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ORIGINAL

Regional Collaboration in Public Health Policy: Evaluating Family Assistance Team Involvement in Stunting Reduction

Colaboración Regional en la Política de Salud Pública: Evaluación de la Participación del Equipo de Asistencia Familiar en la Reducción del Retardo en el Crecimiento

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ABSTRACT

Introduction: the study examined regional collaboration in public health policy by assessing the involvement of Family Assistance Teams (FATs) in accelerating stunting reduction in Lampung Province, Indonesia. It aimed to identify FATs' roles, performance, and operational challenges in implementing integrated health and nutrition programs under decentralized governance.
Method: a qualitative approach was used through focus group discussions with 23 FAT members from North Lampung, West Lampung, and Way Kanan Regencies. Participants were purposively selected based on program intensity. Data validation was conducted through interviews with family planning field officers to ensure accuracy and policy relevance.
Results: the findings revealed variation in role comprehension, sectoral coordination, and digital data use. Key challenges included limited technical skills, scarce resources, and weak integration with Regional Stunting Reduction Teams. Nonetheless, locally driven strategies supported by village funds, structured task allocation, and active engagement in health posts enhanced program performance and outcomes.
Conclusions: The study concluded that strengthening institutional capacity, improving digital data management, enhancing coordination mechanisms, and introducing performance-based incentives were vital to increase FAT effectiveness. These insights provided strategic guidance for refining collaborative governance and expanding sustainable stunting reduction initiatives across regions.

Keywords: Regional Collaboration; Family Assistance Team; Stunting Reduction; Public Policy; Community Health.

RESUMEN

Introducción: el estudio examinó la colaboración regional en la política de salud pública al evaluar la participación de los Equipos de Asistencia Familiar (FAT) en la reducción acelerada del retraso en el crecimiento en la provincia de Lampung, Indonesia. Su objetivo fue identificar los roles, el desempeño y los desafíos operativos de los FAT en la ejecución de programas integrados de salud y nutrición bajo una gobernanza descentralizada.
Método: se utilizó un enfoque cualitativo mediante discusiones en grupos focales con 23 miembros de FAT de los distritos de Lampung Norte, Lampung Oeste y Way Kanan. Los participantes fueron seleccionados intencionalmente según la intensidad del programa. La validación de los datos se realizó mediante entrevistas

con funcionarios de planificación familiar para garantizar su fiabilidad y relevancia política.

Resultados: los hallazgos mostraron variaciones en la comprensión de roles, la coordinación intersectorial y el uso de datos digitales. Los principales desafíos incluyeron limitaciones técnicas, escasez de recursos y débil integración con los Equipos Regionales de Reducción del Retraso en el Crecimiento. Sin embargo, las estrategias locales apoyadas por fondos comunitarios y una participación activa en los puestos de salud mejoraron el desempeño del programa.

Conclusiones: el estudio concluyó que fortalecer la capacidad institucional, mejorar la gestión digital de datos, optimizar la coordinación e introducir incentivos basados en el desempeño fueron esenciales para aumentar la eficacia de los FAT. Los resultados ofrecieron orientaciones estratégicas para perfeccionar la gobernanza colaborativa y ampliar programas sostenibles de reducción del retraso en el crecimiento.

Palabras clave: Colaboración Regional; Equipo de Asistencia Familiar; Reducción del Retraso en el Crecimiento; Política Pública; Salud Comunitaria.

INTRODUCTION

Stunting remains one of the most critical public health challenges both nationally and globally. It is not only linked to chronic undernutrition among children but also serves as a multidimensional indicator reflecting social inequality, weak public policy implementation, and deficiencies in health-based regional planning.[1,2] In Indonesia, the prevalence of stunting remains concerning despite gradual improvement in recent years. According to the 2023 Indonesian Health Survey, the national prevalence stood at 21,2 percent, a decline from 24,4 percent in 2021. The Indonesian Government, through the National Strategy for the Acceleration of Stunting Reduction, aims to lower this rate to below 14 percent by 2024.[3] However, achieving this ambitious target requires a more integrated, collaborative, and context-specific approach.[4,5] Compared with other Asian countries, Indonesia's stunting prevalence remains relatively high. For instance, Vietnam reports a prevalence of around 19,6 percent, the Philippines 26,7 percent, while Thailand and Malaysia record 13,3 percent and 20,9 percent, respectively.[6] Singapore, in contrast, maintains an exceptionally low prevalence of under 5 percent. These figures indicate that while Indonesia has made measurable progress, its position remains suboptimal and requires targeted policy interventions supported by stronger institutional capacity at the regional level.

