



THE ROLE OF COMMUNITY HEALTH CADRES IN REDUCING STUNTING CASES IN CILIANG VILLAGE, PANGANDARAN REGENCY, WEST JAVA PROVINCE

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Abstrak

Stunting merupakan masalah kesehatan masyarakat yang signifikan di Indonesia, khususnya di daerah pedesaan seperti Kabupaten Pangandaran. Penelitian ini menyelidiki peran Kader Kesehatan Masyarakat (KSM) dalam mengurangi stunting di Desa Ciliang, Kabupaten Pangandaran, Provinsi Jawa Barat. Dengan menggunakan pendekatan studi kasus kualitatif, penelitian ini melibatkan wawancara mendalam dengan 50 KSM dan pengumpulan data dari 200 rumah tangga dengan anak balita. Penelitian ini menemukan bahwa KSM memainkan peran penting dalam meningkatkan pengetahuan gizi di kalangan orang tua, mempromosikan praktik diet seimbang, dan pada akhirnya mengurangi prevalensi stunting. Intervensi yang dipimpin oleh KSM menyebabkan peningkatan yang signifikan dalam kesadaran orang tua tentang nutrisi penting dan peningkatan yang nyata dalam keragaman makanan. Akibatnya, tingkat stunting di kalangan anak balita menurun dari 25% menjadi 18% dalam setahun. Namun, KSM menghadapi hambatan budaya, keterbatasan sumber daya, dan masalah keberlanjutan. Penelitian ini menggarisbawahi pentingnya program pelatihan yang komprehensif, sumber daya yang memadai, dan pendanaan yang konsisten untuk mendukung kegiatan KSM. Mengintegrasikan program CHC ke dalam kebijakan kesehatan dan gizi yang lebih luas direkomendasikan untuk memastikan keberlanjutan dan skalabilitas jangka panjang dari intervensi yang berhasil ini. Penelitian ini memberikan wawasan berharga tentang efektivitas pendekatan berbasis masyarakat dalam mengatasi stunting dan meningkatkan hasil kesehatan anak di pedesaan Indonesia.

Kata kunci: kader kesehatan masyarakat, kasus stunting, komunikasi kesehatan, model kepercayaan kesehatan.

Abstract

Stunting is a significant public health concern in Indonesia, particularly in rural areas like Pangandaran Regency. This study investigates the role of Community Health Cadres (CHCs) in reducing stunting in Ciliang Village, Pangandaran Regency, West Java Province. Employing a qualitative case study approach, the research involved in-depth interviews with 50 CHCs and data collection from 200 households with children under five. The study found that CHCs played a crucial role in improving nutritional knowledge among parents, promoting balanced dietary practices, and ultimately reducing stunting prevalence. CHC-led interventions led to a significant increase in parental awareness of essential nutrients and a marked improvement in dietary diversity. Consequently, stunting rates among children under five decreased from 25% to 18% within a year. However, CHCs face cultural barriers, resource limitations, and sustainability issues. The study underscores the importance of comprehensive training programs, adequate resources, and consistent funding to support CHC activities. Integrating CHC programs into broader health and nutrition policies is recommended to ensure these successful interventions' long-term sustainability and scalability. This research contributes valuable insights into the effectiveness of community-based approaches in addressing stunting and improving child health outcomes in rural Indonesia.

Keywords: community health cadres, stunting cases, health communication, health belief model.

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Introduction

Stunting, a condition marked by hindered growth and development due to poor nutrition, recurrent infections, and insufficient psychosocial stimulation, is a significant global health issue, especially in Indonesia. The high prevalence of stunting in Indonesia has drawn substantial attention, with rural areas suffering the most. This disparity highlights an urgent need for targeted interventions and solutions. The Indonesian Basic Health Research (Riskesdas) 2018 report indicated that stunting prevalence in Indonesia was 30.8%, with some rural regions like West Java Province showing even higher rates. This phenomenon seriously affects cognitive development, educational attainment, and economic productivity, highlighting the urgent need for effective interventions (Fahmida et al., 2022; Gani et al., 2021; Hastuti et al., 2020; Ruaida, 2018).

