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Nutrition Therapy for Stunting

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ABSTRACT

Stunting is a decrease in height growth rate as measured by the height value by age under minus two standard deviations of the WHO child growth standards graph. In 2016 as many as 22.9% (154.8 million) of children under five years of age suffered from stunting, and Indonesia is in the 5th place of the country that suffers most from stunting. The leading cause of stunting is unbalanced nutritional factors in quantity and quantity during the growth period. Other causes are human factors; infant and child feeding practices, severe infections, subclinical infections, low birth weight babies and premature infants and social factors, such as household poverty, poor parenting, unresponsive eating practices, inadequate child stimulation, food insecurity, limited health services, access to clean water and sanitation. Children can be predicted to be stunting by measuring height periodically since birth. The most effective intervention to prevent stunting is to increase children's diet quality. The Indonesian government role as a program and policymaker is to create a Stunting Intervention Framework, namely Specific Nutrition Interventions and Sensitive Nutrition Interventions. In conclusion, stunting can be predicted and can be prevented. Provision of MPASI by WHO recommendations that are timely, adequate, safe and are given in the proper manner is a specific nutrition intervention that can prevent stunting.

1. Introduction

Stunting, commonly known as stunted growth, is a decrease in the growth rate in body length or height in the overall developmental growth process, which is determined by a height for age value below minus two standard deviations seen from the WHO child growth standards chart. Stunting begins in the first 1000 days of life. Globally in 2016, 22.9% or 154.8 million children under five years of age suffered from stunting. In Indonesia, this figure is even higher, reaching 34%.

Several factors cause stunting, but the leading cause is nutritional factors, namely nutrition lacking in both quantity and quantity during its growth

period. These nutritional factors do not stand alone but are associated with many factors, including socioeconomic status, infection and maternal nutritional status.

Causes of stunting

Some factors that contribute to stunting include poor maternal health and nutrition, inadequate infant and child feeding practices, and infection. Other contributions from mothers to the incidence of stunting are short maternal stature, short birth spacing, and pregnancy in adolescence which results in poor fetal nutritional intake. Infant and child



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feeding practices, including non-exclusive (not optimal) breastfeeding and complementary feeding that are limited in quantity, quality, and variety. From Riskesdas data (2015) there are 60% of infants 0-6 months do not get exclusive breastfeeding, and 2 and 3 children aged 6-24 months do not receive complimentary foods properly. Another cause can be severe infection leading to wasting, which has a long-term impact on linear growth, depending on severity, duration and relapse, especially if there is insufficient food to support healing. Subclinical infections are caused by exposure to a contaminated environment and poor sanitation due to malabsorption of nutrients and the ability of the intestine to function as a deterrent to organisms that cause infection. In addition, babies with low birth weight and premature babies can tend to be stunted.

Social factors also play a role in the occurrence of stunting in children. Poverty in the household, neglect by caregivers, unresponsive feeding practices, inadequate child stimulation, and food insecurity can all interfere with growth and development. Limited health services, including antenatal and postnatal care. Data from the Ministry of Health and the World Bank show that the attendance rate of children in Posyandu has decreased from 79% in 2007 to 64% in 2013. Stunting can be predicted by measuring length/height periodically from birth. Every child has a specific height potential at a certain age. This potential can be determined.

Prevention of stunting

The steps to prevent nutritional stunting are described below. Measure body length/height periodically to find out if the position is approaching stunting or stunting has occurred. Provision of adequate nutrition to meet the needs of height growth. Inadequate nutrition is one of the many causes of stunting. Focusing on the first 1000 critical days from in the womb to the second birthday is very

important. In addition, Improving optimal breastfeeding practices is key to ensuring the healthy growth and development of children. Early initiation and exclusive breastfeeding for six months can protect against gastrointestinal infections. Among the most effective interventions to prevent stunting during supplementary feeding is improving the quality of the child's diet. Evidence suggests that a more diverse diet and dietary consumption of animal protein are associated with increased linear growth.