Lampung Province is among the regions facing substantial challenges in reducing stunting rates. Its diverse geography, uneven access to basic health services, and variations in local government capacity make Lampung a representative case for evaluating the effectiveness of regional collaboration in addressing public health issues.[7,8] Within this context, the Family Assistance Team (FAT) plays a strategic role. The FAT represents an institutional innovation that provides direct assistance to families at risk of stunting through a community-based, cross-sectoral collaborative approach.[9] According to the 2023 SKI, Lampung ranks as the third lowest province in stunting prevalence after Bali and Jambi, at 14,9 percent. Nevertheless, several districts, including West Lampung, North Lampung, and Way Kanan, continue to experience relatively high prevalence rates.

This study is significant because evaluations of the FAT's effectiveness remain limited, particularly from regional planning and public policy perspectives. Previous research has primarily focused on medical or nutritional aspects, with limited attention to how decentralization, local capacity, and stakeholder synergy influence program outcomes.[10,11] Therefore, this research aims to fill this gap by examining regional collaboration as a policy approach to complex public health challenges.

The novelty of this study lies in three key aspects. First, it evaluates the implementation of the FAT not only in terms of outcomes but also in terms of process.[12] Second, by employing a public policy and regional planning perspective, it offers a systemic analytical lens.[13] Third, focusing on Lampung Province, with its geographical and administrative diversity, provides a valuable case study that may inform similar regional contexts.[14]

At the national level, the findings of this study are expected to generate evidence-based recommendations for both local and central governments to improve decentralized policy implementation and promote the replication of best practices.[15,16] At the international level, stunting remains a core indicator of the Sustainable Development Goals (SDGs), particularly target 2,2, making this study relevant for other developing countries.[17,18]

Methodologically, this study employs a qualitative analytical approach to comprehensively assess the role of the FAT. This approach enables an in-depth exploration of institutional, socio-cultural, and spatial factors influencing program performance.[19] Data were collected through policy analysis, interviews, observation, and secondary data on stunting prevalence and regional indicators.

The regional collaboration approach adopted in this study reflects the principles of a whole-of-government and whole-of-society framework, which has proven effective in tackling complex health challenges.[20] The FAT functions as a bridge between national policy directives and local implementation, serving as a key agent of change within communities. Evaluating its performance within a regional planning framework is therefore

crucial for strengthening long-term public health systems.[21]

This study contributes new insights into the development of adaptive and context-sensitive stunting reduction policies. The findings are expected to enrich public policy and regional planning discourse while providing practical references for implementing community-based health interventions in other parts of Indonesia and comparable developing nations. The FAT plays a central role in implementing the stunting convergence policy, which requires multi-sectoral coordination from provincial to village levels. However, evaluations of its effectiveness and coordination mechanisms across sectors remain limited. Constraints such as budget limitations, low motivation among FAT members, and challenges in interpersonal communication with target families may hinder optimal program outcomes. Therefore, this study aims to assess how FAT involvement and cross-sectoral coordination contribute to stunting reduction in Lampung Province and to develop data-driven policy recommendations for strengthening regional planning and public health policy implementation. The objectives of this research are to analyze the FAT's contribution, evaluate the effectiveness of collaborative intersectoral approaches, and provide evidence-based recommendations for improving regional planning and policy execution related to stunting reduction.

METHOD

This study adopted a qualitative descriptive design to analyze the involvement and operational experiences of the Family Assistance Team (FAT) in stunting reduction efforts.[22] The research was conducted between July and September 2024 across three regencies in Lampung Province, namely North Lampung, West Lampung, and Way Kanan, which were selected based on the intensity of programme implementation as determined by regional authorities.