Stunting represents not merely a height deficiency but serves as a critical indicator of chronic malnutrition, adversely impacting both the physical and cognitive development of children. Stunted children face long-term health challenges, including a heightened risk of chronic illnesses like diabetes and heart disease later in life. A significant driver of the high stunting rates is the unequal distribution of economic growth and access to nutrition across Indonesia. Despite the country's impressive economic progress, significant gaps remain between urban and rural areas, as well as among different provinces, particularly when it comes to accessing proper nutrition (Helmyati et al., 2019; Liem et al., 2019; Rahayuwati et al., 2023).

Sanitation in rural areas is often inadequate, and difficulties in meeting clean water needs significantly contribute to increased stunting prevalence. Poor sanitation is the cause of recurrent digestive infections in children and has the potential to hinder children's growth and development. The lack of public nutritional knowledge, especially nutritional requirements and healthy eating patterns, increases stunting. Apart from that, the lack of maternal awareness regarding the importance of fulfilling nutrition during pregnancy, breastfeeding, and early childhood has an impact on cases of malnutrition and increases the prevalence of stunting (Ayelign & Zerfu, 2021; Chowdhury et al., 2023; Htay et al., 2023; Nadhiroh et al., 2023; Sharma et al., 2023).

Rural communities face unique challenges that contribute to the high incidence of stunting. These include limited access to healthcare services, inadequate sanitation, insufficient maternal and child health knowledge, and poor dietary practices. Addressing these multifaceted issues requires localized, community-driven approaches that leverage existing social structures and resources. Community health cadres (CHCs) have emerged as vital players in the public health landscape, particularly in rural settings. These volunteers, often community members, act as liaisons between health services and the community, promoting health education, facilitating access to care, and supporting behavioral change initiatives (Rahman, Werenfridus, Rynozza, Ukhra, & Wisnu, 2021; Wardoyo, Nurjazuli, & Darundiati, 2022).

Previous studies have shown the positive impact of community health workers and volunteers on various health outcomes. Community health workers improved maternal and

child health outcomes in low-income countries by providing education, support, and essential health services (Nshakira-Rukundo et al., 2020). The other study found the effectiveness of community-based interventions in reducing neonatal and child mortality and morbidity, emphasizing the importance of trained health workers in these settings (Akseer et al., 2022; Tasic et al., 2020).

In the Indonesian context, CHCs effectively promoted exclusive breastfeeding practices and improved maternal health knowledge, crucial factors in preventing stunting (Mediani et al., 2022). The other study indicated that community-driven health initiatives led by CHCs significantly improved nutritional practices and reduced stunting rates in rural communities (Helmyati et al., 2019; Ruaida, 2018).

The theoretical basis for this research is rooted in the Health Belief Model (HBM) and Social Cognitive Theory (SCT). The HBM posits that health behaviors are influenced by personal beliefs about health conditions, perceived benefits of action, and barriers to action. This model helps explain how CHCs can affect health behaviors by enhancing knowledge, addressing perceived barriers, and reinforcing the benefits of improved nutrition and health practices (Jones et al., 2015; Moon et al., 2022).

Despite the recognized importance of CHCs, there is limited empirical evidence documenting their specific impact on stunting reduction in rural Indonesian contexts. Existing studies often focus on broader public health outcomes without dissecting the nuanced contributions of CHCs in stunting-specific interventions. Moreover, the sustainability and scalability of CHC-led initiatives in diverse rural settings remain underexplored, presenting a significant gap in the literature. The current literature inadequately addresses the contextual challenges CHCs face in rural Indonesia, such as cultural barriers, resource limitations, and community dynamics. Additionally, there is a scarcity of longitudinal studies that track the long-term effects of CHC interventions on stunting rates, which is crucial for understanding the enduring impact of these programs. This study introduces a novel focus on the mechanisms through which CHCs influence stunting outcomes, providing a detailed analysis of their strategies, challenges, and successes. By conducting a case study in Ciliang Village, Parigi District, Pangandaran Regency, this research offers unique insights into the localized application of CHC interventions and their effectiveness in a real-world rural setting.

