

## Empowering Communities through Ceting Community (Preventing Stunting) in Sipolu-Polu Village's Posyandu

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### Abstract

*The community service program, known as PkM, was carried out in Sipolu-polu, Panyabungan Kota district, Mandailing Natal regency. The program consisted of three stages. The first stage aimed to educate parents on proper child-rearing practices as a preventive measure against stunting. The second stage focused on educating families on the importance of a balanced diet as a preventive measure against stunting. The third stage involved providing support and evaluating the educational activities in collaboration with the village leaders of Sipolu-polu and healthcare workers from the local health center through the Posyandu program. The purpose of this community service activity is to: 1). Prevent stunting in children aged 0-12 years old in the Sipolu-Polu village community, located in the Panyabungan sub-district of Mandailing Natal district, North Sumatra, Indonesia. Stunting is a significant issue in Indonesia, with a prevalence rate above 20%, and it negatively impacts children's development, learning capacity, and future health. 2). Provide education on appropriate child-rearing practices and balanced food selection to prevent stunting. During this program, the PkM team also provided green bean porridge, biscuits, oranges, and apples to all attendees. The series of PkM activities is expected to contribute significantly as a preventive effort against stunting in the future.*

**Keywords:** balanced diet, child-rearing practices, stunting

### A. Introduction

The district of Sipolu-Polu is situated in the Panyabungan sub-district of Mandailing Natal district. The area is home to approximately 13,500 inhabitants, the majority of whom earn their livelihoods through agriculture and government employment. Sipolu-Polu is located in the heart of Panyabungan, making it a strategically advantageous location that facilitates the daily activities of its inhabitants.

Based on data collected by the World Health Organization (WHO) in 2020, approximately 22% or 149.2 million toddlers worldwide suffer from stunting. According to the 2019 Indonesian National Nutrition Status Survey (SSGBI), the prevalence of stunting in Indonesia decreased to 27.7%. Meanwhile, in West Java, the prevalence of stunting also decreased to 26.21% during the same year. However, in Bogor, the prevalence of stunting increased from 4.52% in 2019 to 10.50% in 2020. In the province of North Sumatra, the prevalence of stunting ranks 17th nationally, at 25.8%, making it the 17th province with the highest cases of stunting in Indonesia. The data from the World Health Organization (WHO) in 2017 cited by Anafrin et al. shows that globally, around 151 million children, or 22% of children under five, suffered from stunting. Indonesia ranked fifth with the highest prevalence of stunting from 2010 to 2016 in Asia, according to WHO in 2018. The prevalence of stunting among Indonesian children under five was 30.8%, which represents a decrease of 6.4% from 37.2% in 2016 [1]. According to the KBBI (Indonesian Dictionary), "Mencegah" means to prevent something from happening; to hold back; to not follow, obstruct, prohibit, or prevent something from happening [2]. According to Kinanti, stunting is a chronic malnutrition problem caused by a prolonged inadequate intake of nutrients due to inappropriate food intake [3]. According to Yudianti et al, stunting is a chronic growth inhibition caused by long-term malnutrition [4]. According to the Ministry of Health quoted by Nur, stunting is a nutritional status condition of toddlers who have a height or body length that is classified as insufficient when compared to their age, stunting is a failure to grow in young children (under five years old) due to chronic malnutrition, resulting in the child being too short for their age [5],[6]. Stunting is a developmental disorder experienced by children due to poor nutrition, repeated infections, and inadequate psychosocial stimulation [7].

It can be concluded that the prevention of stunting is an effort to prevent, restrain, or prohibit the occurrence of chronic malnutrition that causes chronic growth impairment in toddlers due to the provision of inadequate nutrition, which can affect the child's height, making them too short for their age. Therefore, the prevention of stunting must be done by providing adequate and appropriate nutrition to meet the needs of the child's nutrition.

The nutritional status of children less than five years of age was measured anthropometrically. Length was measured for children aged less than two years old and height for those two years of age and older. Length was measured using a wooden stadiometer to the nearest 0.1 cm and height was measured using Microtoice tape to the nearest 0.1 cm. The height-for-age measurement status was expressed in Standard Deviation (SD) units (Z-score) from the median of the reference population. Children with a measurement of  $<-2$  SD units from the median of the reference population were considered short for their age (stunted) and children with measurement of  $<-3$ SD units from the median of the reference population were considered to be severely stunted [8].

