

EFFECTIVENESS OF ACCOMPANIMENT FOR ADOLESCENTS AND PREGNANT WOMEN WITH ANEMIA: ENDEAVORS IN EARLY STUNTING SCREENING DURING THE FIRST 1000 DAYS OF LIFE

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Abstract

The 2022 Indonesian Nutritional Status Study survey reveals that the prevalence of stunting among children under five was 21.6%. In Central Java province, the rate was 20.8%, while in Brebes Regency, it reached 29.1% (the highest in Central Java). Stunting poses a significant nutritional challenge affecting the growth and development of young children. This issue is linked to factors such as malnutrition in pregnant women, adolescents, and nursing mothers, as well as the presence of infectious diseases in mothers. The well-being of young women is crucial, as they will become the next generation of parents, shaping the nation's future. By 2030, an estimated 68% of Indonesia's economic support will come from individuals of productive age, including current adolescents who will soon become parents. This cross-sectional observational study aimed to assess the effectiveness of assisting adolescents and pregnant women with anemia as an early stunting screening initiative. The data collection involved checking hemoglobin levels in adolescents and pregnant women, assisting those with anemia for 30 days, and then re-evaluating their hemoglobin levels. Univariate frequency distribution analysis indicated increased hemoglobin levels among adolescents and anemic pregnant women. Chi-square analysis resulted in a p-value of 0.04, suggesting that assisting adolescents and pregnant women as an early stunting screening effort effectively addresses anemia.

Keyword: Stunting; Teenager; Pregnant Women, Anemia; 1000 HPK

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1. Introduction

Stunting represents a persistent challenge in nutrition, as it stems from a deeply rooted issue of malnourishment linked to inadequate nourishment. The evaluation of stunting necessitates meticulous consideration of factors such as height or bodily length, age, and gender of the young child. This multifaceted condition eludes societal awareness, owing mainly to the tendency to overlook a toddler's height or body length measurement. Consequently, addressing stunting has emerged as a central objective in the

global endeavor to ameliorate nutritional standards.^[1,2]

More than 80% of child mortalities are attributable to nutritional deficiencies. The findings from the Indonesian Nutritional Status Study (SSGI) in 2022 reveal a national stunting prevalence of 21.6%. Within Central Java, the stunting incidence is 20.8%, while the district with the highest percentage of stunted children is Brebes, at an alarming 29.1%. Regrettably, such figures remain far from the targeted prevalence articulated in the National Medium-Term Development Plan for 2020-2024,

which aspires to reduce stunting rates to a mere 14%.^[3]

Adolescent girls who suffer from anemia are at risk of becoming anemic women of childbearing age who then become anemic pregnant women, and even experience a lack of protein energy. This increases the chances of giving birth to a low birth weight (LBW) baby and stunting, complications during childbirth and several other pregnancy-related risks.^[4,5]

Enhancing nutrition during adolescence for prospective brides, expectant mothers, postpartum mothers, and young children enrolled in early childhood education is a powerful method of prevention of stunting. This holistic approach incorporates both nourishment- and non-nourishment-based strategies, warranting the reinforcement and expansion of interventions sensitive to stunting-related factors, such as access to clean water, food security, sanitation, education, infrastructure, healthcare services, and economic stability.^[6,7]

The insufficiency of nutritional intake during pregnancy can lead to stunting, as the developing fetus also experiences a deficiency in vital nourishment. This is further compounded by improper dietary patterns and low-quality sustenance, ultimately hindering growth. The interrelatedness between education levels, knowledge, and attitudes toward fulfilling essential nutrients during pregnancy is crucial for enhancing maternal health and well-being. The absence of proper knowledge and practices can become obstacles to improving nutritional status because an authentic understanding of nutrition during pregnancy and the first two years of life is paramount for fostering optimal growth in the future.^[8,9]

Efforts to prevent stunting have been carried out with utmost diligence, commencing from the prenatal period or within the crucial first 1000 days of life, one of which involves enhancing maternal knowledge about the attitudes and behaviors indispensable for

thwarting stunting.^[10] The profound awareness of health, fulfillment of nutritional needs, and enlightenment during adolescence for prospective mothers and expectant women must be conscientiously attended to effectively mitigate the risk factors associated with stunting and pave the way for holistic well-being.^[11,12]