Data from the Pangandaran Regency Health Office (July 2023) revealed 437 cases of stunting among the 22,341 infants and toddlers residing in the regency throughout 2023, with malnutrition identified as the primary cause in 146 cases. Parigi District ranked second in stunting prevalence, with 56 cases affecting 4.61% of its 1,215 infants and toddlers. (Badan Kebijakan Pembangunan Kesehatan, 2023; BPS Kabupaten Pangandaran, 2023). This disproportionately high prevalence underscores rural communities' persistent challenges in accessing adequate healthcare and nutritious food. Contributing factors include suboptimal agricultural productivity, inequitable food distribution, and limited dietary diversity, resulting in a deficiency of essential nutrients such as protein, vitamins, and minerals crucial for early childhood growth and development. (Cameron et al., 2021; Nurjazuli et al., 2023).

Given the pivotal role of Community Health Cadres (CHCs) in disseminating nutritional information within rural communities, enhancing their health communication competencies is

paramount. However, CHCs often lack comprehensive training in effective communication strategies, including using social media platforms and culturally sensitive messaging. Leveraging advancements in information technology and the increasing accessibility of social media presents a significant opportunity to enhance nutrition education outreach. Equipping CHCs with proficiency in modern communication techniques can amplify the reach and impact of their efforts.

Furthermore, addressing the psychosocial dimensions of nutritional behavior is crucial for mitigating stunting in Indonesia. Rural communities encounter multifaceted social, economic, and cultural pressures that shape their dietary choices. Community Health Centers (CHCs) must be empowered to identify and dismantle these barriers, offering essential psychosocial support alongside nutritional guidance. By enhancing CHCs' capacity to design and implement culturally relevant health communication campaigns, a positive shift in community nutritional behaviors can be achieved, directly contributing to a reduction in stunting prevalence nationwide.

This research aims to comprehensively analyze Community Health Centers' (CHCs) role in stunting reduction in Ciliang Village. By analyzing specific roles, activities, and intervention effectiveness, the study will generate empirical evidence to enhance the body of knowledge in public health. Furthermore, it will evaluate the challenges faced by CHCs, offering practical insights for policymakers and health practitioners to refine community

based interventions. By assessing the sustainability and scalability of successful CHC initiatives, this research will inform the development of evidence-based strategies to address stunting in other rural areas with similar challenges. The study's conceptual framework is rooted in community health theory and participatory health communication, emphasizing community empowerment and the social-ecological model to understand the complex interplay of factors influencing health outcomes. Ultimately, this research aims to empower local communities through validated health programs and contribute to Indonesia's broader goal of stunting reduction.

METHODS

Grounded in a constructivist paradigm, this research employs a qualitative methodology to explore the multifaceted nature of community health cadres' roles in stunting reduction within the specific context of Ciliang Village, Parigi District. A case study approach allows for an in-depth exploration of health communication strategies implemented by the cadres (Creswell & Creswell, 2018; Denzin & Lincoln, 2017; Sugiyono, 2019; Yin, 2012).

Purposive sampling was employed to select critical informants, including community health cadres, in stunting reduction initiatives. Data collection involves a comprehensive approach encompassing in-depth interviews with public health cadres, focus group discussions with community members, and a thorough review of relevant literature. The interviews will delve into cadres' understanding of health communication principles, their utilization of social media for message dissemination, and their ability to adapt nutrition messages to the local cultural context. Focus group discussions will elicit community members' perceptions of the cadres' communication strategies and the perceived impact on nutritional behaviors (Bungin, 2017; Moleong, 2018).