The Team Leader of Sumatera Utara, Nawal Lubis, has explained that there are 23 cases of stunting in the villages of Pidoli Lombang and Pidoli Dolok in the Panyabungan sub-district of Mandailing Natal district. One of the causes of stunting in the area is the poor and inadequate environmental sanitation [9].

Despite the decreasing trend in stunting prevalence, it remains a serious problem in Indonesia, with prevalence rates still above 20%. Therefore, stunting remains a significant issue that must be urgently addressed to significantly reduce its prevalence rates, in line with WHO recommendations (Ministry of Women's Empowerment and Child Protection, 2020). The impacts of stunting include suboptimal verbal and cognitive motor development in children, with future risks of obesity and other health problems. Additionally, stunting negatively affects learning capacity, performance, productivity, and work capacity. Stunting also has adverse effects on reproductive health (Ministry of Health Data and Information Center, 2018).

Therefore, Sipolu-Polu is recorded as one of the villages with cases of stunting. As a result, the service team has undertaken an education program on appropriate child-rearing practices and balanced food selection as efforts to prevent stunting.

## B. Research Method

The objective of this activity is to target all members of the Sipolu-Polu village community who have children aged 0 to 24 months. In the Community Service activity, the team collaborated with healthcare workers coordinated by the Mandailing Natal District Health Office and healthcare workers from the Panyabungan City Health Center. The activity was carried out in conjunction with the Posyandu schedule. Health Office employees and Puskesmas healthcare workers acted as speakers. They delivered material related to child-rearing practices and the nutritional needs for optimal growth. The activity began with a presentation by the speakers, followed by discussion and a question-and-answer session on nutrition, malnutrition, and prevention measures to reduce and eventually eradicate stunting in the Sipolu-Polu village community in the coming years. In addition, the team also conducted simulation exercises to design a balanced menu for children's nutrition. The community service team distributed green bean porridge, biscuits, oranges, and apples to attendees of the educational event. Healthcare workers also examined toddlers by measuring their weight, height, and routine activities typically carried out at each Posyandu. This community service activity was carried out four times, from October 2022 to January 2023. The team coordinated and collaborated with healthcare workers to analyze Posyandu activity records. The results of the analysis showed good progress, with toddler growth increasing. The team coordinated with healthcare workers to continue communicating with the Stunting Prevention community (CETING), committed to reducing the risk of stunting in the Sipolu-Polu village to zero cases of stunting in 2024. Everyone is committed to realizing a stunting-free community, achieving the Madina Madani community.

**Table 1.** Work Procedure

First stage	Second stage	Third stage
1. Identifying the partner's issues.	1) Educating on parenting styles.	Monitoring and Evaluation (M&E) activities and compiling an Activity Report, carried out as a measure of accountability for the activity implementation, which is then followed by writing a journal for publication.
2. Collecting data on community members in Sipolu-polu who have children aged between 0 and 12 years old.	2) Educating on the nutritional needs for children's growth.	
3. Drafting a Community Service Proposal (PKM) to offer solutions to the partner's issues.	3) Educating and simulating balanced menu planning.	

### C. Result and Discussion

The details of the community service activities are elaborated as follows:

- 1) The education on reproductive health and nutrition for adolescents and expectant mothers[10]  
I engage in these efforts through a community-based program aimed at preventing stunting, known as "ceting". Within this initiative, I provide education on reproductive health and proper nutrition to both adolescents and expectant mothers.  
Both adolescents and expectant mothers are particularly vulnerable to stunting. As such, I provide education on the importance of good reproductive health and nutrition to prevent stunting in children.  
Regarding reproductive health education, I teach methods for maintaining reproductive health, including the importance of hygiene and preventing sexually transmitted diseases, as well as the significance of regular health checkups. Through these activities, my aim is to increase community awareness regarding the importance of reproductive health.
- 2) The education of knowledge regarding the nutritional needs of pregnant women and their requirements during pregnancy[11]  
during pregnancy is a fundamental aspect of my community empowerment activities. One of our efforts to prevent stunting in children is by forming a Ceting community and providing education to pregnant women about their nutritional needs during pregnancy.  
During these activities, my team and I impart knowledge about the necessary nutrition for pregnant women and their fetuses, such as protein, carbohydrates, fats, as well as vitamins and minerals essential for optimal fetal growth and development. Additionally, we provide information on foods that are recommended and discouraged during pregnancy.  
We hope that through this education, pregnant women can better understand the importance of appropriate nutritional intake during pregnancy, thereby preventing stunting in their children. By strengthening the Ceting community as a platform to share information and experiences, we aim to create a healthier environment that supports the optimal growth and development of children in the community. The efforts made by the government to prevent stunting include specific nutrition interventions and sensitive nutrition interventions. Specific nutrition interventions include providing additional food for pregnant women, early initiation of breastfeeding and exclusive breastfeeding for lactating mothers, providing complementary feeding, providing deworming

medication, providing zinc supplementation, fortifying food with iron, providing protection against malaria, providing complete immunization, as well as preventing and treating diarrhea.[12]

