

INCREASED STUNTING CASES DUE TO FOOD INSECURITY AND THE NUTRITION IMPACT OF THE COVID-19 PANDEMIC

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ABSTRACT

Covid-19 around the world, including in Indonesia, has harmed the community's economic system, including the decline in people's income. This has an impact on people's purchasing power which leads to a lack of food availability in the family, causing reduced food intake, poor nutrition, and health problems. The purpose of the study was to determine the impact of the Covid-19 pandemic on the increase in the number of stunting cases due to food insecurity and malnutrition in toddlers. The results of a literature review, it shows that the Covid-19 pandemic has an impact on parents' income and has an impact on meeting family needs, especially the fulfillment of nutrition for toddlers. Children who are malnourished from an early age can affect their physical and psychological growth and development, decrease neurodevelopmental and cognitive functions, and increase the risk of chronic diseases in adulthood. The disruption of growth and physical and psychological development of these children affects the number of stunting cases. Covid-19 not only has an impact on social, economic, and cultural conditions but also has an impact on food sovereignty. Food security as the basis for realizing a prosperous society requires maximum contribution from all stakeholders and the community. Efforts to achieve food security and nutrition improvement are encouraged, among others, by food diversification, supplementary feeding for children under five years old, nutrition education efforts to increase exclusive breastfeeding, baby and child feeding, and promotion of balanced nutrition guidelines.

Keywords: *Stunting, Food Insecurity and Nutrition, Covid-19*

INTRODUCTION

The situation and conditions of the developing pandemic in Indonesia have been designated as a national disaster by Presidential Decree No. 12 the year 2020 about "Determination of Non-Natural Disasters for the Spread of Corona Virus Disease 2019 (Covid-19) as National Disasters" (Presidential Decree, 2020). Of course, this non-natural disaster due to the spread of Covid-19 affects the food security of the community. The Covid-19 pandemic has had an impact on many things, including the health and development of children. Household food security indirectly has an impact on the problem of malnutrition, one of them is the case of stunting in toddlers. The current world condition due to the pandemic has an impact on increasing stunting cases in children, including in Indonesia. Cases of stunting in children may increase due to limited supervision of food safety and nutrition. Stunting is a failure of body and brain growth in toddlers due to malnutrition. Stunting causes children to have short stature due to growth disorders which mostly occur due to nutritional problems. Stunting can occur due to insufficient nutrition for a long period of time. This can happen in the midst of a pandemic because of the limited entry of healthy food and access to health services. The stunting rate in children in Indonesia is quite high, even before the

pandemic occurred. Covid-19 has hampered health services, economic problems, and uneven distribution of food. As a result, the risk of disease can increase, including stunting in children.

Covid-19 presents an extraordinary challenge for authorities in the field of national food safety surveillance systems to routinely carry out their duties in accordance with national regulations and international recommendations. During the pandemic, most of the authorized staff of the authorities perform Work from Home (WFH), which can result in reduced direct monitoring and supervision of food safety and nutrition. The food distribution factor (food supply chain) during the pandemic decreased because farmers were not free to work on the land, limited transportation to bring agricultural products to the market, and restrictions on the opening of markets due to the recommendation to stay at home. The Indonesian government's policy is to limit community mobility through the Large-Scale Social Restriction policy and the Enforcement of Community Activity Restrictions to anticipate the spread of Covid-19, if not anticipated, food and nutrition insecurity will occur, especially in areas identified as vulnerable.

Food is very important because it is one of the most basic human needs and must be met to sustain life. In addition, the fulfillment of food is part of human rights guaranteed by the state as a basic component to realize quality human resources. Food strength is very important and at the same time prone to problems when facing a disaster or epidemic/pandemic situation as it is today. The Covid-19 pandemic all over the world, including in Indonesia, has harmed the community's economic system, including the decline in people's income. This affects people's purchasing power which leads to a lack of food stocks in the family. Insufficient amounts of food are expected to cause reduced food intake, malnutrition, and health problems. Food and nutrition insecurity among children is a significant threat to the development of early childhood health worldwide and increases the incidence of stunting. Children who experience stunting from an early age can inhibit physical and psychological growth and development, decrease neurodevelopment and cognitive function, and increase the risk of chronic disease in later adulthood.

