

AN IMPACT ANALYSIS OF THE STUNTING HANDLING PROGRAM IN ANAMBAS ISLANDS REGENCY IN 2023

Rahayu ^{a)}, Chrismis Novalinda Ginting ^{a)}, Sri wahyuni nasution ^{a*)}

^{a)} Universitas Prima Indonesia, Medan, Indonesia

^{*)} Corresponding Author: sriwahyuninasution@unprimdn.ac.id

Article history: received 10 October 2024; revised 21 October 2024; accepted 27 December 2024

DOI: <https://doi.org/10.33751/jhss.v8i3.11221>

Abstract. In 2013, the prevalence of stunting in Indonesia reached 34.1% and only decreased to 31% in 2022. Therefore, the Indonesian Government is targeting a reduction in the prevalence of stunting to 14% in 2024 through national policies and various programs at various levels of government. One of the areas that has a program to accelerate the reduction of stunting is the Anambas Islands Regency which has a stunting prevalence of 21.7% in 2021. This study aims to determine the impact of the implementation of the prevention and acceleration program for reducing stunting in the Anambas Islands Regency. This study is a qualitative study conducted at the Tarempa Health Center and the Siantan Selatan Health Center. Information in this study was obtained from three Key Informants (Head of the Health, Population Control, and Family Planning Office, Head of the Siantan Selatan Health Center, and Tarempa Health Center Posyandu Cadres) and four Ordinary Informants (mothers of stunted children). Data collection in this study was carried out through in-depth interviews and analyzed by triangulation and matching with secondary data. In addition, communication between implementing actors is carried out routinely through both face-to-face and online, implementation resources are well available, all implementing actors have good dispositions, and have a clear bureaucratic structure. It can be concluded that the implementation of prevention and acceleration of stunting reduction is running well and has succeeded in reducing the prevalence of stunting in Anambas Islands Regency.

Keywords: Anambas; implementation; stunting

I. INTRODUCTION

Malnutrition remains a major public health problem in many countries and is the leading cause of nearly half of child deaths worldwide.[1]. The long-term impacts of malnutrition in children are extensive, resulting in lower educational attainment, lower economic productivity, and increased risk of non-communicable diseases.[1][2].

Stunting can be defined as a form of chronic malnutrition characterized by body height that is below the curve of -2 standard deviations on the WHO standard growth chart based on age.[3][4]. Clinically, stunting can be recognized by a relatively short height compared to children of the same age.[5]. Stunting is still one of the most common nutritional problems found in poor and developing countries and is closely related to repeated infections and inadequate psychosocial stimulation.[1][6][7].

Various studies have identified various risk factors for the occurrence of *stunting*, starting from the level of education of parents to the location where the toddler lives[8].

Stunting, as a problem that arises due to malnutrition has an impact on the health status of children, both directly and indirectly, and in the short and long term, such as inhibiting children's cognitive development, thus affecting academic achievement, and ultimately affecting the child's adult life prospects.[9]. In addition, stunting can also affect a child's social and personal development. [10]. The various impacts of stunting are the reason for various organizations in the

world to initiate a global nutrition target, namely to reduce the prevalence of stunting in toddlers by 40% before 2025.[11]. In addition, the United Nations through the Sustainable Development Goals (SDG) on the second goal, the second target is committed to ending all forms of malnutrition by 2030, including stunting. However, the presence of the coronavirus disease 2019 (COVID-19) pandemic in 2020 caused efforts to achieve global nutrition improvement targets, both the 2025 nutrition target strategy and the second target of the second goal of the SDG.[11][12][13][14].

To continue to suppress prevalence and incidence *stunting* In Indonesia, in 2021, President Joko Widodo issued Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting Reduction. This Presidential Regulation targets the prevalence of stunting to be 14% by 2024.

With the prevalence *stunting* Indonesia, which is still on average decreasing by less than 1% per year since 2013 to 2022, and with the prevalence of stunting in 2022 still at the level of 30%, and the time to achieve the target set by Presidential Decree No. 72 of 2021 which is only a bout 1 year, researchers are interested in examining the implementation of the stunting prevention and handling program in Anambas Islands Regency in 2023.

