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EFFECTIVENESS OF MANAGEMENT STRATEGY OF IMPLEMENTATION OF STUNTING PROGRAM: CASE STUDY

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ABSTRACT
Stunting remains a significant public health challenge in Indonesia, with multifactorial causes including maternal nutrition, inadequate infant feeding practices, and poor sanitation. Effective implementation management of stunting programs is key to addressing this issue sustainably. This study aimed to analyze the effectiveness of management strategies in implementing stunting reduction programs in Tempeh Subdistrict, Lumajang Regency, focusing on process and outcome indicators. The qualitative approach employed a purposive sampling method, consisting of six informants divided into primary informants and triangulation informants. These included health office staff, community health center officers, and mothers of stunted children. Data were collected through interviews and document reviews, then analyzed using interactive data condensation, presentation, and conclusion drawing. The study found that the SIDERA program (Stimulation, Early Detection Friendly to Children) empowered PAUD teachers in early detection and parental education on nutrition, which contributed to reduced wasting and underweight prevalence, indicators closely linked to future stunting. Effective cross-sectoral synergy among health centers, local governments, educational institutions, and community health volunteers facilitated program implementation. However, challenges remain in timely training delivery and strategic targeting of interventions to the most affected communities. Effective management strategies that emphasize comprehensive understanding of programs, accurate targeting, timeliness, achievement of objectives, and tangible changes in community behavior are crucial for stunting prevention efforts. Strengthening coordination and optimizing training schedules for key stakeholders such as PAUD teachers can further improve program outcomes.

Keywords: early detection; management effectiveness; program implementation; SIDERA; stunting

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INTRODUCTION

Stunting, or failure to thrive due to chronic malnutrition, is a public health problem that is still a serious challenge in Indonesia. This phenomenon not only affects the individuals who experience it, but also has broad implications for the quality of human resources, productivity, and economic growth of the nation in the future. The cause of stunting is an imbalance in nutritional intake and other health problems in the first 1000 days of birth. (Ernawati A, 2020) The incidence of stunting in toddlers is 22.2% or around 150.8 million with the largest proportion coming from South Asia (58.7%) and the lowest proportion coming from Central Asia (0.9%). (Ministry of Health, 2021) Stunting cases in Indonesia are ranked 4th in the world and 2nd in Asia. In 2019 the number of incidents reached 27.67% although this figure decreased compared to cases in 2013 which was 37.8%. The incidence of stunting in Indonesia is currently still above the maximum tolerance standard set by WHO, which is less than 20%. The target achievement set by Indonesia is to reduce the incidence of stunting to 14% in 2024. The stunting rate in Indonesia in 2024 was 19.8%. This figure has decreased from the previous year and has succeeded in achieving the target set. (Ministry of State Secretariat, 2025).

The incidence of stunting in Tempeh District, Lumajang Regency, is still relatively high, although there has been a decline from year to year. Data from the Tempeh Health Center shows a decline in the number of stunting in toddlers in its working area, from 240 children in 2020 to 142 children in 2023. However, several areas in Tempeh District still have quite high stunting rates, such as Tempeh Kidul in 2020 and Kaliwungu in 2023 (Puteri N, Sari D, 2024) The main causes often start during pregnancy, where inadequate maternal nutritional intake can result in babies being born with low birth weight (LBW). After birth, suboptimal exclusive breastfeeding and inappropriate practices of providing complementary foods (MPASI) (both in terms of quality, quantity, and cleanliness) are significant triggers for stunting. In addition, poor environmental sanitation and limited access to clean water make children susceptible to repeated infections, such as diarrhea, which further worsens their nutritional condition. Other factors that are no less important are the low level of education and knowledge of parents about nutrition and child health, as well as poverty that limits family access to nutritious food and health services. (Khoiriyah & Ismarwati, 2023).

Efforts to combat stunting in Indonesia have been implemented through various programs, but challenges in implementation management often hinder their effectiveness. Based on previous research, for example a study conducted by Rachmawati et al. (2020) regarding the management of the implementation of stunting control programs at the Puskesmas level, it was often found that the lack of coordination between sectors was the main obstacle. Multi-sectoral programs such as stunting control require synergy between the Ministry of Health, Ministry of Agriculture, Ministry of Public Works and Public Housing, and other related institutions. However, in the field, there is often overlapping programs or conversely, a lack of intervention in certain areas.

