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## Optimizing Stunting Prevention and Handling Programs in Sinjai Regency

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### Keyword:

Optimization;  
Prevention; Handling;  
Prevalence; Stunting.

**Abstract:** The problem of stunting is still a serious challenge in public health development in Indonesia, especially in areas with high prevalence such as Sinjai Regency. This study aims to evaluate the implementation of stunting prevention and handling programs comprehensively, including the effectiveness of regional policies, inter-sector coordination, and community participation. This research uses qualitative research methods, data collection is carried out through interviews, documentation, field observations, and Focus Group Discussion. The results of the study show that the implementation of the program is still not optimal. In terms of weak cross-sector coordination, low understanding of the Sinjai Regent Regulation Number 40 of 2021 at the implementing level, limited training of posyandu cadres, and an optimal child growth monitoring system. This shows the inequities between policy design and the realities of implementation on the ground. This study concludes that the optimization of stunting programs must be carried out through strengthening coordination across OPDs, integration of information systems, revitalization of cadre training, and active involvement of community leaders. A participatory approach based on local socio-culture has been shown to be effective in increasing public acceptance of government programs. The novelty of this research lies in an integrative approach that brings together policy evaluation, technical implementation, and social dynamics of the community in a single analytical framework based on the local context. These results are expected to be a reference in the formulation of stunting policies that are more adaptive and sustainable at the regional level.

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## 1 Introduction

Stunting is an emerging public health problem characterized by impaired growth and development in children, mainly due to chronic malnutrition and inadequate nutritional intake during the critical period of infants and early childhood. Every year, millions of children around the world suffer from stunting, which adversely affects their physical and cognitive development, leading to lifelong consequences. Based on Regent Regulation Number 40 of 2021 concerning Prevention and Handling *Stunting* in Sinjai Regency, as well as many factors that contribute to the prevalence of stunting, including dietary practices, maternal education, socioeconomic status, sanitation, and access to health services. Research Highlights The importance of education and knowledge of mothers in preventing stunting. Mothers with higher educational attainment tend to adopt healthier parenting practices and have a better understanding of nutritional needs during pregnancy and early childhood. This maternal knowledge influences feeding practices and health behaviors that are critical in stunting prevention, as illustrated in research conducted in a variety of contexts, including developing countries in Africa and Asia (Ningsih et al., 2024) (Erhamwilda et al., 2024).

In addition to the influence of the mother, socioeconomic factors play an important role in determining the nutritional status of children. Economic constraints often limit access to nutrient-rich foods, leading to inadequate food intake that contributes to stunting. The prevalence of stunting is disproportionately higher among poor households, as evidenced by several studies that show a direct correlation between economic status and child nutrition (Uwiringiyimana et al., 2019)(Bahru et al., 2020)(Galasso & Wagstaff, 2019). Lower household incomes and food insecurity have been cited as major contributors to malnutrition and stunting in various regions, such as Nigeria and Ethiopia (Bahru et al., 2020)(Galasso & Wagstaff, 2019). Another important element in overcoming stunting is the integration of nutrition interventions with sanitation and health programs. Studies have shown that interventions aimed at improving water, sanitation, and hygiene (WASH) conditions significantly impact children's health outcomes, including stunting rates. The integration of these components not only addresses food shortages but also the environmental causes of malnutrition, thus presenting a multi-pronged approach to combating stunting (Kumar & Lakhtakia, 2021).

Nutritional problems in toddlers are still a major problem in the population order. Nutritional problems in toddlers include stunting, wasting and overweight (Afandi et al., 2023). Nutritional status is one of the factors that plays a very important role in the quality of human resources, especially related to intelligence, productivity and creativity. (Laksono et al., 2024). *Stunting* occurs from the moment the fetus develops in the womb. Mothers who are malnourished will have the potential to give birth to babies who develop with the condition *stunting* (Aswi et al., 2024). When the baby is born, the baby will not be seen *stunting*, but when he was two years old *stunting* will be visible to the child. Not only does it inhibit the growth of the body, *stunting* also affects children's cognitive abilities(Garina et al., 2024). Furthermore, *stunting* can be life-threatening if left untreated without special treatment to improve the condition. In infants, efforts to prevent *stunting* done while still in the womb until two years old (Hamzah et al., 2025).

