








Reducing the Prevalence of Stunting Rates through the Foster Fathers for Stunting Children Program

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Abstract

Through the foster father program for stunted children, which was started by the Lubuklinggau Mayor, this study seeks to lower the prevalence of stunting in Lubuklinggau City. In October 2023, 155 stunted toddlers were registered in the ePPGBM application. During the intervention period, each child is assigned a foster father who will help by providing meals. By comparing the nutritional status of toddlers before and after receiving assistance from the foster father program for stunting toddlers, this study employed an experimental design. The research method used is an experimental method. The effectiveness of the intervention program provided was then determined using the paired samples T test. The findings indicated that there were significant differences in the nutritional status of toddlers before and after receiving the intervention, with a p-value of 0.000 (.05) and the study's findings indicate that the stunting foster father program had an impact on the nutritional status of the toddlers who received intervention, as evidenced by the 19 toddlers (12.2%).

A. Introduction

The government, through the BKKBN, has stipulated BKKBN Regulation Number 12 of 2021 concerning the National Action Plan for the Acceleration of Reducing Indonesia's Stunting Rates for 2021-2024 (RAN PASTI). The action plan is used as a reference for coordination, synchronization and integration between ministries/institutions, provincial regional governments, district/city regional governments, village governments and stakeholders in implementing the Accelerated Stunting Reduction program. To coordinate increased cooperation and partnership with Stakeholders, the BKKBN as Chief Executive of the Acceleration of Stunting Reduction launched the Father's Care for Stunting Children program (Yudiana, 2022).

Fathers for Fostering Stunting Children (BAAS) is a collaborative initiative involving various levels of society to effectively accelerate the reduction in stunting rates, with a primary focus on families at risk of stunting. BAAS is a mutual cooperation movement that collaborates with all elements of the nation, aiming to reduce the alarming level of stunting. In this context, BAAS's efforts focus on families who are at high risk of experiencing stunting, with the hope of providing the support and information needed to prevent

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stunting from occurring. Through this inclusive approach, BAAS aims to make a significant contribution to overcoming the problem of stunting and improving the quality of life of children throughout the region (Achmad & Ilhami, 2022).

Efforts to accelerate stunting reduction (hereinafter referred to as PPS) are a national priority that require synergy and collaboration of many parties, involve various multi-sector interventions from various administrative levels, and even need to involve the public and/or the non-administrative general community. Administratively, at the regional level, a Stunting Reduction Acceleration Team (TPPS) was formed from the Regency/City level to the village level TPPS, involving all elements of the state civil apparatus from various sectors (Republik Indonesia, 2021). As a national priority program, each region is obliged to make every effort to implement the national PPS program (Republik Indonesia, 2021). The President gave full mandate to the National Population and Family Planning Agency (BKKBN) to lead the national PPS program.

Priority care focuses on two activities, namely providing additional food and sanitation assistance including access to clean water. Meanwhile, accompanying care, namely donors, can provide Communication, Information and Education (KIE) to families at risk of stunting as a group or intrapersonally (Wahyuni et al., 2023). So far, addressing malnutrition has focused on babies from birth to age five year. In fact, the golden period is when the child is still in the womb until the age of two years. Therefore, a paradigm shift in handling malnutrition is needed. Therefore, the government is implementing the Accelerated Nutrition Improvement Program with the First 1000 Days of Life Movement. Apart from that, it is hoped that further research on stunting by looking at regional situations and conditions will be carried out on an ongoing basis in order to prevent negative impacts that will have long-lasting consequences for the nation's future generations (Ruaida, 2018).

Factors that influence the occurrence of stunting in early childhood are: energy intake, birth weight, maternal education level, family income level, parenting patterns and food welfare. Interventions that can be carried out are: 1. Providing adequate energy intake through a supplementary food program 2. Providing nutritional intake and Fe tablets to pregnant women so that fetal development is optimal and births with normal weight 3. Increasing the mother's knowledge about nutrition and health 4. Opening jobs so that they can meet the family's nutritional needs. 5. Providing counseling about parenting styles. 6. Providing education about various foods and training on using the yard as a vegetable garden (Nugroho et al., 2021).

According to the 2022 Indonesian Nutrition Status Study's (SSGI) findings, 11.7% of children under the age of five in Lubuklinggau City had stunting. Stunting rates have been reduced by a variety of intervention strategies, one of which is the Lubuklinggau City Fisheries Service's provision of fish-based supplementary feeding (PMT). This study intends to evaluate the efficacy of supplementing the diets of stunting toddlers in Lubuklinggau City with fish-based foods (Nugroho, Yansyah, et al., 2023). This research is in line with research conducted by (Nugroho, Armeidi, & Mahyuddin, 2023). Based on the results above, it can be concluded that the prevalence of stunting in the provinces of South Sumatra and Bengkulu in general has decreased, but there are 6 districts in the two provinces that are still experiencing an increase in the prevalence of stunting.

