RESEARCH ARTICLE

Factor Affected Stunting Prevention in North Bengkulu District: a Qualitative Study

Yusran Hasymi,1 Yetti Purnama,2 Rostika Flora, Angesti Nugraheni, Nurlaili Nurlaili1

1Department of Nursing, Faculty of Mathematics and Natural Sciences, Universitas Bengkulu, Bengkulu, Indonesia, 2Department of Midwifery, Faculty of Mathematics and Natural Sciences, Universitas Bengkulu, Bengkulu, Indonesia, 3Department of Public Health, Faculty of Public Health, Universitas Sriwijaya, Palembang, Indonesia, 4Department of Midwifery, Faculty of Medicine, Universitas Sebelas Maret, Surakarta, Indonesia

Abstract

Stunting has been a considerable problem that indicates the poor level of public health in Indonesia. There are various efforts made to reduce stunting rates. The North Bengkulu regency has significantly successfully reduced the stunting rate over three years. This study aims to determine the measures to accelerate stunting reduction in the North Bengkulu regency. This is a qualitative descriptive study with data collected through focus group discussions and in-depth interviews. The study was implemented at the North Bengkulu regency in October 2021. There were five participants in the focus group discussion, and two participants were in-depth interviewed. The data were then transcribed verbatim and analyzed using the narrative analysis technique. The result of this study shows that the Head of the North Bengkulu Regency has been an outstanding leader with a strong commitment and vision to prevent stunting. The head of villages in North Bengkulu regency collaborates with public health centers in using village funds and determining the priority scale for stunting prevention. The involvement of cadres to empower the community is essential. The implementation of cross-program cooperation has been implemented. However, the cross-sectoral collaboration was not optimal. There is a difference in determining to stunt between cadres and nutrition workers. The training for stunting cadres and nutrition officers was carried out in stages. The cross-sectoral collaboration needs to increase to improve the program’s effectiveness. The cadres and nutritionists need to train to determine stunting rates.

Keywords: Collaboration, cross-sectoral, prevention, stunting

Introduction

Stunting is a condition of failure to grow and develop in children under five years of age due to malnutrition, so the child is too short for his age. The incidence of stunting is measured after the child is two years old, even though malnutrition occurs since the baby is in the womb and in the early days after the baby is born.1-3 Stunting was a condition of a child who was short or very short and not by his age, which was a factor of malnutrition and repeated diseases for a long time in the fetal period until the first two years of a child’s life.4,5 The prevalence of stunting in developing countries is in the high category.5-7 It is at 30.8% in Indonesia, still above the world’s 22.2%. Stunting in sub-Saharan Africa is 34.5%, in Ethiopia, 52.4%, and its prevalence in Congo at 40%. The prevalence of stunting in Indonesia is higher than in other countries in Southeast Asia, such as Myanmar (35%), Vietnam (23%), and Thailand (16%), and ranks fifth in the world. The World Health Organization has determined that nutritional problems in a country should be less than 20%.7 The percentage of children under five who are very short and aged 0–59 months in Indonesia in 2018 is 11.5% and 19.3%, respectively. This condition increased from the previous year, namely 9.8% and 19.8%.8

The Basic Health Research (Riskesdas) Bengkulu Province in 2018 illustrates the prevalence of nutritional status (height/age) in children aged 0–23 months, showing the percentage of concise children at 10.4% and 18.6% short children, which is below the national average on a tiny scale.9 Data for monitoring the movement’s implementation for measuring the growth and development of toddlers at the local integrated healthcare center (posyandu), Bengkulu province, in 2021 shows the most significant number of toddlers in North Bengkulu regency spread over 19 sub-districts with the percentage of stunting toddlers of 8.79%. North
Bengkulu regency was one of the regencies in 160 stunting locus regencies/cities in Indonesia. The stunting rate was at 35.8% and 25.9%, which fell drastically to 10.53% in 2017, 2018, and 2019 respectively. In 2020, the stunting rate in the North Bengkulu regency fell to 9.5%. For this remarkable achievement, North Bengkulu regency has won an award from the Bengkulu Provincial Government as the most innovative, inspiring, replicative, and best performing district in the implementation of convergence actions to reduce stunting rates and was appointed as the district representing Bengkulu province to participate in the national level competition of stunting prevention.

