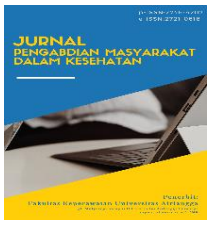

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THE ACCOMPANIMENT OF SUPPLEMENTARY FOOD FOR MONITORING THE STUNTING RISK CHILDREN IN RENGAS I VILLAGE OGAN ILIR

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ABSTRACT

Introduction: The Ogan Ilir Regency district has the second-highest prevalence of stunting in South Sumatra, with a prevalence rate of 24.9%. Providing additional meals (PMT) is an essential component, especially to improve the conditions of low-income communities affected by malnutrition, with a specific focus on young children. The purpose of the activity is to provide a continuous supply of food, thus preventing body weight loss and promoting optimal nutritional well-being.

Methods: The event took place at a village in Payaraman District situated in Ogan Ilir Regency. The participant were the two children, namely Anak R (3.5 years old) and Anak S (1.7 years). The service methods included the process of meal preparation for PMT and the delivery of meals to the homes of children. The method used for the PMT involved the daily allocation of food, the nutrient composition of various foods, including pumpkin, potatoes, carrots, maize and similar substitutes. At the end of the month, the final anthropometric measurements were collected. The anthropometric measurements encompassed body weight, and height. The weight of the youngster was measured using a digital scale manufactured for further analysis.

Results: There was a noticeable improvement in weight and height of Anak R and Anak S. Anak R demonstrated a weight gain after the programme from exactly 9.30 kg to 9.80 kg, while Anak S showed an increased weight from 7.80 kg to 8.50 kg. Anak R's height improved from 81.0 cm to 85.0 cm and Anak S's from 71.0 cm to 72.0 cm. Despite the observed growth in the weight and height of both children, the acquired findings did not meet the desired levels for each child's weight and height.

Conclusion: Community service activities include food supplementary accompaniment and stunting surveillance has assisted for children with high risk of stunting conditions to gain weight and height after food additions. The accompaniment community service activity can be used as an effort to reduce cases of malnutrition.

KEYWORDS

accompaniment; community services; KKN; stunting; supplementary food.

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1. INTRODUCTION

Stunting and other malnutrition problems are still public health problems of global concern. As many as 149.2 million children under five in the world are estimated to experience stunting (World Health Organization, 2022). Stunting can have long-term and significant impacts, including stunted growth, decreased cognitive and mental abilities, susceptibility to disease, and low productivity (Kementrian Kesehatan Republik Indonesia, 2023). Stunting can occur due to inadequate nutritional

intake according to age (Beal et al., 2018). The number of stunting in Indonesia is ranked fifth in the world (United Nations Children's Fund, 2020). The stunting management programme has been declared a national priority by the Indonesian Government, highlighting the importance of implementing integrated measures to address the increasing prevalence of cases (Rahman et al., 2023).

The Nutritional Status Study conducted by the Ministry of Health of the Republic of Indonesia (Kemenkes RI) has indicated that the prevalence of stunting in South Sumatra Province in 2022 remains significantly elevated, around 18.6%. In 2022, Ogan Ilir Regency has the second-highest occurrence of stunting in South Sumatra, with a prevalence rate of 24.9% (Menteri Perencanaan Pembangunan Nasional/Kepala Badan Perencanaan Pembangunan Nasional, 2021). The achievement of the stunting reduction aim of 14% as specified in the National Medium Term Development Plan 2020–2024 has not been realized in Ogan Ilir Regency. The PMT is a constituent element of the Ogan Ilir Regency Government's endeavor to address and reduce the incidence of stunting in Ogan Ilir, including Rengas 1 Village. The execution of the PMT programme in Rengas 1 Village involves the active participation of students, local cadres, and midwives (Badan Penelitian dan Pengembangan, 2019).

The community service activities were conducted by students participating in the 61st KKN (Real Work Lecture) programme at Universitas Muhammadiyah Palembang. Posko 38 refers to the group of KKN students assigned to Rengas 1 Village, Payaraman District, Ogan Ilir Regency. The decision to focus on only two children, Anak R (3.5 years) and Anak S (1.7 years), was carefully considered and highlighted the potential impact of severe stunting for these children. The programme objective was to evaluate the impact of PMT provided by KKN students on the reduction of stunting in children at risk, through the monitoring of their growth in terms of weight and height over a designated period.