METHOD

This research uses a literature study method. The literature study method is an arrangement of activities related to library data collection, reading, taking notes, and managing written materials (Nursalam, 2016). The literature source year is taken from 2012 to 2022 (the last 10 years). This study uses secondary data such as books, journals, articles, and other relevant sources. This study uses data analysis techniques in the form of content analysis. Various literature reviews were used to identify the increasing number of stunting cases in Indonesia due to food and nutrition insecurity due to the Covid-19 pandemic.

RESULTS AND DISCUSSION



Nutrition problems are currently a global concern, especially in developing countries, including Indonesia. Wasting, being overweight, and stunting are the three main problems in children under five in Indonesia based on data from the Global Nutrition Report. Stunting is a condition where toddlers have a length or height that is less than their age. The condition of toddlers aged under 59 months with a height below minus 2 Standard Deviations from the WHO standard median. Stunting in toddlers is a chronic nutritional problem caused by many factors, including social and economic conditions, maternal nutritional intake during pregnancy, baby morbidity, and poor nutritional intake in baby. This condition causes disturbances in later life such as difficulty achieving maximum physical and intellectual development (Kemenkes RI, 2018). According to Sandjojo, Eko P. (2017) stunting is a nutritional problem caused by inadequate nutritional intake over a long period of time due to the inclusion of inappropriate food with the required nutrients. Stunting can occur in the womb and only appears when the toddler is two years old. The IQ of stunted children is lower than the average IQ of other normal children (Kemenkes RI, 2016).

Another definition of stunting is a linear growth disorder due to prolonged malnutrition. The nutritional status of stunted toddlers is one of the causes of 2.2 million causes of death in under-fives worldwide (Apriluana, G. & Fikawati, S., 2018). A similar opinion was also expressed by Victora et al. (2018), that stunting is a slow linear growth, where the length or height is not appropriate for age. As the opinion of the Ministry of Health of the Republic of Indonesia (2011), stunting is a linear failure of body growth indicated by low height and Z-Score values according to the TB/U index compared to children their age (Apriluana, G. & Fikawati, S., 2018). Stunting is a condition of growth failure in toddlers due to repeated infections and malnutrition for a long time, especially during the first thousand days of birth. (TNP2K, 2017). According to Atmarita (2018), stunting is a state of long-standing nutritional deficiency that occurs at a critical time for fetal growth and development. In Indonesia, it is currently estimated that 37.2% of children aged 0-59 months, or around 9 million children are stunted, which continues until school age 6-18 years.

Based on some of the opinions above, it can be concluded that the stunting condition of toddlers aged under 59 months, especially during the first thousand days of birth with a height that is not appropriate for age due to repeated infections and chronic malnutrition that causes disturbances in optimal physical and cognitive development in achieving maximum physical and intellectual development.

In Indonesia, the incidence of stunting at this time is a health issue and the national prevalence rate is 20.1% (Ministry of Health, 2017). Out of 10 children, around 3-4 children experience stunting (Zahraini, Y., 2013). Indonesia is the country with the highest prevalence of stunting in Southeast Asia (Trihono et al., 2015). The number of children with stunting in Indonesia ranks fifth in the world, where more than a third of children 0-59 months have a height below the average (Kemenkes RI, 2013). Based on the results

of a study by the United Nations Children's Fund in 2014, more than 162 million children under five in the world are stunted (Azriful, A. et al., 2018). Nationally, the prevalence of stunting in children aged 0-59 months reached 35.6% (Balitbangkes RI) in 2010 and continued to increase in 2013 by 37.2%. The results of monitoring the state of nutrition in 2015, stunting cases in Indonesia were seen by age, where at the age of 0-23 months experienced stunting as much as 23.1% and as much as 35% at the age of 24-59 months (Atmarita, 2018). Of the various nutritional problems in the community, stunting is one of them, and WHO sets a limit on community nutrition problems at 20%. The results of the integration of the SSGBI and Susenas studies show that the prevalence of stunting in Indonesian toddlers in 2019 was 27.67%. This percentage is much lower than in 2018 (Riskesdas) which was 30.8%. Taking into account the decline in prevalence rates from 2018 to 2019, it is not impossible that the 14% target in 2024 can be achieved (BPS, 2019). However, the presence of Covid-19 has changed the paradigm of human behavior, including healthy living behavior.