In addition, the limited trained human resources, especially in remote areas, are also a crucial issue. Health workers and integrated health post cadres often do not have adequate capacity to conduct comprehensive nutrition education or effective growth and development monitoring. Research by Suryana & Rahayu (2018) highlights the importance of strengthening human resource capacity in ensuring that specific and sensitive nutrition interventions can run optimally. The aspect of community participation also plays an important role. Although the government has initiated various community-based programs, the level of community participation and awareness to adopt healthy lifestyles and balanced nutrition still needs to be improved. Data from research by Anggraini et al. (2019) shows that empowering families and communities through a participatory approach can increase the success of stunting control programs. Therefore, the management of the implementation of stunting control in Indonesia requires comprehensive improvements, starting from strengthening cross-sector coordination, increasing human resource capacity, to more intensive community empowerment, so that the positive impacts can be felt evenly and sustainably.

The purpose of this study is to explore and analyze the effectiveness of management strategies in the implementation of the Stunting Reduction Program in Tempeh Regency. This study specifically aims to understand the extent to which program implementers have a comprehensive understanding of the content and mechanisms of the stunting program, assess whether the program has targeted the right groups such as pregnant women, toddlers, and high-risk families, and evaluate the timeliness of the implementation of each program stage according to planning. In addition, this study also aims to measure the achievement of program objectives both in terms of administrative results and real impacts in the community, and describe concrete changes that occur as a direct result of program implementation, such as increased nutritional awareness, changes in family behavior, and a decrease in stunting rates. In an effort to achieve these objectives, this study uses the analytical framework of Edward III's policy implementation theory and the program effectiveness approach according to

Sutrisno (Latifah, 2024) which includes five main indicators: program understanding, on-target, on-time, goal achievement, and real change.

METHOD

The method used is qualitative. According to (Creswell, JW and Poth, 2018) qualitative research is a type of research that explores and understands the meaning in a number of individuals or groups of people who come from social problems. The reason researchers use qualitative research methods is because researchers start from social situations, so researchers conduct observations and interviews and documentation to informants who are considered to know about the social situation. The data collection techniques used are interviews and documentation studies. Interviews were conducted with Health Service employees, health center officers and mothers who have stunted toddlers.

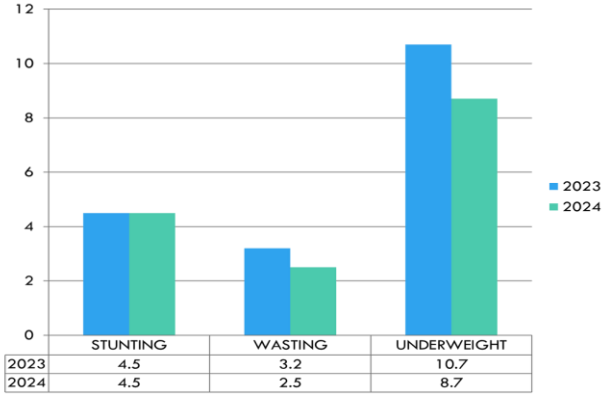
Some important elements that must be considered in the qualitative analysis process are data condensation, data display, and drawing conclusions, which are carried out interactively along with the data collection process (Matthew B. Miles, A. Michael Huberman, 2014) . In selecting and determining informants, researchers refer to the purposive sampling technique, namely selecting informants who can be trusted to be competent data sources for research problems. On that basis, this study attempted to find people who are competent or directly related to the Analysis of the Effectiveness of Program Implementation.

RESULT

Implementation of Stunting Reduction Program

The implementation of the stunting prevention and handling program at the Tempeh Health Center is carried out together with cadres and midwives from each fostered village. One of the efforts to handle stunting that has been carried out by the Tempeh Health Center is the SIDERA Program. SIDERA (Stimulation, Child-Friendly Early Detection) is an innovation of the Tempeh Health Center in terms of child growth and development health services. One of the activities is to empower PAUD teachers to participate in detecting growth and development using the KIA book so that if deviations are found, referrals can be made to the health center immediately. In preparation for the implementation of SIDERA in the 2022 budget year, coordination was carried out with early childhood education institutions located at the Tempeh District Education Office. PAUD teachers in the Tempeh Health Center area have received training and guidance regarding the SIDERA innovation.