Based on the preliminary study conducted by researchers in Sidamulya Village, Wanasari District, Brebes Regency, it was found that there is still a high incidence of stunting, with 31 toddlers affected in the two villages. Additionally, there are adolescents and pregnant women experiencing anemia. Therefore, there is a need for a special approach to address anemia in adolescents and pregnant women in order to prevent stunting as early as possible. In this study, adolescents and pregnant women identified with anemia will receive guidance. During the guidance process, their food intake will be monitored, and they will be educated about anemia, nutrition, and stunting, hoping to eliminate anemia in both adolescent girls and pregnant women. This is intended to serve as a solution to address the issue of stunting, particularly in the Brebes Regency

2. Method

This research was a pre-experimental study involving treating a specific group without a control group. The research activities were carried out in the Wanasari District, Brebes Regency, from June to August 2023, to determine the effectiveness of guidance for adolescents and pregnant women with anemia in the Wanasari District, Brebes Regency. Sampling was done using consecutive sampling. The samples in this study are adolescents and pregnant women who have anemia. The measurement tool used to analyze the anemia status is a checklist containing the results of the Hb examination. The observed variable is the anemia status before and after the 30-day guidance. Respondents will have their Hb levels

checked to determine if they have anemia or not. Before the examination, the respondents will sign a consent form to participate, and the researcher will explain various aspects of the study until the respondents fully understand and consent. The respondents will be guided for 30 days through a WhatsApp group to communicate and provide education. After 30 days, the Hb levels of the adolescents and pregnant women will be re-examined. Once the research data is obtained, data analysis will be conducted. The analysis used to identify the anemia status before and after the treatment in this study will involve using the Chi-square test with a confidence level of 95% and α 5%.

3. Result and Discussion

Table 1. Age Distribution of Respondents

Category	n	%
Early Adolescence	9	30
Late Adolescence	9	30
Early Adulthood	8	26.7
Late Adulthood	4	13.3

Table 4. Effect of Accompaniment Adolescence and Pregnant Women with Anemia

Before Accompaniment	After Accompaniment			Total	p-value
	Normal	Mild	Moderate		
Mild	13	9	0	22	0.004
Moderate	3	3	0	6	
Severe	0	1	1	2	
Total	16	13	1	30	

Table 4 indicates that offering intensive support to pregnant women and adolescents can effectively tackle the anemia problem. This is supported by the chi-square test's p-value of 0.004, below the significance level of 0.05. This suggests a notable connection between mentoring and the occurrence of anemia in teenagers and pregnant women.

The results indicated that supporting adolescents and pregnant women with anemia increased Hb levels in both groups. This was achieved through educational interventions that improved their knowledge about nutrition, leading to a positive change in dietary habits.

Total	30	100
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Table 1 shows that most respondents are early and late adolescents, with nine respondents (30%) in each category.

Table 2. Distribution of Anemia Status Before Accompaniment

Category	n	%
Mild	22	73.3
Moderate	6	20
Severe	2	6.7
Total	30	100

Table 2 shows that 22 respondents (73.3%) experienced mild anemia

Table 3. Distribution of Anemia Status After Accompaniment

Category	n	%
Mild	16	53.3
Moderate	13	43.3
Severe	1	3.3
Total	30	100

Table 3 shows that 16 respondents (53.3%) did not experience anemia.

Preventing anemia in adolescents and pregnant women is crucial due to its impact on pregnancy outcomes. Research has shown that anemia during pregnancy is associated with stunting in toddlers, as evidenced by a study conducted in Gilang village, Ngunut sub-district, Tulungagung district. The Spearman rho test results indicated a p-value of 0.000.^[13]

Research on adolescent girls' knowledge and attitudes toward consuming iron supplement tablets to prevent stunting shows that most respondents have good knowledge (57%) and good attitudes (75%). Specifically, the majority with good knowledge (32.5%) and good

attitudes (47.5%) are at the high school education level. The study indicates that most adolescent girls recognize the importance of consuming iron supplements to prevent stunting, and most (52.5%) have shown improved attitudes due to increased knowledge. This is crucial for meeting nutritional needs and addressing anemia effectively.^[14,15]

4. Conclusion

Assisting adolescents and pregnant women experiencing anemia has been found to impact their anemia status, as evidenced by a significant p-value of 0.04 in the chi-square test.

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