In areas with high stunting rates, such as parts of Southeast Asia and Africa, traditional feeding practices often include monotonous diets that lack diversity and essential nutrients. Studies show that inadequate complementary feeding practices, in which children under two years of age receive a diet of low energy and poor nutrition, contribute significantly to stunting (Elysée et al., 2018). In addition to socioeconomic and educational factors, environmental determinants, such as the spatial distribution of health services and community involvement in nutrition initiatives, must be considered. Research shows that local approaches tailored to community needs and environmental conditions increase the effectiveness of stunting prevention strategies. Geospatial

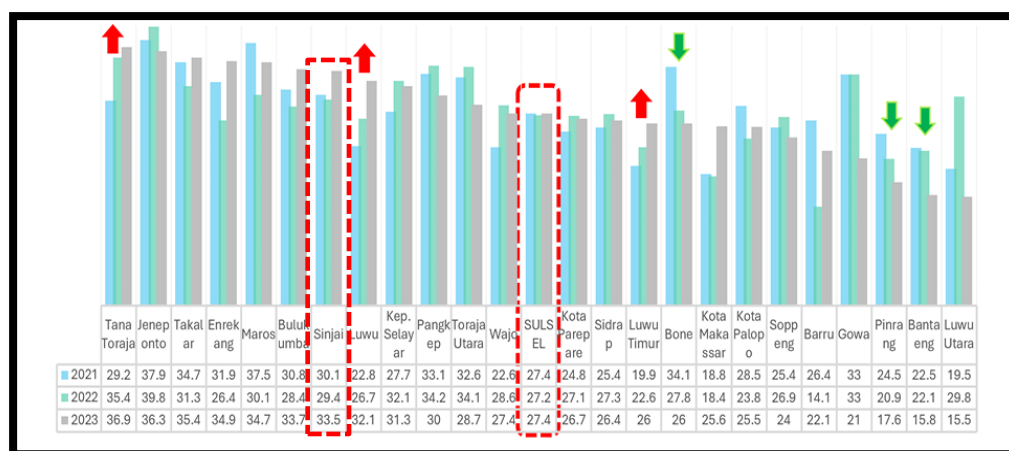
analysis has identified areas with a higher prevalence of stunting, enabling targeted interventions that address specific regional challenges such as accessibility to clean water, health facilities, and nutritious food sources (Aheto & Dagne, 2021).

Malnutrition for a long time occurs from the fetus in the mother's womb to the beginning of the life of babies and toddlers from 0-23 months 1000 days of life experienced *stunting*, This must be maintained both nutrition and external factors that affect stunting in the first 1000 days of life (Yuhan et al., 2024). Fertilization or pregnancy plus the age of 2 years of toddlers is when stunting must be prevented and treated with the fulfillment of other nutrients (Suryadinata et al., 2024). According to WHO, stunting is still often found in developing countries, one of the developing countries, namely Indonesia. Visually, stunting can be seen from the state of a child's body that experiences stunted growth so that it becomes short or even very short (Putri et al., 2024). Condition *stunting* This leads to poor cognitive ability, low productivity, and increased risk of disease resulting in long-term losses to the Indonesian economy (Rosalia et al., 2022).

Previous research indicates that a multisectoral approach is crucial in reducing the prevalence of stunting. (J et al., 2024) emphasized that the success of the program is highly dependent on the integration of specific and sensitive nutrition interventions involving the Health, Education, Social, and Community Empowerment Offices. Meanwhile, (Afandi et al., 2023) found that although various interventions such as supplementary feeding (PMT), nutrition education, and counseling have been carried out regularly, uneven distribution of resources and low cadre capacity are major challenges in the field. These studies underscore the importance of optimizing program management, including cross-sectoral planning, rigorous monitoring, and community empowerment as active partners in stunting prevention. The urgency of this research is further strengthened by the emergence of new dynamics after the COVID-19 pandemic. (Narayan, 2021) noted that the pandemic has worsened access to basic health services such as monitoring the growth and development of toddlers and nutritional services for pregnant women. The decline in the rate of exclusive breastfeeding, delays in complementary feeding, and increased economic pressure on families cause stunting risk factors to become more widespread. Therefore, it is important to review the effectiveness of existing programs and adjust implementation strategies to be more adaptive to post-global health crisis conditions.