Stimulation and early detection in children can be done by parents or teachers by instilling clean and healthy living behavior with a pleasant atmosphere and direct practice will be more effective in forming a healthy and quality generation. The target of SIDERA activities is aimed at PAUD children in the Tempeh Health Center work area



	STUNTING	WASTING	UNDERWEIGHT
2023	4.5	3.2	10.7
2024	4.5	2.5	8.7

Diagram 1. Prevalence of Toddler Nutrition Cases in the Tempeh Health Center Area

Based on the bar chart presented, it can be seen that the prevalence of toddler nutrition cases in the Tempeh Health Center area varies between the three groups studied. In the case of stunting, the prevalence of nutrition cases between 2023 and 2024 showed almost the same value. This indicates that in this group, the proportion of nutrition cases between the two categories did not have a significant difference. Then , in Toddler *wasting* and *underweight* , it can be seen that the prevalence of nutritional cases for 2023 is slightly higher compared to 2024. Although the difference is not too large, this can indicate a decrease in the number of *wasting* and *underweight cases* that occur in toddlers in the Tempeh Health Center area. It should be noted that *wasting* and *underweight toddlers* are potential new stunting cases if not given the right intervention. The decrease in *wasting* and *underweight* cases is a positive indication that the SIDERA program, which is being pursued through education for PAUD teachers, is starting to show results. Given that *wasting* and *underweight toddlers* are potential new stunting cases if not given the right intervention, this decrease is very crucial in preventing the emergence of stunting cases in the future. The success of the SIDERA program in providing nutrition education to PAUD teachers has effectively contributed to increasing awareness and better nutritional practices among early childhood, thereby reducing the prevalence of *wasting* and *underweight.*

Literacy in line with the results of this study (Hakimah et al., 2022) shows that nutritional interventions carried out through educational channels, especially those involving parties related to child care such as PAUD teachers, have a significant positive impact. Integrated nutrition education programs in early childhood education environments can be an effective strategy to improve knowledge, attitudes, and practices related to nutrition, which ultimately contribute to improving the nutritional status of toddlers. Synergy cross sector Also play role crucial in success effort decline stunting rates in the region Tempeh Health Center. Although the data presented show the relative prevalence of stunting stable between 2023 and 202, the decline significant on cases of wasting and underweight indicate existence strong foundation for prevention of stunting in the future front. Foundation This No only woke up from educational programs like SIDERA which targets PAUD teachers, but Also from Work The same close between various party.

The results of the study showed that collaboration between Health center, government village sub-district, institution education (PAUD), cadres health, up to sector agriculture or food local, has create supportive ecosystem repair nutrition toddlers. Health centers play a role in screening, administration supplements, and education health. Government village sub-district can facilitating resilience programs food or sanitation environment. Institutions education become guard at the forefront in implementation education nutrition and monitoring growth children in the environment study. The cadres play a role active in mentoring family And counseling direct to society. When all sector This move simultaneously with same goal , the resulting impact become more big and sustainable. Decline number *wasting* And *underweight* become proof real that approach holistic and coordinated This in a way effective prevent toddler fall to in condition nutrition worse than worse severe, so that on its turn can press stunting figures in the future upcoming.

Various studies have shown that cross-sector synergy is the key to success in stunting reduction programs. This approach allows for more optimal utilization of resources and a wider range of interventions, because the problem of stunting itself is multidimensional and cannot be solved by one sector alone. According to (Herni et al., 2024) in their research, coordination between the central government, regional governments, non-governmental organizations, and local communities is very important for the implementation of effective stunting programs. The involvement of these various actors ensures that nutritional

interventions are integrated with clean water and sanitation programs, maternal and child health, food security, and social protection.

