MORFAI JOURNAL
Multidiciplinary Output Research For Actual and International Issue

DETERMINANT ANALYSIS OF OPEN DEFECATION WITH STUNTING INCIDENCE IN ACEH SINGKIL DISTRICT

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Abstract

Stunting is a nutritional problem in Indonesia that is a cross-sectoral problem due to its complex and multifactor causal factors. The government has a role of involvement and capacity in stunting reduction interventions. One of the determinants of stunting in Aceh Singkil District is open defecation which is an indicator of WASH (Water, Sanitation, Hygiene) that contributes to the incidence of inflammatory diseases. This study aims to analyze the determinant of open defecation with stunting incidence in Aceh Singkil District. This study used a qualitative design with Focus Group Discussion data collection techniques for the regional working unit in Aceh Singkil District. The results showed that open defecation is still one of the causes of stunting in Aceh Singkil District where open defecation behavior still exists, such as digging landfills, flying toilets, and public bathing, washing, and toilet facilities in rivers. The problems related to this are the low level of proper drinking water facilities, the behavior of open defecation, and the lack of clean water sources. The conclusion is that there is a need for support from policymakers in improving specific interventions carried out by cross-sectors, especially the rules on Gampoeng for residents who are still doing defecation.

Keywords : Stunting, Open Defecation

1. INTRODUCTION

Indonesia is currently still facing various nutritional problems, one of which is the problem of stunting. The problem of stunting is the focus of the government's attention because it will have a serious impact on the quality of human resources in the future. Stunting is a condition of growth failure in children under five due to chronic malnutrition, especially during the first 1000 days of life. Children are classified as stunted if their length or height according to age is lower than the applicable national standard (Bappenas, 2018).

Based on Riskesdas in 2018, Indonesia's stunting prevalence is around 30.8%. Based on SSGI data (2021), Indonesia's stunting data is at 24.4%. Aceh Province has stunting prevalence of 33.2%. Aceh Singkil District is a district with a high prevalence of stunting, namely 26.9% in 2021.

The problem of stunting is a cross-sectoral problem that is still a public health problem. The factors causing the stunting problem are very complex and multifactor that affect cross-sectoral stunting programs. Reducing stunting focuses on addressing the causes of nutritional and non-nutritional problems. Various programs and efforts have been made by the government to overcome the problem of stunting both in terms of specific indicators and sensitive indicators (Khasanah et al., 2022; Purnama et al., 2021).

Stunting can result in body organs not growing and developing optimally. In the short term, stunting leads to stunted growth and cognitive development. In long-term impacts, stunting leads to a decrease in intellectual capacity and risk of non-communicable diseases in the future. Therefore, efforts to reduce stunting are important as early as possible to avoid long-term impacts (Soliman et al, 2021; Leroy & Frongillo, 2019; Reiher & Mohammadnezhad, 2019; Trihono et al., 2015).

Efforts to reduce stunting are carried out through 2 interventions, namely specific and sensitive nutrition interventions. In addition, supporting prerequisites are needed that include political and policy commitments for implementation, government and cross-sectoral engagement, and capacity to implement. Reducing stunting requires a holistic approach, which must start by meeting the supporting prerequisites (Khasanah et al., 2022; Maulida et al., 2021).

Data on Indonesia's health profile for 2018 – 2020 shows several indicators related to sensitive factors of stunting prevention, namely; implementation of Community-Based Total Sanitation, proper sanitation, the proportion of poor people, livable houses, and low Human Development Index (HDI) levels (Kemenkes RI, 2020).

The UN responded that the importance of building sanitation is part of human rights. Among the Sustainable Development Goals is universal access to adequate and equitable sanitation and the eradication of open defecation by 2030 (WHO, 2017). However, sanitation problems are still a problem in several developing countries, one of which is Indonesia. (Purnaweni, 2018).

The Indonesian government has made a policy related to Community-Based Total Sanitation. For many years sanitation service programs in Indonesia have been dominated by the form of providing subsidies. The Community-Based Total Sanitation program requires sanitation services to participate in changes in citizen behavior. One of the sanitation problems in Indonesia is the practice of open defecation. The impact of this bad practice is the onset of several infectious diseases that can cause stunting (Audiena & Siagian, 2021; Perangin-angin, 2022).

The government has a responsibility to provide good sanitation and control the habit of open defecation. In addition, it also has a target to provide toilets or latrines at home for all residents. However, Changing people's attitudes and behavior is very difficult. Open defecation behavior in Indonesia occurs in both rural and urban areas throughout Indonesia's provinces. Bringing citizens to hygiene awareness is a difficult task.

