STANTING INDEX MODEL AS AN EVALUATION OF SPECIFIC NUTRITION INTERVENTION POLICIES IN THE HEALTH DEPARTMENT GORONTALO CITY

Olan Jusuf[1], Susanto Kabilina, [2] Abdul Rahmat, [3] Lisda Van Gobel[4)]
Postgraduate at Bina Taruna University, Gorontalo
Email: olanjusuf8@gmail.com : abdulrahmat@ung.ac.id ; lisdavangobel69@gmail.com

Article history:		Abstract:
		Standing is one of the problems in determining the future. By looking at the stunting proportion of approximately 20%, it shows that this really affects the health index in the city of Gorontalo. The existence of the stunting index model really helps the government in making decisions so that it can determine which policies can be taken to respond to stunting. The aim of this research is to look at a responsive stunting index model that can be used on toddlers in Gorontalo. The index model uses a mathematical formulation using Sustainable Development Goals (SDGs) indicators and other related indicators. Data collection was carried out by looking at standing data for the last four years. The results of this research show an acceleration of stunting reduction with a long-term strategy so that specific and sensitive nutritional interventions can be optimized, and have a strong basis for making improvements according to regulations and quickly in the process of solving problems.

INTRODUCTION

Stunting can occur as a result of malnutrition, especially at 1000 HPK. Fulfillment of nutrition and health services for pregnant women needs attention to prevent stunting. Stunting will affect a child's intelligence level and health status as an adult. The aim of this service is to increase public awareness of stunting and its dangers and public knowledge, especially about preventing the problem of stunting, preparing healthy food menus. The government has attempted to carry out continuous high-level advocacy and the good news is that nutrition is now a national priority. A multi-sector approach also continues to be carried out through sensitive nutrition programs which are implemented simultaneously including learning from various previous very successful programs such as Posyandu, PKH, PNPM Generasi, Pamsimas (noviansyah 2022). Another step is to seek results-based financing, namely performance-based Special Allocation Funds (DAK) in the health and education sectors using nutrition indicators, encourage the implementation of National Health Insurance (JKN) capitation payments, to improve nutrition services, and encourage Village Funds to revitalize programs. community nutrition. The impacts caused by stunting can be felt in the short and long term (Nugroho 2019) . In the short term, the child's immune system will decrease and they will be susceptible to disease, while in the long term it will cause reduced cognitive and motor development in children. If this situation is allowed to continue, it will affect the quality of Indonesian human resources in the future (Lawaceng and Rahayu 2020) . So in this situation the Indonesian government is obliged to invest in nutrition in its people.

Children who experience stunting can continue and are at risk of growing up with a short body. Children who grow short at an early age (0-2 years) and remain short at the age of 4-6 years have a 27 times risk of remaining short before entering puberty; On the other hand, children who grow normally at an early age can experience growth faltering at the age of 4-6 years and have a 14 times risk of short growth at prepubertal age (Arystami & Tarugan, 2017). The problem of stunting is closely related to lower middle class or poor communities who are less aware of the negative impact on children if they experience stunting. Addressing stunting is a national development priority through the National Action Plan for Nutrition and Food Security, organizing and empowering communities in health promotion and healthy living community movements, including village funding priorities. Other government efforts are through mass media, communication with families and advocacy (Astuti 2018) .

The condition of the stunting proportion of toddlers and toddlers which is still above 20 percent in a region indicates that there are still chronic nutritional problems and public health problems. Initially, the government carried out specific and stunting-sensitive nutritional intervention efforts as part of the National Nutrition Awareness Movement within the framework of the First 1000 Days of Life (HPK). Various obstacles in implementing interventions encourage the government to determine breakthrough steps and accelerate the program. Recommendations for the stunting

intervention action plan were reorganized with one of the main pillars being regular monitoring and evaluation. The Gorontalo City Health Service has an important role in specific nutritional interventions to reduce the prevalence of stunting in Gorontalo. The CIPP process focuses problems in three indicators which are the function of planning, implementation, monitoring and evaluation indicator management (Mahendradhata et al. 2022) .

Process Evaluation (Process Evaluation). emphasizes the goal of detecting or predicting procedural designs or implementation plans during the implementation stage, providing information for program decisions and as a record or archive of procedures that have occurred. This evaluation activity also aims to help implement decisions as well as assess and detect the implementation of plans that have been determined to assist implementers in carrying out activities. A simple and responsive model in the form of a stunting index can be part of the pillars of the stunting intervention action plan mentioned above. It is hoped that the stunting index model can help decision makers formulate, implement and evaluate policies in dealing with stunting in the future.

Gorontalo City is the target area for interventions to handle stunting in Gorontalo Province. The limitations of specific nutrition and sensitive nutrition in Gorontalo City are the basis for determining this area as one that needs to resolve the incidence of child stunting. The main factor in the high number of stunting cases is the result of the community's economic conditions caused by inadequate income. Most children who experience stunting are born to families whose livelihood is labor. Seeing that wages in Gorontalo are still low, this has resulted in many children being malnourished and mothers' parenting patterns ignoring the baby's nutritional intake.