The success in reducing *wasting* and *underweight rates* in the Tempeh Health Center area, which are strong predictors of stunting in the future, is a concrete indicator of the effectiveness of the implementation of an integrated program supported by strong cross-sector synergy. This shows that a holistic approach has succeeded in identifying the root of the problem and providing targeted solutions, thus producing positive changes in the nutritional status of toddlers in the Tempeh Health Center area. Although the stunting data in the diagram shows stability, the decline in *wasting* and *underweight* in the context of cross-sector synergy is a strong indicator that the foundations for stunting prevention have been well laid at the Tempeh Health Center. Continuous and coordinated collaboration will be key to seeing a more substantial decline in stunting rates in the years to come.

DISCUSSION

Program Understanding (Process Effectiveness)

An effective management strategy must ensure that all stakeholders, from grassroots implementers to policy makers, have a comprehensive understanding of the program. The effectiveness of the process focuses on the quality of the program implementation itself. This includes aspects of resource management, coordination between agencies, community participation, transparency, and accountability (Mohamad Borut, 2021)

The SIDERA program that has been running at the Tempeh Health Center has been well understood by all program implementers consisting of the Head of the Health Center, health promoters, Cadres, Village Midwives, and program recipients, namely PAUD teachers in the Tempeh Health Center work area. Knowledge related to the ongoing program is important to ensure that the program can be implemented on target so that it can help resolve problems related to the increase in stunting rates in the Tempeh Health Center work area.

In addition, the steps that must be taken in implementing the program, the roles and responsibilities of each, and indicators of program success are fundamental components of a structured and effective program planning and implementation. This is in line with Anis' research (Anis et al., 2021) which states that a program that is run can be said to be effective if it is able to meet the targets that have been set. To assess the effectiveness of a program, it is necessary to determine the extent of the impact and benefits generated by the program. because the effectiveness of a program is a reflection of the organization's success in achieving the targets that have been set.

PAUD teachers as the target of the program have been fully involved and encouraged to intervene in stunting prevention measures such as early identification of signs of stunting in children, nutrition education for parents, and growth and development stimulation. The Health Center has provided adequate training and easy-to-understand modules, as well as providing a discussion forum that allows PAUD teachers to clarify doubts and deepen their understanding of the SIDERA program as a whole.

As supported by various findings in previous studies. This analysis will dissect how the SIDERA program management strategy. Research (Rayani et al., 2025) shows that the success of health and nutrition interventions is highly dependent on the capacity and understanding of implementers in the field. Lack of understanding of the causes of stunting, the importance of 1,000 HPK, or effective education methods can hinder implementation. Therefore, if the training of PAUD teachers in the Tempeh Health Center work area is not comprehensive or the material is not easily accessible/understood, this has the potential to become *a bottleneck* that can be proven by similar case studies in other areas.

Management is also responsible for upholding rational-legal authority. This means that decisions made, whether regarding resource allocation, policy development, or patient case management, must be based on technical knowledge, applicable rules, and established procedures. Health care organizations, through their management, strive to eliminate elements of traditional or charismatic authority that may interfere with the consistency and objectivity of services. They ensure that qualifications, competence, and performance are the basis for staff placement and promotion, and are the primary benchmarks for evaluating service effectiveness. (Ali et al., 2023)

Right on Target (Instrumental & Objective Effectiveness)

Targeting is at the heart of instrumental effectiveness and contributes to the effectiveness of goals. Management strategies must ensure that program interventions and resources actually reach the most vulnerable and at-risk groups in society. PAUD teachers as The SIDERA program targets have role strategic in accompanying the growth and development of early childhood and interacting directly with parents, making them the target of the program is a very appropriate step. PAUD teachers can be effective agents of change in early detection, basic nutrition education, and promotion of clean and healthy living practices in the school and family environment.

The National Strategy for Accelerating Stunting Prevention (Stranas Stunting) states that Early Childhood Education (PAUD) is one of the interventions for preventing stunting, especially in increasing awareness, commitment, and parenting practices of parents regarding maternal and child nutrition. The prevalence of stunting will increase as the child gets older. Therefore, it is important to provide education to teachers and parents about the importance of nutritional intake, parenting, and good sanitation behavior as early as possible. (Romadona et al., 2023)

Based on the interview results, participants gave a positive response by providing information that the basic concept of stunting is very important to be understood first as a basis for determining or identifying stunting and also determining the next steps in dealing with stunting. After participating in this training, participants understand the definition, causative factors, characteristics of stunting, impacts, and how to identify stunting. The research findings are in accordance with research (Santi et al., 2020) which found that conceptual material is the basis of a training. Likewise, this training prioritizes participants' understanding of the basic concepts of stunting first, such as the definition, causative factors, characteristics, impacts and identification of stunting in children before proceeding to the next material. (Sefrina & Elvandari, 2020) also stated that participants who already understand the basic concepts of the training material will find it easier to understand the next training material.

