



## POLICY ANALYSIS OF BUDGET UTILIZATION IN STUNTING PROGRAMS BASED ON DISTRICT HEALTH ACCOUNT

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### ABSTRACT

Stunting, a chronic nutritional issue with significant impacts on the quality of human resources, remains a major health challenge in Indonesia. This study analyzes the policy on budget utilization for stunting programs based on the District Health Account (DHA) to enhance the effectiveness and efficiency of health financing. The research was conducted at the Aceh Jaya Health Office, Aceh Province, using a quantitative method with a comparative program evaluation approach. Data were collected through a review of stunting budget documents from 2017 to 2023 and direct observations of budget distribution. The findings reveal an increasing trend in the stunting budget since the implementation of the stunting reduction acceleration policy in 2020, peaking at IDR 5.316 billion in 2023. Prior to this policy, budget allocations were fluctuating and lacked clear priorities. The use of DHA provided a comprehensive overview of financial flows, funding sources, and their utilization. DHA also identified that most funds were allocated to indirect activities, such as maternal health management and community nutrition, while direct allocations for stunting patients tended to decrease. This study supports the effectiveness of DHA in optimizing budget allocation for stunting programs, ensuring more targeted use of funds, and improving financing efficiency. DHA has the potential to become a critical instrument for local governments in data-driven budget planning to achieve the national stunting prevalence target of 14% by 2024.

Keywords: budget policy; district health account; public health; stunting

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## INTRODUCTION

Stunting is a linear growth disorder indicating poor nutritional status, characterized by short or very short stature due to malnutrition (Nasikhah & Margawati, 2019). This condition can hinder brain development, leading to long-term consequences such as mental delays, reduced learning ability, and an increased risk of chronic diseases such as diabetes, hypertension, and obesity (Ministry of Health of the Republic of Indonesia, 2023). According to the Global Nutrition Report (2016), Indonesia ranked 108th out of 132 countries in terms of stunting prevalence. Data from the 2019 Indonesian Toddler Nutritional Status Study (SSGBI) showed that the stunting prevalence in Indonesia reached 27.67%, meaning approximately 8 million children experienced growth disorders, or 1 in 3 children suffered from stunting. Based on the pocketbook summary of the 2022 Indonesia Nutrition Status Survey (SSGI) from the Ministry of Health of the Republic of Indonesia (2023), the stunting prevalence decreased to 21.6% compared to 24.4% in 2021. However, the prevalence of wasting and underweight increased in 2023 to 7.7% and 17.1%, respectively, compared to the previous year.

The issue of stunting has a significant impact on the quality of human resources, which are a critical asset for a nation. Its negative effects include lower intelligence levels, cognitive impairments, reduced productivity, and an increased risk of diseases, all of which cumulatively contribute to long-term economic losses for Indonesia (Trihono et al., 2019). Research indicates a negative correlation between the prevalence of malnutrition among toddlers and the Regional Gross Domestic Product (RGDP), suggesting that higher

malnutrition rates are associated with lower RGDP values in a given area (Kusumawardhani & Martianto, 2011). According to the monitoring report by the Task Force for Accelerating Stunting Reduction, the budget absorption or realization rates in regions with moderate to high stunting prevalence remain relatively low (Susilo, 2024). These findings highlight the need for accelerated measures to optimize budget utilization and the implementation of stunting case audits, ensuring the stunting prevalence target of 14% by 2024 can be achieved (Sitepu, 2023).