II. RESEARCH METHODS

This research is a qualitative descriptive research or exploratory research with an approach *cross-sectional*. Exploratory research is a form of research used to answer the research question "how?", in this case to answer the question of how to implement the stunting prevention and handling program in Anambas Islands Regency in 2023. Meanwhile, the cross-sectional approach refers to the measurement time of the research variables, where in the cross-sectional approach, all variables are measured simultaneously over a certain period of time.[15].

This study was conducted to determine the implementation of prevention and handling programs *stunting* in Anambas Islands Regency, North Sumatra. This research was conducted for 6 months, namely the period from June 2023 to December 2023.

The object of this research is the prevention and handling program *stunting* in Anambas Islands Regency in 2023. Meanwhile, the subject (sample) in this study is the informant. Informants are individuals who have information about the object being studied. The selection of informants in this study was carried out using a non-probability selection technique, namely *purposive* Sampling. Purposive sampling is a sample/subject (informant) selection technique where researchers independently determine the samples/subjects (informants) used in the research based on the characteristics needed in the research.[15]. Unlike quantitative research that requires a certain number of samples/subjects as a representation of the population, in qualitative research, the samples/research subjects are not a representation of the population, but are selected based on their knowledge of the object being studied.

In this study, the informants used included the Anambas Islands District Health Office, Tarempa Health Center, Siantan Selatan Health Center, and parents of toddlers with *stunting* in Anambas Islands Regency.

The research instrument used in this study was an interview guide or *interview guide tools*. The use of this interview guideline tool aims to help researchers collect the data needed to answer the questions in this study. This interview guideline tool is a form consisting of the informant's identity and a list of questions that must be asked to the informant. This interview guideline tool is different from a questionnaire, where in the questionnaire the answers are filled in independently by the respondent, while the interview guideline tool helps researchers ask questions to the informant, and the informant's answers are recorded using a voice recorder.

In addition to the interview guide, other instruments used in this study were a voice recorder, camera, and stationery.

The data in this study consists of primary data and secondary data. Primary data is data obtained directly from information sources. In this study, primary data are prevention and handling programs *stunting* in Anambas Islands Regency and its implementation, both from implementers and the general public. Primary data collection in this study was conducted using in-depth interview techniques with informants by researchers. This data collection was carried out after the informant gave his/her informed consent to become an informant in this study. All conversations that occurred during the primary data collection process were recorded using a voice recorder to make it easier for researchers to compile interview transcriptions. In addition, at the end of the interview, the researcher conducted visual documentation in the form of photos of informants obtained using a camera.

Secondary data is data that is not obtained from its primary source and is generally already in the form of managed data. Secondary data in this study includes the number of cases *stunting* in Anambas Islands Regency obtained from the Anambas Islands Regency Health Service, the population of Anambas Islands Regency obtained from the website of the Central Statistics Agency of Anambas Islands Regency, as well as other data that are useful for this study.

Data processing in this study began by changing the primary data obtained from in-depth interviews into accurate transcript form (*letter to letter*). The transcript that has been arranged is then changed into a matrix form so that it becomes simpler and facilitates the analysis process. Based on the arranged matrix, keywords are determined which are then used for the triangulation process which aims to test the validity of the data obtained. Triangulation is a process of cross-checking between the data words owned, researcher observations to document reviews. In addition, source triangulation, namely cross-checking between data sources is also carried out. Source triangulation is carried out by confirming the information conveyed by the informant with colleagues who are not informants in this study. Data triangulation, both as a test of validity and source triangulation is carried out repeatedly during the data collection and data processing process, until all data provided by the informant is considered by the researcher to be in line and there is no information gap between informants so that data analysis can be carried out accurately.

Qualitative data analysis was carried out with reference to Miles, Huberman and Saldana's qualitative data analysis.[16] consisting of:

- 1) Data Condensation, which is the process of selecting, simplifying, abstracting and transforming data contained in raw data. This process is part of the data processing that has been done previously. This data condensation aims to strengthen existing data[16].
- 2) Data Presentation, namely the process of organizing and arranging information in an orderly manner so that conclusions can be drawn.[16] This data presentation process is carried out by referring to the existing matrix and keywords to describe the interaction between the matrix and keywords. With this data presentation, the collected data becomes easier to digest and understand.
- 3) Drawing and Verifying Conclusions, in contrast to quantitative research which can only draw conclusions after analyzing data, in qualitative research, researchers can make abstract conclusions along with data collection by identifying patterns, explanations, and propositions that emerge during the data collection process. However, researchers must remain open to changes in conclusions after going through the data analysis process where the final conclusion will be found.