Covid-19 has impacted undernutrition worldwide, particularly in low- and middle-income countries, where young children suffer the worst consequences (United Nations, 2020). Strategies to deal with Covid-19 include trade restrictions, physical distancing, closing schools, and locking down. This condition has an impact on the food system, disrupts the manufacture, distribution, and sale of nutritious and affordable fresh food, and encourages families to rely on less nutritious alternatives (Robertson et al., 2020). Social protection systems in many lower-middle-income countries have had to withstand the overwhelming burden of many poor families struggling to gain access to the services and food needed in times of economic crisis. Prevalence is starting to increase at the age of 3 months, then the stunting process slows down when children are about 3 years old. There are different interpretations of stunting cases by age group in children. For children under 2-3 years old, it describes the process of failure to grow or stunting that is still ongoing/occurring. Meanwhile, children who are more than 3 years old describe a situation where children have experienced growth failure or have become stunted (Fikawati, S. et al., 2017).

Several factors that cause stunting in toddlers include maternal nutritional factors during pregnancy and postnatal nutritional intake factors (Fikawati, S. et al., 2017). Malnutrition during pregnancy and the growth period of toddlers causes children to become stunted. In the first 1000 days of a child's life, malnutrition has permanent consequences (UNICEF, 2013). Several studies show that stunting is influenced by income (Soetjningsih & Ranuh, Ig. N. Gde, 2013; Tiwari, R. et al., 2014), parenting, availability of food consumption, socioeconomic (Aritonang, 2012), height of parents (Prendergast & Humphrey, 2014; Rahayu, A. et al., 2015). Other studies mention that low parental education puts a risk of stunting in toddlers (Chirande, L. et al., 2015; Rannan-Eliya, R. P. et al., 2013). Parents with good education get all the information on how to raise, maintain health, and educate their children (Andriani, M. & Wirjatmadi, B.,

2017; Trihono et al., 2015). Breastfeeding too early will increase the incidence of stunting because the baby's digestion is not perfect so it is more susceptible to infectious diseases such as diarrhea and vomiting and acute respiratory infections (Meilyasari & Isnawati, 2014). Diarrhea is related to failure to thrive due to malabsorption of nutrients. If this loss is not replaced, it will lead to malnutrition, failure to thrive, and severe dehydration that can lead to death (Meilyasari & Isnawati, 2014). Babies who are not given exclusive breastfeeding are also at significant risk of stunting (Chirande, L. et al., 2015). Non-exclusive breastfeeding is the dominant risk factor causing children to experience stunting (Al-Rahmad et al., 2013).

In more detail, the framework of the causes of stunting in Indonesia consists of direct causes which include nutritional intake and health status. Indirect causes include food security, social environment, health, and housing (Bappenas, 2018). Stunting is a key indicator of child welfare and is an indicator of the Sustainable Development Goals (SDGs) of Indonesia's 2045 vision. Southeast Asia in 2019 was the region with the highest prevalence of stunting in the world (31.9%) after Africa (33.1%). Indonesia is a Southeast Asian country with the sixth highest prevalence after Bhutan, Timor Leste, Maldives, Bangladesh, and India, which is 36.4% (WHO, 2019). There are about 171 million stunted children around the world, 167 million children (98%) live in developing countries. UNICEF states that in 2011, one in four children was stunted. Furthermore, it is estimated that there will be 127 million children under five who are stunted. The global target for the Sustainable Development Goals is to eliminate malnutrition by 2030. The 2025 global nutrition target expects stunting in toddlers to decrease by 40% (UNICEF, 2013).

The problem of stunting (short) is one of the nutritional problems facing the world. Stunting increases the risk of morbidity and mortality, brain development is less than optimal so motor development is hampered, and mental growth is stunted (Unicef, 2013). The short-term impact of stunting is affecting cognitive abilities, physical growth, intelligence, and metabolic disorders. The long-term effects of stunting are easy sickness, diabetes, heart and blood vessel disease, obesity, cancer, stroke, disability in old age, and poor quality of work (Kemenkes RI, 2016). These conditions have become increasingly clear for Indonesia, which shows a trend (tendency) for Non-Communicable Diseases (NCD) increasing from 2007 to 2013, where it is estimated that there are 70 million adults (>18 years old) who suffer from NCD (Atmarita, 2018).

Stunting is a chronic nutritional deficiency that occurs in the womb and for 2 years of a child's life which results in decreased intelligence and physical capacity which causes a decrease in productivity, a slowdown in economic growth, and an extension of poverty. In addition, stunting can also have an impact on a weak immune system and susceptibility to chronic diseases such as heart disease, diabetes mellitus, and cancer as well as maternal reproductive disorders in adulthood (Fikawati, S. et al., 2017).