Research by Samsudin et al. (2023) in Central Java revealed that the IFE matrix score for regions with high stunting reduction reached 2.61, higher than the score for regions with low stunting reduction, which was 1.86. The key factors driving accelerated stunting reduction in high-performing regions included support for local policies and regulations (0.225), strong leadership commitment (0.211), priority programs or innovations (0.197), and effective coordination (0.197). Meanwhile, in low-performing regions, the main supporting factors were adequate funding (0.180), support for local policies and regulations (0.169), effective coordination (0.169), and strong leadership commitment (0.154). In reality, various issues persist regarding healthcare financing at the district/city level. These include a disproportionate allocation of budgets toward physical infrastructure, insufficient funding for operational needs, and delays in budget disbursement from the government. The challenge ahead lies in how health sector planners can develop plans based on data and evidence. However, to date, the planning process at health offices still faces limitations in financial information, including details on funding sources, their utilization, and the beneficiaries (Sugianto, 2021). The Health Account provides a systematic overview of the flow of funds used for the consumption of goods and services in healthcare. Its primary objective is to offer an expenditure perspective to better understand health systems. One of its main focuses is to produce reliable and timely data, enabling comparisons across countries and periods. This data is crucial for monitoring healthcare spending trends, which can serve as the basis for future growth projections (OECD, 2019). Additionally, the Health Account functions to compare the roles and contributions of various entities, such as government agencies, the private sector, and health insurance companies, in delivering essential services (Zakeri et al., 2015). This study aims to analyze the policy of budget utilization for stunting programs based on the District Health Account.

## **METHOD**

The research employed a quantitative method or quantitative design with a comparative program evaluation approach using DHA. The population for this study consists of all stunting budget documents from 2017 to 2023. This study was conducted by the Aceh Jaya Health Office in Aceh Province from January to March 2024. The data collection process in this study was carried out using documentation study techniques by reviewing the Budget Implementation Documents (BID) and/or reports on the realization of funding for the stunting health program. Additionally, direct observation was conducted, where the researcher gathered data through direct observation of the distribution of the budget for the acceleration of stunting reduction in the study area.

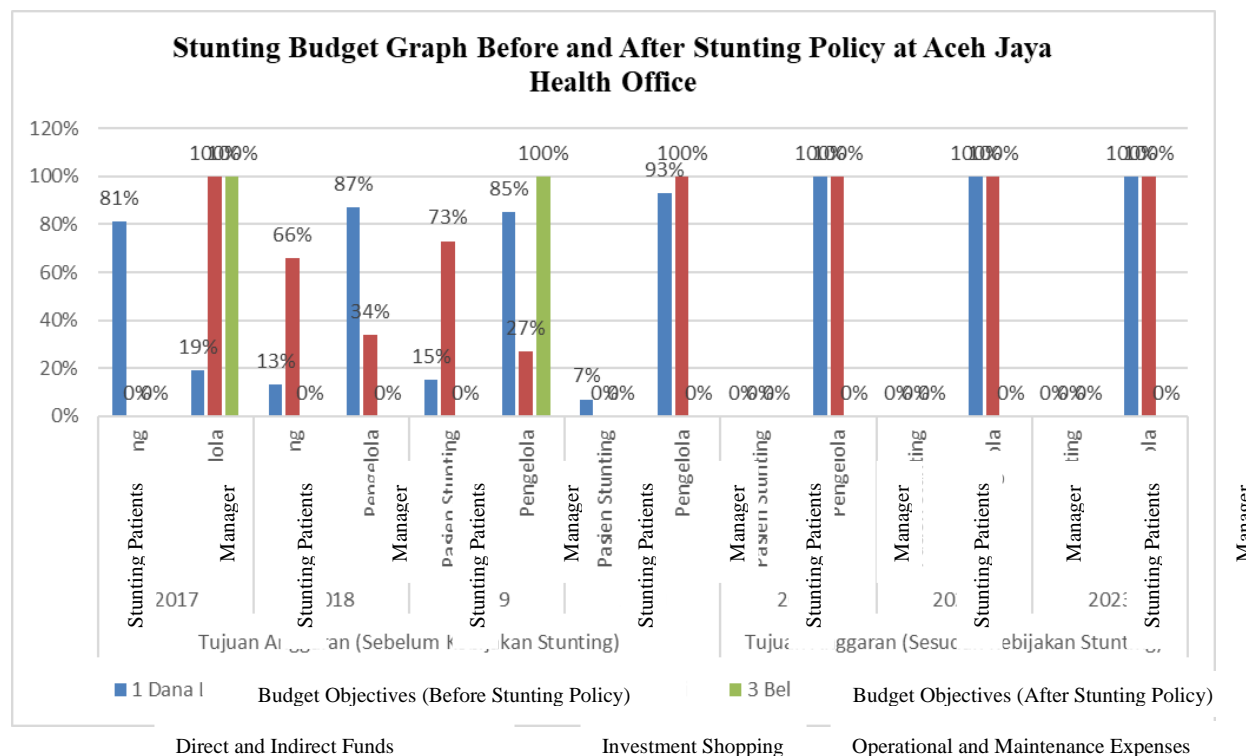
## **RESULT**

Table 1 shows that the total stunting budget before the stunting policy was Rp. 2,307 million, and the total stunting budget after the stunting policy was Rp. 11,071 million. The difference in the budget before and after the implementation of the stunting policy is Rp. 8,763 million.