The decline in the stunting rate in the North Bengkulu regency is an intelligent work of the North Bengkulu Government in the stunting prevention program. Therefore, knowing what activities have been carried out by the North Bengkulu regency related to reducing the stunting rate is necessary. Therefore, this study aims to analyze the program activities implemented by the North Bengkulu Regency associated with the acceleration of stunting reduction.

**Methods**

The research was a qualitative approach with a policy study design in the North Bengkulu regency. Informants came from stakeholders who were North Bengkulu Regency Stunting Team members. Informants were recruited through the purposive sampling technique. This research was conducted in October 2021 at North Bengkulu regency. The data were collected through in-depth interviews with two stakeholders of North Bengkulu regency (Head of Health Department and Manager of Nutritional Program). The focus group discussions (FGD) were conducted with five participants. They are Head of Early Childhood Education Division of the Education Office, Head of Horticultural and Plantation Food Crops Office, Head of Marine and Fishery Office, Head of Livestock Office, and Head of Social Office.

The FGD and in-depth interviews aimed to obtain information on the acceleration of stunting reduction in the North Bengkulu regency based on the five pillars of the stunting reduction acceleration program. An in-depth interview was carried out based on the interview guide that was adapted from the five pillars of stunting prevention. In addition, the FGD is also carried out based on topics as a guide to ensure the discussion stays focused on the issue of stunting prevention.

The author maintains the study’s trustworthiness using several steps. The interview and FGD were recorded with an audio recorder, transcribed verbatim, and the researcher also applied the triangulation technique. The data was then analyzed with the narrative analysis technique to understand what action the stakeholders in North Bengkulu have taken that contributed to the success of the acceleration of the reduction rate of stunting. This analysis also fits to know what is the stakeholder’s view of the five pillars of stunting prevention in the North Bengkulu regency.

This research passed the ethical clearance test based on ethical clearance certificate number 283/UN9.FKM/TU.KKE/2021 from the Health Research Ethics Committee, Faculty of Public Health, Universitas Sriwijaya.

**Results**

The factors that influence the success of stunting reduction programs include support for cross-program, cross-sector activities, and strengthening operational strategies to improve the quality and scope of interventions. Further, increasing human resource capacity, improving service quality, strengthening nutrition education, strengthening management of nutrition interventions at the public health center and posyandu, and supportive policy.

The results of the research on factors that influence the success of reducing the incidence of stunting in the North Bengkulu regency are based on five pillars: (1) leadership commitment and vision; (2) national campaign and behavior change communication; (3) convergence, coordination, and consolidation of central, regional, and village programs; (4) food security and nutrition; and (5) monitoring and evaluation (Figure).

Based on FGD observations, the leadership’s commitment and vision have gone very well. The regent’s regulations indicate the commitment to stunting prevention and the formation of a stunting cluster team. The North Bengkulu Regency Government has a policy of Regent Regulation Number 23 of 2019 and a Regent’s Decree of 2019. It favors the use of village funds to implement
stunting program convergence. The village Government also runs the village fund program in stunting implementation. Together with the public health centers, The village government made a stunting management program, including family latrines, supplementary food provision, etc. Solid and consistent commitment to all relevant stakeholders, making nutrition and health programs work in synergy because there is support from the non-health sector and the support of other stakeholders. The following is an excerpt from the results of an in-depth interview with the Head of the Health Office:

"At the time of 2018/2019, the central (government) conveyed to North Bengkulu regarding stunting. Initially, it was the same as other districts. We conveyed to the team that stunting is not only a matter for the Health Service. We must make the team by the regent or the governor’s representative and so on."

"We formed a regulation for the working group (pokja) consisting of 17 regional apparatus organizations (organisasi perangkat daerah, OPD) by the direction of the national stunting management strategy. We make the regulations. The decree was signed by the regent and consisted of 17 OPD. After that, we formed a regent regulation related to the convergence of stunting in North Bengkulu. Each pokja and the regulations have several job descriptions that each OPD must carry out concerning their respective job description. Coordination of the implementation is that we draft regional action plans for each OPDs."