Toddlers are one of the age groups that are vulnerable to nutritional problems. One of the nutritional problems that often occur in toddlers is stunting. The linear growth deficit in stunted toddlers is the result of accumulation in the first 1000 days of a child's life. Stunting in the first two years of life causes permanent damage, including short adulthood, lower schooling opportunities, and low adult income (Azriful, A. et al., 2018).

The Food Security Agency (BKP, 2013) defines food insecurity as a condition of food shortages that occurs in regions, communities, and households at particular times to meet physiological needs standards for growth and public health. The Food Security Agency (BKP, 2013) defines food insecurity as a condition of food shortages that occurs in regions, communities, and households at certain times to meet physiological needs standards for growth and public health. According to Sumarmi (2014), the term food insecurity is often refined with the term decreased food security (Purwantini, T. B., 2014). There are two types of food insecurity conditions, namely chronic and temporary food insecurity. Chronic food insecurity is the inability of households to meet the standard of minimum food needs for a long time (BKP, 2013). The word nutrition comes from Arabic which means food substances, in English it is known as nutrition which means food ingredients or nutrients or is often interpreted as the science of nutrition. A broader understanding of nutrition is the process by which living things use normally consumed food through metabolic processes to produce energy (Irianto, Djoko P., 2017). To get good nutritional quality, the food we consume every day must contain nutrients, for example in Indonesia, people have long been recommended to consume four healthy five perfect foods, namely rice, vegetables, fat, fruit, and milk. It is hoped that consuming foods that contain nutrients will help in physical growth and development and adequate energy to carry out daily activities. From the description that has been presented, it can be concluded that nutrition is a substance contained in foods that contain carbohydrates, fats, proteins, vitamins, and minerals that are important for humans for human growth and development, maintaining body processes, and as a provider of energy for carrying out daily activities.

The term nutritional insecurity is the opposite of the condition of nutritional security. Nutritional security requires a combination of food and non-food components. Nutritional security as indicated by nutritional status is the ultimate goal of food security, health, and individual parenting. One of the main causes of nutritional problems is food insecurity. The other main causes are the health and environmental conditions of the community and upbringing. Wherever there is food insecurity, there is a risk of malnutrition (DKPP Jabar, 2021). The indicator of nutritional status that is often used according to Khomsan (2008) is the nutritional status of children under five because the age group is vulnerable to nutritional problems. The emergence of nutritional problems experienced by developing countries is an

indication of weak food security among the population. Low-income results in people not being able to access food that can meet nutritional needs. As a result, malnutrition threatens children under five who are a vulnerable group (Yunianto, 2021).

In Indonesia, food insecurity and nutrition are not a new issue. Cases of food insecurity have been known since the 1960s, even during the Japanese colonial period. Analysis of undernutrition or malnutrition often focuses on the case of children under five because they are more sensitive to nutritional deficiencies than adults. The problem of food insecurity is not due to the problem of low food production, but rather to the pattern of food distribution itself. Food and nutrition insecurity is a reflection of the food situation and nutritional adequacy of individuals in a community in an area as a result of the lack of entry points for food, both physically, socially, and economically. Cases of food insecurity and nutrition are heavily influenced by poverty factors, in addition to other determinant factors (FAO, 2013), so it can be said that food insecurity in this case is a condition of vulnerability to purchasing power. The amount of food insecurity is a picture of the situation of the level of food accessibility in the community which is reflected in the level of nutritional adequacy of the community as measured by the Nutrition Adequacy Rate (NAR) (BKP, 2013). NAR is the level of consumption of essential nutrients that are considered sufficient to meet the nutritional needs of almost all healthy people in a country.

The depth level of food insecurity is indicated by an indicator of the adequacy of calorie consumption per capita per day with an NAR value of 2,000 kcal (WNP, 2004). If the per capita consumption is less or less than 70% of the NAR (energy consumption < 1,400 kcal) it is categorized as very food insecure; around 70% to 89.9% of the NAR is categorized as light to moderate food insecurity; and more than 90% of the NAR is included in the food security category. Analysis of the situation of food security must begin with an evaluation of the nutritional status of the community followed by the level of consumption, supply, and food production; not the other way around. The state of good nutrition for the community is shown by the absence of individuals suffering from hunger and malnutrition. This indirectly describes the places of entry for food and social services that are evenly distributed and quite good (Purwantini, T. B., 2014).

