

DETERMINATION OF STUNTING IN TODDLERS IN DEMAK REGENCY

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ABSTRACT

To see the factors that cause stunting in toddlers and warnings, as well as interventions that must be done to curb the stunting rate according to the needs and conditions of the Demak Regency community. This research uses a quantitative quantitative approach. The study population was the parents of children under five who were stunted in Demak Regency. Research data are in tabular form. The current national prevalence of stunting is 30.8%, in Central Java it is 31.22%, while in Demak it is 26.1%. According to WHO, the maximum limit for stunting patients is 20% of the total number of children under five. The direct causes of stunting are nutritional intake and infectious diseases. Indirect causes, namely victims of food at the household level, behavior or care for mothers and children, and health and environmental services. Environmental factors are the most important factor in the process of stunting compared to ethnic or genetic factors. Low public knowledge, poor hygiene, slum neighborhoods, lots of infectious diseases, contaminated or insufficient food, all in a poor environment. Maternal education and knowledge of maternal nutrition are factors related to the incidence of stunting in children under five. The factors causing stunting in Demak Regency are maternal education, family income, maternal knowledge about nutrition, offering exclusive breastfeeding, and fulfilling nutrition.

Keywords: *Nutrition, Behavior, Stunting*

1. INTRODUCTION

The problem of malnutrition and over nutrition in children under five is still a challenge in improving public health in Indonesia. The current priority problem of malnutrition is chronic malnutrition in children under five, which is represented by anthropometric status of TB / U that is below normal, namely children with short and very short categories, which is called stunting (Budhathoki et al., 2019). Stunting is an ongoing journey that can be built from the conditions of pregnancy of pregnant women with parenting styles (Tanjung et al., 2020). Parenting patterns for babies up to 1,000 days of birth are very influential on the incidence of stunting. At 270 days the fetal growth period that grows at 730 days after birth to 2 years is the compilation of tissue mass and organ maturation which is the basis. Stunting can be caused by a lack of nutritious food intake and recurrent infections, such as diarrhea and respiratory infections (Habimana and Biracyaza, 2019).

Stunting can be devastating in the short and long term. In the short term, stunting can have an impact on growth failure, barriers to cognitive and motor development so that it affects brain development. Meanwhile, the long-term impact of stunting is a permanent decrease in intellectual capacity, impaired structure and function of nerves and brain cells. The impact of stunting is permanent and difficult to return to its potential growth path. Children who are already short (stunted) will decrease their physical potential, thus hindering the potential for other abilities and skills that are very important for the development of the next quality of life. The stunted child presented a decrease in intelligence. As a result, in the next period, they will have low cognitive abilities and lead to uncompetitive quality of work, thus affecting low economic productivity (Yadika ADN et al., 2015).

According to the World Health Organization (WHO), the maximum limit for stunting patients is 20% of the total number of children under five. Based on the results of basic health research (Riskesmas), the percentage of children under five with stunting in 2018 was 30.8%. In Indonesia, 9.8% of children under five have very short nutritional status and 19.8% of children under five have a short nutritional status. The percentage of stunting (very short and short) in the under-five group (29.6%) was higher than in the baduta group (20.1%) (Ministry of Health RI, 2018). In Central Java, the prevalence of stunting according to PSG data shows an increasing development from 2014 to 2017, namely 22.6% -24, 8% -23.9% and 28.5% in 2017. The high prevalence of stunting in Indonesia and in Central Java, which is spread across all districts / cities, is feared that there will be a "lost generation" in the future. Nutritional status monitoring data (PSG) in 2017 shows the prevalence of stunting in Central Java is 28.5% spread across all districts / cities with a prevalence range, the lowest is 21.0% in Semarang City, and the highest is 37.6% in Grobogan Regency. Based on the data, all districts / cities in Central Java are still facing the problem of chronic stunting malnutrition. Thus, in all districts / cities in Central Java, comprehensive efforts are needed to reduce the prevalence of stunting (Dinkes Central Java, 2019).