The national campaign to change community behavior has implemented the behavior of clean and healthy life activities, socialization of stunting, prospective brides, and maximum reproductive counseling. However, there are still some obstacles, such as a lack of advocacy, campaigns, and dissemination related to stunting and efforts to prevent it, especially for adolescents and eligible women. The following is an excerpt from the results of in-depth interviews with the Head of the Health Office and nutrition program managers:

"Pregnancy care for pregnant women is not good in some villages. Exclusive breastfeeding and

---

**Figure  Five Pillars of Stunting Prevention**

- Leadership commitment and vision
- Monitoring and evaluation
- Food security and nutrition
- Five Pillars of Successful Stunting Prevention
- National campaign and behavior change communication
- Convergence, coordination, and consolidation of central, regional, and village programs

---

Global Medical and Health Communication, Volume 10 Number 2, August 2022
family habits should be given more attention. Starting from pregnant women because stunting doesn’t only happen or develop after the baby is born. The average husband’s attention is good. However, in some areas, it is not. Pregnant women should be kept from inhaling cigarette smoke when their husband smokes. If you want to smoke, you can, but smoking is outside the house. Then there is also an additional source of clean water that is not optimal because the number of clean water sources is low, the result of our health evaluation. The regional work unit takes care of public works or settlements. If the health recap of sanitation data is only, the drinking water or clean water supply in North Bengkulu is still below 60% while the national target is 90%.”

Convergence, coordination, and consolidation of central, regional, and village programs. The stunting prevention program has been running simultaneously in all ministries. In addition, cross-sectoral and cross-program collaboration has been running based on ministry programs. The program is aimed at priority targets for the first 1,000 days and uses the provided intervention package. Based on the results of the FGD with stakeholders, one of which was the Head of Early Childhood Education (PAUD), the following information was obtained:

“In our PAUD, we carry out activities such as measuring children’s weight and height in collaboration with the Health Service, in this case, the public health center in their respective regions. Implement to provide additional food to socialize stunting. What is stunting, and how can we act in synergy with parents? In PAUD, there is parenting to explain how to provide balanced nutrition.”

Social assistance and nutritional non-cash food assistance have been carried out by the duties of the relevant ministry functions. Department of Horticultural and Plantation Food Crops with the assistance program of plant seed, sustainable food garden, preparation of seed houses, demonstration plots, and member’s yards. Department of Marine and Fisheries with the fish breeding program, and the Department of Social with the family hope program. Efforts have been made to develop food diversification based on local food resources. The Health Office has trained nutrition workers, and the village government has undertaken and funded village cadre activities. Village cadres have measured stunting children. The following is an excerpt from the results of the FGD with the Head of the Horticultural and Plantation Food Crops service:

“The Horticultural and Plantation Food Crops service assists agricultural seeds, such as rice, corn, and large livestock such as cows and goats. We do this and, of course, indirectly reduces stunting and has an economic impact on the community in the near term, meaning that if we have rice or corn seed assistance in 3–4 months, we can already enjoy the results, of course, this will have an economic impact. There are also cows and goats; if the goats are also six months or one year old, you can enjoy the results. We have been handling this activity for a long time. We already know that all activities that assist the community without ongoing assistance have such an impact, but because field extension workers are involved, all of them are involved. The program we worked on together turned out to be able to bear fruit.”

Stunting data were obtained from the electronic-community-based nutrition recording and reporting conducted by the Health Service through the public health center. Still, the stunting reduction rate from the public health centers varied. Based on information from the Head of the Health Office and the Head Department of Nutrition, it was stated that there was a decline in the stunting rate in the last three years reaching 8.9% in 2020:

“Specifically for stunting, what was shown earlier was not the results of 2018, 2019, and 2020 surveys. Instead, it was electronic-community-based nutrition recording and reporting data, carried out twice a year, weighing and measuring with the target of all toddlers in North Bengkulu. Therefore the results of community-based measurements show the numbers have decreased from the first 35% in 2018, 25% in 2019, and 2020. The electronic-community-based nutrition recording and reporting measurement was carried out because there was no special survey related to nutrition and stunting, only in 2020 the data was only 8.9%.”

