

The Causes Of Stunting And Preventive Stunting Action

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Abstract. Health is one of the basic needs of people in order for them to do their obligations and enjoy life. One of the health problems that concern the government of Indonesia through the ministry of health is about how to reduce the prevalence of short children or stunting. The cause of the stunting condition is multidimensional because it is not only caused by nutritional factor and bad experiences of pregnant women and children. An understanding of the cause of stunting needs to be explained to the community. The act of preventive stunting is indispensable so as that precaution could be done to impact the condition of the children in Indonesia. Educating the community and supporting the government programs of the republic of Indonesia for the development of the country and prosperity of the people are a must.

Keywords: stunting; cause of stunting; preventive stunting.

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INTRODUCTION

Health is the most important thing in life. Good health is a condition that is always expected by everyone from birth to the end of age. Healthy conditions allow people to carry out daily obligations and other routines. Obtaining proper health facilities is certainly also the right of every citizen guaranteed by law. Based on data from the Ministry of Health of the Republic of Indonesia, the health development for the 2015-2019 period is focused on four priority programs, namely: 1) reduction in maternal and infant mortality, 2) decreasing shortage prevalence (stunting), 3) infectious disease control, and 4) control of non-contagious diseases. Improving the community's nutritional status is an effort to reduce the prevalence of short toddlers, which is one of the national development priorities listed in the 2015-2019 Medium-Term Development Plan (RPJMN) main target. The goal is to reduce the prevalence of stunting (short and very short) in children under-five years old to 28% (Kementrian Kesehatan RI, 2016). Stunting is a big threat to the quality of Indonesian people and a threat to the nation's competitiveness. Children are a great asset of the nation for a better future, so they need to be, cared for, educated, and trained to prepare them for it. Stunting is a health problem that can reduce the quality of children as the nation's assets in the future so that these problems have to be addressed.

There are still many people who are not familiar with the term of stunting. The

information that has been implemented by the government needs to be improved again to educate the public. Stunting is a new issue that has become the focus of the WHO to be immediately resolved because it affects the physical body functions and the increasing number of child morbidity (Mugianti, Mulyadi, Anam, & Najah, 2019). This condition does not only disturbs a child's physical growth (short / stunted), but also disrupt his brain development, certainly affect to his abilities and achievements in school, productivity and creativity during productive ages (Kemenkes, 2018). Stunting is a condition of a shorter body when compared to height according to age level. Stunting problems can start in the womb when the fetus begins to develop until the child is 2 years old. When calculated from the first day of pregnancy, the birth of a baby to a child aged 2 years is the first 1000 days of human life, referred to as a window opportunity (Kementrian Kesehatan, 2010).

THE CAUSES OF STUNTING

Parents have an important role in the growth and development of their sons and daughters from infants to adults. The results of growth and development experienced by toddlers are accumulated since in the womb. Good and healthy nutrition in toddlers (under five years old) is an important foundation for their health and very supportive of the process of growth and development in the future. Disturbances in the process of growth and development can occur if the requirements for energy and protein sources cannot be met

(Hermina & Prihatin, 2011). Stunting can specifically start from a pregnant mother. The main causes of stunting are related to nutritional quality and nutrient intake patterns in pregnant women and children during the 6 weeks of pregnancy (Purba, 2019). The nutritional conditions of pregnant women, before becoming pregnant even afterwards will determine fetal growth. Malnourished pregnant women are at risk of giving birth to babies with low birth weight, and this is a major cause of stunting (Hidayati, 2010). After birth, babies who are not breastfed properly will be at risk of suffering from various infections due to eating patterns that are not sufficiently nutritious and unhygienic. The provision of food for babies and children is crucial to the growth of children, because short is due to the impact of chronic malnutrition for the first 1,000 days of a child's life (Solin, Hasanah, & Nurchayati, 2013). After the age of 6 months the child needs to get nutritional intake that can meet his micronutrient and, macro nutrient need. (WHO, 2013).

The risk factors that affect the incidence of stunting in children aged 12-24 months are low levels of energy adequacy, protein, zinc, low birth weight and high exposure to pesticides (Wellina, 2016). Pesticide exposure received by pregnant women can also make the baby stunting. Several types of pesticides known as thyroid disrupting chemicals (TDCs), can interfere with the structure and function of the thyroid gland, interfere with the synthesis, secretion, transport, binding and elimination of thyroid hormones, which have the effect of hypothyroidism (Hellina, Kartasurya, & Zen, 2016). Hypothyroidism in pregnant women causes the growth and development of the fetus / child. Children aged 25 - 60 months can also experience stunting if babies are low birth weight (LBW), immunization is incomplete. Fathers who do not work and economic status are not factors in stunting children aged 25 - 60 months (Mugianti et al., 2019). The role of family and health workers can also be a factor in stunting if they (family and health personnel) are not optimal in the context of the child's growth process (Purba, 2019).