Based on the results of the Indonesian Health Survey (SKI), the prevalence of the Indonesian population experiencing malnutrition (stunting) in 2023 is 21.5 percent. This figure is still far from the target of the 2nd SDGs, which is 14 percent by 2030. Even so, this figure has decreased quite significantly when compared to the last 10 years, namely in 2013 the prevalence of stunting reached 37.2 percent. Meanwhile, at the provincial level, the stunting prevalence rate in South Sulawesi in 2023 is 27.4 percent. This figure is greater than the stunting rate at the national level. This figure tends to be stable in the last 3 years, in 2021 the stunting rate was also 27.4 percent. Meanwhile, in Sinjai district, there will be an increase in 2023 of 33.5 as per the data contained in the figure below:

**Figure 1: Stunting Prevalence Data Trends by Regency/City of South Sulawesi Province, 2021–2023**



Source: Semester 1 Report of the South Sulawesi Province Stunting Reduction Acceleration Team (2024)

Based on the data above, this research is very important to be carried out in order to provide an impact and solutions to the government in overcoming the problem of stunting prevalence in Sinjai Regency. Of course, the government must work hard to achieve the SDGs target in 2030, which is up to 14 percent and break the poverty chain through stunting alleviation. And the main problem is that the prevalence of insufficient food consumption is still quite high, as well as the non-optimal implementation of stunting prevention and handling programs in Sinjai Regency. From these problems, the researcher formulated the problems in this study are, first, what are the government's efforts and strategies in reducing the prevalence of stunting in Sinjai Regency?, second, what are the government's actions and policies in preventing and handling stunting in Sinjai Regency?. The implications of this study provide an in-depth understanding of the problem of stunting prevalence and provide recommendations to local governments to make strategic and effective policies and actions in handling stunting.

## 2 Research Methods

In this study, it examines the optimization of government policies, government strategies, and the effectiveness of stunting programs using qualitative research methods to obtain data and an in-depth understanding of the Optimization of Stunting Prevention and Handling Programs in Sinjai Regency. Data collection was carried out through interviews, documentation, field observations, and Focus Group Discussions (FGD) (Creswell, 2024). The key informant interviewed was the Sinjai District Health Office, which had extensive knowledge and experience related to the issue being researched. In addition, data is also collected from official documents and direct observations in the field to gain a comprehensive understanding. The use of Vosviewer analysis tools facilitates comprehensive and systematic data analysis.

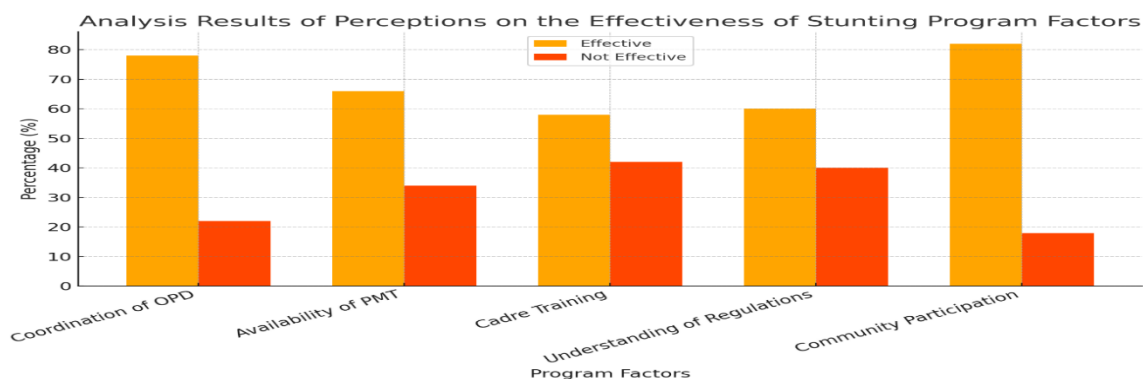
Triangulation validation is an important step in ensuring the validity and reliability of research findings. By combining various data sources from interviews, documentation, observations, and FGDs, this study ensures the consistency and accuracy of the analysis results. The triangulation validation process also involves comparing and aligning findings from different data sources to strengthen the reliability of the interpretation of the results (Creswell, 2024). Through this systematic approach, it is hoped that this research will provide an in-depth understanding of the Optimization of Stunting Prevention and Handling Programs in Sinjai Regency and produce

relevant and effective policy recommendations. The results of the research obtained are then compiled to be reported to inform the progress of the research results.