The study population consisted of all FAT members involved in stunting reduction at the subdistrict level. From this population, 23 FAT members were selected purposively in accordance with criteria set by local authorities. The inclusion criteria required participants to have at least six months of experience in FAT activities, direct involvement in family mapping or mentoring tasks, and willingness to participate in the study. The exclusion criteria applied to members who were not active in stunting-related duties or who were unable to attend the scheduled FGDs. No participants met exit criteria during data collection. The final sample was organised into three Focus Group Discussion (FGD) groups representing the three regencies: eight participants in North Lampung, eight participants in West Lampung, and seven participants in Way Kanan. Each group represented three FAT teams operating within one purposively selected subdistrict, determined based on accessibility, time availability, and respondent readiness.

The study analysed five thematic variables derived from the main research objectives. These variables included the role and function of FATs, cross-sector collaboration, the effectiveness of FAT interventions, FAT members' capacity and institutional support, and socio-cultural contextual factors influencing public health programmes. The selection of these variables was informed by several theoretical frameworks. Policy implementation theory highlights that successful implementation depends on policy formulation, implementer capacity, and the socio-political environment, thereby supporting the sub-focus on FAT roles and local context. The theory of collaborative governance emphasises coordination between governmental and non-governmental actors in public policy,[23] while contemporary public policy perspectives further highlight the importance of trust, shared objectives, and mutual commitments.[24] Healey's theory of participatory planning reinforces the relevance of local stakeholder engagement in planning and decision-making,[25] and Friedmann's theory of regional development underscores the importance of local actors in regional problem solving.[26] These frameworks guided the organisation of research sub-focuses and the development of the FGD instrument.

Data collection employed an FGD guide that was developed and validated by *the* research team through consultation with two public policy experts and one maternal and child health practitioner. Their feedback ensured conceptual clarity and relevance to field conditions. FGDs were conducted at the designated Subdistrict Extension Office or at a FAT member's residence, depending on mutual agreement. Each session began with an explanation of the study objectives, assurance of confidentiality, and clarification of discussion rules, followed by participant introductions to build rapport. A trained facilitator guided each discussion using open-ended questions, and a note-taker documented key points. Audio recordings were used to ensure accuracy and reduce transcription bias. Each FGD lasted approximately 90 to 120 minutes and concluded with a summary of preliminary findings.

To strengthen data reliability, cross-check interviews were conducted with Family Planning Field Officers (PLKB or PKB) in each regency. These interviews verified structured policy-related information gathered during FGDs and ensured consistency across locations. All audio recordings and field notes were transcribed verbatim before analysis.

Data analysis followed a thematic analysis approach, including familiarisation with the data, coding, categorisation, and theme development. Coding was performed independently by two researchers, and discrepancies were resolved through discussion. Triangulation was carried out by comparing data across FGD

groups and by integrating insights from PLKB or PKB validation interviews.

Ethical principles were applied throughout the study. Participation was voluntary and informed consent was obtained from all participants. Confidentiality was maintained by anonymising names and securely storing all data. Ethical approval was obtained from the Institutional Ethics Committee of the University of Bandar Lampung under protocol number 073/KEP-UBL/2024, ensuring compliance with national ethical standards for qualitative research involving human participants.

RESULTS

Role and Function of the Family Assistance Team

FGD results from North Lampung, West Lampung, and Way Kanan show that several FAT members did not fully understand the concepts of stunting and families at risk of stunting. In two cases, PKK Chairpersons were unaware that they also served as TPPS Chairs. In North Lampung, role distribution was concentrated among midwives and healthcare workers, while PKK and KB cadres mainly assisted prospective brides and grooms. FAT members in West Lampung reported having attended orientation sessions but still felt insufficiently prepared for field assistance.

Cross-Sector Collaboration and Regional Coordination

In North Lampung, coordination operated through data integration between Posyandu and records of prospective brides and grooms, with nutritionists analyzing the data. Challenges included uneven distribution of measurement tools and recurring errors in the Elsimil application. In West Lampung, FAT members divided work by Posyandu area, collected Dasa Wisma data, and submitted reports to village authorities. Village funds supported stunting interventions, although delays in operational payments were noted. In Way Kanan, several TPPS units were inactive, limiting coordination.