III. RESULTS AND DISCUSSION

- 1) Stunting Prevention and Handling Policies and Programs in Anambas Islands Regency

The Anambas Islands Regency Government signed a commitment to accelerate stunting reduction in 2022 and produced regulations at the regional level in 2023 through the Anambas Islands Regent Regulation Number 23 of 2023 concerning Integrated Prevention and Acceleration of Stunting Reduction in Anambas Islands Regency and the Decree of the Regent of Anambas Islands Regency Number 987 of 2023 concerning Amendments to the Decree of the Regent Number 1553 of 2021 concerning the Coordination Team for the Acceleration of Prevention and Reduction of Stunting in Anambas Islands Regency 2022. These two regulations are the efforts of the Anambas Islands Regency government to achieve the stunting reduction target contained in Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting

Reduction which targets the prevalence of stunting to 14% in 2024.

According to Key Informant I, in Anambas Islands Regency, the main program to accelerate the reduction of stunting is through the provision of additional food: *"..providing food to toddlers and pregnant women, especially pregnant women who have chronic energy deficiency..."*

Key Informant I

Meanwhile, Key Informants II and III added that the stunting prevention and handling program in Anambas Islands Regency also consists of screening through simultaneous and routine weighing and providing supplements, vitamins, and milk for at-risk populations:

"..the program includes simultaneous weighing to prevent stunting.."

Key Informant II

"... there is a program to provide additional food for toddlers, pregnant women and also provide vitamins and milk"

Key Informant III

Meanwhile, based on the periodic report on the implementation of the acceleration of stunting reduction in Anambas Islands Regency, there are at least four programs for preventing and handling stunting in Anambas Islands Regency which are branded as Gasing Innovation (Healthy and Stunting-Free Anambas Movement), Grebek Stunting, Pinter Gasing, and eGasing.(Anambas Islands Regency Stunting Reduction Acceleration Team, 2024). The Gasing Innovation Program is a cross-sector program in the Anambas Islands Regency which consists of various efforts and interventions such as:

- a. Implementation of vaccination;
- b. Measuring and weighing toddlers at Posyandu;
- c. Supplemental feeding for pregnant women and chronic energy deficiencies;
- d. Increasing food security;
- e. Childcare education through PAUD;
- f. Sanitation and clean water; and
- g. Family Hope Program.

The Gasing Innovation Program has succeeded in significantly reducing the prevalence of stunting in Anambas Islands Regency from 15.8% in 2021 to 4.39% as of February 2024.

The Grebek (Regent/Vice Regent Movement) Stunting Program is a program where the regent or deputy regent of Anambas Islands Regency visits and provides assistance to families with stunted children directly. The implementation of this program aims to eliminate the negative stigma against stunting. The Pinter (Continuous Intensive Assistance) Gasing

Program is a flagship program of the Health, Population Control, and Family Planning Office of Anambas Islands Regency where health center officers provide intensive assistance to stunted children throughout the year. Meanwhile, the eGasing innovation is a sectoral monitoring portal for stunting in Anambas Islands Regency.

In addition, the stunting acceleration program in Anambas Islands Regency also consists of:

- a. Implementation of Community-Based Total Sanitation (STBM);
- b. Provision of blood-boosting tablets (TTD) for prospective brides and grooms (catin);
- c. Providing additional nutritional intake for pregnant women with KEK;
- d. Socialization and implementation of exclusive breastfeeding;
- e. Socialization and implementation of MPASI;
- f. Providing additional nutritional intake for toddlers;
- g. Provision of anemia status screening services for adolescent girls;
- h. Provision of postpartum family planning services;
- i. Reproductive health assistance and nutrition education for prospective fertile couples; and
- j. Toddler Family Development Class on the first 1000 days of life;

2) Actors in Implementing Stunting Prevention and Handling Policies and Programs in Anambas Islands Regency

Presidential Regulation Number 72 concerning the Acceleration of Stunting Reduction stipulates that the policy for preventing and handling stunting at the national level is directed by the Vice President and assisted according to their fields by the Coordinating Minister for Human Development and Culture, Minister of National Development Planning/Head of the National Development Planning Agency, Minister of Home Affairs, Minister of Health, Minister of Finance, Minister of Social Affairs, Minister of Villages, Development of Disadvantaged Regions and Transmigration, Minister of Religion, Minister of Public Works and Public Housing, Minister of State Secretary, and Chief of Presidential Staff, while its implementation is led by the Head of the National Population and Family Planning Agency (BKKBN).