Based on the data obtained, it is necessary to conduct research to determine the factors causing the high incidence of stunting in children under five in Demak Regency. Thus, we can find out the efforts and interventions that must be made to reduce the high rate of stunting in accordance with the needs and characteristics of the people of Demak Regency.

2. METHODS

This research is a cross sectional study using a quantitative descriptive approach. The sampling technique used was purposive sampling by taking 50 parents of toddlers who were stunted in Demak Regency. The dependent variable is the incidence of stunting in children under five, while the independent variable is exclusive breastfeeding, energy intake, maternal education, maternal occupation, and economic status. The research data are presented in tabular form.

3. RESULT

The research results are presented in the form of a table attached at the end. Based on the research, it is found that stunting is influenced by many factors. These factors are interrelated with one another. The causes of stunting are exclusive breastfeeding, energy intake, maternal education, maternal occupation, and economic status. Toddler stunting is caused by a history of non-exclusive breastfeeding, low energy intake, low level of maternal education, mothers who do not work, and low family economic levels.

4.DISCUSSION

The growth and development of children under five is influenced by several factors. These results are in line with the research of Soetjiningsih (2014), where there are two factors that influence children's development, namely genetic factors and environmental factors.

Environmental factors can affect the development of a child after birth. Postnatal environmental factors can be classified into biological environment, physical factors, psychosocial factors, family factors, and customs. Family factors, such as mother's education level, mother's employment status, and family income.

Exclusive Breastfeeding.

Based on the research results, most of the research subjects did not exclusively breastfeed. Toddlers who are stunted, more than 50% do not have a history of exclusive breastfeeding. This is in line with research conducted by Dewi AP et al. (2019) and Komalasari et al. (2020) that breastfeeding babies contributes to the nutritional status and health of the baby. All substances a baby needs in the first six months of life can be met from breast milk. Breast milk can meet half of the nutritional needs of infants aged 7-12 months. In the second year of a baby's life, breast milk provides one-third of the nutrients needed. Breast milk contains immune substances that protect babies from infectious diseases. In addition, breastfeeding is also associated with the growth of the child's body length. The duration of breastfeeding has a positive relationship with long growth, the longer the children are breastfed, the faster they grow both in the second and third years of life (Mugianti S et al, 2018). Another study added that colostrum provides a protective effect on newborns so that babies who do not receive colostrum have a higher incidence, duration and severity of diseases, such as diarrhea that contributes to malnutrition (Supariasa IDN and Purwaningsih H, 2019).

Giving complementary foods too early (less than 6 months) can cause toddlers to be prone to infectious diseases because the baby's digestive tract is not ready to digest food. Infectious diseases that often affect children under five are diarrhea and ISPA. Toddlers who suffer from infectious diseases can interfere with their growth process because the process of absorbing nutrients from the food consumed is lost due to viruses in their digestive system (Aini EN et al., 2018; Rahmawati LA et al, 2020). Research by Sari DN and Medhyna V (2019) states that toddlers who are given formula milk are more prone to contracting diseases because the nutritional content in formula milk is not as good as in breast milk.

Energy intake

Based on the results of the study, most of the stunting toddlers received sufficient and even low energy intake. Low energy intake is the highest cause of stunting because total energy is directly related to physical growth deficits in children. This is in line with research conducted by Nurgina et al. (2019) that toddlers who receive low energy intake are stunted 2.7 times higher than toddlers who receive sufficient energy intake. Low energy intake is influenced by the mother's ignorance about stunting so that the mother does not have any efforts to increase energy intake for children. As an alternative, mothers can make creative foods that can make children more interested in eating them. In addition, infectious diseases can also result in decreased appetite in children (Mugianti S et al., 2018).

Parents' parenting plays an important role in regulating the nutrition and quality of food consumed by children. If the quality of food consumed by toddlers is good, it will meet the nutritional needs of toddlers properly. Thus, it can avoid the incidence of malnutrition in children (Rahmawati LA et al., 2020).