The BAAS program was relatively recently launched so the effectiveness of this program still needs to be researched further. Therefore, this research aims to fill this knowledge gap by investigating the effectiveness of socialization of the foster father program for stunted children in preventing stunting (Achmad & Ilhami, 2022). Instances of wasting or poor weight gain may precede linear growth retardation (Richard et al., 2012).

B. Research Methods

The research method used is an experimental method. The total sample was 155 stunted toddlers spread across the Lubuklinggau City area. The first test variable assesses the nutritional condition of stunted toddlers (TB/U) before being given intervention, then intervention is given through the foster father in the form of recommended food. The research was conducted from October to December 2023. The nutritional status of toddlers (TB/U) at the end of the intervention was measured as a final test. The effectiveness of the intervention program provided was then determined using the paired samples T test.

After data on nutritional status before and after the intervention was collected, data analysis was then carried out using the SPSS Version 25 application with the Paired Sample T. In addition, a correlation test of paired samples was carried out with a significance value of $0.001 \leq 0.05$, meaning that there was a

relationship between height before the intervention and after the intervention in toddlers after being given intervention through the stunting adoptive father program. children (BAAS).

C. Result and Discussion

After all the stunted toddlers whose fathers have determined their care, then interventions are designed to be given to the stunted toddlers by the Lubuklinggau City Health Service with recommendations for specific interventions in the form of food and its nutritional value as follows:

Table 1. Recommended Foods and Their Nutritional Value

Nutritional Value	Chicken Eggs	Milk	Meal
Calorie	93,1 kkal	250 kkal	260 kkal
Carbohydrate	0,7 gram	8 gram	30,6 gram
Protein	7,6 gram	34 gram	10,7 gram
Fat	6,4 gram	10 gram	10,4 gram

Specific intervention products recommended include chicken eggs, milk and meal as shown in the following picture:



Figure 1. Recommended Foods for Stunted Toddlers

Eggs are a type of protein with a digestibility value of up to 100%. This food commodity has the most economic value compared to other animal protein sources (Suswati et al., 2023). Consuming growing-up milk (GUM) ≥ 300 ml/day was protective against stunting (Sjarif et al., 2019). One effective intervention program to reduce stunting rates is by providing balanced nutritional staple foods to toddlers (Nugroho, Armeidi, & Humsi, 2023), and also the need to provide information and education to the public to consume more varied food sources of animal protein, such as protein from nuts (Ernawati et al., 2017).

This PMT is given by foster fathers of stunted children directly to their respective targets accompanied by posyandu cadres assisted by Puskesmas nutrition officers and supervised periodically by Health Service officers. The following is documentation of PMT distribution activities for targets in the field:



Figure 2. Distribution of PMT for Stutnig Toddlers by Foster Fathers

Results of Developmental Nutritional Status of Target Toddlers

The nutritional status of toddlers was measured before and after providing the foster father's intervention. The following is a picture and table of the results of measuring the nutritional status of toddlers carried out in October and November:

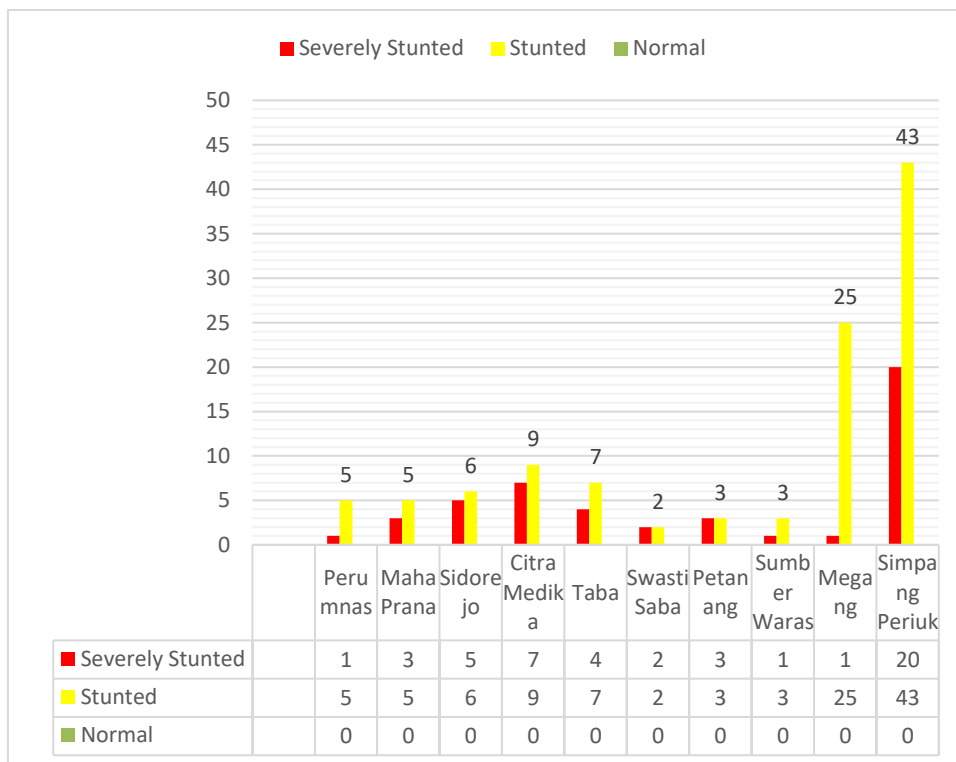


Figure 3. Graph of Results of Measuring the Nutritional Status of Target Toddlers Before Intervention in October

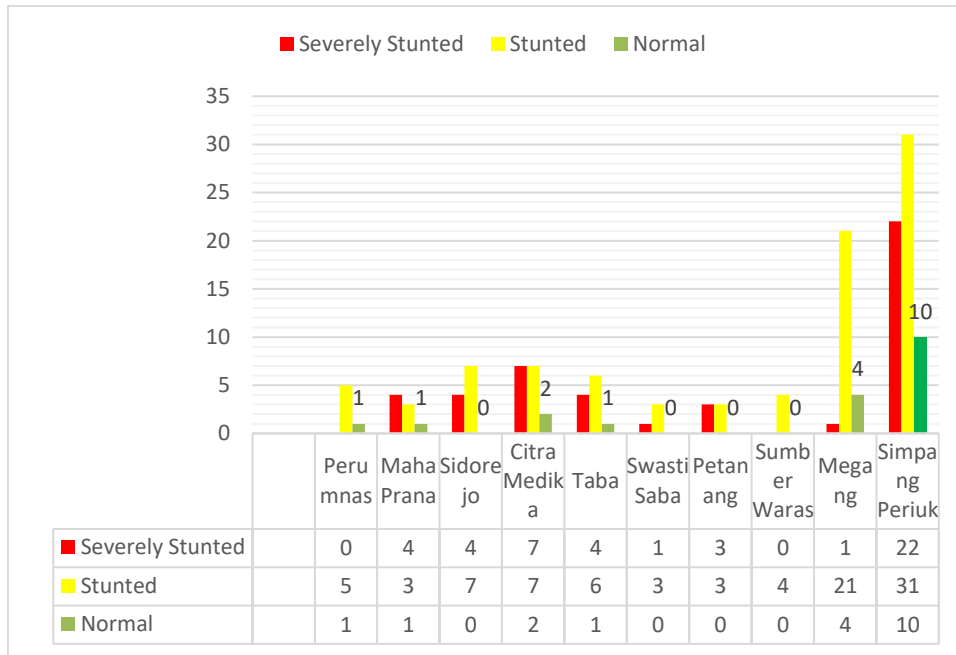


Figure 4. Graph of Results of Measuring the Nutritional Status of Target Toddlers After Intervention in November

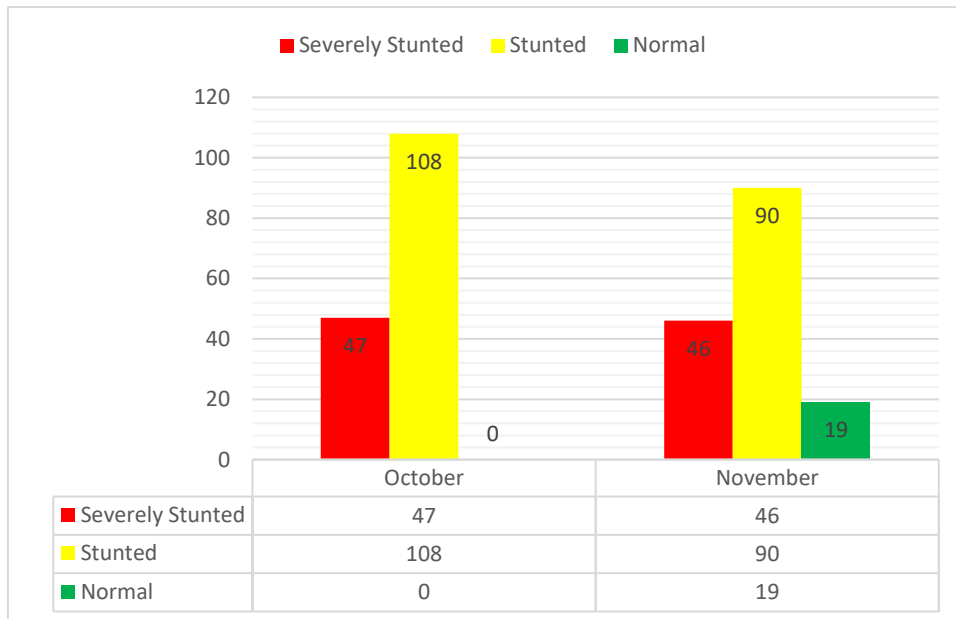


Figure 5. Graph of Results of Measuring the Nutritional Status of Target Toddlers Before and After Intervention

Nutritional status measurements before and after the foster father's intervention are carried out by nutrition officers and posyandu cadres during weighing activities, however, if the toddler is not present at the posyandu, nutrition officers and cadres will go to the toddler's house to measure the toddler's nutritional status targets.