Findings in the Tempeh Health Center area show the need verification related mechanism selection of PAUD teachers that are used target intervention education nutrition. From the results data collection, not yet there is proof that PAUD teacher selection is carried out in a way strategic with consider PAUD locations in the regions with high prevalence of stunting. The majority of teachers involved chosen on base availability and convenience access, not on base need priority region with greater burden of stunting big. This is potential reduce effectiveness intervention Because education No in a way direct target communities most in need. Besides that, content education nutrition provided Still nature general and not yet fully customized with need specific Tempeh community. Analysis need community, such as availability food local, custom eat, and factor socio- cultural influences pattern foster nutrition, not yet become base main in compilation material.

The above is in line with research (Rahmadani et al., 2025) which shows that nutrition education interventions directed at villages with high stunting prevalence are significantly more effective in reducing the risk of stunting than education that is carried out evenly without considering the stunting distribution map. So in this case the program target selection process (including PAUD teachers or cadres) must consider stunting prevalence data and specific community conditions to optimize resources and impact.

Appropriate Time (Process Effectiveness)

Timeliness is a crucial element of process effectiveness. Stunting interventions are often critical during the golden period of a child's growth. Management strategies must ensure that the SIDERA program is implemented according to the established schedule, without significant delays. Given that the first 1,000 days of a child's life (HPK) are very time-sensitive. Delays in counseling, detection, or follow-up from PAUD teachers to parents can reduce the effectiveness of the program. The schedule for PAUD teacher training, provision of educational materials, or reporting and follow-up mechanisms are implemented according to the planned timeline. The timely aspect in implementing the program through PAUD teachers is very crucial, considering the sensitivity of the timing of stunting interventions during the golden period of growth. The results of the interviews showed that supporters of the SIDERA program such as the distribution of nutritional supplements had been carried out according to schedule, but training and education for PAUD teachers were held after or during the intervention so that this could reduce the impact of the intervention and could eliminate the golden opportunity for prevention. The thing that needs to be underlined is that the training provided to PAUD teachers is not always completely late so that it still takes time to be able to make improvements related to the golden opportunity for stunting prevention.

The aspect of timeliness in program implementation, especially PAUD teacher training, provision of educational materials, and reporting and follow-up mechanisms, has proven to be a crucial factor in supporting the success of stunting prevention interventions. Findings in Tempeh District showed that although the distribution of nutritional supplements through the SIDERA program had been carried out according to schedule, training and education for PAUD teachers were often provided simultaneously or even after the intervention had begun. Mismatch time This potential reduce effectiveness intervention, especially Because time toddler especially age 0–2 years — is period golden period *of* growth child, where every delay can impact significant towards growth and development term long.

This finding is in line with research (Widaryanti, 2022) which shows that training of PAUD cadres and teachers carried out in *a late-phase* or after the start of distribution of additional food causes the knowledge transferred to parents to be less than optimal. As a result , there is inconsistency between consumption intervention (such as food additional) and practice home care.The above statement shows that it is necessary to assess the PAUD teacher training schedule, provision of educational materials, or reporting and follow-up mechanisms implemented according to the planned timeline. If there is a delay in providing resources or support to PAUD teachers, this can be a serious obstacle. According to (Purwanti, 2021) the delay in the golden period is quite sensitive because the impact will be permanent, therefore adequate nutritional fulfillment is needed.