Even though the prevalence of stunting in Gorontalo City is lower than in other districts in Gorontalo Province, the government must be responsive in reducing and preventing the growth of stunting.

The standing index model or often referred to as the Standing Index Model is a tool or method used to pass intervention policies or government actions in a particular field or sector. This model aims to measure the extent of the effectiveness and impact of the policy on the goals to be achieved.

1. Policy Implementation

Policy implementation is the most important aspect of the entire policy process. Policy implementation is a real manifestation of a policy, because at this stage a policy is not only limited to the real realization of the policy, but also has links to consequences or impacts that will lead to the implementation of the policy (Rohman 2013) . Policy implementation can be interpreted as a series of activities that will be carried out as a form of follow-up to achieve the stated policy objectives (Maulana, Sholihah, and Wike 2022)

There are four policy implementation factors that can influence decision making (Fallo 2020) ; 1) Communication; Effective implementation occurs when decision makers already know what they are doing. 2) Resources; If the policy implementers who are responsible for implementing the policy lack the resources to implement the policy and lack the resources to carry out the work effectively, then the implementation of the policy will not be effective. 3) Disposition; If a policy implementation is to be effective then policy implementers must not only know what will be done but must also have the ability to carry it out so that in practice there is no bias. 4) Bureaucratic Structure; Such complex policies require the cooperation of many people. When the bureaucratic structure is not conducive to the available policies, this will make resources ineffective and hinder the implementation of the policy.

2. Stanting

Stunting can be defined with various explanations, namely the condition of failure to grow in children under five years old (toddlers) as a result of chronic malnutrition so that the child's height or body length is too short for his age. (Priyono 2020) . The standard standard for the size of toddlers as used by the World Health Organization (WHO) in this case was agreed according to the Multicentre Growth Reference Study (MGRS) in 2006. The Indonesian Ministry of Health also defines stunting, meaning children under five with their z-score value, if z -score less than -2 Standard Deviation (SD) is categorized as a stunted toddler. Toddlers with a z-score of less than minus 3 (-3) SD are categorized as severely stunted toddlers (Lasmadasari et al. 2023) .

RESEARCH METHODS

The development of the stunting index model uses a mathematical formulation of secondary data from the Sustainable Development Goals (SDGs/TPB) indicator metadata which consists of 4 development pillars, namely social, economic, environmental, and law and governance (Bappenas 2017) . The stunting reduction program is one of the programs that can be evaluated through the indicator metadata. The indicators that will be analyzed are a series of time series data over a period of 4 years.

RESULTS AND DISCUSSION

The government is trying to deal with stunting. This is done to ensure equal distribution of the Gorontalo City Health Service which has an important role in specific interventions to reduce the prevalence of stunting. Nutritional intervention is not enough to overcome stunting. So the government has 11 specific interventions, namely, anemia screening, consumption of blood supplement tablets (TTD) for young women, pregnancy checks (ANC), consumption of blood supplement tablets for pregnant women, providing additional food for pregnant women with chronic energy deficiency (KEK), monitoring toddler growth, Exclusive breastfeeding, providing MPASI rich in animal protein for toddlers, managing toddlers with nutritional problems, increasing coverage and expanding immunization, educating teenagers, pregnant women and their families, including triggering free open defecation (BABS).

Specific interventions are activities implemented to address the direct causes of stunting. In this activity, it was discovered that the target number for the city of Gorontalo was 33 toddlers who were served by 31 toddlers. The stunting index as a new measuring tool can be validated using concurrent validity by calculating the correlation of the index with the criterion measure, namely an external measure that is considered valid . The series of intervention activities for the target group can be seen in the following table.

Table 2. Specific Nutrition Intervention Activities in Gorontalo City

No.	Activity	Target
1	Integrated ANC (Ante Natal Care).	All health center work areas
2	Providing PMT (supplementary feeding)	Toddlers who experience nutritional problems and pregnant women who experience CED (chronic energy deficiency) in all puskesmas working areas
3	Giving Vitamin A	Babies, toddlers, postpartum mothers in all puskesmas working areas
4	Orientation/Training on Infant and Child Feeding (IYCF)	At the selected Community Health Center
5	Promotion of exclusive breastfeeding	All work areas
6	Assistance for Pregnant Women with KEK	Huangobotu Stunting Locus in 2021

The formulation used in the food and nutrition security composite index is carried out in several stages, namely: 1) ranking is carried out for the food and nutrition security pillar indicators. Indicators in data sets have different units of measurement, normalization is required so that they are in the same units. One of the normalization methods is ranking, this is the simplest normalization method which has the advantage of simplicity and independence from outliers. 2) weighting is carried out on the food and nutrition security pillars to obtain a total weight value (Wardani et al. 2021) . The weighting method is carried out with the weight composition of each pillar of food and nutrition security using a proxy or indicator approach based on adjusted AHP (Analytical Hierarchy Process) results.