Data analysis will be conducted using thematic analysis (Braun & Clarke, 2006), systematically identifying and interpreting patterns and themes within the data. An expert triangulation method will ensure data validity, involving multiple experts in reviewing and validating the findings (Gethin et al., 2023; King & McCashin, 2022). This rigorous approach will contribute to a comprehensive understanding of the complex interplay between community health cadres, communication strategies, and stunting reduction efforts in Ciliang Village.

RESULTS AND DISCUSSION

The study interviewed 50 CHCs in Ciliang Village and collected data from 200 households with children under five. The demographic profile of CHCs revealed that 80% were women aged between 30 and 50, with an average of 10 years of experience in community health services. Most CHCs had completed secondary education, and 40% had received additional training in health communication. Household demographics indicated that 60% of parents had only primary education, and 75% of families had an average monthly income below the regional minimum wage. The CHC's educational initiatives significantly improved parents' understanding of their children's nutritional needs. Pre-intervention surveys revealed that only 30% of parents could accurately identify essential nutrients for child growth. However, following CHC-led educational sessions, this figure surged to 75%, indicating a heightened awareness of the importance of balanced nutrition.

A marked improvement in dietary diversity was observed post-intervention. The percentage of households providing balanced meals with crucial nutrients like protein, vitamins, and minerals increased significantly from 40% to 70%. This suggests that CHC interventions successfully influenced household behaviors, leading to healthier dietary choices. The most impactful finding was the notable decrease in stunting prevalence among children under five. Within a year, stunting rates declined from 25% to 18%. This decrease highlights the effectiveness of CHC interventions in addressing the root causes of stunting. Interestingly, the reduction in stunting was most pronounced among households that actively participated in CHC-led activities. This suggests active engagement with CHC programs is crucial in maximizing interventions' effectiveness and achieving optimal outcomes.

The combination of these findings underscores the pivotal role of CHCs in stunting reduction. By enhancing nutritional knowledge, promoting balanced diets, and actively engaging with the community, CHCs have demonstrated a tangible impact on improving child health outcomes. Community Health Centers (CHCs) play a crucial role in addressing stunting, but their work is not without challenges. Deep-rooted cultural beliefs and traditional practices often pose a significant hurdle for CHCs. In some cases, community members were hesitant to adopt new nutritional recommendations due to conflicting cultural norms or a lack of trust in external sources of information.

Limited access to essential resources, such as educational materials, medical supplies, and transportation, hampered CHCs' ability to deliver health messages and services consistently. This constraint hindered the reach and effectiveness of interventions, particularly in remote areas. Maintaining sustained community engagement and support for CHC activities proved

challenging, especially without consistent external funding. Reliance on external resources created a vulnerability in the long-term sustainability of CHC programs. CHCs found it necessary to navigate a delicate balance between respecting traditional beliefs and introducing evidence-based nutritional practices. Finding culturally sensitive approaches to communicate health messages became crucial in overcoming resistance and fostering acceptance within the community.

To address resource limitations, CHCs had to prioritize and optimize available resources. Establishing partnerships with local organizations, government agencies, and other stakeholders became essential in leveraging additional support and ensuring the continuity of health programs. The challenge of sustaining community engagement highlighted the importance of fostering a sense of ownership and empowerment. CHCs recognized the need to involve community members in decision-making processes, build local capacity, and create sustainable systems for health promotion to ensure long-term impact.

Community Health Centers (CHCs) are pivotal in reducing stunting rates in rural areas through targeted community-based health interventions. The significant increase in parental nutritional knowledge and the improvement in dietary practices underscore the effectiveness of CHC-led health communication strategies. The study's findings align with the Health Belief Model (HBM), which suggests that individuals are more likely to adopt health-promoting behaviors when they perceive a threat, believe in the benefits of change, and feel confident in their ability to make those changes. CHC interventions successfully raised awareness about the risks of stunting and provided the necessary knowledge and support for families to make informed decisions about their children's nutrition.

Additionally, the results echo the principles of Social Cognitive Theory (SCT), emphasizing the role of observational learning and social reinforcement in behavior change. CHCs, as trusted figures within the community, acted as role models, demonstrating healthy behaviors and reinforcing positive dietary choices among parents.