Food security is the availability of basic necessities distributed by the state to every citizen, starting from the sufficient availability of food, both in quantity and quality, safe, diverse, containing nutrients, evenly distributed, and affordable; does not conflict with religious values/beliefs and community culture, so that they live healthy, active, and productive lives continuously (Arlus 2017). Covid-19 changed everything, and the food logistics system was disrupted due to limited community activities during the pandemic and the limited food supply chain that threatened people's lives.



The impact of Covid-19 is very significant on the lives of Indonesian families. Approximately 3 million people lost their livelihoods, children cannot access nutritious feeding programs, and some families are struggling to buy the food they used to eat. People have to spend more time at home which will lead to a decline in the level of the community's economy and there may be a change in food consumption to become less diverse, as well as increased consumption of processed foods and reduced consumption of nutritious foods, including fresh fruits and vegetables. The current situation could exacerbate the situation that many families had previously faced in accessing affordable quality food. The current food supply system and supply chain are disrupted due to social restrictions (Kemenkes RI, 2020). Nutrition is an important concern in maintaining the immune system. Adequate and good nutrition is needed for cells to function optimally. An “activated” immune system, in this case, becomes increasingly high in energy intake during the period of infection, with greater basal energy expenditure. The Covid-19 pandemic has caused many changes in daily life (Kemenkes RI, 2020). Food security is a condition of the availability of sufficient food for everyone at all times and for every individual who has access to it, both physically and economically. The focus of food security is not only on food supply at the regional level but also on the availability and consumption of food at the regional and household levels, and even for individuals in meeting their nutritional needs (Arlus 2017).

Food security is very important as well as vulnerable to problems when dealing with a disaster situation like today, namely the Covid-19 pandemic. The Covid-19 pandemic that has hit the world, including Indonesia, has disrupted all sectors of people's lives, including one of the most strategic, namely food security (Arif et al., 2020). The existence of this Covid-19 Pandemic can affect energy intake in every household due to the level of income of each household decreasing it can cause food needs and nutritional intake of each household to decrease. The emergence of the Covid-19 pandemic has also entered into the economic structure of the community so it affects the economic life of the community. The functional theory sees a structure in society that has its respective functions and roles and is interrelated with one another. The emergence of a problem in one area will affect other fields. Covid-19 is a problem in the medical field, but its impact extends to the community's economic system. Therefore, the economic structure begins to adapt to a problem that occurs, and the emergence of dysfunction makes the economic life of the community change (Dani, J. A, 2020; Kirigia, J. M. & Muthuri, R. N. D. K., 2020). According to FAO (2013), the causes of food insecurity are unavailability of food, low purchasing power, insufficient food at the household level, and improper distribution of food among household members. Meanwhile, the causes of food insecurity in households are very complex, such as the socio-political situation of agriculture and its farmers, the low area of productive agricultural land per capita, low productivity and land fertility, climate anomalies, low modern agricultural techniques that have an impact

on low food production, and low power. buying households as a result of limited income from off-farm. People who experience food insecurity are everyone who is below the poverty line (FAO, 2010).

The Poverty Line reflects how many rupiahs of a person's minimum expenditure is to meet basic needs for one month, both food and non-food. The Poverty Line consists of the Food Poverty Line, which is the minimum expenditure value for food needs equivalent to 2,100 kilocalories per capita per day, and Non-Food and Non-Food Poverty Lines, namely the minimum expenditure value for non-food needs in the form of clothing, housing, education, and health (BPS, 2022). From BPS data, the average national Poverty Line is IDR 486,168 per capita per September 2021. This means that if the average monthly expenditure per capita is below the Poverty Line, then the poor are grouped (Kusnandar, Viva B., 2022).

With the Covid-19 outbreak, complaints from the community is how to continue life to meet basic needs. For freelancers, living conditions during the pandemic are devastating for the family economy. The sluggish economy on various fronts has had an impact on suffering for the underprivileged. The underprivileged must continue to get their right to various services, especially services to obtain food. Previous survey data stated that the number of underprivileged people was around 25 million people. Communities that were previously classified as vulnerable and underprivileged, are now included in the underprivileged group. When business stops, employee layoffs are inevitable. In addition, the reduction in working time has an impact on the wages earned. People's participation and support are needed in dealing with the situation due to this pandemic. The government is trying to solve health, social, economic, and basic needs problems.

