

# Nutrition Education During Pregnancy Increases Pregnant Women's Knowledge in Preventing Stunting

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## Nutrition Education During Pregnancy Increases Pregnant Women's Knowledge in Preventing Stunting

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**Abstract:** Stunting is a result of chronic malnutrition experienced by a person during pregnancy and early birth, which can increase infant and child mortality, make them susceptible to illness, and inhibit growth and development. The aim of the activity is to provide education about pregnancy nutrition to prevent stunting. The targets were 10 pregnant women in Tanjung Anom Village. The service methods are counseling and discussion. The results of the activity showed that after being given education, there was an increase in pregnant women's knowledge about nutrition during pregnancy and efforts to prevent stunting. Advice to village midwives and local Posyandu cadres to provide assistance to pregnant women in meeting nutritional needs in order to prevent stunting in future children.

**Keywords:** Education, Pregnancy nutrition, Stunting.

### 1. INTRODUCTION

Stunting is a problem of malnutrition caused by inadequate nutritional intake over a long period of time due to the provision of food that is not in accordance with nutritional needs. Stunting can occur when the fetus is still in the womb and only appears when the child is two years old. Stunting is a chronic malnutrition condition experienced by a person from the time the child is born which can increase the death rate in infants and children, get sick easily, and inhibit both motor and mental growth (Rahmadhita, 2020).

According to the World Health Organization (WHO), an area is said to be experiencing acute nutritional problems if the prevalence of stunted babies is more than 20% or underweight toddlers is above 5%. In 2017, more than half of the world's stunted children came from Asia (55%) while more than a third (39%) lived in Africa. Of the 83.6 million stunted children under five in Asia, the largest proportion comes from South Asia (58.7%) and the lowest proportion in Central Asia (0.9%) (Trisyani et al., 2020). Indonesia is in the fifth highest stunting position in the world with a prevalence of 37.2% compared to neighboring countries, namely Myanmar (35%), Vietnam (23%), Malaysia (17%), Thailand (16%) and Singapore (4%) (Salamung, 2024).

The prevalence of stunting in North Sumatera in 2018 was 32.3%, the highest prevalence was Donggala Regency at 34.9% and the lowest was Buol Regency at 9.4%. Stunting in Deli Serdang Regency reached 26%. The problem of stunting in children starts from the beginning of life which will have an impact on later life such as increased

incidence of morbidity and death, cognitive, motor and verbal development in children is not optimal, increased health costs which will cause body posture that is not optimal as an adult (shorter). compared to general), increased risk of obesity and other diseases, decreased reproductive health, less than optimal learning capacity and performance during school, and less than optimal productivity and work capacity (Rahmawati et al., 2020).

One factor that influences the occurrence of nutritional problems is the lack of knowledge of pregnant women about balanced nutrition. A mother who has poor knowledge and attitudes about nutrition will have an impact on her nutritional status, because good knowledge is related to providing balanced menu choices.(Olsa et al., 2017). Mothers with good knowledge about the nutritional needs of toddlers tend to have children who also have good nutritional status. This is related to the mother's understanding of the benefits and functions of nutritious food for the growth and development of her toddler. Knowledge based on proper understanding will foster new expected behavior (Susilowati & Himawati, 2017). Pregnant women's knowledge, including about nutrition, is very important so that pregnant women pay more attention to their condition during pregnancy, especially the food they consume to prevent stunting through fulfilling nutrition, preparing food properly so that nutrients and cleanliness are well maintained for the health of pregnant women and the child's growth and development (Sukmawati et al., 2024).

Based on the results of a preliminary study conducted in Tanjung Anom Village, Pancur Batu District, Deli Serdang Regency, North Sumatera Province in 2024, data was obtained on the number of 42 children, of which 3 children were indicated to be stunted, 3 children were at risk of stunting and 36 other children were normal. The number of pregnant women consisted of 10 people, after filling out a questionnaire regarding the mother's level of knowledge regarding nutrition was obtained around 60% of pregnant women have insufficient knowledge. Children experience stunting due to the mother's lack of knowledge regarding health and nutrition during pregnancy. It is important to carry out community service activities with the aim of increasing pregnant women's knowledge about balanced nutrition to prevent stunting.

