

## Preventive Measures Against Stunting through Healthy Lifestyle Education for Pregnant Women

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### ABSTRACT

Stunting is a significant nutritional problem related to the growth and development of toddlers. One aspect that influences the occurrence of stunting is the condition of the mother before pregnancy, the nutrition of the pregnant woman, and her weight and height. One way to prevent stunting can be through education for pregnant women so that it is hoped that there will be changes in behavior, and increasing knowledge and attitudes in pregnant women. Therefore, community service activities through education about stunting for pregnant women are very important. This community service activity aims to increase pregnant women's insight and knowledge about what stunting is and how to take preventive measures to prevent it. Methods for carrying out activities include exposure by resource persons, examination/measurement (ANC) as well as mentoring and training in exercise for pregnant women.

## **INTRODUCTION**

Stunting is a condition characterized by inadequate growth and development in children during the first 1,000 days of life, primarily resulting from chronic malnutrition. This issue, commonly referred to as stunting, represents a significant nutritional challenge globally, including in Indonesia. According to the World Health Organization (WHO), the factors contributing to stunting include family and household dynamics, the provision of complementary foods alongside breastfeeding, the practice of breastfeeding itself, and a history of infections. In the Southeast Asia region, the findings from the 2018 Regional Health Research (Rakesda) indicate that 30.8% of children under the age of five are affected by stunting. This statistic translates to approximately seven million toddlers in Indonesia, who represent the future generation of the nation, facing potential challenges in their competitiveness as they grow. Over the past decade, there has been no notable improvement in the rates of stunting in Indonesia.

The short-term effects of stunting include interruptions in brain development, impairments in intelligence, physical growth abnormalities, and metabolic issues within the body. In the long term, the adverse consequences manifest as reduced cognitive capabilities and academic performance, weakened immunity leading to increased susceptibility to illness, and a heightened risk of chronic conditions such as diabetes, obesity, cardiovascular diseases, cancer, stroke, and disabilities in later life. Additionally, these factors contribute to diminished work quality and lower economic productivity. Most of the children who are stunted have poor learning achievements, while the majority of children who are not stunted have good learning achievements.

Stunting is a condition where children under five fail to thrive due to chronic malnutrition and recurrent infections during the First 1,000 Days of Life (HPK). Factors influencing: 1) Parental care practices; 2) ANC and PNC services are of poor quality; 3) Access to nutritious food is still lacking; 4) Lack of access to clean water and sanitation. The target groups for stunting prevention include: prospective brides (catin), pregnant women, postpartum mothers, toddlers 0-23 months, and toddlers 24-59 months. Risk factors for stunting are higher in close pregnancy spacing, low maternal education, low socioeconomic status, feeding practices and environmental factors.

The health and nutritional conditions of the mother before and during pregnancy and after delivery affect fetal growth and the risk of stunting. Other factors affecting the mother are the mother's body posture (short), the pregnancy distance is too close, the mother is still a teenager, and inadequate nutritional intake during pregnancy. The fetus' nutrition depends entirely on the mother, so the mother's nutritional adequacy greatly influences the condition. the fetus she is carrying. Pregnant women who are malnourished or have insufficient food intake will cause problems with fetal growth in the womb.

Education is part of health education activities. Health education is defined as a learning process carried out for individuals, families, groups, and communities to change unhealthy behavior to healthier patterns. Improvement efforts to overcome stunting include efforts to prevent and reduce disorders directly (nutritional interventions specific) and efforts to prevent and reduce disorders indirectly (sensitive nutrition interventions). Specific nutritional intervention efforts are focused on the First 1,000 Days of Life (HPK) group, namely pregnant women, breastfeeding mothers, and children 0-23 months because the most effective prevention of stunting is carried out in the 1,000 HPK (golden period or critical period/windows of opportunity). Health education increases pregnant women's knowledge about the danger signs of pregnancy. The expected result of health education is an increase in knowledge and attitudes and the ultimate goal of achieving changes in individual, family, and community behavior in maintaining healthy behavior and playing an active role in realizing a good level of health.

Based on the description above, it is very necessary to provide education about stunting and its prevention both theoretically and practically to pregnant women in Pamekaran village, Sumedang Regency, West Java.

### *Activity Objective*

This activity aims to increase insight and knowledge of pregnant women about stunting and how early preventive steps can be taken

### *Benefits Activities*

1. Increased insight and knowledge of pregnant women about stunting and early prevention steps
2. The health condition of pregnant women is monitored both by independent monitoring and by posyandu cadres.

## **IMPLEMENTATION AND METHODS**

### *Activity Targets*

The residents who are the beneficiaries of the activities are 20 pregnant women in Pamekaran village, Sumedang Regency, West Java, with the age range of pregnant women 20 to 35 years.

### *Implementation Method*

Implementing educational activities related to stunting for pregnant women is carried out using the theory presentation method regarding the importance of balanced nutrition for pregnancy, ANC examinations, and the implementation of exercise for pregnant women. Implementation stages include:

### *Preparation*

In the preparation stage, coordination was carried out with cadres of pregnant women in Pamekaran Village, Sumedang Regency, West Java regarding data on the number of pregnant women, then cadres were invited to attend educational and mentoring activities on the day the activity took place.

