reinforcing factors (family support)., (Subratha and Peratiwi, 2020).

The causes of stunting are divided into direct causes and indirect causes. The direct causes of stunting include inadequate food intake, diarrhea in children under five, and incomplete immunization. This direct cause is strongly influenced by indirect causes such as families not having proper sanitation, food insecurity conditions in the population, and under-fives' growth not being monitored regularly. (Khairani, 2020). Based on the study's results, several factors related to stunting include a history of infectious diseases, completeness of immunization, complementary feeding, and exclusive breastfeeding (Noorhasanah et al., 2020). The results of other studies indicate that the factors associated with the incidence of stunting are driving factors (mother's knowledge, exclusive breastfeeding), enabling factors (availability of funds, availability of family food), and reinforcing factors (family support) (Subratha and Peratiwi, 2020).

The short-term impact of stunting is brain development disorders that can impact children's intelligence, physical growth disorders, and body metabolism disorders. The long-term impact of stunting is low cognitive, so learning achievement is low. In addition, stunting impacts children's health, such as low immunity, vulnerability to disease and high risk of death in old age, such as diabetes, obesity, heart and blood vessel disease, cancer, stroke, and disability.(Kementrian Kesehatan Republik Indonesia, 2017). So the stunting problem threatens the quality of Human Resources in the future.

Steps to prevent stunting that needs to be considered are: (1) to meet nutritional needs during pregnancy, (2) to provide exclusive breastfeeding until the baby is six months old, (3) to eat healthy complementary foods, (4) to

continue to monitor the child's growth and development. Moreover, (5) always clean the environment (Khairani, 2020). Meanwhile, the handling of stunting, according to the Chairperson of the Indonesian Pediatrician Association (IDAI), Prof. Dr. dr. Safe B Pulungan Sp. A (K) is by providing nutritious food (Handayani, 2021) Based on Madeleine Leininger's theory of Culture Care, it was modifying a culture that conflicts with health values through prior negotiations with the people around them (Alligood, M, 2017). As an application of this theory, it is possible to approach the parents of the father or mother of a toddler (grandfather/grandmother) as people who are culturally obedient to influence their perception of health. Based on this background, the service wants to overcome the problem of stunting in the form of a foster grandparents program to increase the knowledge of the productive elderly about stunting and improve the nutrition of children under five in Sengon Village.

## GENERAL DESCRIPTION OF THE COMMUNITY, PROBLEMS AND TARGET SOLUTIONS

The partner in this community service activity is Sengon Village, one of the villages in the Bendungan sub-district that requires special attention. Most people in Sengon Village have the latest education in junior high school and work as farm labourers and private employees with an average income below the regional minimum wage of Trenggalek Regency ( $\pm$  800,000). Sengon Village was the locus of stunting in 2019. Of the 143 Children under five in Sengon Village at this time, only 111 (78%), which are actively participating in the Posyandu for children under five, means that there are still 32 children under five (22%) whose growth and development cannot be monitored by the village midwife. Of the 111 children under five who actively participate in posyandu activities, 2 (1.8%) are stunted, and 10 (11.1%) are malnourished.

Village midwives and Ponkesdes nurses have also provided counselling to cadres. However, the behaviour of giving breast milk, feeding complementary breast milk, and fulfilling nutrition for Children under five in Sengon village communities is still low. The people of Sengon Village believe more in beliefs held for generations in fulfilling nutrition. They believe that if the child does not want to eat, it is not a problem because they have their respective portions in life, and they believe that formula milk is better than mother's milk. This situation supports the village midwife's statement that her education was unsuccessful because pregnant women and families with children under five had more confidence in their environment and their parents, grandparents, or elders. In addition to that, only mothers who came to the Posyandu under five were given an education.

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### Problems

Some of the problems faced by partners include: (1) lack of knowledge and behaviour in meeting nutritional needs in the first 1000 days of life, will be at risk of increasing stunting rates, (2) lack of participation of the elderly as people whose opinions can be trusted in preventing stunting, and (3) there were 2 (1.8%) stunting and 10 (11.1%) malnutrition out of 111 children under five.