The causes of stunting are also caused by social and infrastructure factors. Social factors causing stunting (Purba, 2019): 1) early marriage (<15 years), 2) poverty, 3) divorce that can reduce BDNF genes in children, 4) divorce affects the decline of BDNF genes in children, 4) husbands who added wives can also reduce BDNF genes in children, 5) wrong parenting affects the decline

of the BDNF gene in children. The BDNF gene (Brain Derived Neurotrophin Factor) itself is a protein that is abundant in the brain and peripheral nerves, which affects nerve development, growth and survival (Widyanto & Tj, 2012). This condition shows that the BDNF gene is very influential on the intelligence of children, because stunting children do not only have short bodies but also the quality of brain development is not optimal (Purba, 2019). Infrastructure factors that can cause stunting in children (Purba, 2019): 1) poor sanitation, 2) lack of clean water facilities, 3) lack of health infrastructure.

PREVENTIVE STUNTING ACTION

Stunting is one of the health problems faced by the world, and gets special attention to be overcome (Vonaesch et al., 2017). Prevention measures need to be promoted and implemented with the aim of reducing the prevalence of stunting in Indonesia. Stunting can be eradicated if the causes of the staging in each region can be controlled. The need to reduce the prevalence of stunting appears and is reflected in the targets of the World Health Assembly (WHA) and Sustainable Development Goals (SDGs) (Nasrul, Maudu, & Hafid, 2017). Stunting in children is a condition that occurs due to malnutrition, antenatal, intrauterine, and postnatal factors (Nasrul et al., 2017). Stunting in early life is a condition that is considered a disadvantage, low adult income, loss of productivity and if accompanied by excessive weight gain later in childhood increases the risk of chronic diseases associated with nutritional problems. Optimal height growth conditions are indicators stating that interventions related to health programs provided to meet nutritional needs can be implemented properly.

Stunting problems are caused by several risk factors, which can be addressed in an integrated manner by involving various lines of stakeholders. Programs that can be carried out and refer to sustainable national health development to overcome stunting include optimizing nutrition and providing health education to mothers (Supadmi, 2018). Considering that stunting is among the indicators of a comprehensive implementation plan for mothers, infants and children, the implementation of monitoring nutritional status (PSG) is a measure of the goal of stunting reduction (Nasrul et al., 2017). Giving exclusive breastfeeding 0-6 months is one of the obligations of a mother to

optimize the nutritional status given to children. Accidentally decreasing breastmilk intake, because of giving excessive amounts of complementary foods or giving other food too often, can reduce the intake of breastmilk for children. Therefore, supplementary feeding should be given appropriately (Dewey K.G & S, 2008).

The Sustainable Development Goals (SDGs) are programs that are part of the 2nd sustainable development goal, namely overcoming the problem of hunger and various nutritional problems and achieving food security by 2030. the government's target through the ministry of health is to reduce the prevalence of stunting in 2025 by 40% (Kementerian Kesehatan RI, 2018). One of the efforts made to realize this, the government set stunting as one of the priority programs. Program based on the Minister of Health Regulation No. 39 of 2016 concerning Guidelines for Implementing a Healthy Indonesia Program with a Family Approach, the efforts made to reduce the prevalence of stunting are:

1. Pregnant and Maternity
 - a. Intervention for the first 1,000 days of life;
 - b. Strive for integrated quality assurance of ante natal care (ANC);
 - c. Increase delivery at health facilities;
 - d. Organizing programs for giving food high in calories, protein and micronutrients (TKPM)
 - e. Early detection of disease (contagious and non-infectious)
 - f. Worm eradication
 - g. Improving the transformation of the Healthy Towards Card (KMS) into the MCH Handbook
 - h. Organize Early Breastfeeding Initiation (IMD) counselling and exclusive breastfeeding
 - i. Counselling and family planning services
2. Toddler
 - a. Monitoring toddler growth
 - b. Organizing Additional Food Delivery (PMT) activities for toddlers
 - c. Organizing early stimulation of child development
 - d. Providing optimal health services
3. School Age Children
 - a. Revitalizing School Health Enterprises (UKS)
 - b. Strengthening the institution of the UKS Development Team

- c. Organizing a School Children Nutrition Program (PROGAS)
- d. Enforce schools as a smoke-free and drug-free area

CONCLUSION

Stunting is a health problem that occurs throughout the world, one of them is Indonesia. The Indonesian government has tried to do a program in order to reduce the prevalence of stunting in Indonesia. Stunting toddlers in the future will experience difficulties in achieving optimal physical and cognitive development. Stunting problems occur because of poor nutrition in pregnant women and young children, so exclusive breastfeeding is very important for their growth and development. Government efforts to reduce the prevalence of stunting in Indonesia still need to be improved by involving all existing stakeholders so that information can truly be conveyed to all Indonesian people. The educational factors that are benefited by the community and the role of the government in improving the economy of the community will have a positive impact on the pattern of nutritional intake, healthy lifestyle, harmonious family relationships, proper marriage age, increased family welfare, and increased environmental quality that can support growth and development of children so that the prevalence of stunting can be reduced and even resolved. The positive impact received by children is the increase in BDNF genes in children that can help their growth and development become the next generation of civilized, intelligent and capable nation to make Indonesia become a respected country in the world.

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