Family food security concerns three important things, namely food availability, access, and consumption. Aspects of food availability depend on natural, physical, and human resources. Amid the Covid-19 outbreak, availability was also constrained by the limited food choices on the market, the shortage of mobile vegetable vendors, and the number of stalls selling street food that were closed. Meanwhile, access to food can only occur if the household has sufficient income. Covid-19, which causes people's income to drop drastically, certainly disrupts food access. Various government assistance, including the basic food distribution program or the Family Hope Program (PKH), can temporarily help to overcome the situation of food shortages that may occur at the family level. Furthermore, after access to food is food consumption which will greatly determine whether all family members will be able to achieve optimal health status. The fragile condition of family food security raises further concerns, namely the deteriorating nutritional status of the community.

The strength of family food consists of three things, namely availability, access, and food consumption. Food availability depends on natural and human resources. During the pandemic, food availability was constrained by the lack of various kinds of food in the market, the scarcity of mobile

vegetable traders, and many food stalls that were closed. Access to food occurs when the household has sufficient income. The pandemic caused income to drop drastically, this disrupted access to food. Food distribution program / Family Hope Program distributed by the government, while helping to overcome food difficulties that occur at the household level. Lastly, food consumption is crucial to achieving the maximum degree of health for family members. Furthermore, the condition of weak household food strength causes a sense of worry, namely the decline in the nutritional state of the household. According to Khomsan, A. (2020) nutritional security is a reflection of nutritional intake and nutritional status of the community which is an input for the formation of healthy individuals. Many factors determine nutritional security. Poverty as a cause of difficulty in accessing food is believed to be the most important factor that hinders the realization of maximum nutritional security.

Nutrition is a very important factor. Children's growth and development as the nation's next generation really need the fulfillment of good food substances. With good nutritional status, children will grow and develop well, have disease resistance, are agile, and will always be enthusiastic in carrying out daily activities. A description of the nutritional state at a certain time for a person so that it can be used to determine whether a person is experiencing a good or bad nutritional state is a nutritional status. According to WHO, a condition caused by a balance between nutrient intake from food and the nutritional requirements needed by the body for metabolism is the nutritional status (Harismi, A., 2021). The definition of nutritional status according to Irianto, Djoko P. (2017) is a statement that nutritional status is an indicator of whether the food supply in the household is good/bad. To support children's growth and development, take care of their health, and support sports achievement, good nutritional status is needed. According to Marmi (2013), nutritional status is defined as health status produced by a balance between nutritional needs and inputs. Nutritional status is largely determined by the availability of nutrients in sufficient quantities and in the right combination of time at the cellular level of the body to develop and function normally. Nutritional status can be interpreted as a description of a person's physical condition as a reflection of the balance of incoming and outgoing energy by the body. While nutritional status according to Banudi (2013) is a condition of the body as a result of feeding and the fulfillment of nutrients. Hartono (2017) revealed that the nutritional state of the child is influenced by two things, namely inadequate food intake and infectious diseases. Insufficient energy intake can cause a negative imbalance, resulting in a lower than normal or ideal body weight (Hartono, 2017).

The most nutritional problem in our country is malnutrition. Toddlers (0-5 years) are the age group that most often suffers from malnutrition or is one of the groups of people who are vulnerable to nutrition. In developing countries, children aged 0-5 years are the group most vulnerable to nutrition. Children usually suffer from various infections and are of low nutritional status (Hartono, 2017). The main factor causing



malnutrition in toddlers is food insecurity, poor health conditions, poor sanitation conditions, parenting patterns, and incorrect provision of additional food (Kemenkes RI, 2019). According to UNICEF, malnutrition is caused by several things, namely direct causes that are influenced by infectious diseases and the entry of insufficient nutrients both in quality and quantity. Indirectly influenced by the reach of health services and their quality, unsatisfactory child care patterns, poor environmental sanitation, as well as low food strength in the household (Hutagalung, Nancy T., 2016). Food intake plays an important role in preventing stunting, including protein, carbohydrates, and iodine. Protein is a very important nutrient for stunting children. Stunting children who lack protein are not only threatened with failure to grow, but also more easily lose muscle mass, experience bone fractures, and get infectious diseases (Hartono, Soesanti H., 2020). Proteins are important in the formation of structure, function, and regulation in living cells and viruses. This protein can be obtained from several sources, including meat, fish, eggs, nuts, mushroom extract, milk, and poultry (Paramadhanti, Bunga A., 2019). The emergence of malnutrition problems, including stunting in developing countries, is an indication of weak nutritional security among the population. Indonesia has a relatively large number of malnutrition sufferers, although it is recognized that this is better than in the previous decade.

