

# Strategy for Decreasing the Rate of Stunting Through Early Childhood Health and Nutrition Training for Tutors/Parents of Early Childhood Education

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**Abstract:** The health sector, with various problems, namely stunting, infectious diseases, non-communicable diseases, and others, is still a priority that continues to be improved in Indonesia. The rate of stunting or failure to thrive in Indonesia is at 30.8%, which is above the WHO recommendation (20%). In 2017, around 29.6% of toddlers in Indonesia belonged in short and very short categories. This number was included in the high category when compared to the neighboring countries such as Myanmar and Thailand. Stunting is usually generated due to malnutrition, lack of parental knowledge, care and nurture, and so on. Stunting does not only occur in rural areas but also occurs in urban areas, i.e., DKI Jakarta. East Jakarta is the second-highest (25.7%) location where stunting occurred. Since this activity was conducted in Duren Sawit Subdistrict, where numerous people still received Healthy Jakarta Cards, special efforts were needed to reduce the high stunting rate. Efforts were made in the form of Health and Nutrition Training with several stages such as giving material and question and answer session, FGD for designing a healthy menu for early childhood, and the practice of making them. The training was given to  $\pm$  35 ECE tutors and parents of students from various ECE in Duren Sawit Subdistrict. Tutors and parents seemed enthusiastic and active during the activities, especially when they were given the task to create a one-week healthy menu in groups and then closed with a demo of making a cake with purple sweet potato as ingredients.

**Keywords:** nutrition, stunting, ECE tutors, parenting

## I. INTRODUCTION

The Indonesian Human Development Index (HDI) in 2017 ranked 116 out of 180 countries in the World [1], down three from the previous year. HDI assessment indicators consist of economic, education, and health aspects. The health sector, with various problems such as stunting, infectious diseases, non-communicable diseases, and others, is still a priority that continues to be improved in Indonesia.

Stunting is the failure of growth and development of a child under five years old (toddlers) caused by chronic malnutrition and infection, especially in the first 1,000 days of life [2]. Reference [3], even though in 2018 the percentage of stunting in Indonesia decreased from 37.2% to 30.8%, this number was nevertheless higher than the WHO recommendation (20%). Based on the results of Nutritional Status Monitoring conducted by the Indonesian Ministry of Health in 2017, around 29.6% of toddlers in Indonesia belonged in short and very short categories.

This number was included in the high category when compared to neighboring countries such as Myanmar (29%), Sri Lanka (17%), Thailand (10%), and others (Ministry of Health, 2018). Meanwhile, reference [4] stated that the data from Statistics Indonesia in 2015

showed that the number of early childhood (0-8 years) was 39,656,000. The data shows how large the number of early childhood in our country. However, [5] showed data in 2019 that  $\pm$  25.14 million (9.41%) of Indonesia's population lives below the poverty line. Low levels of education (averaged junior high school) surely have an impact on the level of early childhood health.

The latest data in 2015, according to [6], showed that the maternal mortality rate was quite high, around 305/100,000 births and the infant mortality rate in 2016 was around 25.5/1000 births. These conditions undoubtedly have an impact on early childhood development programs, where children need good nutrition and proper care and nurture so they can grow into a high-quality generation.

Stunting itself can be caused by various aspects, including the parental nutrition understanding, family financial factors [7], culture, healthy habits [8] and inaccurate care and nurture. The effect of these things can make a child inevitably get an infection that results in stunting. [9] added other things that could lead to the appearance of stunting, such as diet, parental nutrition awareness, economic level, parental education, and parental care and nurture. Parents are the main and first environment for children.

It is in line with what was stated by a Russian psychologist, Vygotsky, that parents have an essential role in the growth of their children. The meaning of parent and family involvement in childcare which involves six types viz.; parenting, communicating, volunteering, learning at home, decision making, and cooperating in the community.

Reference [10], nurturing, caring for, and educating early childhood is a full-time and very challenging job but gives rewards and surprises. These things are challenging for parents and every family, bringing great interest and fascinating, there is even a desire to continuously want to nurture and observe the growth and development of abilities and skills of early childhood in general. The process of child development should run naturally.

Children will grow vertically (quantitatively) which can be seen through size, weight, body length, and more. On the contrary, horizontal (developmental) growth is qualitative that cannot be measured but can be seen and felt through everyday attitudes and behavior. The indicators above show that full attention to the improvement of Indonesia's human resources, which must be started at an early age, is really important.