Achievement Objectives (Effectiveness) Objective)

An effective management strategy must be able to bring the stunting program towards achieving its main goal, namely a significant and sustainable reduction in stunting prevalence. Measurement of this achievement does not only focus on quantitative targets, but also on the qualitative impact on children's health and well-being. The strategic role of PAUD teachers in prevention and the solution to stunting is through delivery information knowledge and understanding to children from an early age, so it is necessary PAUD teacher competency in

knowledge and skills about child development stimulation early age. (Sasmita et al., 2020) . Knowledge and these skills are very important for provide maximum service to students appropriately. The results of the study showed that the response of all targets to nutrition and health education provided by PAUD teachers was in the good category, in line with the theory of effectiveness which emphasizes indicators of goal achievement as a measure of the success of an intervention. In this theory, effectiveness is assessed from the extent to which the goals that have been set can be achieved optimally. Good acceptance of the material and teacher abilities indicate that the educational message was successfully understood and internalized by the targets, which was then reflected in real behavior in the form of compliance in consuming all the food provided. This is evidence that the educational goal, namely increasing knowledge and forming healthy eating habits in early childhood, has been achieved. Thus, the positive response and compliance of the targets are concrete indicators of the effectiveness of the education program, in accordance with the concept that goals can be said to be achieved if the expected behavioral changes appear consistently in the targets.

According to (Yusnita, Fauziyah S, 2025) the knowledge and abilities of teacher educators PAUD in early childhood development assessment is quite good. The majority (56.3%) of PAUD teachers have good knowledge about development children . PAUD teacher knowledge about growth and development child Also Already on Category high (70.6%). However, the implementation growth and development monitoring child educate by PAUD teachers in detect stunting incident since early, relatively new Lots don, because related with level understanding, and the ability of PAUD teachers to problem or stunting cases in the region surrounding areas. Although obtained results that PAUD Teachers' knowledge about SDIDTK (stimulation, detection) And intervention early developmental deviations) partly big in category good (70.21%).

Based on research (Tyrer & Fazel, 2014) showed that increasing knowledge and nutritional practices at the household level initiated by educational institutions can be positively correlated with reducing stunting. This is in line with research (Hositanisita et al., 2024) showing that nutritional education provided by trained posyandu cadres significantly increased the knowledge of mothers of toddlers, which led to increased practices in providing balanced nutritious food and a decrease in the incidence of toddlers with poor nutritional status within 6 months.

One of the crucial issues in Indonesia is equal access to health services, especially for people in remote and island areas. Although there have been massive efforts through the National Health Insurance (JKN) or BPJS Kesehatan, geographical constraints, limited facilities, and a shortage of specialist medical personnel in the regions are still significant obstacles. (Noor et al., 2021) This inequality has an impact on limited public access to promotive-preventive information and services, including nutrition education. In the context of the theory of effectiveness with indicators of achieving goals, nutrition education efforts for PAUD teachers are an important strategy to bridge this gap. Well-educated PAUD teachers can act as agents of change in their communities, convey correct nutrition information, and encourage the implementation of healthy eating patterns in children from an early age. When teachers are able to convey material appropriately and can be well received by the target, and there is a change in behavior in the form of healthy eating habits, this is a concrete indicator that the goal of nutrition education has been achieved effectively. Thus, empowering PAUD teachers through nutrition education not only improves the quality of learning, but also becomes a strategic solution in bringing health services closer to remote communities through an adaptive and sustainable approach.

The involvement of PAUD teachers in helping to reduce stunting rates through nutrition education carried out by non-health professionals has been proven to reach more targets,

especially in areas with limited medical personnel. Effective education for parents and caregivers can improve feeding practices, which are one of the main determinants of stunting. Therefore, this intervention is very relevant to support the national target of reducing Indonesia's stunting prevalence to 14% by 2024, as stipulated in the National Medium-Term Development Plan (RPJMN), by expanding the reach of education through empowering PAUD teachers and cadres at the grassroots level.

Real Change (Effectiveness of Goals and Processes)

Real change goes beyond numbers and indicators. Real change reflects the real impact of programs on people's lives, which is the culmination of effective goals and the result of effective processes. The results of qualitative observations and in-depth interviews with PAUD teachers, parents, and posyandu cadres in Tempeh District showed real changes in parenting behavior and practices that were directly related to the role of PAUD teachers as nutrition education agents. Specifically, PAUD teachers in several villages in Tempeh have succeeded in initiating healthy eating habits in the PAUD environment, for example through a *healthy lunch policy* with a more varied and nutritious menu than before, as well as a joint meal program that is used as an educational moment about the benefits of vegetables and vegetable protein. According to health behavior research (Pera et al., 2021), it is emphasized that behavioral change requires a consistent, repetitive approach and is supported by an adequate environment.