In addition, in the implementing secretariat there are also four special fields, namely the sensitive and specific intervention service team, the behavioral change and family assistance team, the convergence and planning

coordination team, and the data, monitoring and evaluation and knowledge management team.

This information is also supported by data from Ordinary Informants who have benefited from the implementation of policies to accelerate prevention and reduce stunting in Anambas Islands Regency through Health Center officers, Koramil, Deputy Regent, Sub-district employees, and PKK mothers.

3) Evaluation of the Stunting Prevention and Handling Program in Anambas Islands Regency

Based on Presidential Regulation Number 72 of 2021, the evaluation of the stunting reduction acceleration program at the national level is carried out twice a year. (President of the Republic of Indonesia, 2021). This evaluation is generally conducted every semester or every six months, both at the national, provincial, and district/city levels.

Evaluation of the implementation of the stunting prevention and handling program at the district level in Anambas Islands Regency is carried out every six months. According to key informant II, the evaluation is carried out every month at the Tarempa Health Center:

"...we evaluate every month...what are the problems and actions that need to be improved in the following month..."

Key Informant II

This is also in accordance with the Decree of the Regent of Anambas Islands Number 1553 of 2021 concerning the Coordination Team for the Acceleration of Stunting Prevention and Reduction in 2022, which stipulates that at the secretariat level of the implementing team, evaluations through meetings are carried out at least once a month, while the Regent reports progress to the Governor at least twice a year (every six months).

4) Communication on the Implementation of the Stunting Prevention and Handling Program in Anambas Islands Regency

Presidential Regulation Number 72 of 2021 stipulates that external communication (campaign) for the implementation of the stunting reduction acceleration program is carried out every month with the support of the Ministry of Health, Ministry of Communication and Information, BKKBN, Regional Governments, and other stakeholders. In the Decree of the Regent of Anambas Islands Number 1553 of 2021 concerning the Coordination Team for the Acceleration of Stunting Prevention and Reduction in 2022, communication for the implementation of the stunting prevention and reduction acceleration program is carried out through internal meetings with a minimum

frequency of once a month, with the exception of the steering team which is regulated to report to the Governor at least twice a year.

Meanwhile, communication between the implementing actors and the implementation targets (families at risk of stunting and families with stunted children) and the wider community is carried out through visual print media (banners and posters), socialization through counseling, and through cooperation with the Anambas Islands Regency Communication and Information Service through videotron. In addition, socialization using social media is also carried out directly by the Public Health Midwife through the Anambas Islands Regency Health Program through the Facebook, Instagram, and Tiktok platforms.

However, the implementation of communication in the form of counseling and videotrons with this target population is not specifically regulated in the Regulation of the Regent of Anambas Islands Regency Number 23 of 2023 concerning Integrated Prevention and Acceleration of Stunting Reduction.

5) Resources for the Implementation of the Stunting Prevention and Handling Program in Anambas Islands Regency

Presidential Regulation Number 72 of 2021 and Anambas Islands Regent Decree Number 1553 of 2021 do not regulate the addition of human resources allocated for the stunting reduction acceleration team, either at the national, provincial, district/city, or village levels. According to all Key Informants, until the time this research was conducted, there were no additional human resources assigned to the Health Center or Sub-district to carry out the stunting prevention and handling program.

In the Health Center, this implementation involves all existing human resources in the Health Center such as the health promotion section, environmental health, integrated health posts (posyandu) (and cadres), and other human resources. In addition, according to the Decree of the Regent of Anambas Islands Number 1553 of 2021, other government elements also participate in the implementation of the prevention and acceleration program for reducing stunting in the Anambas Islands Regency, such as sub-district, village, and sub-district officers. However, the role of each of these actors differs based on their respective fields.