### Target solutions

Based on the theory of Madeline Leininger, Culture care Decisions and actions include (1) cultural care preservation/ maintenance, (2) culture care accommodation/ negotiation, and culture care repatterning/ reconstruction (Alligood, M, 2017). Therefore, in overcoming the problem of knowledge and behaviour of partners in providing nutrition for the first 1000 days of life, we carried out promotive actions based on negotiation techniques and cultural reconstruction by empowering the elderly. The goal is to increase people's knowledge and behaviour in fulfilling nutrition for the first 1000 days of life, which includes: (1) antenatal micronutrient supplementation, (2) balanced protein energy, (3) promotion of exclusive breastfeeding, (4) promotion of improved infant and child food (PMT). ), (5) the practice of complementary feeding and (6) vitamin A supplementation. Through counselling and training methods to prevent the increasing prevalence of stunting in Sengon village.

According to Madeline Leininger's thesis, cultural care decisions and acts include: (1) cultural care maintenance and upkeep; (2) cultural care accommodations; and (3) cultural care reconstruction and repatterning (Alligood, M, 2017). Therefore, we implemented promotional measures based on negotiating strategies and cultural reconstruction by giving the elderly more authority in order to address the issue of partners' knowledge and behavior in providing nourishment for the first 1000 days of life. The objective is to increase people's awareness of and behavior toward promoting nutrition that is adequate for the first 1000 days of life, which includes: (1) antenatal micronutrient supplementation, (2) balanced protein energy, (3) promotion of exclusive breastfeeding, and (4) promotion of improved infant and child food (PMT). ), (5) complementary feeding techniques, (6) vitamin A supplements, and so forth. by way of counseling

### METHOD

The activities of “kakek nenek asuh” were applied in the form of providing education to participants of the integrated fostered post, which was attended by the elderly and carried out at the Village Hall and supporting health centres. The learning methods used in education are lectures and "getok tular".The activity steps include: (1) pre-test for participants who come, (2) officers provide education to them about stunting and fulfilment of nutrition in the first 1000 days of life and (3) train socialization methods; after that, (4) they were allowed to disseminate the information obtained to their families and neighbours for approximately four weeks ("getok tular") and (5) re-evaluated by post-test. In addition, the service provider also identifies the number of under-fives who are malnourished and stunted from the data of the village midwife. Children under five who are identified as malnourished will be visited by the servant and given counselling on nutritional fulfilment, accompanied by the elderly who attend education. The success of the counselling is evaluated from the results of the weighing. one month later.

### RESULTS AND DISCUSSION

Kegiatan “kakek nenek asuh” program to increase the knowledge of the elderly and improve the nutritional status of children It was carried out at the Sengon village hall and auxiliary health centers, with different targets.



Figure 1. Presentation of Stunting Materials at Sengon Village Hall

Table 1 Knowledge of the Elderly before and after the Implementation of the “Kakek Nenek Asuh” Program in Sengon Village, August 2022

Pre-test	Post-test					
	Good knowledge	%	Sufficient knowledge	%	Lack of knowledge	%
Good knowledge	0	0	0	0	0	0
Sufficient knowledge	0	0	0	0	0	0
Lack of knowledge	68	62%	26	24%	16	14%
Total	68	62%	26	24%	16	14%
<i>Wilcoxon sign rank test</i>		Sig. 0.000				

Based on table 1, 100% of respondents had less knowledge about stunting before education about stunting in the foster grandparent's program. Meanwhile, after education, the majority of respondents knowledge increased, namely 62% or 68 people became good, and 24% or 26 people became sufficient, while the remaining 14% (16 people) still had less knowledge.