Effectiveness of FAT Interventions

In North Lampung, interventions included counseling, supplementary feeding, vitamin provision, sanitation education, referrals, and monitoring. Posyandu attendance reached approximately 60 percent of the target. In West Lampung, standardized anthropometric tools were available, but Elsimil adoption remained limited. Funding for supplementary feeding and food packages was available, although some operational support had not been disbursed.

Capacity and Support for FAT

North Lampung villages provided limited funds for supplementary feeding and cadre stipends. Several FAT members felt inadequately trained, especially regarding Elsimil. Technical issues affected Elsimil use in Way Kanan and North Lampung. In West Lampung, monthly supervision occurred, although overall capacity still required strengthening. Human resource limitations constrained PKB supervision in Way Kanan.

Local Social and Cultural Context

North Lampung FAT members submitted monthly reports manually due to low Elsimil utilization caused by technical problems. In West Lampung, routine monitoring and evaluation were conducted, although limited human resources hindered some activities. Posyandu attendance in Way Kanan reached 40 percent, and 60 percent in West Lampung. Some FAT members were inactive, and community engagement varied across locations.

Data-Driven Policy Recommendations Reported by Stakeholders

Stakeholders across the three regencies identified the need for strengthening FAT competence, improving cross-sector coordination, enhancing data reporting mechanisms, expanding area-based interventions, and improving operational funding and incentive systems.

DISCUSSION

This study examined the implementation of FAT roles, cross-sector coordination, intervention effectiveness, capacity support, and socio-cultural aspects influencing stunting reduction in three regencies. The results indicate that implementation performance varied widely due to differences in institutional structures, availability of resources, and the socio-cultural environment of each area. Across regencies, key constraints included incomplete FAT role comprehension, inconsistent coordination mechanisms, uneven adoption of digital reporting systems, and limited financial and technical support. These issues were compounded by diverse patterns of community engagement, reflected in Posyandu attendance fluctuating between 40 and 60 percent and the presence of inactive FAT members.

The limited understanding of stunting among several FAT members aligns with global findings showing that

frontline workers often lack the required knowledge when training is insufficient. Evidence from Pakistan[27] and Nepal[28] shows that deficits in technical preparation weaken implementation quality. In this study, similar gaps were observed in the application of family mapping tools and in counseling practices. This situation reflects Mazmanian and Sabatier's perspective that unclear distribution of authority and limited understanding of policy goals constrain implementation effectiveness.[29] Additionally, the concentration of responsibilities among a few health workers in certain areas demonstrates the challenges caused when authority is unevenly distributed.

Cross-sector coordination patterns, especially in West Lampung, mirrored collaborative governance dynamics described by Ansell and Gash.[24,30] FAT members succeeded in collecting Dasa Wisma data, working with village governments, and holding regular meetings. Such practices are consistent with the emphasis on trust-building, inclusive participation, and shared commitment. However, in Way Kanan, the limited activity of TPPS structures reflected institutional fragmentation, a challenge also highlighted by Grindle, who emphasized the importance of bureaucratic cohesion for effective public policy implementation.[31] Previous studies have shown that policy environments marked by institutional incoherence often produce uneven results,[32] which is consistent with the inconsistencies observed in this study.

The challenges associated with Elsimil also parallel findings from digital health initiatives in Ethiopia, where technological improvements enhanced accuracy but required stable infrastructure and sustained user competency.[33] FAT members reported connectivity issues, difficulties synchronizing data, and challenges understanding certain system features. These obstacles resemble findings from studies on digital administration systems where infrastructure and technical readiness determine usability.[34] Choi's argument that digital tools improve service delivery only when systems are accessible and user-friendly[35] is strongly reflected in FAT members' experience. Such challenges are also consistent with research showing that digital governance requires not only adequate hardware but also institutional support and continuous training.[36]