Table 2. Results and Percentage of Target Toddler Nutritional Status Measurement During Intervention

No	Nutritional Status	Nutritional Status Measurement Month	
		October	November
1	Severely Stunted	47 (30,3%)	46 (29,6%)
2	Stunted	108 (69,6%)	90 (58%)
3	Normal	0 (0%)	19 (12,2%)

Amount	155(100%)	155 (100%)
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In the initial stage, before intervention was given, it was discovered that of the 155 target toddlers, 47 toddlers (30.3%) experienced severe stunting nutritional status and 108 toddlers (69.6%) experienced stunting. After being given the intervention, anthropometric measurements were taken in the form of the toddler's weight and height. The final results of the intervention were 46 toddlers with severely stunted nutritional status (29.6%), 90 toddlers with stunted nutritional status (58%) and 19 toddlers with normal nutritional status (12.2%). %).

Statistical Test Results

After data on nutritional status before and after the intervention was collected, data analysis was then carried out using the SPSS Version 25 application with the Paired Sample T Test with the following results:

Table 3. Data Distribution

	Mean	N	Std Deviation	Std Error Mean
Before	78.3697	155	9.50097	.76314
After	80.0658	155	8.94814	.71873

From the table above it is known that the number of samples before and after the intervention was N = 155 each with a median height (mean height) before the intervention of 78.3697 cm and after the intervention of 80.0658 cm. The standard deviation before the intervention was 9.50097 and after the intervention was 8.94814. The mean standard error before the intervention was .76314 and after the intervention was .71873.

Table 4. Paired Samples Correlations

	N	Correlation	Sg
Before& After	155	.981	<.001

From the results of the paired sample correlation test, it is known that the significance value is $0.001 \leq 0.05$, meaning that there is a relationship between height before the intervention and after the intervention in toddlers after being given intervention through the foster father program for stunted children (BAAS).

Table 5. Paired Samples Test

	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std Deviation	Std Error Mean	95% Confidence Interval of the Difference				
				Lower				Upper
Before - After	1.69613	1.88369	.15130	-1.99502	-1.39723	-11.210	154	<.001

From the results of the statistical test table above, it can be interpreted as follows:

1. It is known that the significance value = $0.001 \leq 0.05$, so there is a significant difference in the height of toddlers before and after being given the intervention, so it can also be concluded that providing intervention through the foster father program for stunting children (BAAS) can increase the height of toddlers thereby reducing the stunting rate. on the target toddler.
2. T count = $-11.210 < t$ table 1.97569, so statistically there is a difference in height between before and after being given intervention through the foster fathers program for stunted children (BAAS) for the target toddlers.

Innovative collaborative governance in the implementation of the Foster Fathers for Stunting Children (BAAS) program is needed considering the availability of creative space for various constructive decisions and decisions in handling stunting (Wijayanti et al., 2023). Stunting prevention requires cross-sector collaboration and is carried out comprehensively. Existing policies and regulations at the central level must also be followed up with follow-up at the regional to village level and involve not only the health sector but also other related sectors. The community-based prevention system needs to be further improved, because high public awareness of the importance of balanced nutrition, sanitation and environmental cleanliness is a big asset to reduce stunting rates (Nisa, 2018).

The good practices demonstrated by the performance of the team that implemented the Foster Children's Foster Care program in an innovative manner are worthy of being used as a reference for local governments in designing technical guidelines for implementing this policy. This step, which starts from unifying the vision and meaning of the mission within the team and then disseminating it through formal and informal networks until it obtains widespread support, is an innovation that needs to be accommodated in a policy framework that can be implemented by various villages in the district and even has the potential to be used as an example in other regions (Wijayanti et al., 2023). Efforts to improve children's nutritional status toddlers can be done by maximizing the use of local food products and the use of social media, especially in preventing stunting for toddlers (Nadimin, 2022).

D. Conclusion

Considering that the results of statistical tests with a significance level of $0.00 \leq 0.05$ show that there is a significant difference in the target height of toddlers between before and after receiving the intervention, it can be concluded that the intervention of the foster father program for stunting children (BAAS) is quite effective in increasing height, toddlers and reduce stunting rates. Based on the facts above, it is clear that providing this program is one intervention that can be used to reduce stunting rates.

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