Based on the results of FGD information related to the training of nutrition workers,
the informant stated that it was not possible to equalize stunting data:

“Our survey for basic health research is conducted every five years. However, because the nutrition sector has not submitted the stunting data to the Development Planning Conference (Musrenbang), we have initiated a mini basic health research study program every year to monitor the overall nutritional status in Indonesia. I don't think I can equalize it. First, the Indonesian nutritional status survey uses sampling data. It uses the Statistics Indonesia data, in which one can use ten samples. We only sample 300 children under five each year from 22,398 children under five from North Bengkulu regency. As for the electronic-community-based nutrition recording and reporting, the central guidelines are obligated to measure all targets in the working area. At least we enter the report at 90%, which means logically, in our research, the larger the sample, the smaller the data. If they do it in stunting spots, that number will be high while we measure it for all targets. The measurement technique is the same, the tools used are the same as the education, and the sample size affects the numbers.”

Discussion

This study's results indicate a strong political commitment from stakeholders in the North Bengkulu regency regarding stunting prevention. Various strategic plans have been prepared and implemented by the North Bengkulu regency. The leadership's commitment and vision are outstanding; there is a regent regulation related to stunting prevention and forming a stunting cluster team. In utilizing village funds, the village head is above the attention of the public health centers in determining the priority scale for stunting prevention and the involvement of human development cadres to empower the community.

The problem of stunting can be overcome with a strong political commitment from a leader to mobilize all sectors that will handle stunting. Stunting is a priority problem in the regions that can be resolved through the commitment of regional leaders and cooperation between regional apparatus organizations. In addition, political commitment is needed in the government's agenda to improve nutrition to reduce the incidence of stunting.

Commitment is a will, desire, or step that aims to fulfill the goal of achieving an effort or endeavor. Political commitment is significant because fulfilling a nation’s goals must be supported by a politician or leader of the nation itself. Without political commitment, what is expected and planned will not be achieved with good results.14

The interviews with policymakers in the North Bengkulu regency show that verbal, institutional, and commitment have gone very well. The attention from leaders to the problem of stunting, coordination of multi-sectoral nutrition programs, implementation of stunting policies, and the existence of a particular budget for stunting in regional and institutional budgets shows a strong political commitment from the North Bengkulu regency to stunting prevention.

The community behavior change campaign has been implemented in the North Bengkulu regency, but there are still various obstacles related to behavior change in preventing stunting. For example, attention to pregnant women, exclusive breastfeeding that has not been maximized, smoking habits in the house, and little clean water are different obstacles in preventing stunting in the North Bengkulu regency.

Many things affect people's behavior. Behavior is formed due to environmental adaptation. The lack of knowledge and unsupportive attitudes cause difficulty in changing people's behavior in implementing healthy living. The behavior also causes a slow decline in stunting rates in the regions.15

Healthy conditions can be achieved by changing behavior from unhealthy to healthy behavior and creating a healthy environment in the household. Therefore, various strategies have been developed to change people's behavior towards healthy behaviors that can help accelerate stunting reduction, namely (a) National campaigns and outreach using various forms of media and various community activities; (b) Interpersonal communication to promote behavior change at the household level; (c) Ongoing advocacy to decision-makers at various levels of government; and (d) Capacity building for program managers. The achievement strategy is implemented through a behavior change communication approach outlined in the communication strategy at the center and the local level.13

The convergence, coordination, and consolidation of central, regional, and village
programs in the North Bengkulu regency have been going well. Convergence is an approach to delivering coordinated, integrated, and joint interventions to prevent stunting to priority targets. Convergence efforts to accelerate stunting prevention are carried out by planning, implementing, monitoring, and evaluating programs/activities. Convergent implementation of interventions by aligning planning, budgeting, implementation, monitoring, and controlling activities across sectors and between levels of government and society.

Efforts to accelerate stunting prevention will be more effective if specific and sensitive nutrition interventions are combined. Therefore, a convergence of service delivery requires an integrated process of planning, budgeting, and monitoring of government programs/activities across sectors to ensure each specific nutrition intervention service’s availability to prioritize target families and sensitive nutrition interventions for all community groups, especially the poor.

