

Family-Based and Integrated Health Post (Posyandu) Stunting Prevention Strategies Through Education and Empowerment In Bangun Jaya Village, Sukamara Regency

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ABSTRAK

Stunting continues to pose challenges in improving child health outcomes, particularly in relation to growth and developmental potential. Addressing this issue requires not only clinical efforts but also strengthening the role of families and community-based health workers. This study aimed to explore the impact of a participatory educational activity designed to improve knowledge on stunting prevention among community members in Bangun Jaya Village, Sukamara Regency. The activity involved 40 participants, including pregnant women, mothers of young children, and Posyandu cadres. A pretest–posttest approach was applied to assess changes in knowledge following the intervention. Educational sessions were delivered through visual materials and facilitated discussions to encourage engagement and reflection based on participants’ daily experiences. The Wilcoxon Signed Rank Test was used to examine differences in knowledge scores before and after the intervention. The findings indicated a clear improvement in participants’ understanding, reflected by an increase in mean scores from 6.9 prior to the activity to 10.7 afterward, with statistically significant results ($p < 0.001$). Sustained efforts that involve both families and local health cadres are essential to support long-term behavioral changes and community participation. **Keywords:** stunting prevention, family empowerment, Posyandu, health education.

INTRODUCTION

Stunting is a condition of impaired growth in children caused by prolonged nutritional deficiency and influenced by various environmental factors and parenting practices [1]. This condition remains a serious public health issue because it not only affects physical growth but also impacts cognitive development and children's learning abilities [2].

In the long term, children who experience stunting are at risk of having lower productivity and being more susceptible to non-communicable diseases in adulthood. Therefore, stunting prevention must be carried out comprehensively and involve multiple sectors [1,2].

The Indonesian government has established the acceleration of stunting reduction as one of its national priorities through policies emphasizing an integrated cross-sectoral approach [3]. In addition, efforts to improve community nutritional status have been strengthened through various regulations supporting promotive and preventive healthcare services [4,5].

However, the success of these programs largely depends on active community participation, particularly within families. Families play a crucial role in meeting nutritional needs, implementing child feeding practices, and promoting clean and healthy living behaviors [6].

Integrated Health Service Posts, known as Posyandu, serve as a community-based healthcare initiative and represent a strategic platform for supporting stunting prevention. Through Posyandu, communities can access growth monitoring services, immunizations, and health education [7]. Nevertheless, the utilization of Posyandu has not been optimal due to limited public awareness regarding the importance of these activities.

Therefore, educational interventions are needed that not only focus on delivering information but also encourage active community participation so that the material provided can be more easily understood and applied in daily life.

METHODS

This activity was conducted at Posyandu in Bangun Jaya Village, Sukamara Regency, in December 2025. The approach used was participatory education, involving participants actively throughout the implementation process.

A total of 40 participants were involved, consisting of pregnant women, mothers with toddlers, and Posyandu cadres. The activity began with a pretest to assess the participants' initial level of knowledge. This was followed by the delivery of educational material using visual media accompanied by interactive discussions. Afterward, a posttest was conducted to evaluate changes in participants' knowledge.

The pretest and posttest data were analyzed using the Wilcoxon Signed Rank Test to determine differences before and after the intervention.

RESULTS

The community service activity on family- and Posyandu-based stunting prevention education was carried out in March 2026 at Posyandu in Bangun Jaya Village, Sukamara Regency, Central Kalimantan. The activity involved pregnant women, mothers with toddlers, and Posyandu cadres, with a total of 40 participants.

Table 1. Respondent Characteristics

Characteristics	Frequency	Percentage (%)
Pregnant Women	12	30%
Mothers with Toddlers	20	50%
Posyandu Cadres	8	20%

Table 2. Community Service Activity Procedures

Description	Activity
Title	Family- and Posyandu-Based Stunting Prevention Education
Partners	Bangun Jaya Village Government and Posyandu
Location	Bangun Jaya Village
Target Participants	Pregnant women, mothers with toddlers, and Posyandu cadres (n = 40)
Method	Pretest - Interactive Education - Discussion - Posttest
Outcome	Increased community knowledge regarding stunting prevention
Implementation Time	March 2026

Statistical analysis using the Wilcoxon Signed Rank Test showed a significance value of $p < 0.001$, indicating a significant difference between pretest and posttest scores.

