



Correlation between The Covid-19 Pandemic and Stunting Occurrence in Indonesia

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ABSTRACT

The Covid-19 pandemic has a significant impact on various aspects of life, especially in health aspect. One of other impacts caused by the Covid-19 pandemic is the increasing of stunting occurrence in Indonesia. The objective of this research is to find out the correlation between the Covid-19 pandemic and stunting occurrence in Indonesia. The method of this research used descriptive qualitative research, which in this research describes the formulation of the existing problems. The data collection technique used a literature review based on various researches related to the topic of this research. The results of the research indicated that there is a correlation between the Covid-19 pandemic and the increasing of stunting occurrence in Indonesia, that is the interruption of health care and social protection for children, and families' lack of ability to provide children's requirements for things like nutritious meals.

Keywords: Covid-19 Pandemic, Health Aspect, Stunting

INTRODUCTION

The Covid-19 pandemic, which first surfaced in 2020. Almost every element of life, including health, the economic, sociocultural, and others, have been impacted by this illness. Covid-19-related health issues are a particular source of concern. It is due to the fact that this virus has killed millions of people. According to the WHO, there have been more than 160 million confirmed cases, and more than 220 countries have been affected and around 31 million people have died as a result.

One of the health problems that has increased due to the COVID-19 pandemic is stunting. Stunting is a developmental disorder experienced by children due to malnutrition, repeated infections, and inadequate psychosocial stimulation. During the first 1,000 days of life, chronic malnutrition and recurring infections are the main causes of stunting. According to WHO data, 149.2 million children under the age of five would be stunted in 2020, or around 22% (WHO, 2021).

Stunting has to be a health issue, even in Indonesia. According to data from the Directorate General for Regional Development of the Ministry of Home Affairs, the number of children in Indonesia who experienced stunting in 2022 reached 1,320,807 out of the country's total population of 15,792,357 children. West Sulawesi Province had the highest prevalence of stunting at 23.1%, or 22,903 children overall (Noorani, 2022). There are 14 provinces in Indonesia that have high rating levels for regions with stunting of 20% to 30%. The number of provinces in Indonesia with stunting rates over the extremely high limit of 30% is 19, with East Nusa Tenggara Province and Aceh having the highest rates at 42.6% and 37.1%, respectively (Wardani et al., 2022).

Furthermore, Indonesia has experienced an increase in the prevalence of stunting as a result of the Covid-19 virus pandemic. This issue was also highlighted by Hasto Wardoyo, Director of the National Population and Family Planning Agency (BKKBN), who said that the Covid-19 pandemic caused an increase in the stunting rate. Hasto Wardoyo predicts that up to 2 million children could suffer from nutritional issues, particularly in low- and middle-income countries (LMICs), in which wasting can lead in stunting. Based on the background of this research, its objectives are to find out the correlation between the Covid-19 pandemic and stunting occurrence in Indonesia.

LITERATURE REVIEW

Coronavirus Disease 2019 (Covid-19)

More than 6 million people have died as a result of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is the cause of the coronavirus disease 2019 (COVID-19), the most serious global health crisis since the 1918 influenza pandemic. It has had a serious impact on the world's demographics. SARS-CoV-2 spread quickly around the world when the first cases

of this mostly respiratory viral infection were initially recorded in Wuhan, Hubei Province, China, in late December 2019. As a consequence, the World Health Organization (WHO) was compelled to declare it a worldwide pandemic on March 11, 2020. Several SARS-CoV-2 variations have been identified throughout this pandemic, however only a small number of them are recognized as variants of concern (VOCs) by the WHO due to their impacts on public health throughout the world. In according to the WHO's epidemiological update, five SARS-CoV-2 VOCs have been discovered since the beginning of the pandemic (Casella et al., 2022):

1. Alpha (B.1.1.7): first variant of concern described in the United Kingdom (UK) in late December 2020
2. Beta (B.1.351): first reported in South Africa in December 2020
3. Gamma(P.1): first reported in Brazil in early January 2021
4. Delta (B.1.617.2): first reported in India in December 2020
5. Omicron (B.1.1.529): first reported in South Africa in November 2021

