

## Empowering Health Cadres as Stunting Center Managers

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### Abstract

At present, stunting in children aged 3-5 years is the biggest child health problem experienced by most developing countries including Indonesia. A survey conducted in January 2023 with local health officials found that out of 170 toddlers, 30 were malnourished in the form of underweight, 18 toddlers and 12 toddlers were indicated to be stunted with parents who had low economic status. The general objective of this activity is focused on achieving health independence through establishing information centres and stunting management facilities managed by health cadres as an effort to prevent an increase in stunting prevalence as well as a facility to increase the income of families who have children at risk of nutritional problems, families who are indicated to be stunted through stunting centres. The activity method uses an assessment-based community development approach through seminars, training and mentoring. The instrument uses questionnaires and checklists. Indicators of achievement are the level of knowledge, skill level and income of families with infants and toddlers at risk of malnutrition and stunting. The target partners are 55 health cadres and 55 mothers who have babies and toddlers aged 5 years in the Sidoarjo area. The results of this activity found that there was a difference in the mean in each indicator of achievement of the level of knowledge of 66.6. Food management skills of 66.2, health-based entrepreneurship skills of 64.3 and family income indicators of 1.63 and Whitney mean test results with Sig = 0.001. The community development-based assessment approach method through seminars, training and mentoring is effective in changing the level of knowledge, perception and behaviour of health cadres and mothers who have infants and toddlers in fulfilling nutrition and improving the family economy as a form of support for stunting reduction programs, family food security as well as family economic security

**Keywords:** Stunting; Empowerment ; Health Cadres; Toddler Mothers Group

### Abstract

Sampai saat ini, stunting pada anak usia 3 – 5 tahun merupakan masalah kesehatan anak terbesar yang dialami oleh sebagian besar negara berkembang termasuk Indonesia. Survey yang telah dilakukan pada bulan Januari 2023 bersama petugas kesehatan setempat bahwa dari 170 balita 30 mengalami gizi yang buruk berupa berat badan kurang sejumlah 18 balita dan 12 balita terindikasi stunting dengan orang tua yang memiliki status ekonomi rendah. Tujuan umum kegiatan ini terfokus pada pencapaian kemandirian kesehatan melalui mendirikan pusat informasi dan fasilitas tata laksana stunting yang dikelola oleh kader kesehatan sebagai upaya mencegah peningkatan prevalensi stunting sekaligus sebagai fasilitas peningkatan pendapatan keluarga yang memiliki anak dengan resiko masalah gizi, keluarga yang terindikasi stunting

melalui stunting center. Metode kegiatan menggunakan pendekatan *assasement based community development* melalui seminar, pelatihan dan pendampingan. Instrumen menggunakan kuesioner dan cek list. Indikator ketercapaian adalah tingkat pengetahuan, tingkat ketrampilan dan pendapatan keluarga yang memiliki bayi dan balita beresiko terjadinya gizi buruk dan stunting. Sasaran mitra adalah 55 kader kesehatan dan 55 ibu yang memiliki bayi dan balita yang berusia 5 tahun di wilayah Sidoarjo. Hasil dari kegiatan ini didapatkan adanya perbedaan mean pada masing- masing indikator capaian tingkat pengetahuan sebesar 66.6. ketrampilan pengelolaan bahan makanan sebesar 66.2, ketrampilan kewirausahaan berbasis kesehatan 64.3 serta pada indikator pendapatan keluarga sebesar 1.63 dan hasil uji *mean whitney* dengan  $\text{sig} = 0.001$ . Metode pendekatan *assasement based community development* melalui seminar, pelatihan dan pendampingan efektif dalam mengubah tingkat pengetahuan, persepsi dan perilaku kader kesehatan dan ibu- ibu yang memiliki bayi dan balita dalam pemenuhan gizi serta peningkatan ekonomi keluarga sebagai bentuk dukungan pada program penurunan stunting, ketahanan pangan keluarga sekaligus ketahanan ekonomi keluarga

**Kata kunci:** Stunting; Pemberdayaan ; Kader Kesehatan; kelompok ibu balita

## INTRODUCTION

Right now, stunting in children aged 3-5 years is the biggest child health problem experienced by most developing countries including Indonesia. Stunting is a category of nutritional problems where height gain is not in accordance with the age of children. The impact of stunting includes delays in child growth and development and has a long-term impact, namely a decrease in intellectual quality which is at risk of experiencing a decrease in performance productivity in the future. In 2019, the prevalence of stunting in Indonesia reached 31.8%, while in East Java it reached 32.8%. This prevalence exceeds the national rate set by the Government of Indonesia and has increased significantly during the COVID-19 pandemic, which is due to limited access to health services, global economic recession, lack of knowledge about stunting and lack of nutrition services. (Kemenkes, 2023; Rahman, Rahmah, 2023)