Knowledge is the result of knowing after people have sensed particular objects. The study's results prove that a person's behaviour based on knowledge will be more lasting than one not based on knowledge (Notoatmodjo, 2010). The results of this study follow the theory that after health promotion is given, knowledge will increase. Notoatmodjo (2010) also explained that one of the factors that influence knowledge is information or exposure to mass media. However, some elderly do not experience increased knowledge because it can be influenced by factors such as education level, according to Mahadewi's research (2020), which explains that education is one of the factors that affect the knowledge of the elderly. The results of his research show that the higher the level of education, the higher the knowledge (Mahadewi et al., 2020).

In the implementation of this "kakek nenek asuh" program, the elderly who received education about stunting were allowed to inform their families and neighbours ("getok tular"). Word-of-mouth communication (WOM) is a way of communication in which a person conveys a message to someone else, and then the message moves because that person has disseminated the message he has received. Communication by word of mouth is carried out from one person to another, individually, between two or more individuals, and the delivery of information is carried out verbally and informally. A person's communication chain conveys a message to someone so that the message moves because of the other person. The person then disseminates the message face-to-face, via telephone, or through short messages that circulate automatically in a specific community group. Factors that influence the occurrence of a "getok tular" culture in a place include a sense of belonging, reputation, and availability to help each other between communities (Sufanti et al., 2021). The "kakek nenek asuh" program applied in Sengon Village is very effective because it is by the characteristics of the community who have high social values and highly uphold the values of cooperation and kinship. Submission of information about stunting given by the elderly to their families and neighbours directly will increase the effectiveness of conveying messages. The increased knowledge of the elderly, apart from being exposed to information from servants, their role as communicators in delivering messages about stunting will increase the credibility and capability of their knowledge about stunting. The results of research on the credibility of communicators and the credibility of word-of-mouth communication messages partially and simultaneously on the communicant's motivation for the message conveyed (Resmaningrum, 2013).



The results of the nutritional assessment of children under five are shown in Table 2

Table 2 Nutrition of Children under five Before and After the Foster Grandparents Program in Sengon Village, September 2022

	Weight gain	%	Fixed weight	Post-test	%	Weight loss	%
Weight	6	60%	4		40%	0	0%
Total	6	60%	4		40%	0	0%

The nutritional status of children under five was assessed based on the presence or absence of weight gain for one month after the program was implemented. Table 2 shows that 60% of children under five (6) who suffer from malnutrition and stunting experience weight gain, while the remaining four (40%) do not gain weight. Based on the evaluation results from mothers of children under five, weight gain was possible because the mother managed to change the way of feeding with responsive feeding so that the child's appetite and food intake also increased. Meanwhile, according to mothers of children under five who do not experience weight gain, the responsive feeding method has not succeeded in increasing toddlers' food intake. According to dr. Meta Hanindita, Sp.A. (K) that one of the complementary feeding strategies according to WHO is responsive feeding and being timely, adequate, and safe. Responsive feeding allows feeding under the hunger or satiety signal from the child; the eating process is not forced and follows the rules (Hanindita, 2020). In addition, word of mouth (getok tular) will increase the communicant's motivation for the message the communicator conveys (Resmaningrum, 2013). The results of the service show that the foster grandfather program can improve community behaviour, especially among mothers of toddlers, in fulfilling child nutrition, so that it impacts the nutritional status of children in Sengon Village. Furthermore, this program can change the culture of mothers under five in providing nutrition to their children. Initially, the mother thought that the child did not want to eat and was thin because the "nature" of each child was different, so they changed the method of giving food to children that were "responsive feeding" to increase their weight.

## CONCLUSIONS AND SUGGESTIONS

Community service activities in the form of a foster grandparents program to increase community knowledge and nutrition of children under five in Sengon Village resulted in several conclusions, namely: (1) The "kakek nenek asuh" program can increase public knowledge about stunting, from lack of knowledge to sufficient knowledge and good knowledge. (2) The "kakek nenek asuh" program can improve the nutrition of children under five, as evidenced by the increased body weight of children under five during the last month. Suggestions for health workers and the government of Sengon Village to continue this "kakek nenek asuh" program and ensure the elderly carry out their duties in helping to monitor the healthy development of children under five around them.

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