The WHO has stated that education, isolation, prevention, controlling the transmission, and treatment of infected persons are the critical steps in controlling contagious diseases like COVID-19. It is possible to minimize the spread of infection by making the following recommendations (Lotfi et al., 2020):

1. Staying at home (home quarantine) and avoiding any direct contact with any healthy (possible asymptomatic patients) or infected person, which has been called shielding;
2. Avoiding nonessential travel;
3. Observing social distancing rules like avoiding crowded public places and maintaining at least two meters of distance between each person, especially if they are coughing or sneezing;
4. Avoiding shaking hands when greeting others;
5. Frequently washing hands for at least 20 s with soap and water or hand sanitizer with at least 60% alcohol, especially after touching common surface areas, using the bathroom, or shaking hands, avoiding touching eyes, nose, and mouth with unwashed hands; and
6. Disinfecting surfaces using household sprays or wipes.

Stunting

Stunting is when a child fails to grow to the proper height for his or her age. The main cause is poor nutrition in pregnant women, babies and toddlers (Aljifri, 2020). Stunting is a form of malnutrition, but it is more accurately described as under nutrition. Few people in Indonesia lack sufficient calories, but low awareness of balanced nutrition means that meals are often heavy on rice, with little protein or vegetables. Many parents also do not understand the importance of breastfeeding,

relying instead on formula which is not as nutritious for a baby. There are four causes of stunting such following below:

1. Malnutrition in pregnant women and toddlers;
2. Lack of access to clean water and sanitation;
3. Limited access to health services; and
4. Infection.

Stunting can be prevented by parents by taking certain mechanisms such following below (WHO, 2018):

1. Mothers need to follow a balanced diet before pregnancy starts to ensure that the proper nutrients are passed on to the fetus;
2. Indonesia's Ministry of Health recommends that a healthy meal should consist of around one third fruits and vegetables, one third carbohydrates like rice, and one third protein like meat, fish or vegetarian protein sources;
3. The parents should also practice proper hygiene, including washing the hands with soap and water before preparing or eating food;
4. Experts recommend exclusive breastfeeding for the first six months of a baby's life, and husbands can play a role by supporting their wife's decision to breastfeed; and
5. Once the baby starts weaning, introduce fruit and vegetables into his or her diet.

RESEARCH METHODOLOGY

This research used a qualitative descriptive research type. Qualitative descriptive research is defined as research that is included in the type of qualitative research. The purpose of this research is to reveal facts, phenomena, circumstances, variables and circumstances that occur when the research is conducting (Sugiyono, 2019). Poerwandari defines qualitative research as research that produces and processes descriptive data.

The data collection technique used in this research was a literature review. Literature review is a type of data collection that examines several documents related to this research. In this research, the data used were journals, scientific articles, and media, both print and online, to obtain appropriate research data (Ramdhani et al., 2014). According to Danial and Warsiah, literature review is a research that was accomplished using a various sources, including books, publications, and scholarly articles concerning the research topics.

In addition, according to Suyanto and Sutinah (2006), they stated that there are several steps in processing qualitative data such following below:

1. Data reduction, its meaning is the process of reducing and simplifying the data obtained from the outcomes of data collecting.

2. Data presentation is defined as a combination of organized information that enables users to make decisions and take action. This technique is used following the data reduction procedure.
3. This technique aims to comprehend the meaning or purpose, order, patterns, settlement, causal process, or proposition in an effort to verify or retract findings.

RESULT AND DISCUSSION

The Factors Causing Occurrences of Stunting

According to the WHO, stunting is a growth and development problem that affects children and is caused on by insufficient recurrent infections, psychological stress, and malnutrition (Izza et al., 2019). Stunting-related variables are divided into direct and indirect factors. The practice of providing colostrum and only nursing are direct factors. Children's food patterns and infectious illnesses they develop. Meanwhile, the indirect factor of the incidence of stunting is access and availability of food ingredients as well as sanitation and environmental health (Sari & Harianis, 2022).