To determine the nutritional state of toddlers, the determination of nutritional status is regulated by the Ministry of Health No. 1995/MENKES/SK/XII/2010 about nutritional standards for toddlers. The standard regulates the determination of nutritional status according to body weight/age, body height/age, and body weight/body height, and Body Mass Index/Age. Each of these indicators has a different category division. The index based on PB/U or TB/U is obtained from a comparison between PB or TB with age which can be used to describe chronic malnutrition, namely short (Yunianto, Andi E. et al., 2021). The nutritional status of a toddler (1-5 years) requires more nutrition because this is the golden age. During this time a child will experience physical, and mental development, and will discover new things so the fulfillment of nutrition at this time plays an important role (Hasdianah, H. R. et al., 2014).

Based on several opinions about nutritional status, it can be concluded that nutritional status is a state of body health that is obtained from a balance between nutritional needs and nutritional input. Assessment for the nutritional state in stunted children based on TB/U or PB/U has a Z-score = < -2 SD, this value indicates that a short or very short body condition is the result of growth failure.

Covid-19 causes children in our country who are still in their infancy to be more vulnerable to stunting. The pandemic adds to the challenge for the government in its efforts to reduce the stunting prevalence rate to fourteen percent by 2024 (National Medium-Term Development Plan 2020-2024). Currently, Indonesia is still in the second highest rank in the ASEAN region after Cambodia. Indonesia's statistical prevalence rate still shows a fairly high presentation. This figure is higher than the world stunting



prevalence rate in 2020, which is 22%. Of the 34 provinces in Indonesia, 10 provinces have high stunting rates, namely East Nusa Tenggara, West Sulawesi, West Nusa Tenggara, Nanggroe Aceh Darussalam, Gorontalo, South Kalimantan, West Kalimantan, Central Kalimantan, Southeast Sulawesi, Central Sulawesi. Toddlers under 2 years of age are more vulnerable and have the potential to suffer from stunting. Covid-19 has hampered stunting prevention activities, as well as hampered public services, integrated service posts for pregnant women, Early Childhood Education, and Family Development for Toddlers. With the impact of the pandemic, access to food for the poor is increasingly constrained due to hampered food production and distribution. Moreover, the COVID-19 pandemic has made economically weak communities vulnerable to losing sources of income which has an impact on the reduced ability of households to meet the needs for nutritious food. Children who are victims of Covid-19 and who have lost their parents also can experience a decrease in their quality of life, including the decline in care, health and education services which will affect the growth and development of children. (Arifa, Fieka N., 2021).

The multidimensional stunting problem requires cross-sectoral efforts and involves all stakeholders in an integrated manner so that the budget ceiling must be spread across the central and regional governments. In 2021, The Ministry has issued an initial ceiling for the stunting prevention budget which is allocated at Rp32.98 trillion. Meanwhile, the addition of funds to the regions and villages there is a budget transfer of special physical allocation funds amounting to Rp7.35 trillion. Support for stunting prevention was also expanded by adding special physical allocation funds for the environmental sector, in addition to the non-physical budget allocated for Rp4.1 trillion. The attention of all parties, from the central and local governments, health sector workers, private sector, social organizations, religious organizations, and universities, to the mass media to stunting cases and efforts to accelerate the reduction of stunting cases in Indonesia is needed. With the Presidential Regulation (Perpres) No. 72 of 2021 regarding the acceleration of stunting reduction which is the legal umbrella for institutional ministries, it is hoped that this stunting problem can be resolved quickly and can reach the target of 14% by 2024 later (Arifa, Fieka N., 2021).

Covid-19 has disrupted activities related to the economy in all businesses, including agriculture. The impact of Covid-19 that must be anticipated includes food readiness for the entire community. Many people's economic activities have stopped, services have been hampered, and the agricultural sector has suffered a fairly heavy blow. More serious disturbances were detected in distribution and marketing systems. With the extraordinary increase in active cases in recent weeks, there have been at least 2 million cases with 55,000 deaths, placing Indonesia in the 18th position in the world with the most cases of Covid-19. The pandemic that never ends is pressing the world community in various aspects. In addition to disrupting life and the health system, various policies to overcome the pandemic, such as border closures,



lockdowns, and the temporary suspension of world trade and export-import activities hampered the world's economy and food and nutrition security. A sustainable food system must also be able to guarantee and empower vulnerable and marginalized groups, to ensure sustainability is present in every food distribution, from production to consumption (Ibrahim, Jabal T., 2021).