- 3) The activity that I engage in as part of my dedication to society is the education of awareness regarding antenatal care through the approach of community outreach (prevent stunting).[13]

The purpose of this endeavor is to enhance the awareness of the community, particularly expecting mothers, regarding the significance of antenatal check-ups.

During this undertaking, my focus lies on the delivery of information that is both easily comprehensible and relevant to the community's requirements. Additionally, I collaborate with local healthcare professionals to offer trustworthy and precise information. Furthermore, I also leverage information and communication technologies, such as social media and instant messaging applications, to provide education to the community on a broad and effective scale.

Through this initiative, it is hoped that the community, especially expecting mothers, will comprehend the importance of antenatal check-ups and subsequently improve the health of both the mother and the fetus. By enhancing the community's awareness of maternal and child health, it is expected that the prevalence of stunting, which remains a significant health concern in Indonesia, can be reduced.

- 4) One of the activities in the Community Empowerment Program through Ceting Community (Prevent Stunting) is education on the importance of giving birth in healthcare facilities. [14], [15] One of the activities in the Community Empowerment Program through Ceting Community (Prevent Stunting) is education on the importance of giving birth in healthcare facilities. The aim of this activity is to raise awareness among the community about the importance of giving birth in a safe place with quality services guaranteed.

This education is carried out by organizing meetings and discussions with pregnant women, groups of mothers, and local community leaders. During this activity, we provide information about the risks and dangers that can occur if giving birth outside of healthcare facilities, such as complications, infections, and maternal and infant deaths.

We also introduce the benefits of giving birth in healthcare facilities, such as receiving adequate medical services, trained medical personnel equipped with adequate medical equipment, and supporting facilities such as blood transfusions and operating rooms if needed.

During this activity, we also facilitate questions and discussions related to childbirth and maternal and infant health. With this education activity, it is hoped that the community will become more aware of the importance of giving birth in healthcare facilities and be able to make the right decision in choosing a safe place for childbirth for the mother and the baby.

Improvement of the healthcare service index by considering the following 5 indicators:

1. Deliveries performed by healthcare professionals
2. Sufficiency of the number of doctors in each district
3. Sufficiency of the number of integrated health posts
4. Sufficiency of the number of midwives
5. Ownership of health service guarantee by the population

If all five indicators are met in each regency/city, it can reduce stunting problems in infants and children by 27.39-36.29 percent.[16]

- 5) The importance of education on the initiation of early breastfeeding (IMD) and efforts to obtain colostrum or breast milk from mothers is crucial[17]

The community empowerment activities I undertake aim to enhance the knowledge and awareness of the public on the significance of performing IMD, as well as efforts to obtain colostrum or breast milk for newborns.

IMD refers to the process of providing breast milk to infants within one hour of birth. This is imperative as newborns have the ability to absorb breast milk effectively at that time, thereby obtaining substantial benefits for their health. Additionally, colostrum or breast milk produced at the early stages of childbirth contains vital nutrients and immunological components that are crucial in safeguarding infants against infections and diseases.

During our educational activities, we expound on the importance of IMD and provide information on how to perform it correctly. We also elaborate on the benefits of colostrum or breast milk for newborns and ways to obtain sufficient breast milk. Furthermore, we also provide information on the significance of monitoring the dietary patterns of breastfeeding mothers and methods of preserving the quality of breast milk produced.

It is hoped that through these activities, the public will gain a better understanding of the importance of performing IMD and efforts to obtain colostrum or breast milk for newborns. This will assist in reducing the prevalence of stunting and enhancing the health and quality of life of the community.