### **Implementation**

Implementation of activities is carried out in several types

1. Presentation of theories about stunting and the need to maintain balanced nutrition to prevent stunting. At the presentation stage the resource person, pre and post-test questionnaires were also distributed to see whether there was an increase in participants' knowledge about the importance of balanced nutrition for pregnant women.
2. Examination, weighing, and measuring pregnant women (ANC). Health monitoring, health monitoring is carried out through interviews using post-mortem assistance for pregnant women which aims to see risk factors for stunting. Looking at the KIA book aims to see the results of the mother's last ANC examination. Measurements to obtain data on upper arm circumference (Lila) and abdominal circumference.
3. Assistance and exercise training for pregnant women

### **Activity Evaluation**

Evaluation of activities was carried out as a whole to see the level of success and usefulness of activities for the community, specifically the community of Pamekaran Village, Sumedang Regency, West Java.

### **Time and Place of Activities**

This activity was carried out by the Village Health Center of Pamekaran Village, Sumedang Regency, West Java. Activities will be carried out from July to September 2023

## **RESULTS AND DISCUSSION**

There were 20 pregnant women participants with an age range of 20 to 35 years. In quantitative descriptive data, data can be presented as shown in the univariate test results in Table 1 below:

**Table 1. Frequency Distribution of Pregnant Women Based on Univariate Test**

<b>No</b>	<b>Variable</b>	<b>N</b>	<b>Percentage (%)</b>
1	<b>Education</b>	5	25
	Low	12	60
	Middle	3	15
	High		
2	<b>Parity</b>		
	Primigravida	4	20
	Multigravida	16	80
3	<b>Knowledge (Post-test)</b>		
	Less		
	Enough	2	10
	Good	3	15
		15	75
Total		<b>20</b>	<b>100</b>

From the data presented in Table 1, it can be explained that of the 20 pregnant women participants, in terms of education level, it is dominated by pregnant women with secondary education levels, namely 12 people (60%) with parity or frequency of giving birth more than once as many as 16 people (80%), while for the knowledge category after participating in educational activities or theoretical exposure about the importance of maintaining balanced nutrition for pregnant women, data was obtained that as many as 15 people (75%) knew a good category.

**Activity 1: Theoretical Presentation on Stunting and the Importance of Maintaining Balanced Nutrition for Pregnant Women**

The theoretical presentation on the importance of maintaining balanced nutrition for pregnant women was carried out by resource persons from the Indonesian Christian University assisted by community health center officers and the public health service implementation team. At the start of the activity, participants filled out a questionnaire sheet with several questions about nutrition for pregnant women. Participants took part in the education with great enthusiasm and enthusiasm. The resource person's presentation material was about what types of food are good to consume during pregnancy and inappropriate or balanced doses/portions. In the discussion session, participants asked several questions to the resource person specifically on how to ensure adequate nutrition for pregnant women with limited economic conditions, to which the resource person then responded that nature has provided various sources of protein, both vegetable and animal, it just remains how the book can utilize and process it properly. Well, in other words, nutritious food doesn't always have to be expensive and an industrial product, in fact what nature provides is much better. At the end of the activity, participants filled out the post test questionnaire again, and then the results obtained from the pre-test and post-test scores were good, where there were 15 people (75%) whose knowledge fell into the good category based on the post test (this has increased From the pre-test the good category was only obtained by 7 participants or 35%). Documentation of educational activities as in Figure 1 below:



**Figure 1. Documentation of Pregnant Women Education Activities**

**Activity 2: Examination, weighing and measuring pregnant women (ANC).**

Health monitoring, health monitoring is carried out through interviews using post mortem assistance for pregnant women which aims to see risk factors for stunting. Looking at the KIA book aims to see the results of the mother's last ANC examination. Measurements to obtain data on upper arm circumference (Lila) and abdominal circumference. Risk factors at 1000 HPK that can increase the incidence of stunting include: the risk of chronic energy deficiency in early pregnancy (LILA < 23 cm), the mother experiencing anemia in the third trimester of pregnancy. The nutritional condition of the mother before pregnancy can influence the initial process of growth and development of the fetus she is carrying. Pregnant women with CED cause fetal growth restrictions resulting in a risk of stunting. The size of the upper arm circumference in pregnant women is a simple indicator to identify the risk of a baby experiencing growth faltering and stunting. The upper arm circumference of pregnant women is a better predictor than body mass index. Insufficient upper arm circumference is associated with less maternal education and low economic status. Documentation of inspection activities as in Figure 2 below:



**Figure 2. Documentation of Pregnant Women Examination Activities**

## **CONCLUSIONS AND RECOMMENDATIONS**

Healthy lifestyle education activities for pregnant women include socialization activities about the importance of maintaining balanced nutrition, examination, and measurement (ANC), and accompanying exercise training for pregnant women as a series of preventive measures against stunting in Pamekaran Village, Sumedang Regency, West Java, which were carried out well and brought benefits. which is very big for the community, especially pregnant women, where their insight and knowledge increase about stunting and various things that can be done to prevent stunting.

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