Local governments have the authority to make health policies in their regions according to the analysis of problems in their respective regions. The cause of complex stunting problems also requires complex interventions. Nutritional interventions require intersectoral contributions and collaboration to reduce the incidence of stunting. The implementation of stunting programs in Indonesia varies greatly and it is necessary to evaluate the implementation of each program in each sector at the regional level to accelerate the reduction of stunting prevalence.

In addition to specific and sensitive factors, community behavior factors related to efforts to support stunting prevention are also still a problem in Aceh Singkil District. Efforts to prevent and accelerate stunting reduction are also strongly influenced by policies, strategies, and programs carried out by local governments, both provincial and district governments, especially those in Aceh Singkil. This study aims to analyze the determinant of open defecation with stunting incidence in the Aceh Singkil District.

2. IMPLEMENTATION METHOD

This study used a qualitative study design to analyze the determinant of open defecation as the cause of stunting problems in Aceh Singkil District. Aceh Singkil District is one of the districts in Aceh Province. The data collection technique is Focus Group Discussion (FGD) which allows participants to discuss problems in a group setting and obtain more detailed opinions openly. The Focus Group Discussion was held in Aceh Singkil District by involving participants consisting of regional working unit related to stunting in Aceh Singkil District, namely Bupati or Governor (in district), Sub-District Head, Ministry of Religion, Department of Public Works and Spatial Planning, District Health Department, Social Department, Education Department, Food Department, Agriculture Department, Environmental Department, Regional Development Planning, Research and Development Agency, Marine and Fishery Department, and Woman Empowerment, Child Protection, and Family Planning Department. The informants numbered 22

people. They were selected based on purposive sampling techniques so that the expected data could be obtained from their knowledge and experience in the field of stunting in Aceh Singkil District.

Research data are obtained from primary data. Data collection using semi-structured questionnaires through FGDs. The FGD took place led by the facilitator and there were minutes. During the FGD process, recording will be carried out. Furthermore, the data will be analyzed according to qualitative analysis steps, namely data collection, data classification according to the research theme, filtering or reducing valid and reliable data used to answer problem formulations, and drawing conclusions.

3. RESULTS AND DISCUSSION

Stunting is caused by many factors. This can be known based on data and experience in the field owned by each regional working unit in Aceh Singkil District. Therefore, researchers obtained some information related to the determinants of open defecation related to stunting events in Aceh Singkil District. The results showed that open defecation is still one of the causes of stunting in Aceh Singkil District where open defecation behavior still exists, such as digging landfills, flying toilets, and public bathing, washing, and toilet facilities in rivers. As the head of Woman Empowerment, Child Protection, and Family Planning Department said:

“Sanitation factors are the cause of stunting such as open defecation behavior, drinking water using river water, and defecation in rivers. This is still done by people living in watersheds.”

This is in line with the WASH (Water, Sanitation, and Hygiene) program. UNICEF supports the Government of Indonesia to accelerate access to safely managed water, sanitation and hygiene supplies. Another regional working unit also said something similar that the causes of stunting are related to water, sanitation, and individual hygiene. As said by the Department of Public Works and Spatial Planning office, namely

“Sanitation and clean water as one of the indicators causing stunting. In Aceh Singkil, sanitation problems are still very concerning in some areas, for example, there are still soil models that are dug up and then put in wood and then defecated and closed. When it is full, it will be stockpiled and then dug again in another place. There are also flying toilets, maybe we already know in the rural part there are still. On the river still do public bathing, washing, and toilet facilities. For public bathing, washing, and toilet facilities, some take water from the river.”

Some of the factors stated to be the cause of stunting, namely environmental factors, clean water sources, and sanitation facilities are still limited. Clean water sources are still limited because people still use river water as a source of water for public bathing, washing, and toilet facilities, and drinking water. Department of Public Works and Spatial Planning office says:

“When asked by the residents where the water source came from, apparently they made a pipe connecting to the river and then pulled it with a DAB machine (water pump machine). If it is for drinking water, they will filter it first and then consume it. For bathing, there is no more filter directly used and for men directly bathing in the river. So one of the causes is drinking water and sanitation. Then drinking water and sanitation are in line.”

Based on the results of the analysis carried out, several problems in Aceh Singkil were obtained from sensitive factors, namely the lack of food availability and safety, the low level of proper drinking water facilities, the behavior of defecating, and uninhabitable houses.

“For understanding the community is a bit difficult, having to sit together and then ask about the mindset of the community. For sanitation, we have made and have pursued it at the locus of stunting. However, our problem in drinking water is because drinking water is besides because of the funds..”

The Health Department said "stunting is caused by chronic malnutrition, the second cause of which is due to recurrent infections. Now, this recurrent infection is closely related to inadequate sanitary conditions.”