The government's efforts to reduce the prevalence of stunting in Indonesia are carried out through various programs including the national stunting campaign, increasing access to nutrition and food security, the formation of stunting cadres and stunting family companions until 2024 (Aria et al., 2022; UNICEF Indonesia, 2015)

A survey conducted in January 2023 with local health officials found that out of 170 toddlers, 30 were malnourished in the form of underweight, 18 toddlers and 12 toddlers were indicated to be stunted, with parents who had low economic status and worked as vegetable sellers, fried foods, parking attendants, and a small number lived in housing complexes. The interview results found that the problem of malnutrition and stunting was caused by lack of knowledge about nutritional adequacy, the causes of nutritional adequacy problems, and the impact of malnutrition on health cadres, lack of participation of health cadres in overall health programs and low socioeconomic status of stunting families. The general objective of this activity is to focus on achieving health independence through establishing information centers and managed stunting management facilities by health cadres as an effort to prevent an increase in stunting prevalence as well as a facility to increase the income of families who have children at risk of

nutritional problems, families who are indicated to be stunting through stunting centers, while the special objective is to increase the empowerment of knowledge, skills of health cadres related to children's nutritional status and related to efforts to use vacant land as a provider of local food (Livestock and Farm Stunting in house) and improving MPASI management skills with local materials and entrepreneurial skills for families who have children at risk and are indicated to be stunted

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

### General description

Sidoarjo Regency is one of the districts that has a fairly high stunting prevalence of 16.1% and ranks 26th district with a high stunting prevalence. This prevalence has increased when compared to the previous year which was 14.8%, this prevalence is far when compared to the prevalence in Surabaya City which was 4%. Several sub-districts in Sidoarjo that contributed to the prevalence include Jabon 15.6%, Gedangan 14.8%, Taman 13.2%, Tulangan 12.7%, Sedati 11.7% and Prambon 10%. Wage Village is one of the villages located in Taman District with an area of 207 ha, 3 villages, 14 Community Pillars and 82 Neighborhood Pillars and has a population of 23,000 people. A survey conducted in January 2023 with local health officials found that out of 170 toddlers, 30 were malnourished in the form of underweight, 18 toddlers and 12 toddlers were indicated to be stunted, with parents who had low economic status and worked as vegetable sellers, fried foods, parking attendants, and a small number lived in housing complexes. The interview results found that the problem of malnutrition and stunting was caused by lack of knowledge about nutritional adequacy, the causes of nutritional adequacy problems, and the impact of malnutrition on health cadres, lack of participation of health cadres in the overall health program and low socioeconomic status of stunting families

Tabel 4. Target description

No	Name of target	Characteristics of target	Amount	General problems or targets
1	Non-Economic target	Health cadres	55	Health, education and economics
		People who have toddlers	55	

### Problem

Tabel 5 Problem and solution

No	Problem	solution	Indicators of goal
1	Knowledge level of stunting, infant and toddler feeding, health-based entrepreneurship	Material exposure	Increase skor knowledge /skill/behaviour
2	Food management skills with local ingredients	Demonstration	
3	Health-based business management skills	Training	
4	Family income	Training	Increase in income of toddler families

## Target solution

The initial stage carried out in this activity is socialization with the target of activities with the aim of introducing programs, activities, materials to be delivered and preparing activity schedules.

The second stage is the provision of material related to stunting and stunting center management

The third stage is to provide training on local food management skills, stunting detection skills, counseling skills, skills in compiling a health-based home business canvas business

The fourth stage of target assistance in the implementation of the stunting center as well as monitoring changes before and after activities are carried out

## METHOD

This service activity is a downstream of the chairman's research entitled the effectiveness of triple c parenting on the perception and behavior of caregivers with obese children and analysis of factors that affect the prevalence of stunting in Surabaya using the E stunting application. The method used in this workshop is assessment-based community development, where the service team has conducted a problem study and the ability of available community resources. The instruments used in measuring the success of the program are questionnaires and check lists that measure indicators of knowledge, skills and family income. The target of the activity is health cadres totaling 55 cadres and parents who have infants and toddlers who are at risk of malnutrition and stunting totaling 52 parents. The data analysis used was a pre and post activity difference test using Whitney mean test analysis which looked at the difference in pre and post activity mean. The location of this activity took place in the village of Wage Kecamatan, Taman Sidoarjo Regency, East Java.