2. MATERIAL AND METHODS

In the preparatory phase, activities began in early February 2024 with the coordination between KKN students from Universitas Muhammadiyah Palembang, local health workers and village cadres. The objective was to mitigate the high prevalence of stunting in Rengas 1 village, Payaraman subdistrict, by PMT to children at risk of severe stunting. Prior to the start of the programme, health workers conducted a nutritional needs assessment of the children and screened two children, Anak R (3.5 years old) and Anak S (1.7 years old). The students and village leaders have carefully planned the meals and snacks to ensure complete nutrition, and have chosen ingredients such as pumpkin, potatoes, carrots and maize to provide a balanced diet. Snacks were pastry, dumplings, veggie bakwan, pumpkin dumpling,

Picture 1. The cooking food process and distributing food to children who are at risk of stunting. The complete video has been uploaded on https://bit.ly/VideoPendampinganMakanan

Figure 2. The measuring children's weights and heights. Baseline data was collected, following the next four weeks, using the digital weight/height measurement

purple sweetpotato dumpling, chicken combo, rice balls, bananas, bananas and pumpkin stew (Figure 1).

During the implement phase, the students liaised with village cadres to prepare meals for the children. The preparation process involved cooking meals rich in protein, vitamins and minerals to ensure that each child receives adequate nutrition. The meals were then distributed daily to the homes of Anak R and Anak S. This routine is maintained throughout the month of the programme.

After a full month, anthropometric measures, including weight for age, height for age and weight for height were taken weekly to assess the children's growth (Efendi et al., 2022). The children's weight was measured using digital scales (Fajar et al., 2022), while their height was recorded using appropriate measuring instruments (Figure 2).

3. RESULTS

There is a noticeable improvement in weight and height of Anak R and Anak S, specifically for Anak R has shown a weight gain from 9.3 kg to 9.8 kg after the programme, whereas Anak S exhibited a weight gain from 7.8 kg at the commencement to 8.5 kg by the end of the programme (Figure 3). Meanwhile, the vertical dimension of Anak R rose from 81 cm to 85 cm, followed by Anak S has risen from 71 cm to 72 cm (Figure 4). Despite the observed growth in the weight and height of both children, the acquired findings did not meet the desired levels for each child's weight and height.

4. DISCUSSION

Stunting is a complex phenomenon in that children experience physical and mental developmental challenges, a weakened immune system, nutritional and health problems, and below-average academic achievement (Triharini et al., 2023). The matter of stunting should not be undervalued, as it signifies a noteworthy public health issue that is closely linked to increased vulnerability to sickness and mortality (Ghiffari, Utama, et al., 2023). Stunting in pregnant women and children is influenced by several factors and cannot