Table 1.

**Amount of stunting budget before and after stunting policy**

Stunting Budget Before Stunting Policy		Stunting Budget After Stunting Policy		Budget Difference (Million)
Year	Budget (Million)	Year	Budget (Million)	
2017	Rp. 1.012	2021	Rp 1.276	Rp 264
2018	Rp. 174	2022	Rp 4.478	Rp 4.304
2019	Rp. 329	2023	Rp 5.316	Rp4.987
2020	Rp 792			Rp4.524



Graph 1. Stunting budget before and after stunting policy

Graph 1. shows that the distribution of the budget for stunting reduction and healthcare services from 2017 to 2023 reflects a shift in allocation priorities. In 2017, most of the budget was allocated for supplementary feeding for stunting patients (73%), and this allocation continued to decrease until 2023, when the entire budget was allocated for healthcare services management, with no direct allocation for stunting patients. A similar trend occurred with investment funds, where in 2018 and 2019, most of the budget was allocated for the formation of PMT Warung Balita Sehat, but from 2020 to 2023, these funds were entirely redirected to manage healthcare for pregnant women and community nutrition. Operational funds, previously used for providing medicine and nutrition facilities from 2017 to 2019, were no longer allocated after 2020, due to the merging of investment and operational budgets into one integrated allocation.

## DISCUSSION

The results of the DHA analysis show that before the stunting policy was implemented, the budget allocated by the government fluctuated each year. This is evident from the budget reduction in 2018 compared to 2017, followed by an increase in 2019, although the amount was much smaller than the 2017 budget. After the implementation of the stunting policy, the budget for stunting reduction increased each year since 2020, with the largest allocation in 2023. The research results also show that the allocation of funds for stunting reduction has increased over the past seven years. In 2017, the allocation for stunting reduction was IDR 1,012 million, but in 2018, this budget decreased to IDR 174 million. In 2019, the budget

increased again to IDR 329 million and continued to rise starting from IDR 792 million in 2020, IDR 1,276 million in 2021, IDR 4,478 million in 2022, and IDR 5,316 million in 2023. This increase in the budget is closely related to the issuance of Presidential Regulation No. 72 of 2021 on the Acceleration of Stunting Reduction, which is a regulation that governs the acceleration of stunting reduction in Indonesia.

The results of this study are in line with the research conducted by Ishtara (2021) which shows that DHA at the district level can assess the adequacy, accuracy of allocation, and effectiveness of health financing as a basis for setting funding policy priorities for the following fiscal years. The study by Lestari (2018) also shows that DHA can illustrate the use of the HIV/AIDS prevention program budget, with the budget absorption for early detection of HIV/AIDS amounting to IDR 1,031 million, and the HIV/AIDS prevention program absorbing IDR 1,976 million. The majority of the budget allocation was directed toward indirect programs at the district/city level. The stunting reduction budget from the state budget is channeled through the Provincial-District/City Governments according to their authority for related activities (Fazriyah et al., 2024). This budget allocation is expected to be part of an orchestration with local government funds to reduce stunting (Indonesia, 2024). As more regions receive interventions from the central government to address stunting, local governments are expected to handle stunting more optimally in their respective areas, integrating and collaborating to reduce the prevalence of stunting in Indonesia as part of efforts to achieve an Advanced Indonesia (Sumanti, 2024). The budget identification process for the stunting program can be carried out using DHA (M. Susanti et al., 2025).