Reducing stunting requires direct nutritional intervention. For example, the availability of quality food and the ability to buy nutrient-rich foods will impact a family's ability to provide a healthy diet and prevent child stunting. The role of the Government as a program and policymaker, namely: increasing the identification, measurement, and understanding of stunting; enact policies that can strengthen interventions to improve nutrition and maternal health since adolescence; implementing interventions to improve exclusive breastfeeding and complementary feeding practices; strengthen interventions in the community, including water, sanitation and hygiene to prevent and protect against diarrhoea, malaria, helminthiasis, and other subclinical infections in children.

The Indonesian government has tried to take steps to reduce stunting by making a Stunting Intervention Framework. The Stunting Intervention Framework carried out by the Government of Indonesia is divided into two, namely Specific Nutrition Interventions and Sensitive Nutrition Interventions. Specific Nutrition Interventions are short-term interventions aimed at children in the first 1,000 days of life, generally carried out in the health sector. The results are recorded in a relatively short time and contribute to a 30% reduction in stunting.

Specific nutrition interventions are divided into several primary interventions starting from the mother's pregnancy to a toddler. Specific nutrition



interventions are targeting pregnant women. This intervention includes providing supplementary food (PMT) to pregnant women to overcome chronic energy and protein deficiency, overcome iron and folic acid deficiency, overcome iodine deficiency, overcome helminthiasis in pregnant women and protect pregnant women from malaria. Specific nutrition interventions targeting breastfeeding mothers and children aged 0-6 months are carried out through several activities that encourage early breastfeeding initiation, primarily through breastfeeding and colostrum and encourage exclusive breastfeeding.

Specific nutrition interventions are targeting breastfeeding mothers and children aged 7-23 months. This intervention includes activities to encourage continued breastfeeding until the child/baby is 23 months old. Then, after babies over six months old are accompanied by complementary feeding, provide deworming medicine, provide zinc supplementation, fortify iron into food, provide protection against malaria, provide complete immunization, and prevent and treat diarrhoea.

The second Stunting Intervention Framework planned by the Government is the Sensitive Nutrition Intervention. Ideally, this framework should be carried out through various development activities outside the health sector and contribute to 70% of stunting interventions. The target of the specific nutrition intervention is the general public and not specifically pregnant women and toddlers in the first 1,000 days of life. Activities related to sensitive nutrition interventions can be carried out through several generally macro activities across ministries and institutions.

The role of doctors in stunting alleviation is in Specific Nutritional Interventions and Sensitive Nutrition Interventions. In the Specific Nutrition Intervention in the form of implementing and supervising the provision of additional food (PMT) and others with the target of pregnant women,

breastfeeding mothers, children aged 0-6 and children aged 7-23 months. This intervention includes activities to encourage continued breastfeeding until the child/baby is 23 months old. Then, after the baby is over six months old, it is a critical period where the baby's food intake in the form of exclusive breastfeeding is no longer enough, and complementary feeding must be started. Disturbance in feeding during this transitional period can result in children becoming stunted later.

Nutrition for Stunting

The WHO global strategy for feeding infants and young children in 2003 recommended that complementary feeding meet four requirements. The first principle of feeding is on time, meaning that complementary feeding must be given at the right time, namely when exclusive breastfeeding is no longer sufficient to meet the nutritional needs of infants. Second, complementary foods are adequate, meaning they have adequate energy, protein, and micronutrients according to their age. Complementary foods must be safe, prepared, and stored safely and hygienically, given using clean hands and cutlery. MPASI is appropriately given, meaning that MPASI is given by paying attention to hunger and satiety signals. The frequency of feeding and the feeding method should encourage children to eat more actively in sufficient quantities using hands, spoons, or self-feeding (according to the child's age and developmental stage).

2. Conclusion

Stunting can be predicted so it can be prevented. The role of the government as a program and policymaker, namely increasing the identification, measurement, and understanding of stunting. According to WHO recommendations on time, adequate, safe, and given in the right way, the provision of complementary foods is a specific



nutritional intervention that can prevent stunting.

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