### 3 Results and Discussion

The results of the study show that the implementation of stunting prevention and handling programs in Sinjai Regency has undergone various strategic efforts, both through specific and sensitive nutritional intervention approaches. However, in its implementation in the field, there are still a number of obstacles that hinder the effectiveness of the program as a whole. Data from official documents and in-depth interviews with health office officials, posyandu cadres, and community leaders reveal that there is still a gap between the policies formulated and the technical implementation at the village and sub-district levels. One of the important findings is that understanding of the substance of Regent Regulation No. 40 of 2021 is still limited to the structural level of the agency, while technical implementers in the field such as village midwives, posyandu cadres, and community leaders have not fully understood the content of the regulation. This causes the intervention program to not run uniformly between regions. Some villages are active in carrying out activities, such as nutritional counseling and routine check-ups of toddlers, but others experience stagnation due to low initiative and lack of escort from technical OPDs. The following are the results of data analysis based on Focus Group Discussion (FGD) in the stunting prevention and handling program in Sinjai Regency.

**Figure 1. results of data analysis based on Focus Group Discussion (FGD)**



From the graph and table above, it can be seen that the community participation factor has the highest level of effectiveness perception, which is 82%, followed by OPD coordination (78%) and the availability of PMT (65%). Meanwhile, cadre training and regulatory understanding obtained lower levels of effectiveness, at 58% and 60%, respectively, indicating the need for technical capacity building and policy socialization at the implementation level.

From the aspect of cross-sector coordination, it was found that the communication forum between Regional Apparatus Organizations (OPD) such as the Health Office, the Social Service, and the Women's Empowerment and Child Protection Office (DP3AP2KB) is still administrative and has not touched synergy in planning and program execution in the field. Some OPDs admitted that they are still working within a sectoral framework and do not yet have a joint action plan based on cross-sector data. This is strengthened by the findings of a document study that shows that there is no integrated reporting system between agencies regarding stunting intervention data. Information from health workers indicates a decrease in exclusive breastfeeding coverage and an increase in the number of undernourished toddlers during the pandemic. The system's unpreparedness to adapt to emergencies shows the weak flexibility of regional policies in dealing with crisis situations.

In addition, challenges also arise in terms of budget availability and distribution. Most of the informants stated that the funds allocated for stunting activities are often disproportionate to the real needs in the field. The budget is more focused on ceremonial activities or initial socialization,

but there is minimal program oversight and long-term monitoring. This shows that the planning and budgeting aspects have not been systematically identified based on field needs. Another important factor is the capacity and workload of posyandu cadres. The results of field observations and in-depth interviews show that cadres are often the spearhead of program implementation, but are not supported by ongoing training and proper incentives. Some cadres said that their motivation decreased due to the high workload without adequate technical support. This condition risks reducing the effectiveness of community-based interventions that should be the main foundation in stunting control.

Key Indicators	Target Program	Actual Reach	Gap	Policy Analysis & Implications
<b>Stunting Prevalence (%)</b>	14%	33,5%	-19,5%	There will be an increase in 2023 and 2024. Therefore, it is necessary to increase cross-sector integration, especially in areas with high prevalence. So that the target can be depressed in accordance with the program target.
<b>Nutrition Monitoring News (%)</b>	100%	85%	-15%	The achievement has not been maximized. There are still 15% of toddlers who have not been monitored regularly. It is necessary to strengthen the function of the Posyandu, support for cadres, and the use of digital technology in nutrition reporting.
<b>Nutritional Intake of Pregnant Women (%)</b>	100%	70%	-30%	This low number indicates a high risk in the pregnancy phase. Nutrition education strategies, the provision of blood tablets, and specific assistance for pregnant women in KEZ need to be strengthened.
<b>Supplementary Feeding (PMT) (%)</b>	100%	80%	-20%	The distribution of PMT is not even. Distribution chain improvements, logistics monitoring, and a community-based approach are needed to ensure recipients are on target.
<b>Complete Immunization of Toddlers (%)</b>	100%	90%	-10%	The achievement is relatively good, but it is still necessary to target toddlers in the 3T (Disadvantaged, Frontier, Outermost) areas so that complete basic immunization can be universal.
<b>Families at Risk of Receiving Assistance (%)</b>	100%	75%	-25%	Assistance has not reached all at-risk families. Strengthening the capacity and number of Family Assistance Teams (TPK) is essential to ensure a holistic range of interventions.