## 2. IMPLEMENTATION METHOD

This activity was carried out in conjunction with posyandu activities for pregnant women in collaboration with posyandu cadres which were held on November 22 2024 in Tanjung Anom Village, Pancur Batu District, Deli Serdang Regency. The target audience is pregnant women in Tanjung Anom Village. The service methods carried out in this activity are: 1) Measuring the level of knowledge of pregnant women in Tanjung Anom Village before and after being given counseling, 2) Education and discussion, namely providing material to pregnant women about understanding balanced nutrition, nutritional needs during pregnancy, nutritional management during pregnancy, the impact of malnutrition, signs and symptoms and prevention of stunting. Evaluation was carried out using pre and post test questionnaires to assess pregnant women's knowledge before and after being given education.

## 3. RESULTS AND DISCUSSION

In this activity, education about nutrition during pregnancy and the signs, symptoms and prevention of stunting is provided using the counseling method using leaflet media, then followed by a discussion session. In the discussion session, participants were active and enthusiastic, asking questions regarding the types of food that should be consumed, food arrangements when children start being given complementary foods for breast milk, and efforts to prevent stunting.

Participants' knowledge about nutrition during pregnancy was measured before and after education using a questionnaire about stunting and nutrition during pregnancy in pregnant women with the results as shown in table 1.

**Table 1.** Description of Pregnant Women's Knowledge Before and After Pregnancy Nutrition Education to Prevent Stunting

Knowledge	Before Education		After Education	
	F	%	F	%
Good	4	40	8	80
Enough	0	0	2	20
Not enough	6	60	0	0
Amount	10	100	10	100

Table 1 shows that 40% of the 10 participants before the education had good knowledge and after the education it increased to 80%. The pre-test results showed that 60% of mothers had insufficient knowledge about nutrition in pregnant women to prevent stunting. Lack of knowledge about balanced nutrition in pregnant women results in mothers not understanding the need for good nutrition during pregnancy and the impact of nutritional imbalances on children's health. Research shows that a mother who has poor knowledge and attitudes about nutrition will greatly influence her nutritional status, because good knowledge is related to providing balanced menu choices (Misrina & Salmiati, 2024). Other research proves that knowledge about nutrition in mothers is one of the factors that determines the growth and development of babies and toddlers. Mothers who have good nutritional knowledge are better able to implement nutritional requirements better than mothers with less nutritional knowledge. The ability to apply nutritional knowledge in food selection and processing influences skills in managing household income allocation to choose good food (Lukman et al., 2017).

Education is part of health education activities. Health education is defined as a learning process carried out for individuals, families, groups and communities which aims to change unhealthy behavior to healthier patterns. The health education process involves several components, including using teaching and learning strategies, maintaining decisions to make changes in action/behavior, and health education also focuses on changing behavior to improve their health status (Listyarini et al., 2020).

The results of post tests carried out on pregnant women after being given counseling showed that around 80% of pregnant women knew about balanced nutrition for pregnant women to prevent stunting. Pregnant women become more aware of the importance of fulfilling adequate nutrition during pregnancy to avoid various health problems both during pregnancy and after birth. This is proven by the mother becoming aware of the daily diet menu that is nutritious for health and how to regulate her diet. The mother already knows the impact that could occur if she is malnourished during pregnancy, thus giving rise to feelings of alertness and being more careful.

Be careful and alert in maintaining nutritional balance so that you can break the cycle of stunting in society by improving nutrition. Education for pregnant women has a significant influence on increasing mothers' knowledge about stunting prevention. Previous research shows that after educational interventions, there is an increase in maternal knowledge (Anggraeni & Murni, 2024). Education for pregnant women can change their behavior in preventing stunting (Yunitasari et al., 2024). Education for

pregnant women has a significant influence on increasing mothers' knowledge about stunting prevention. The mother's attitudes and behavior during pregnancy are supported by the mother's knowledge about her pregnancy (Ekayanthi & Suryani, 2019). The most successful nutritional health intervention for pregnant women is knowledge (Musdalifah et al., 2020).

#### 4. CONCLUSIONS AND SUGGESTIONS

Community service activities by providing education about nutrition during pregnancy to prevent stunting show an increase in pregnant women's knowledge about nutrition during pregnancy to prevent stunting. Service providers provide advice to village midwives and local Posyandu cadres so that they can provide assistance to pregnant women in meeting nutritional needs in order to prevent stunting in future children.

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