Table 1. Minimum and Maximum Values of Stunting Index Modeling Variables

No.	Variable	Weight	Adjusted weight values
1	Hope Food Pattern/PPH	0.186	0.32
2	Energy availability level	0.269	0.40
3	Protein adequacy level	0.269	0.33
4	Babies aged <6 months who are exclusively breastfed	0.144	0.05
5	Rice price volatility	0.186	0.19
6	Proportion of consumption expenditure	0.367	0.37
7	People living above the poverty line	0.421	0.21
8	RT that has access to adequate drinking water	0.144	0.11
9	Prevalence of toddler stunting	0.643	0.21
10	Percentage of pregnant women with CED	0.357	0.14

After weighting with a proxy or approach using the AHP (Analytical Hierarchy Process) result values, then 3) determine the upper limit value (K) for each indicator which is 100, 4) standardize the score with the score formula which is the actual value (X) divided with an upper limit value (K), where score = r if r ≤ 100, score = 100 if r > 100, 5) determines the index value obtained from multiplying the weight (B) with the score (r) (Lestari, Martianto, and Tanziha 2018) . The index values obtained are then categorized into classifications so that the food and nutrition security situation can be identified with a range of values, namely food secure (≥80%), vulnerable (70%-79%), food insecure (≤70%).

The government's efforts to reduce stunting rates in Gorontalo City have had good results, but the provincial government must work harder to see that stunting growth in 5 districts is a high number and has no signs of decreasing. To ensure that intervention activities are evenly distributed to all target groups, priority locations are created based on the level of stunting prevalence in an area.

To reduce the prevalence of stunting in the city of Gorontalo, the government has determined specific nutritional interventions with priority indicators 1) coverage of KEK pregnant women who receive recovery PMT; 2) Coverage of attendance at posyandu (ratio of attendance to total target); 3) Coverage of toddlers with diarrhea who receive zinc supplementation; 4) Coverage of services for postpartum mothers; 5) Coverage of attendance at posyandu (ratio of attendance to total target). (Source: Analysis results, 2021)

The absence of proper sanitation facilities also increases cases of disease originating from bacterial contaminants such as diarrhea and worms which in turn affects the nutritional status of children. However, the standing index value often increases every year. The Gorontalo City Government has made various strategic efforts in 14 stunting locus sub-districts in 2022 through integrated action, situation analysis of the stunting reduction program, preparation of activity plans, and stunting consultations,". In each district, Germas is formed, which is the initial forum for preventing

stunting growth in each Likewise at the sub-district level, through the Community Health Centers in the sub-district area, to launch Germas which is coupled with a declaration of community-based total sanitation, so that through Germas activities spearheaded by the OPD, sub-district and sub-district governments, Germas truly becomes part of the customary culture . the daily lives of the community . So the policy that has been issued by the Gorontalo city government is considered optimal considering the number of reductions in stunting in the city of Gorontalo is quite specific.

This is done by updating the strategy with a support program for families at risk of stunting or in this case preventing it early. Starting from 2019 (28.3%), 2020 (18.5%), 2021 (12.8%), and 2022 (19.4%), the decline in the prevalence of stunting has been seen to be gradual. Efforts to overcome this problem require cross-sector collaboration through specific nutrition interventions and sensitive nutrition interventions. Specific nutritional interventions contribute 30% to overcoming stunting, while sensitive interventions contribute 70% to overcoming stunting. Specific nutritional interventions carried out by the health sector, directly on target, namely; babies, toddlers, teenagers and pregnant women, in the form of community resource health efforts (UKBM) such as; Posyandu which includes maternal and child health services, immunizations and early growth and development stimulation (SDIDTK), family development for toddlers, classes for pregnant women, giving blood supplement tablets to young women, prevention and prevention of infections and worm infections in babies and toddlers.

Another policy implemented by the government is the availability of clean water to support the daily activities of poor people. Other support, in the form of laws regarding food, also involves the role of the private sector and society, but is still not well integrated so it does not provide significant leverage in improving the nutritional status of the community. With broad policy implementation and its use, it can substantially help in the decision-making process in public policy because data availability and individual confidentiality are not required in aggregate data analysis.

CONCLUSION

Based on the research results, the index model is an evaluation of government policy as a response to stunting by looking at the composite in stages over four years. The results of the analysis accelerate stunting reduction with a long-term strategy so that specific and sensitive nutritional interventions can be optimized, and have a strong basis for making improvements according to regulations and quickly in the process of solving problems.

SUGGESTION

Sensitive nutrition intervention programs also need to be intensified combined with the use of stakeholder and cross-sector synergy support; The government is focusing more on districts that have experienced an increase in the standing index.

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