From the analysis of the data used above, it not only facilitates monitoring but also provides a strong foundation for evidence-based decision-making. By focusing on indicators that are still far from the target and paying attention to the context on the ground, the stunting reduction acceleration program can be adjusted in a targeted and sustainable manner. Interestingly, this study also found that the involvement of community leaders and local stakeholders greatly determines

the success of the program. In villages that have active religious leaders or village heads, stunting programs tend to run better. These figures act as a driving force for changes in people's behavior, especially in socializing the importance of monitoring growth and providing nutritious food. This suggests that a local socio-cultural-based approach can be an effective strategy in strengthening public acceptance of government programs. In terms of data and monitoring, there are weaknesses in the information system used. Many villages still use manual recording methods in monitoring the growth of toddlers. This makes it difficult to conduct long-term trend analysis and limits the capacity of policymakers to make evidence-based decisions. In addition, the lack of data integration between health offices, social services, and other agencies leads to information overlap and inefficiencies in resource allocation.

In general, it can be concluded that the optimization of stunting programs in Sinjai Regency is highly dependent on strengthening institutional capacity, integrating information systems, empowering communities, and formulating policies that are adaptive to field conditions. Collaboration between agencies needs to be improved by building a systematic, data-based, and results-oriented coordination system. In addition, a participatory approach involving local communities and leaders should be an integral part of stunting prevention and management strategies. This research makes an important contribution in expanding understanding of the practical dimension of the implementation of stunting programs at the regional level. By raising the local context of Sinjai Regency in depth, this study shows that the success of the program is not only determined by formal policies, but also by social dynamics, implementation capacity, and the ability of the system to adapt to changing situations. Therefore, strategic recommendations must be directed at program governance reform, strengthening multi-sector coordination, and revitalizing the role of the community as a subject in child health development.

#### 4 Conclusion

This study concludes that the implementation of stunting prevention and handling programs in Sinjai Regency is not optimal because it still faces challenges in terms of regulation, cross-sector coordination, resource distribution, and community participation. Although formal policies such as Regent Regulation No. 40 of 2021 have been available, their understanding and application in the field is still uneven. Coordination between Regional Apparatus Organizations (OPD) has not run synergistically, so interventions often run independently without an integrated approach based on data and local needs. In addition, the capacity of posyandu cadres as the spearhead of the program is still not optimally supported in terms of training, coaching, and incentives. Field findings also show that community participation, especially local figures, greatly determines the success of the implementation of programs at the village level.

Weaknesses in information systems, manual recording, and data integration between sectors complicate the evaluation and decision-making process. Therefore, optimizing stunting programs requires a multidimensional approach that combines institutional strengthening, good data management, and a community-based socio-cultural approach. This research contributes novelty through an integrative approach that brings together policy evaluation, technical implementation, and social dynamics in one complete analytical framework.

The suggestions in the results of this study are Strengthening cross-sector coordination: Local governments need to form a cross-OPD technical team that works based on a joint action plan, is based on integrated data, and has clear achievement indicators. The coordination system should not stop at formal forums, but must be followed up through the implementation of joint activities in the field. Revitalization of regulatory implementation: Comprehensive socialization of Perbup No. 40 of 2021 is needed, especially to technical implementers at the village level such as midwives, cadres, and village heads. Thematic training and workshops can be a means to increase understanding and capacity for consistent regulatory implementation. Development of integrated information systems: Local governments need to develop digital information systems that facilitate

child growth recording, activity reporting, and intervention tracking. Data integration between the Health Office, Social Service, and DP3AP2KB is essential to avoid overlap and improve program efficiency. Capacity building and cadre incentives: Posyandu cadres need to receive regular training based on field needs, as well as proper incentives to maintain motivation and quality of program implementation. In addition, the supervision system involving health center officers needs to be strengthened to ensure the quality of services. Active involvement of communities and local leaders: Village governments and related OPDs should make religious leaders, traditional leaders, and local communities as strategic partners in nutrition education campaigns and child growth monitoring. Socio-cultural-based approaches have proven to be effective in increasing public acceptance of stunting programs. By implementing these measures, Sinjai Regency is expected to become a regional model in implementing integrated, adaptive, and sustainable stunting prevention and handling programs.

## 5. Thank You Speech

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