In terms of funding, the implementation of the prevention and acceleration program for reducing stunting in the Anambas Islands Regency utilizes the Non-Physical Special Allocation Fund and the Regional Revenue and Expenditure Budget. In 2023, the budget for the prevention and acceleration program for reducing stunting in the Anambas Islands Regency is

IDR 17,747,892,794, where the majority of the budget (IDR 13,998,635,152) is funds used by the Health, Population Control, and Family Planning Office of the Anambas Islands Regency. This budget is a budget outside of the Health Operational Assistance Fund obtained by the Health Center from the Riau Islands Provincial Government and the Ministry of Health.

6) Discussion

Stunting is considered by the Indonesian Government as one of the threats to the prospects of the demographic bonus and Golden Indonesia 2045. In an effort to control the problem of stunting, the Indonesian Government has included the acceleration of stunting reduction in the RPJMN (National Medium-Term Development Plan) 2020-2024. (President of the Republic of Indonesia, 2020). In addition, as a legal basis for the implementation of accelerated stunting reduction in Indonesia, President Joko Widodo issued Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting Reduction (President of the Republic of Indonesia, 2021). These two regulations are the legal basis for the preparation of strategies and programs to accelerate the reduction of stunting and prevent stunting in Indonesia which are used by various state institutions/ministries and local governments in Indonesia.

Based on data from the 2023 Indonesian Health Survey, the prevalence of stunting in Indonesia in 2023 was around 12.9%, while the prevalence of severe stunting was around 5.4%. (Health Development Policy Agency, 2023). This figure has decreased significantly from the data in the 2022 Indonesian Nutritional Status Survey which found that the prevalence of stunting in Indonesia consistently decreased from 27.7% (2019) to 24.4% (2021) and then to 21.6% (2022) (Ministry of Health of the Republic of Indonesia, 2022). The acceleration of this decline is very significant and has achieved the target of reducing the prevalence of stunting as set out in Presidential Regulation Number 72 of 2021, namely 14% in 2024. (President of the Republic of Indonesia, 2021).

In general, the implementation of the stunting prevention and acceleration reduction program in Anambas Islands Regency has been going well, which is marked by the achievement of a decrease in the prevalence of stunting in Anambas Islands Regency from 21.7% before the formation of the Anambas Islands Regency Stunting Reduction Acceleration Team to 12.2% at the end of 2023. This success was achieved through effective and efficient communication between implementing actors, adequate resources, excellent disposition of all actors, and a clear bureaucratic structure. Despite the success of the program that has

been carried out by the Anambas Islands Regency Government in an effort to accelerate stunting reduction in Anambas Islands Regency, it should be noted that the implementation of the existing program still has shortcomings, marked by the fact that there are still implementing actors who do not know the programs for preventing and accelerating stunting reduction in Anambas Islands Regency. One way to overcome this problem is by conducting training and education for implementing actors to improve the knowledge and abilities of implementing actors in carrying out existing programs. With increased knowledge and abilities, it is believed that the acceleration of stunting reduction in Anambas Islands Regency can be even better.

IV. CONCLUSIONS

The program for preventing and accelerating the reduction of stunting in Anambas Islands Regency consists of: Spinning Top Innovation: Implementation of vaccination, Measuring and weighing toddlers at Posyandu, PMT for pregnant women and KEK, Increasing food security, Childcare education through PAUD, Sanitation and clean water, Family Hope Program (PKH), Stunting Raid (visit by Regent/Deputy Regent), Pinter Gasing (Intensive and Continuous Mentoring), eGasing (online portal for stunting monitoring). The prevalence of stunting in Anambas Islands Regency in 2023 was 12.2%. Communication between actors implementing the stunting prevention and handling program in Anambas Islands Regency is currently carried out routinely using various communication media such as print media (posters and banners), electronic communication (Whatsapp, Zoom, social media, videotron), and routine meetings (per month and semester). The resources for implementing the stunting prevention and handling program in Anambas Islands Regency are currently quite adequate, both in terms of human resources and budget. The disposition of the actors implementing the stunting prevention and handling program in Anambas Islands Regency is very positive and responsive, but the disposition of the target community for the stunting prevention and handling program is still lacking. The bureaucratic structure of the implementation of the stunting prevention and handling program in the Anambas Islands Regency is currently good, which is indicated by the existence of SOPs for handling and reporting stunting as well as fragmentation of policy implementation. The current obstacle to implementing prevention and acceleration programs for reducing stunting in the Anambas Islands Regency is the lack of public awareness regarding existing programs.