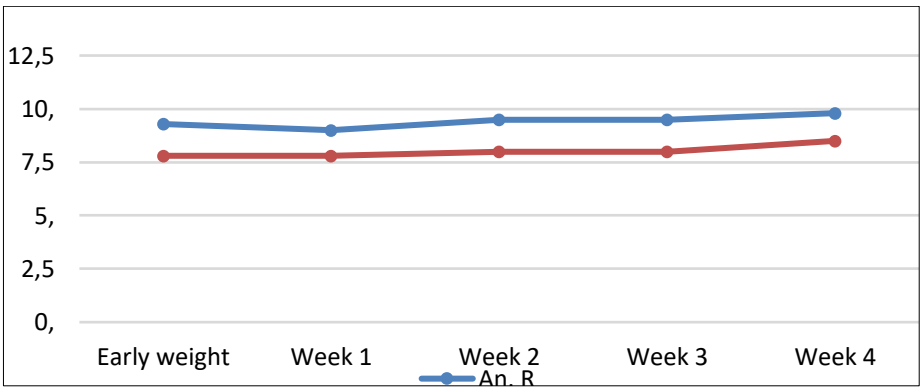

Figure 3. Child's Height Development During the Accompaniment Programme

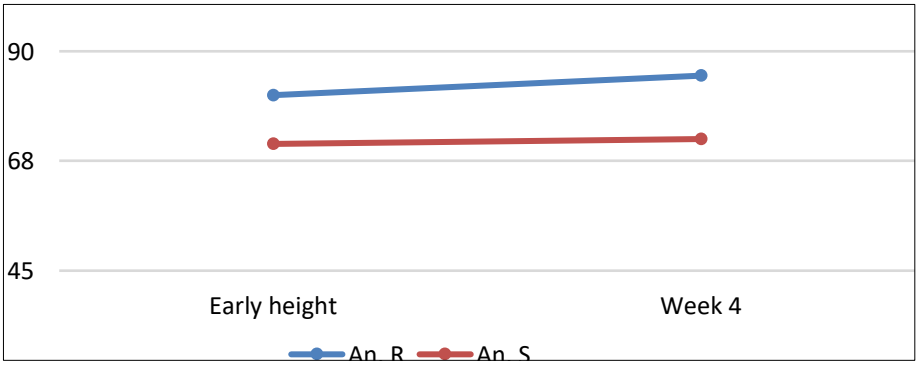

Figure 4. Children's Height Development During the Accompaniment Programme

just be ascribed to insufficient nutrition (Haskas, 2020). One source of the stunting problem is poor nutrition in mothers and children (Oktarina et al., 2023). Several factors that cause stunting include poor parenting practices, limited health services, lack of household access to nutritious food, and lack of access to clean water (Sutarto et al., 2018). (Mikawati et al., 2023) Therefore, it is imperative to enhance efforts focused on reducing occurrences of stunting (Ghiffari, Gusmiatun, et al., 2023).

This result was consistent with the research done by (Irwan et al., 2020), in which all subjects were given more meals for a period of four weeks. The weight increase observed in toddlers who participate in the PMT programme can be related to several variables, such as the administration of PMT and the intake of major meals and snacks (Sugianti, 2017). The supply of additional food can also be achieved through homemade methods as a snack (Riestamala et al., 2021). This is achieved by the provision of a substantial intake of protein, as well as sufficient quantities of essential vitamins and minerals (Iskandar, 2017). The primary aim of the PMT programme initiative is to provide more nourishment to youngsters to facilitate optimal growth and development (Wati, 2020). The appropriate use of nutrients has a crucial role in promoting optimal physical growth, mental development, workability, and overall health, hence contributing to a condition of favorable nutritional status (Widnatusifah et al., 2020).

In terms of the highest prevalence of stunted children, Indonesia ranks sixth internationally (United Nations Children's Fund, 2020). (Trihono et al., 2015) assert that Indonesia's position exceeds that of India, China, Nigeria, and Pakistan. According to the Ministry of Health's Indonesian Nutritional Status Study, there has been a decline in the prevalence of stunting in Indonesia from 27.7% in 2019 to 21.6% in 2022 (Liza Munira, 2023). The primary goal is to attain a 40% decrease in the prevalence of stunting by the year 2025. The government is making efforts to reduce the prevalence of stunting to 17% by 2023 and further to 14% by 2024 (Rini Puji Lestari, 2023).

A limitation of the programme is the relatively small sample size, which was limited to two children. As a result, the findings are not necessarily generalisable to a larger population. Furthermore, the study period of one month may not have been sufficiently long to observe the full impact of the supplementary feeding programme on the children's nutritional status. It should be acknowledged that additional factors, including the children's health status, home environment, and parental involvement in adhering to the recommended diet, were not comprehensively considered, potentially affecting the outcomes.

5. CONCLUSION

Community service activities include food supplementary accompaniment and stunting surveillance as part of KKN 61 Universities Muhammadiyah Palembang 2024 in Payaraman District is proceeding according to plan. Assistance for children with high risk of stunting conditions found two stunted children in the Rengas I village. The child experiences weight gain after food additions and improvements in their height too. In this way, this accompaniment community service activity can be used as an effort to reduce cases of malnutrition.

It is recommended that the duration of supplementary food provision be extended beyond the initial one-month period in order to sustain this programme. It is of the utmost importance to conduct ongoing monitoring of children's growth, accompanied by regular anthropometric measurements in order to track progress and make adjustments to the nutritional intake as required. Moreover, engaging parents in meal preparation and providing them with nutritional education is an effective strategy for ensuring that healthy habits are

maintained at home. Lastly, securing consistent resources and extending the reach of the programme to more children at risk of stunting hinges upon securing ongoing support from local health authorities and government initiatives.

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