Stunting does not only occur in rural areas but also occurs in urban areas, such as in West Java, East Java, DKI Jakarta, and Bali. The DKI Jakarta Health Office stated that in 2017, the condition of infants with malnutrition increased to 2.92%. In DKI Jakarta, stunting occurred in infants aged 0-59 months is reaching 22.7% [11] with the highest cases in Central Jakarta at 29.2% and the second-highest at East Jakarta at 25.7%. This number shows that DKI Jakarta is categorized as acute chronic because it is above the WHO limit of 20%.

East Jakarta had a population of 2,892,783 people with a high average population density of 14,854 people/km<sup>2</sup> [12]. This activity was carried out in Duren Sawit Subdistrict. This subdistrict has a population of 392,961 people with a density of 17,349 people/km<sup>2</sup>, which is the second largest in the East Jakarta region.

With the high percentage of stunting and population density, some action is needed to reduce this percentage. In this subdistrict, there are numerous people who received the Jakarta Health Card. It shows that there is still a necessity for special efforts to reduce the high stunting rate, one of which is to increase activities that can be directly felt by the community.

## II. METHOD

Efforts were made in the form of Health and Nutrition Training, conducted in Duren Sawit Village, Duren Sawit Subdistrict in June 2019, with ± 35 participants consisting of mothers, parents, and ECE tutors and managers. The form of training is the participant observation method [13] and demonstration [14]. With this method, participants are expected to be actively involved directly in cooking demonstrations and Focus Group Discussion (FGD) [15].

The material from the training was Healthy Habits [16]. This material gave a demo of how to wash hands properly with practice simultaneously. Additionally, there was material on Early Childhood Health and Early Childhood Development Stages. Ended with the

performance of making cakes from purple sweet potatoes. It is expected that after attending the Health and Nutrition Training, parents of students will be able to know, to understand and to apply in their daily basis.

## III. RESULT AND DISCUSSION

Stunting or failure to thrive can occur in a variety of social classes; educated or uneducated, economically strong or weak. Because the main point is the efforts made by parents to make the food consumed by their children is proper with their daily needs and a maintained clean and healthy lifestyle which becomes a character so that they can be called a healthy family. Stunting is often insensible by families living in areas that generally have short stature, even among health workers.

Stunting does not receive the same attention as thin weight, especially if the height is not routinely measured as part of the public health program. Many families, health workers, and policymakers are not aware of the consequences of stunting that they cannot be considered as a public health problem.

The knowledge about health and diet (choosing, processing, serving) are needed to achieve a healthy family, notably if early childhood still exists in the family. It will affect the growth process of early childhood. Growing means that something can be measured and calculated like weight. While developing qualitatively, cannot be measured but can be seen in children's daily habits such as happiness, whiny, zealous, weak, quiet, agile, and so on.

Coaching or workshop about the strategy to reduce stunting rates through the Health and Nutrition Training was a series of training conducted in several stages in Duren Sawit Subdistrict in August with ± 35 participants of ECE tutors and parents of students from various ECE. The training was divided into several stages, started with the provision of material about the Strategy for Reducing Stunting Rates through Health and Nutrition Training.

After the material presentation, along with questions and answers session were done, the training continued to form discussion groups to conduct a Focus Group Discussion (FGD) for designing a One-week Healthy Menu for Early Childhood (Figure 1; Figure 2). Then the representatives of each group presented and received some suggestion from other groups. In the end, each participant could carry home the One-week Healthy Menu for Early Childhood.

The next activity is the Healthy Habits practice, i.e., the right way to wash hands whereby the participants seemed very enthusiastic. Toilet Training and balanced nutrition were also explained in this session. The last pursuit was in groups consisting of five people. It was a demonstration of making banana cakes made from purple sweet potato and horn banana. Keep in mind that purple sweet potatoes contain carbohydrate substances that are rich in vitamins [17; 18; 19] so it is good for the growth of the body of early childhood. Participants were very excited to follow it and were happy when they could bring home their product.

## IV. CONCLUSION

The efforts to reduce stunting rates in East Jakarta, which are above the WHO limit number, must be immediately

executed because there is a significant relationship between economic, nutritional knowledge of young parents with care and nurture patterns and the dietary and healthy habits that result in stunting. These efforts must be implemented by all parties viz., parents, ECE tutors, and regional governments because this has become a joint task that must be resolved immediately.



**Figure 1**  
**The Example of Healthy Food**



**Figure 2**  
**The Example of Healthy Drink**

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