Table 3. Wilcoxon Test Results

Variable	Mean Pretest	Mean Posttest	Z Value	p-value	Description
Knowledge	6.9	10.7	-5.21	<0.001	Significant

The results showed an increase in knowledge among all participants after the educational intervention. The average score increased from 6.9 to 10.7. The Wilcoxon test showed a significant difference ($p < 0.001$), indicating that the educational intervention was effective in improving participants' knowledge.



DISCUSSION

The increase in knowledge after the activity indicates that the participatory educational approach was effective in improving community understanding. Participants not only received information passively but were also actively involved in discussions that enabled them to relate the material to their daily experiences. This made the learning process more meaningful and easier to remember.

Knowledge is an important factor in shaping health behavior. Individuals with good knowledge tend to be more capable of making appropriate decisions in maintaining their own health and that of their families [6]. In the context of stunting prevention, this knowledge is related to child feeding practices, growth monitoring, and the utilization of healthcare services.

Stunting is a multifactorial problem influenced not only by nutritional intake but also by parenting practices, sanitation, and access to healthcare services. Therefore, the approach used must be comprehensive and address all of these aspects.

This activity also highlights the important role of Posyandu cadres as intermediaries between healthcare professionals and the community. Cadres with adequate knowledge can help disseminate information continuously and encourage community participation in health-related activities.

These findings are consistent with previous studies showing that health education can improve community knowledge regarding stunting prevention [8,9]. In addition, community-based interventions have been shown to enhance health practices and increase the utilization of healthcare services [10,11].

However, increased knowledge does not always immediately translate into behavioral change. Continuous efforts and environmental support are needed to ensure that these changes can be sustained over the long term.

Policy Implications

The Stunting Prevention Program implemented by the Sukamara Regency Government had previously been carried out in 2024 and was considered highly successful. The intervention involved cross-sector collaboration in stunting prevention assistance activities. Each Regional Government Organization (Organisasi Perangkat Daerah/OPD) was assigned to support one village. These mentoring activities were generally conducted during Posyandu sessions in the assisted villages.

The mentoring activities included efforts to encourage community participation, particularly motivating parents to bring their toddlers and pregnant women to Posyandu. Strategies included providing transportation assistance, offering door prizes, and conducting home visits. These initiatives received positive responses from the community and significantly increased enthusiasm for attending Posyandu.

However, attendance rates may decline once the mentoring program ends, as the assistance program only lasted six months. In some cases, community participation was driven more by incentives rather than intrinsic awareness of health importance. Furthermore, only hospitals and the Health Office represent health-focused OPDs, while other OPDs do not primarily operate in the healthcare sector.

These findings suggest that local governments need to strengthen the integration of educational activities into routine Posyandu programs. Each mentoring activity should coordinate with the Health Office and its technical implementation units to provide qualified health educators during Posyandu sessions. Additionally, improving cadre capacity through ongoing training and providing educational media tailored to community conditions should become a priority.

It is expected that with adequate knowledge among both community members and cadres, internal awareness will grow regarding the importance of maintaining personal and family health, including regularly bringing toddlers and pregnant women to Posyandu for examinations and screenings.

From a policy perspective, stunting prevention efforts in Indonesia have a strong legal foundation and continue to evolve. The government has established the acceleration of stunting reduction as a national development priority through Presidential Regulation Number 72 of 2021, which emphasizes the implementation of integrated nutritional interventions involving multiple sectors [3].

Recent regulatory developments are also reflected in Law Number 17 of 2023 concerning Health, which emphasizes that every individual, including children, has the right to access quality and sustainable healthcare services. In this context, promotive and preventive approaches are essential to ensuring optimal child growth and development [5].

In addition, field monitoring of child nutritional status refers to Minister of Health Regulation Number 2 of 2020 concerning Child Anthropometry Standards, which serves as a guideline for assessing child growth in healthcare facilities, including Posyandu [12]. Furthermore, Minister of Health Regulation Number 8 of 2019 highlights the importance of community empowerment through the involvement of health cadres as frontline service providers at the community level [13].

CONCLUSION AND RECOMMENDATIONS

Family-based education and the empowerment of Posyandu cadres have proven effective in increasing community knowledge regarding stunting prevention.

Participatory and sustainable educational activities should continue to be developed to support behavioral change and improve public health outcomes.

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