## RESULTS AND DISCUSSION

### Result

Table 3 characteristics of partner goals

No	Characteristics of partner goals	n	Frequency	percent
1	Age of Health Cadres	55		
	Productive age 20- 59 years		53	96.4
	Seniors Over 60 years		2	3.6
2	Age of parents who have babies and toddlers	55		
	Productive age 20- 59 years		55	100
	Seniors Over 60 years		0	
3	Age of child	55		
	infants and toddlers less than 5 years old		47	85.5
	Children of age 5- 9 years		8	14.5

Based on table 3 that most cadres are between 20 -59 years old at 96.4% and 3.6% are elderly. Ages 2-59 years are categorized as reproductive after having the characteristics of being able to carry out effective and efficient activities, being able to control stress and emotional, having optimal physical health. The achievement of the overall activity success indicator is greatly influenced by the age of the target, because after that a person has strong motivation, great curiosity and has strong competitiveness so that the group can carry out the entire activity well and according to the plan prepared. While the age of mothers who have babies and toddlers as a whole is at reproductive age so that it has the same characteristics as health cadres. As mentioned earlier, that reproductive age is the age at which a person achieves optimal physical and mental health, has high learning motivation making it easier to play an active role in activities. (Kurniawati & Santoso, 2018; Zuliyanti & Hidayati, 2021). Most of the mothers had babies and toddlers under 5 years old (85.5%) and 14.5% aged 5-9 years. The age of infants and toddlers is an age phase that is vulnerable to nutritional problems and susceptible to infection so that monitoring physical health, growth and development is carried out more incentive and maximum. Monitoring the physical health and growth and development of children of that age is not only carried out by health workers, but can be done by health cadres or parents or caregivers. Therefore, increasing knowledge and skills about growth and development detection, monitoring child nutrition, how to serve food to children is very important for them as an effort to prevent malnutrition including stunting (Adistie et al., 2018; Rohimah et al., 2015; Waliulu et al., 2018)

Table 4: level of knowledge and skills

No	Success indicators	Pre	Post	mean	Sig 2 tailed
1	Level of knowledge	12	39.5	66.6	0.001
2	Skill level				
	Grocery management	12	39.5	66.2	
	Health entrepreneurship	12	39.5	64.3	
3	Income	14.09	38	1.63	

Table 4 explains that most of the activity targets prior to mentoring activities had a score of 12 points of stunting-related knowledge level, 12 points of food management skills score for infants and toddlers as well as the same score on health-based entrepreneurship-related skills. While the income score of families who have babies and toddlers is 14.09 which means that they have enough income to meet the basic needs of the family.

After seminars, training and mentoring, there was a change in knowledge level score of 39.5 points. The same score was 39.5 points on the dimensions of food management skills and health-based entrepreneurship while family income increased the score to 38. Each achievement indicator has a mean difference between before and after the activity. And the results of the man whitney test obtained a signification value of 0.001 which means there is a difference in skill knowledge scores before and after the activity. In the author's opinion, the seminar method, discussion, training and mentoring are methods that are able to stimulate the thinking process of learning targets so as to change individual perceptions.(Waliulu et al., 2018). While the discussion method is able to expand the perspective of learning participants obtained from the learning experience of each participant so that learning participants have a variety of knowledge and are able to apply the results of knowledge in accordance with individual abilities.(Masitha Arsyati & Krisna Chandra, 2020; Untari et al., 2017). The training method provides opportunities for learning participants to apply knowledge in the form of motor. The results of knowledge will

be stored in the long term if the knowledge can be applied to daily activities.(Adistie et al., 2018; Suprpto et al., 2022) The mentoring method is one method that applies direct learning with an expert. This method can build a good relationship, openness between participants and material providers so that learning participants can explore the depth of a science, form of implementation, how to apply. Participants can get practical solutions from the supervisor if they find obstacles in the learning process. Thus, the mentoring method provides opportunities for learning participants to build new experiences in a study that is different for each individual.(Adistie et al., 2018; Kurniawati & Santoso, 2018; Masitha Arsyati & Krisna Chandra, 2020; Suprpto et al., 2022; Untari et al., 2017) Overall, the method carried out in this activity provides changes in achievement indicators by looking at the results of the difference in mean and sig 2 tailed value of 0.001

## CONCLUSIONS AND SUGGESTIONS

The approach method through seminars, training and mentoring is able to change perceptions, behaviors and can build the experience of health cadres and mothers who have babies and toddlers so that they are able to provide solutions in fulfilling nutrition in infants and toddlers and are able to build independent businesses as an effort to maintain the family economy and be significant in helping government programs reduce malnutrition and stunting rates. The results of this activity can be used as an alternative model for solving health problems in the community and for actors of community service activities, it is expected to be broader to deepen studies related to the model of approach to the community

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