The District Health Account (DHA) is implemented to assess the adequacy of health funding, the accuracy of budget allocation, and the effectiveness of health financing conducted by local governments, with the goal of improving public health (Lestari, 2018). Thus, DHA can serve as a legitimizing tool for stakeholders at the district/city level to determine the direction of health financing policy planning (Fazriyah et al., 2024). The DHA is independent and unbiased, meaning it cannot be influenced by any one structure of health financing, as it provides a detailed analysis of both government and private sector aspects (Sari, 2016). At the district/city level, the DHA instrument can be used to provide a comprehensive overview of funding status, the availability of funds, and how those funds are utilized in practice—whether they align with priorities and are used efficiently at the district or city level (Indrayathi & Hardy, 2018). DHA follows the principles of Health Account (HA), which involves identifying the financing accounts within a health program that are then analyzed and used as a basis for evaluation in the allocation and utilization of healthcare costs in a region (Ishtara, 2021). The HA approach can be used in the process of recording health fund flows, which are documented comprehensively, systematically, and consistently within a health system in a specific region. This approach traces the sources and flow of funds within a health system for a given year and region (A. I. Susanti et al., 2019).

The budget allocated for direct and indirect activities from 2017 to 2023 in Aceh Jaya Regency is larger compared to the budget allocation for investment and operations. The lack of difference in the multivariate analysis results also occurred because the budget for investment and operations increased from 2017 to 2023, similar to the increase in the budget allocation for direct and indirect activities. The increase in the budget for stunting reduction is in line with the rising incidence of stunting based on the data obtained. In 2016, 207 children experienced stunting, which increased to 540 in 2017, and further rose to 636 in 2018. There was a slight decrease in 2019, with 507 children affected, but the number sharply increased in 2020 due to a nutrition survey conducted by the Aceh Jaya District Government through the Health Office. In 2021, several programs and activities were implemented, one of which was

the formation of the Community Movement for Stunting Reduction through the Gampong Nutrition House, which became an instrument for the Aceh Jaya District Government to reduce the stunting incidence among children, which reached 643 children in 2023.

The results of the study conducted by Armahedi et al. (2020) show that based on the DHA analysis, the funding sources for the Maternal and Child Health Program in Jember District predominantly come from the Regional Revenue and Expenditure Budget, with most of the funds sourced from the General Allocation Fund and the Special Allocation Fund. The budget management and service delivery are mainly handled by the Health Office, while the largest health function is patient transportation and emergency services, which are used for patient referrals. The largest health program is the health system strengthening program, which serves as a supporting function. Most of the activities carried out are indirect activities, and the spending pattern is primarily allocated to investment expenditures, with the majority of activities conducted at the village level. Moreover, the age group that benefits the most is not distinctly categorized, meaning that both the productive age group, as well as infants and toddlers, receive the benefits of the same activities.

Armahedi et al. (2020) in their study also state that the spending pattern for each health program is primarily allocated to investment expenditures, with the largest expenditure in the planning and procurement programs. As a result, operational spending for the Community Health Efforts and Individual Health Efforts programs is very limited. The largest health program and the primary beneficiaries are the health system strengthening program, which targets an age group that is not specifically categorized. Therefore, the Maternal and Child Health Program, which is part of the Community Health Efforts and Individual Health Efforts programs, and targets specific age groups, has not been implemented optimally. The budget items for the Maternal and Child Health Program are largely prioritized for investment expenditures in indirect activities, leading to very limited operational spending for direct activities, which negatively impacts the program's performance. According to the researcher's assumption, DHA can outline and map budget usage to make it more effective, efficient, and targeted. In designing the budget plan, DHA can serve as a tool to achieve goals, particularly in strategic programs that can improve public health and well-being, such as the acceleration of stunting reduction in Indonesia.

## **CONCLUSION**

The implementation of the District Health Account (DHA) is effective in mapping the allocation and use of the budget for stunting reduction programs in Indonesia. Before the acceleration policy for stunting reduction was implemented, the budget allocation was fluctuating, with unclear priorities. However, after the policy was applied, there was a significant increase in the budget each year, peaking in 2023, with a focus on managing public nutrition health services. The District Health Account can be maximized as an instrument by the government in planning future budgets, which has previously only been analyzed using Microsoft Excel without fully utilizing the DHA.

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