Intervention activities such as home visits, IEC sessions, breastfeeding counseling, and supplementary feeding illustrated FAT involvement in multisectoral nutrition efforts. However, the quality and frequency of these interventions varied by regency. West Lampung demonstrated more structured routines and access to standardized tools, while other areas relied heavily on verbal explanations and limited materials. This aligns with global findings that multisectoral nutrition programs succeed only when supported by operational resources and clear protocols.[37] The limited Posyandu attendance aligns with research demonstrating that social networks and community cohesion strongly influence participation in public health programs.[22,38] In some communities, cultural perceptions regarding nutrition, household decision-making dynamics, and local norms affected participation levels, reaffirming findings that cultural alignment plays a major role in health intervention uptake.[39]

The study also revealed significant constraints regarding operational funding. Limited and inconsistent budget disbursement mirrors findings from Indonesia and Sierra Leone, where funding delays hamper nutrition program performance.[40] FAT members in some areas used personal funds to support transportation or materials, indicating gaps in financial planning and village-level budget execution. This situation reduces motivation and limits the frequency of field activities, which is consistent with literature noting that inadequate budgets undermine frontline performance.

Variations in FAT capacity and readiness emphasize the need for structured and continuous training. This is aligned with Yusnita et al.[41] who highlighted the importance of ongoing mentoring to sustain implementation quality. In districts where routine mentoring was conducted, FAT members demonstrated better application of family mapping procedures and more accurate reporting.[42] Technical limitations in Elsimil further illustrate broader challenges found in digital health reporting systems, where poor connectivity disrupts data flow and delays decisions. Studies show that even well-designed systems cannot function optimally when user competency and infrastructure are insufficient.[34,36]

Overall, these findings suggest several implications. Sustained capacity development is necessary to address both knowledge gaps and technical skills. More standardized and accountable coordination mechanisms are needed to strengthen horizontal and vertical linkages among actors. Reliable digital infrastructure and simplified reporting systems would improve data accuracy and update timeliness. Village-level authorities should prioritize consistent and timely allocation of operational funds to ensure FAT mobility and program continuity. Community engagement strategies should be reinforced through culturally aligned communication, improved social mobilization, and strengthened partnerships with key community leaders. Moreover, integrating spatial and regional development planning with nutrition-focused strategies may support more targeted and sustainable initiatives.

This study has several limitations. First, data collection relied on FGDs and cross-check interviews, which may introduce social desirability bias. Second, variations in participant attendance across regencies may have influenced the depth of insight gathered. Third, the study did not directly assess changes in child nutritional status, limiting the ability to link implementation processes to outcomes. Finally, reliance on participant narratives limits objectivity, and the performance of the Elsimil system could not be independently verified.

CONCLUSIONS

The findings of this study underscore that regional collaboration plays a decisive role in shaping the effectiveness of public health interventions, particularly in stunting reduction efforts across North Lampung, West Lampung, and Way Kanan. In North Lampung, the Family Assistance Teams (FATs) have demonstrated meaningful progress through structured coordination and the use of village-level funding mechanisms. Their collaborative engagement across sectors reflects a growing institutional commitment to addressing stunting as a multidimensional issue. However, persistent gaps in role clarity, insufficient technical competence, limited use of digital technology, and uncertainty in incentive and budget allocation continue to hinder program optimization. Strengthening these structural and operational components requires adaptive policy frameworks that integrate local context, stakeholder dynamics, and evidence-based decision-making.

In West Lampung, the accelerated implementation of stunting reduction policies illustrates how program outcomes are highly contingent upon the coherence of cross-sector coordination, resource adequacy, and the operational capacity of FATs. Effective governance mechanisms, particularly transparent budgeting, consistent financial support, and strong monitoring and evaluation systems serve as critical drivers of success. Sustainable improvement can be achieved through continuous professional training for FAT members, enhanced village financial management, and systematic integration of technology in data collection and program evaluation.

The comparative experiences across the three regions reveal that despite institutional progress, systemic challenges remain in harmonizing inter-agency collaboration, ensuring equitable financial distribution, and fostering community-based participation. These issues highlight the necessity for regionally adaptive governance models that promote shared accountability, inclusivity, and innovation in public health delivery. Ultimately, effective stunting reduction requires not only well-designed regional policies but also continuous capacity building, data-driven management, and strong political and community commitment to ensure long-term, sustainable public health outcomes.

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FINANCING

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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