REFERENCES

[1] Black, R.E. et al. (2013) "Maternal and child undernutrition and overweight in low-income and middle-income countries," *Lancet* (London, England),

- 382(9890), p. 427–451. Available at: [https://doi.org/10.1016/S0140-6736\(13\)60937-X](https://doi.org/10.1016/S0140-6736(13)60937-X).
- [2] Murray, C.J.L. et al. (2020) "Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019," *The Lancet*, 396(10258), p. 1223–1249.
- [3] Quamme, SH and Iversen, PO (2022) "Prevalence of child stunting in Sub-Saharan Africa and its risk factors," *Clinical Nutrition Open Science*, 42, p. 49–61. Available at: <https://doi.org/https://doi.org/10.1016/j.nutos.2022.01.009>.
- [4] Wulandari, RD et al. (2022) "The Targets for Stunting Prevention Policies in Papua, Indonesia: What Mothers' Characteristics Matter?," *Nutrients*, 14(3), pp. 1–10. Available at: <https://doi.org/10.3390/nu14030549>.
- [5] Bailey, RL, West, KP and Black, RE (2015) "The epidemiology of global micronutrient deficiencies," *Annals of Nutrition and Metabolism*, 66, p. 22–33. Available at: <https://doi.org/10.1159/000371618>.
- [6] Prendergast, AJ and Humphrey, JH (2014) "The stunting syndrome in developing countries." *Paediatrics and international child health*, 34(4), p. 250–265. Available at: <https://doi.org/10.1179/2046905514Y.0000000158>.
- [7] de Onis, M. and Branca, F. (2016) "Childhood stunting: A global perspective," *Maternal and Child Nutrition*, 12, pp. 12–26. Available at: <https://doi.org/10.1111/mcn.12231>.
- [8] Suratri, MAL et al. (2023) "Risk Factors for Stunting among Children under Five Years in the Province of East Nusa Tenggara (NTT), Indonesia," *International Journal of Environmental Research and Public Health*, 20(2). Available at: <https://doi.org/10.3390/ijerph20021640>.
- [9] Chowdhury, TR et al. (2020) "Factors associated with stunting and wasting in children under 2 years in Bangladesh," *Heliyon*, 6(9), p. e04849. Available at: <https://doi.org/10.1016/j.heliyon.2020.e04849>.
- [10] Setianingsih et al. (2020) "Impact of Stunting on Development of Children Aged 12–60 Months," *27(ICoSHEET 2019)*, pp. 186–189. Available at: <https://doi.org/10.2991/ahsr.k.200723.047>.
- [11] World Health Organization (2014) *Global Nutrition Target 2025: Stunting Policy Brief*. Geneva: World Health Organization. Available at: <https://doi.org/10.7591/cornell/9781501758898.003.0006>.
- [12] Development Initiatives (2020) *2020 Global Nutrition Report: Action on Equity to End Malnutrition*, Global Nutrition Report. Bristol: Development Initiatives Poverty Research Ltd. Available at: <https://globalnutritionreport.org/reports/2020-global-nutrition-report/>.
- [13] Headey, D. et al. (2020) "Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality.," *Lancet* (London, England), 396(10250), p. 519–521.

Available at: [https://doi.org/10.1016/S0140-6736\(20\)31647-0](https://doi.org/10.1016/S0140-6736(20)31647-0).

- [14] United Nations Development Program (2022) End hunger, achieve food security and improved nutrition and promote sustainable agriculture, Goals. Available at: <https://sdgs.un.org/goals/goal2> (Accessed: 6 June 2023).
- [15] Notoatmodjo, S. (2019) Health Research Methodology. 4th edition. Jakarta: Rineka Cipta.
- [16] Miles, MB, Huberman, AM and Saldana, J. (2014) Qualitative Data Analysis: A Methods Sourcebook. 3rd editio. Thousand Oaks: Sage Publications.