Food security as the basis for realizing a prosperous society requires the maximum contribution of all stakeholders and the community. Food security as a system that is strengthened by other supporting subsystems requires synchronization and integration of observations in taking an action and policy. Food security is said to be successful if it can reach food sufficiency at the household (including an individual), regional, and national levels by relying on local food capabilities, this is what is called food sovereignty. The problem of food security is a common problem that is the responsibility of all parties. Thus, commitment and cooperation must be grown between all parties, especially in the form of close cooperation between the government, the private sector, and the community (among others represented by NGOs and universities). The Food Security Council which has been established from the government side needs to be strengthened and equipped with other forums or institutions that can accommodate private, NGO, and academic contributions. Food security is realized, among others, by food diversification. Diversification is a way to procure more than one type of goods/commodity that is consumed. In the food sector, diversification has two meanings, namely diversification of food crops and diversification of food consumption. The two forms of diversification are related to realizing food strength. Food crop diversification is associated with technical regulation of farming patterns, the diversification of food consumption will regulate or manage people's consumption patterns to meet food needs. Food diversification includes three interrelated areas of understanding, namely diversification of food consumption, diversification of food availability, and diversification of food production. The government's obligation to provide food availability, food affordability, and fulfillment of food intake that is safe, sufficient, of good quality, and the fulfillment of nutritional balance, at the national, regional, and individual levels widely throughout Indonesia at any time by utilizing natural and human resources, institutions, and local culture (Banten Provincial Government, 2022).

Furthermore, the establishment of a sustainable food system is not only to realize the Sustainable Development Goals (SDGs) but so that it can be resilient and last for a long time. So, reflecting on the Covid-19 pandemic, it is also necessary to anticipate system changes due to events that cannot be predicted in advance. COVID-19 has undermined the resilience and stability of food chains in many developing countries, especially for countries with staple food supplies that depend a lot on imports (K, Paulina G. D., 2021). Nila Moeloek said efforts to improve nutrition must be supported by a high commitment from leaders at all levels and ministries/agencies, as well as various non-government stakeholders such as the business



world, civil society groups, universities, development partners, professional organizations, and the wider community. Other breakthroughs made by the Ministry of Health are supplementary feeding for toddlers, nutrition education to increase the supply of exclusive breastfeeding, food intake for babies and toddlers, and publicity guidelines regarding balanced nutrition (Kemenkes RI, 2019). In addition, the government's breakthrough in food diversification is an effort to encourage people to vary the staple foods they eat so they don't focus on just one type. Food diversification is also beneficial for obtaining nutrients from more diverse and balanced nutritional sources. The Ministry of Health emphasizes that improving nutrition that needs special attention is the reduction in stunting cases in toddlers. This is related to intelligence and various diseases, especially non-communicable diseases (Milana, R., 2021).

CONCLUSIONS AND SUGGESTIONS

The impact of Covid-19 on social conditions, economic conditions, cultural conditions, and food sovereignty. Food and nutrition insecurity is a reflection of the condition of food and nutrition insufficiency of individuals in a community group in an area as a result of a lack of access to food, both physical, social, and economic. Food and nutrition insecurity due to Covid-19 causes children in our country who are still in their infancy to be more vulnerable to stunting. This has an impact on increasing stunting cases in Indonesia.

The strength of family food concerns three important things: food readiness, food access, and food consumption. Food strength is very important as well as vulnerability to various things during a disaster/pandemic situation, for example, Covid-19. The food insecurity that is currently afflicting our nation must be used as a whip for all stakeholders and the community to be able to work together to overcome this problem.

Efforts to improve under-five nutrition must be supported by a high commitment from the leadership of ministries/agencies as well as non-government stakeholders. Efforts to achieve food security and improve nutrition are encouraged, among others, by food diversification, supplementary feeding for toddlers, nutrition education to increase exclusive breastfeeding, infant and toddler food intake, and publication of balanced nutrition guidelines. For the authorities, the private sector, and the community: To reduce the incidence of stunting in toddlers, counseling is needed by providing information as early as possible about stunting prevention efforts, especially from factors of food safety, readiness, food entry points, food security and providing subsidies or assistance for vegetable/fruit seeds so that people can use land at home to improve family nutrition.

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