This is in line with the still high incidence of infectious diseases such as diarrhea and helminthiasis in children. Whereas it is known that infectious diseases are the direct cause of

stunting. In addition, there are still many people who use river water as a source of drinking water while the behavior of throwing garbage into the river is still high.

Gunung Meriah Sub-District Head said, "the understanding of the community has not been so big an influence or has not been interested so it is necessary to change the mindset of the community."

People usually do not receive comprehensive education about stunting because stunting is multifactor and people are more inclined to improve the nutritional context such as feeding, food production to increase women's empowerment, and increase plant and food diversity (Mosha et al., 2018).

The same is true in Semarang, which is the capital of central Java province. In one of the sub-districts in the city, there are still many households that do open defecation. Based on the results of research in Semarang, shows that people in jomblang sub-district are still not fully aware of the importance of defecation in latrines (Purnaweni, 2018). This is in line with the results of research that says that open defecation behavior still occurs in Aceh Singkil such as in rivers or land gatherings. Purnaweni's research (2018) includes those who have latrines at home but still do open defecation in rivers. Indonesia is endowed with many rivers and therefore the river is the center of life for many Indonesians.

Research in Nepal shows there are two reasons people still open defecation, namely because of voluntary choice and compulsion. Open defecation has become a habit and a pleasant outdoor activity according to spiritual and religious norms. Open defecation on the grounds because it is forced because it does not have latrine at home (Bhatt et al., 2019).

The inhibiting factor in the country's economic growth is caused by a decrease in people's productivity due to the impact of diseases related to sanitation. Poor sanitation tends to increase the number of people affected by diarrhea or dengue fever, since water sources are heavily contaminated with pathogenic microbes. These environmental-based diseases include stunting, hepatitis A, leptospirosis, Acute Respiratory Infections, skin diseases, and malaria, among others.

With 165 million children suffering from chronic malnutrition (stunted) and 52 million suffering from acute malnutrition (wasted) (UNICEF et al., 2012), more integrated and cross-cutting action is needed. There are three direct pathways that affect children's nutrition caused by poor sanitation (open defecation), namely diarrheal diseases, environmental enteropathy, and nematode infections (UNICEF, 2014).

Poor sanitation and unavailability of sewage facilities often result in individual households and the environment becoming contaminated with human feces containing pathogenic pathways of transmission through fecal-oral causes of diarrhea. Recurrent infections of diarrheal diseases can inhibit the absorption of nutrients and are strongly associated with stunting (SPEARS, 2013 & UNICEF, 2014).

If a family uses an open area such as a field, sewer, garden, yard, or body of water as a toilet, it is classified as open defecation (Badriyah & Syafiq, 2017). This includes the behavior of disposing of pampers used for children's defecation in the open that pose a risk of environmental pollution (Liem et al., 2019). Access to poor sanitation and clean water such as unsafe drinking water and defecation facilities outside the home (Muhafidin, 2022).

Areas with high open defecation behavior also have a high prevalence of stunting. There is a positive relationship between open defecation and stunting. It is estimated that every 10% increase in the prevalence of open defecation will result in a 0.7% prevalence of stunting (Liem et al., 2019). Based on the results of the study, shows that one of the drivers of increasing Height for Age is the reduction of open defecation (13-15%) (Akseer et al., 2020).

Based on the Analysis of Indonesia's Basic Health Research (2013) in Badriyah & Syafiq (2017) shows that in Indonesia there are still some families that use inappropriate water sources, and poor quality water, the main water source is close to potential sources of contamination. 12.9% still open defecation.

The combination of the use of unhealthy latrines and untreated drinking water is related to increasing the chances of stunting in Indonesia. Policies and intervention programs should consider terms of water, sanitation, and hygiene to overcome stunted children in Indonesia (Torlesse et al., 2016). Water, sanitation, and hygiene indicators are open defecation, access to piped water sources, water source repair, and sanitation improvement (Akseer et al., 2020). There needs to support from policymakers in improving interventions and scaling further.

Open Defecation Free (ODF) is part of the Community-Based Total Sanitation Program, an important segment of public health services that must be provided by the government, but has not been properly committed. The success of the ODF program requires the active participation of the community in addition to the responsibility of the government as a public service provider (Purnaweni, 2018).

4. CONCLUSION

The determinant of open defecation is one of the causes of stunting in Aceh Singkil District. This happens due to the behavior of the community's open defecation such as defecating in rivers, flying toilets, and defecating on the ground. In addition, the community still uses drinking water from the river. There needs to support from policymakers in perfecting stunting-specific interventions in this case controlling people's behavior in terms of no longer open defecation by establishing village rules giving rewards in the form of prizes to residents who no longer open defecation and punishment in the form of not being served by the administration at Guechik's office for residents who are still practicing open defecation in Aceh Singkil District.

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