Implementing total convergence does promise a change in the number and management of stunting cases. For this reason, converging is one of the main pillars in the national strategy to accelerate the prevention and reduction of stunting. In implementing this convergence, the role of the Regional Development Planning Agency (Bappeda) is crucial because the organization functions in planning aspects of development activities in the area.\(^{15}\)

Based on the results of this study, it was found that to improve food and nutrition security in the North Bengkulu regency, cross-program collaboration has been carried out well, but cross-sectoral collaboration has not been optimal. Each institution has implemented all programs related to the accelerated improvement of under-five nutrition, but each seems to be running separately. The National Team for the Acceleration of Poverty Reduction states that the five pillar aims to increase access to nutritious food and promote food security. A good cross-program and sector collaboration are needed because the programs that have been prepared can be implemented correctly and on target.\(^{13}\)

Development of food security is carried out to meet basic human needs that provide benefits fairly and equitably. It is based on independence and does not conflict with community beliefs so that quality, independent, and prosperous Indonesian people are formed by realizing sufficient, safe, quality, nutritious, and affordable food availability. Diverse and evenly distributed food availability. Diverse and evenly distributed throughout Indonesia and affordable by the community.\(^{16,17}\)

Many factors that affect food security, such as family income, education, and ownership of productive assets, affect food insecurity.\(^{18}\) The number of family members, education level, food prices, and family income also affect household food security.\(^{19}\) Households in the insecure food category have family members who have access to food in quantity and quality. It will impact meeting the nutritional needs of children under two to achieve optimal dietary status.\(^{20,21}\)

Children in food-secure household conditions have good energy and protein adequacy. In contrast to children from food-insecure families who experience growth delays because they lack access to food, the portion of food is reduced to share with other family members.\(^{22-24}\)

Cross-sectoral and cross-program cooperation is needed to avoid food insecurity. Therefore, the five pillars are coordinated by the Ministry of Agriculture and the Ministry of Health, involving the relevant technical ministries and the regional and village governments. In addition, the Ministry of Social Affairs, through the provision of cash assistance, such as the family hope program and the food social Assistance, including non-cash food assistance, and the Ministry of Health guarantees the availability of exceptional supplementary food for pregnant women and children suffering from malnutrition.

Monitoring and evaluation are essential in implementing stunting prevention and reduction programs. One of the strategies in the five pillars is to improve the data collection system, which can monitor stunting data accurately and periodically at the national and district city levels. The intervention data management system is an effort to manage data at the district city level to the village level, which will be used to support the implementation of other integrated actions and assist the management of integrated stunting reduction programs/activities. The data management system includes data from each indicator, from stunting data to the coverage of specific and sensitive nutrition interventions. The data management system generally aims to help provide and facilitate data access to manage integrated stunting reduction programs.\(^{24}\)

This study indicates that there are still differences in stunting measurement data between community cadres and health center.

Global Medical and Health Communication, Volume 10 Number 2, August 2022
nutrition officers. Given the importance of this data, the Health Office regularly conducts stunting measurement training for nutrition officers and cadres. Today's stunting data is derived from electronic-community-based nutrition recording and reporting. In addition, monitoring and evaluation activities related to stunting prevention programs are always carried out by the public health center and the North Bengkulu Regency Health Office.

Monitoring and evaluation are essential things in the context of accelerating stunting prevention. In general, the purpose of monitoring is to monitor program progress, increase accountability, and learn. Specifically, monitoring is aimed at obtaining: regular reports on program progress and target achievement prepared for the steering committee, program implementing partners, and beneficiaries; a data management system that is reliable, easy to use, and useful for monitoring program progress, identifying problems in implementation, to take corrective action promptly and make decisions and policies; utilization of learning outcomes from monitoring data analysis which will be presented in the form of recommendations, good practice documentation for replication, as well as policy papers. The evaluation aim is to see the achievement and implementation of the national strategy related to stunting. They included the how, to what extent, under what conditions, and the contribution to the acceleration of stunting prevention. This evaluation also includes the effectiveness of independent intervention (single intervention), interventions carried out simultaneously/convergently, including input, process, output, and impact.  

Conclusions

The stunting prevention program in the North Bengkulu regency has been implemented well. However, increasing cross-sectoral collaboration to coordinate stunting prevention efforts is still necessary. In addition, training for nutritionists and cadres needs to be carried out continuously so that there are no differences in determining stunting rates.  

Conflict of Interest

Researchers say that there is no conflict of interest in implementing the research and following the basic research principles.  

Acknowledgment

This research was funded by PNBP of the Faculty of Mathematics and Natural Sciences, Universitas Bengkulu, in 2021.  

References

10. Media Center Pemerintah Kabupaten Bengkulu Utara. BU mewakili Provinsi