Direct Factor

1. Provision of Exclusive Breastfeeding Colostrum

The risk of babies being stunted is 3.7 higher for babies who are not exclusively breastfed (breastfeeding for less than 6 months) compared to babies who are exclusively breastfed (breastfeeding 6 months), in accordance with the findings of basic health research (RISKESDAS) in 2018. The research conducted by Teshome indicated that the possibility of stunting is increased in children who do not get colostrum. Colostrum provides a protective purpose for the infant by nature. This makes it feasible for infants who do not receive colostrum to have problems, such as illnesses that last longer and are more severe, such chronic diarrhea that leads to malnutrition.

2. The Rating of Child Consumption

Consumption rate is considered a factor in determining nutrient intake. Similar to the findings of Hidayati's research, it demonstrates that children with insufficient energy will have a 2.52 times greater chance of developing stunting than children with adequate energy. This case is the same as children who lack vitamins B2, B6 and lack the minerals Fe and Zn also have a risk of stunting.

Consumption behavior is an important cause of stunting. One of the various new cultures that approach the society as a result of modernization is one that is focused on consumption. Nowadays, a lot of kids like "snacking." The quality of "snack" food in relation to good nutrient quality is disputed. Children that eat more snacks have greater body fat.

Indirect Factor**1. Environmental Hygiene and Sanitation**

Families' health is significantly influenced by household sanitation, access to clean water, and cleanliness of the living area. Family members might become easily ill from drinking contaminated or dirty water. Due to their weaker immune systems than adults, newborns are more susceptible to experiencing illness.

Several illnesses, such as diarrhea, intestinal worms, and digestive tract infections, are caused by the existence of unhygienic environmental conditions and sanitation. Children who have digestive system infections will not be able to absorb nutrients properly, which will lead into malnutrition.

2. Access to Availability of Food Materials

Access to food has an impact on human resource quality and is closely related to babies' nutritional needs. Since hunger and poverty are closely related to access to food, academics also frequently examine this topic. According to UNICEF, the number of children under five who were stunted reached 151 million in 2015, or about 22.2% of all children in the world under the age of five. Instead, Indonesia has a significant percentage of stunting at a rate of 30.8%. It means that one in three toddlers experiences stunting.

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Many parents lost their employment as a consequence of the pandemic that began in 2020; this circumstance led to financial problems for a number of families who lost their jobs. Families that are experiencing economic difficulties cannot provide for their necessities for wholesome nutrition. The family's access to food and its nutritional value are impacted by unfulfilled food demands, relying on nutrition services and social protection for children.

In accordance with the lack of proper nutrition for children, it leads into deteriorating health problems. In fact, effective growth and development of children depends on a number of factors, one of which is adequate nutrition and diet. According to Heady D. et al., who were citing BKKBN, the prevalence of wasting increased significantly along with the drop in gross national income (GNI) per person. Therefore, as a consequence of COVID-19, wasting in children grew by around 14.5%, reaching 6.7% of children in 2020. As a result, the child's body declines, very little, or even falls below the normal range.

CONCLUSION

Stunting is when a child fails to grow to the proper height for his or her age. Stunting is a form of malnutrition, but it is more accurately described as under nutrition. Stunting-related variables are divided into direct and indirect factors. The practice of providing colostrum and only nursing are direct factors. Children's food patterns and infectious illnesses they develop. Meanwhile, the indirect factor of the incidence of stunting is access and availability of food ingredients as well as sanitation and environmental health.

In Indonesia, the frequency of stunting cases is currently rising due to the Covid-19 viral pandemic. Families' failure to fulfill their food demands is a result of lack of work due to unemployment or lower family income, which leads to poor nutrition in the family and prevents children from consuming enough nutrients to support healthy growth and development, which leads into stunting.

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