



Optimization of Balanced Nutrition Consumption Equality Through the Nu-CL (Nutritional Child Lunch) Program to Obtain Indonesian Children Zero Hunger and Malnutrition as the Actualization of Sustainable Development Goal 2030

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Abstract. The fulfillment of the right of alimentation for children, especially the fulfillment of children's balanced nutrition consumption, will vary in each family. This fulfillment will of course be adjusted to the social conditions and financial capabilities of the parents. This is the subject of a serious problem because it is known that the number of poverty in Indonesia is still relatively high. A positive relationship was found between the level of poverty and the prevalence of malnutrition and undernutrition. The higher the poverty rate in an area, the higher the prevalence of malnutrition in that region. Therefore, it is necessary to have an exclusive focus on the high prevalence of malnutrition and the threat of obesity and overweight, such as improving the nutritional status of school-age children can help break the chain of intergenerational malnutrition. This focus not only improves nutritional status, but can also escalate mental and cognitive growth and help individuals reach their true potential. This article will discuss the nutritious lunch program to prevent stunting and create health resilience in early childhood in Indonesia.

Keywords: Balanced Nutrition · Zero Hunger · SDGs

1 Introduction

Consumption of nutritious food is important because nutrition is one of the factors that affect children's cognitive development [1]. In fact, with the changing socio-economic conditions of the family where parents have to work until the afternoon, not infrequently until the evening, certainly affects parents' attention to the nutrition of their children that must be fulfilled. Then the full-day program which also requires children to be in school 7 to 8 h a day as well as increasing school activities according to the needs of children at every level, causes the fulfillment of children's nutrition to be disturbed and not fulfilled properly. Jomaa's study showed significant results regarding the correlation

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G. D. Suprobowati et al. (Eds.): ICDNR 2022, ASSEHR 713, pp. 276–281, 2023.

https://doi.org/10.2991/978-2-494069-75-6_35

between nutritional status and student attendance at school. However, it is still inconclusive regarding the results of growth (weight and height), cognitive function (complex memory and mental abilities), behavior and habits in the classroom (concentration and engagement participation), and learning achievement [2].

The shadow of malnutrition and malnutrition still haunts Indonesia to this day because the number of hunger and malnutrition is still relatively high. The 2018 Global Hunger Index report states that Indonesia occupies position 73 with a hunger score of 21.9 or is at a serious level, one of the measuring indexes is the case of malnutrition in the population. Adolescents in Indonesia have also started to suffer from the Double Burden of Nutritional Problems. In 2013, 9.4% of adolescents aged 16–18 years and 11.1% of those aged 13–15 years were underweight (BMI per age < -2 SD Zscore), while 7.3% and 10.8%, respectively, were overweight (BMI per age $> +1$ SD Zscore) [3]. Meanwhile, families with malnourished children usually come from families who are in the trap of poverty. From data from the Central Statistics Agency, it is known that the number of poor people in March 2019 was 9.41% of the Indonesian population under the poverty line, or 25.14 million people. [4] The link between poverty and the gap in the nutritional status of children is inevitable. This is quite serious, considering that the poor nutritional status of children will have an impact on the learning ability and development of students. Therefore, government intervention to handle cases of child nutrition must be carried out immediately. Handling steps can be started in the school environment, where children usually spend more than a third of their day in the same place.

The purpose of this paper is to determine the urgency of equitable distribution of nutrition consumption in Indonesian children to accelerate the achievement of the 2030 Sustainable Development Goals (SDGs) and to determine the implementation of the Nutritious Children's Lunch Program in realizing equitable distribution of nutrition for Indonesian children to achieve better student quality and ensure that children's development can run optimally with the fulfillment of their needs to encourage the creation of the next generation of healthy and high achievers.

2 Research Method

This study uses a qualitative descriptive research method, which is based on the formulation of the problem that will be used to explore or photograph social situations that will be studied thoroughly, broadly, and deeply. According to Bogdan and Taylor quoted by Lexy. J. Moleong, the qualitative approach is a research procedure that produces descriptive data in the form of written or spoken words from people and observed behavior. [5] So this approach will refer to an understanding of the phenomenon of research subjects regarding the phenomenon of malnutrition and stunting that occurs in school-age children due to lack of nutrition at school. In addition, this method is also used to produce the concept of implementing the fulfillment of nutritious food in early childhood.

3 Discussion

3.1 The Urgency of Equitable Nutrition Consumption in Indonesian Children in Accelerating SDGs 2030

The influence of people's income levels on nutritional consumption patterns is a nutritional problem that is currently being faced with errors in consumption patterns and food insecurity. The high poverty rate in Indonesia is certainly the root cause of food insecurity and malnutrition. Poor and middle-class households in Indonesia have a consumption pattern that is minimal in nutrients, while upper-middle-class households have an excessive consumption pattern, especially in energy sources and processed foods. This contributes to the occurrence of malnutrition in the lower middle class and obesity in the upper middle class [3]. Data from the 2020 National Socio-Economic Survey (Susenas) states that the fulfillment of nutrition, especially protein and calories in urban areas is greater than in rural areas due to the condition of the welfare of the urban population being higher than that of rural communities. In addition, the pattern of nutritious consumption is also not evenly distributed because of only 15 of the 34 provinces of Indonesia whose average consumption is above the consumption adequacy standard.