Balanced nutritional intake plays an important role in the child's growth process. The results of research by Mentari S and Hermansyah A. (2018) state that stunting is mostly found in children whose diet is not good. This is because mothers pay less attention to feeding their children. The average child eats less than 3 main meals. Children prefer to play so they often forget about the time to eat. In addition, children like to eat snacks and do not eat fruit every day (Mentari S and Hermansyah A, 2018). Providing balanced nutrition is not only related to the balance of nutritional composition and body needs of toddlers, such as carbohydrates, protein, fat, vitamins and minerals, and water, but also balance with a clean lifestyle to prevent food contamination and infection (Maywita E, 2018).

Mother's Education

Based on the results of the study, most of the mothers of stunting children had moderate or even low education. Education indirectly affects the knowledge of mothers in caring for toddlers (Dewi AP et al, 2019). Individuals who have a higher education level are more likely to know better about healthy lifestyles and how to keep the body in shape, which is reflected in the implementation of a healthy lifestyle, such as eating nutritious foods. Individuals with higher education levels tend to avoid bad habits, such as smoking and alcohol, so they have better health status. The level of education also affects the level of knowledge. A good level of knowledge helps in choosing food properly and handling health problems well (Setiawan E et al., 2018; Komalasari et al., 2020). In addition, research conducted by Yanti ND et al. (2020) states that maternal education is indirectly related to stunting because it plays a role in making decisions related to health care

Mother's work

Based on the research, it was found that most of the stunting mothers were not working. According to Dewi AP et al. (2019) mothers who do not work cannot help the family economy so that the purchasing power of nutritious food for toddlers is still lacking. Adequate family income will support the child's growth and development because parents can provide all the basic needs of the child. Children in families with low economic status tend to consume food in terms of less quantity, quality and variety. High economic status makes a person choose and buy nutritious and varied food (Setiawan E et al., 2018; Amin NA and Julia M, 2014). In addition, families with good economic status can get better public services such as education, health services, and road access so that they can affect the nutritional status of children (Aini EN et al., 2018; Titaley et al., 2019).

Economic Status

Based on the research results, it was found that most of the research subjects had low and middle economic status. This is in line with previous research that the low household income factor was identified as a significant predictor of stunting in children under five by 2.1 times (Apriluana G and Fikawati S, 2018). One of the causes of impaired infant growth and nutritional problems is the economy. Most of the children under five who experience growth disorders have a low economic status (Aridiyah FO et al., 2015). Economic status can indirectly affect the nutritional status of children. For example, families with good economic status can get better public services, namely education, health services and so on (Mugianti S et al., 2018).

MAccording to Sari DN and Medhyna V (2019) the economic status of the family affects the diet and growth of children. Low income will affect the food given to children under five. Income is a factor that most determines the quality and quantity of food. Income and nutrition are closely related in fulfilling food as a necessity for family life. The higher the purchasing power of the family, the more food is consumed and the better the quality of the food consumed. Meanwhile, families with low economic status have low purchasing power for foods that have good nutrition, so they risk macro and micro nutrient deficiencies. Nutritional deficiencies in pregnant women and toddlers can increase the risk of stunting in children (Yanti ND et al., 2020).

5.CONCLUSIONS AND RECOMMENDATIONS

1. The factors causing stunting of children under five in Demak Regency are a history of non-exclusive breastfeeding, low energy intake, low level of maternal education, mothers who do not work, and low family economic levels.

2. Efforts and interventions to reduce stunting are needed through:

a. Integrated pillars include: 1) socialization with a focus on understanding, behavior change, political commitment and accountability; 2) convergence, coordination and consolidation between local governments, village governments, communities and other stakeholders; 3) encouraging food and nutrition awareness policies; and 4) monitoring and evaluation.

b. Increased knowledge and understanding of posyandu cadres regarding early detection of stunting in children under five. Cadres as the closest guard in handling stunting in the regions.

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