Besides that, theres improvement interaction between parents and related PAUD teachers Topic nutrition; many parents start active ask about healthy menu, frequency eat, and proper intake for child toddler they. This is reflected in notes communication of PAUD teachers that shows surge amount informal consultation regarding problem nutrition, such as child difficult eat, choice side dish nutritious, until method prepare food local like tempeh to make it more liked child. Beside that, PAUD teachers too in a way No direct increase parental awareness about importance integrated health service post and immunization. Some PAUD teachers, on initiative alone, working the same with cadre integrated health service post for remind timetable weigh and immunization through group *WhatsApp* PAUD class or moment meeting routine. From the discussion group directed with cadre integrated health post, reported improvement visit to integrated health service post by 18% in 4 months lastly, most of which big initiated by parents PAUD students.

This real change shows that the knowledge provided by PAUD teachers does not stop at understanding, but has been translated into better daily practices in the household and community environment. This indicates the sustainability and potential for long-term impact of the program, where PAUD teachers not only educate children, but also become facilitators of family behavior change in supporting optimal growth and development and preventing stunting in Tempeh District. Findings in Tempeh District, which show change real in behavior Eat healthy , improvement parent - teacher interaction about nutrition , and parental awareness will importance integrated health service post as well as immunization, in line with previous studies that confirm effectiveness the role of PAUD teachers or non- labor cadres health professional in influence practice caregiving in the community. For example , research (Roziana et al., 2023) find that education nutrition by PAUD teachers contributing on improvement consumption vegetable And side dish animal in 65% of children toddler in 6 months, because the teacher is regular remind And demonstrating a healthy menu in class . In harmony with that , study (Hakimah et al., 2022) show that involvement active PAUD teachers in give counseling simple to parents informally successful increase visit integrated health service post by 20% and compliance immunization base complete up to 15% more tall compared to village without intervention education from PAUD teachers. While that , research (Zekaria et al., 2025) find that PAUD teachers are trained education nutrition No

only increase understanding of parents , but Also capable influence habit supplies children , where 70% of children start bring food with content nutrition more Good after the teacher implemented the *provision* program *Healthy.* The results of the study support the findings in Tempeh that knowledge transferred by PAUD teachers to child and parents has translated to practice real at home or in the community, such as habit Eat healthy, active ask question nutrition, up to increasing awareness will importance service health basic. Impact This show sustainability And effectiveness term long intervention education nutrition through PAUD teachers, at the same time confirm that PAUD teachers can become agent strategic in effort acceleration reducing stunting with approach based on community.

CONCLUSION

Conclusion from this research show that effectiveness strategy management the implementation of the stunting reduction program in Tempeh District is very depends on comprehensive understanding from the program implementers, starting from head health cente, cadres health, to PAUD teachers. The SIDERA program was initiated Tempeh Health Center has succeed empowering PAUD teachers as agent education nutrition and detection early, which has an impact positive to decline prevalence of wasting and underweight, indicators important related close with risk of stunting in the future front. Synergy cross sector between health center, government village, institution education, and cadre health Also proven become factor key in support success program implementation, creating conducive ecosystem for improvement of nutritional status toddler. However, the research results also highlight a number of challenges that still exist need repaired, especially related accuracy time implementation training for PAUD teachers who are often late so that reduce effectiveness intervention on period gold growth children. Besides that, the selection of PAUD teachers as target education Not yet fully based on stunting prevalence data in each region, so that intervention Not yet fully target community with risk highest. Although thus, changes real observed in practice parenting, such as habit bring supplies healthy, increasing parent interaction with the teacher about nutrition, and increasing visit to integrated health post, shows that the program has succeed transform knowledge become action that has an impact positive for health toddler. In general overall, this research confirm importance strengthening coordination cross sector, increase quality and accuracy time training for PAUD teachers, as well as determination more program targets strategic and based on data, so that efforts prevention of stunting in Tempeh District can walk more effective, sustainable, and give contribution real to national target achievement reduction in stunting.

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