The fulfillment of this nutritious consumption will certainly have a major impact on children because at the age of growth of course nutritious consumption will also have an impact on intellectual and cognitive development as well as children's health. The prevalence of stunting in Indonesian children at the age of 16 to 18 years is 31.4% and in the age group 13 to 15 years is 35.1%, and what is of concern is that most girls will enter the pregnancy phase in a state of malnutrition so that it can prolong the malnutrition cycle [3]. This has been done by various countries in the distribution of nutritious consumption in children through the national lunch program which has affected alleviating hunger, fulfilling balanced nutrition, and increasing learning abilities, such in all states of the United States, Japan, India, New Zealand, Canada, and other countries. Other. Equitable consumption of children by prioritizing nutrition will certainly contribute to reducing poverty which will certainly contribute to improving children's nutrition and quality to achieve a quality and healthy educated generation, equitable distribution of community welfare, and alleviating hunger and malnutrition as a sustainable development step.

3.2 Implementation of the Nutritious Children's Lunch Program (Nu-CL) in Realizing Nutritional Equity for Indonesian Children

Nutritional problems have become a global problem that haunts this inter-generational chain of nutritional problems as well as addressing food problems for families with low socio-economic conditions. Governments in several countries carry out nutrition interventions using health and nutrition programs at school lunches. In Japan, the School Lunch Program is mandatory for all students, although not all students do not pay, but the Japanese Government has subsidized and only charges \$2.50 per meal [6]. Not only the lunch program, but Japan has also promoted Shokuiku (Education on food and nutrition) since 2005, including the meal program. With school lunch programs and Shokuiku, Japan seeks to fight poverty and nutritional problems, both malnutrition and obesity, for all socioeconomic classes [7]. Seeing that the problems experienced are not much

different, even subjectively Indonesia's condition can be said to be worse, so the school lunch program and Shokuiku should be studied further and adopted. Therefore, one of the policies that can be implemented to directly intervene in nutrition and overcome food insecurity for children with low family economic conditions is through the provision of national lunches interspersed with the provision of nutrition education, namely the Nu-CL program.

The Nu-CL Program is a lunch program initiated by the Central Government and implemented in all schools, both private and public, for Elementary Schools (SD), Junior High Schools (SMP), and High schools (SMA). The Nu-CL Program is aimed at organizing school lunches as a form of fulfilling children's nutrition without burdening the family, especially for families with low socioeconomic conditions. The Ministry of Education and Culture (Kemendikbud) and the Ministry of Health (Kemenkes) will collaborate in designing this program.

The Ministry of Education and Culture as the ministry responsible for providing education and student quality is responsible for designing the modeling of the Nu-CL program. The implementation is adjusted to the needs and schedules at each level of education. In addition, the Ministry of Education and Culture will also issue a policy on nutrition education and the obligation to have nutritionists and nutrition education teachers for every school, starting from public schools. Each nutritionist can work for several schools. Nutritionists are needed to monitor and determine the nutritional fulfillment of school lunches based on the needs and population of students in the school. Meanwhile, nutrition education teachers are needed to educate students about nutrition education with the hope that students can have a healthier lifestyle so that children's nutritional status can improve as in previous research [8].

Meanwhile, the Ministry of Health is responsible for setting nutritional standards that must be met in the Nu-CL program for each level of education. The Ministry of Health also needs to coordinate with the Ministry of Education and Culture regarding the standardization of school nutritionists and standardization of school lunch service providers, either independently by schools or by third parties who have obtained permission from the Ministry of Health. These third parties are like several companies or foundations that have previously provided lunch, such as PT Ajinomoto [9] and Sumba Foundation [10] which hopes to be successful with the Nu-CL Program. As for halal certification for school lunch service providers, it is adjusted to the needs of each school. Then, at the regional level, the local government together with the Education and Health Offices act as supervisors for the implementation of the Nu-CL Program. Local governments can also campaign for local staple foods as one of the products that will be consumed in the Nu-CL Program in the area.

As for financing the Nu-CL program, the cost is taken from the State Revenue and Expenditure Budget for education and health funds. The hope for the implementation of the Nu-CL program is that this program will receive a full subsidy from the government so that parents will not be burdened, considering that one of the goals of this program is also to fight poverty. However, as a starting point for implementation, the following policy scenario can be made: the Nu-CL program is free for students from poor families (full subsidies) and fixes a low price, for example, a maximum of IDR 5,000/meal, for fully non-subsidized students.

Seeing the success of other countries such as Japan in organizing school lunch programs as an effort to fight poverty and improve child nutrition, has brought optimism to the implementation of the Nu-CL program. With the Nu-CL, at least 30% to 40% of the total nutritional consumption of children per day can be fulfilled properly. Children need not have to worry about food insecurity or hunger when they are studying at school, nor do their parents. So that there is a need for cooperation between the government, the community, and related parties to ensure the implementation of this program, to support the quality and good health of children as the generation that determines the future sustainability of the nation's life.

4 Conclusion

The existence of problems regarding the low nutrition of Indonesian children is an important thing to be accommodated through the NU-CL program as part of fulfilling the ideal nutrition of children who are still of school age. The NU-CL program will be implemented at all school levels to fulfill the realization of a child nutrition improvement program and to encourage an increase in the quality of education that will be received by Indonesian children. There is a need for coordination and synchronization of implementation between government institutions and community institutions to achieve zero malnutrition and stunting.

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