6) Education on nutritional needs for children's growth[18]

The community empowerment activities through the CETING (prevent stunting) community that I conduct include education on the nutritional needs for children's growth. The aim of this education is to enhance the knowledge and awareness of the community, especially mothers and prospective mothers, on the importance of balanced nutrition for children's growth and development. During this educational activity, I will provide information on the types of food that contain important nutrients for children's growth, such as protein, carbohydrates, fat, vitamins, and minerals. Additionally, I will also provide information on the required amount and frequency of food consumption to ensure that children can grow healthily and optimally. In addition to imparting information, I will also teach how to choose and serve healthy and nutritious food for children. This is crucial to enable the community to fulfill the nutritional needs of children with appropriate food choices that are suitable for their culture and environmental conditions.

7) Education on planning meals for children and families [6], [19]

The community empowerment activities through the CETING (prevent stunting) community that I conduct include education on planning meals for children and families. The purpose of this activity is to provide an understanding of the importance of adequate nutrient intake for children and families in preventing stunting.

During this activity, I explain the types of healthy and nutritious foods as well as how to plan a balanced meal. I also provide examples of healthy meal menus that can be adjusted to the local community's needs and culture. Additionally, I impart knowledge on how to cook healthily and hygienically, as well as how to prepare food ingredients appropriately to preserve their nutrient content. It is hoped that with this education, the community can understand the importance of a healthy and nutritious eating pattern and prevent stunting in children.

8) One of the activities in community empowerment through the "cegah stunting" (prevent stunting) program is the education of nutritional needs for child growth.[12]

The objective of this initiative is to enhance the public's understanding of the significance of nutrition in child growth and development, thereby preventing stunting in children.

In this initiative, I, as an academic, collaborate with a team of nutrition experts to provide education regarding the nutritional needs of children, including the types of food that should be consumed, the required portion sizes, and the preparation methods for healthy and nutritious meals. Additionally, we provide information on selecting healthy and nutritious food, as well as storing and processing food to preserve its nutritional quality.

This educational activity be carried out through various methods, including direct counseling to mothers in the "cegah stunting" community, posting of posters and brochures in public places, and conducting seminars or workshops on child nutrition and growth. In this initiative, we will also involve community and religious leaders as agents of change in disseminating information on child nutrition to the public.

By providing education on the nutritional needs for child growth, it is hoped that the public become more aware of the importance of nutrition in child growth and development. Thus, it is also hoped that stunting in children can be prevented and the quality of life of the community can be improved.

The community service activities that we conduct are carried out in a similar manner and with the same procedures as those of Anafrin and their team in serving the community. We both form a community with members who are parents of infants. However, there are some differences in the accompanying activities that we conduct compared to Anafrin and their team. Anafrin and their team provide education through activities such as the Si-Gans Package and Demonstration of Child Growth and Development Assessment, simulation and direct practice of assessing a child's weight and height, as well as simulating child development assessment with the Developmental Screening Questionnaire (KPSP). Meanwhile, we conduct our accompanying activities by utilizing the Whatsapp Group (WAG) media as a means to facilitate questions and discussions with the mothers. Sure, I can help you with that! Here's the translation of your sentence into English: "The team activities that we are carrying out consist of 7 activities, namely:" 1). The education on reproductive health and nutrition for adolescents and expectant mothers; 2). The education of knowledge regarding the nutritional needs of pregnant women and their requirements during pregnancy; 3). The activity that I engage in as part of my dedication to society is the education of awareness regarding antenatal care through the approach of community outreach (prevent stunting); 4). One of the activities in the Community Empowerment Program through Ceting Community (Prevent Stunting) is education on the importance of giving birth in healthcare facilities; 5). The importance of education on the initiation of early breastfeeding (IMD) and efforts to obtain colostrum or breast milk from mothers is crucial; 6). Education on nutritional needs for children's growth; 7). Education on planning meals for children and families; 8). One of the activities in community empowerment through the "cegah stunting" (prevent stunting) program is the education of nutritional needs for child growth.

#### **D. Conclusion**

The text discusses the community empowerment activities carried out to prevent stunting in children. The activities involve education on reproductive health and nutrition for adolescents and expectant mothers, knowledge regarding the nutritional needs of pregnant women, antenatal care awareness, the importance of giving birth in healthcare facilities, and the significance of performing IMD. The activities aim to raise community awareness of the importance of proper nutrition and healthcare during pregnancy, childbirth, and infancy to prevent stunting. Through these activities, the community is expected to improve its maternal and child health, reduce the prevalence of stunting, and create a healthier environment for the optimal growth and development of children.

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