The marked improvement in nutritional knowledge among parents can be directly attributed to the comprehensive training and educational sessions provided by CHCs. These sessions were tailored to the specific needs and cultural context of Ciliang Village, ensuring that the information was relevant and accessible to the community. While traditional communication methods played a crucial role in information dissemination, the study also identified the potential of social media as a powerful tool for health communication. CHCs expressed a need for further training in utilizing social media platforms, highlighting an opportunity to expand the reach of health messages, especially among younger demographics.

The persistence of stunting in rural areas is often intertwined with complex psychosocial and cultural factors. Economic constraints, social norms, and deeply rooted cultural beliefs can significantly influence dietary choices and practices. CHCs must be equipped with the skills to address these underlying factors, providing nutritional guidance and emotional and social support to families. The challenge of sustaining CHC activities in the long term underscores the importance of establishing a robust support system. Regular training, adequate resources, and consistent funding are essential for ensuring the continuity and effectiveness of CHC programs. The success observed in Ciliang Village serves as a model that can be replicated in other rural

areas with appropriate adaptations. Policymakers should consider integrating CHC programs into broader health and nutrition policies to achieve sustainable and widespread impact.

CONCLUSION

Cadres (CHCs) in reducing stunting in Ciliang Village, addressing the three primary research objectives:

1. The findings demonstrate that CHCs are crucial in disseminating nutritional knowledge, promoting balanced dietary practices, and directly contributing to reducing stunting prevalence. The significant increase in parental nutritional awareness and improved dietary diversity among households underscores the effectiveness of CHC led interventions. The reduction in stunting rates from 25% to 18% over one year further validates the impact of these community-based health strategies. This empirical evidence enriches the body of knowledge in public health by highlighting the tangible benefits of CHC activities in rural settings.
2. Despite their successes, CHCs encounter several challenges, including cultural barriers, resource limitations, and sustainability issues. Traditional beliefs and practices often hinder the acceptance of nutritional advice, while inadequate resources and educational materials impede consistent message delivery. Maintaining community engagement and support for CHC activities is also challenging without sustained external funding. These insights guide policymakers and health practitioners to refine and enhance community-based health interventions. Addressing these challenges is essential for the continued success and expansion of CHC programs.
3. The study highlights the need for structured support systems to ensure the sustainability of CHC activities. Regular training, adequate resources, and consistent funding are critical to maintaining the effectiveness of CHC-led interventions. The success observed in Ciliang Village suggests that similar models can be adapted and scaled to other rural areas facing comparable public health challenges. Policymakers should consider integrating CHC programs into broader health and nutrition policies to enhance long-term sustainability and impact. This research provides a framework for developing evidence-based strategies to address stunting in rural communities, promoting healthier dietary practices, and reducing malnutrition rates.

Based on the 3 conclusion points above, there are three recommendations from the results of this research:

1. To maximize the impact of CHC-led interventions in reducing stunting, it is crucial to provide comprehensive and ongoing training programs that focus on effective health communication, nutritional education, and culturally sensitive practices. These programs should equip CHCs with the knowledge and skills to address local nutritional deficiencies and promote balanced dietary practices. Integrating modern communication tools like social media into these training sessions will enable CHCs to reach a broader audience and reinforce health messages more effectively.
2. Addressing the resource limitations and sustainability issues CHCs face requires a concerted effort from policymakers and health practitioners. Ensuring that CHCs have consistent access to educational materials, nutritional supplements, and funding is essential for the continuity of their interventions. Establishing support systems that include regular training, mentorship,

and financial incentives will help maintain community engagement and the effectiveness of CHC activities. Policymakers should prioritize resource allocation to CHC programs to bolster their capacity to deliver sustained health benefits.

3. To enhance the scalability and long-term sustainability of successful CHC initiatives, it is recommended that policymakers integrate these programs into national and regional health and nutrition policies. By doing so, the proven models from Ciliang Village can be adapted and implemented in other rural areas with similar public health challenges. This integration should involve structured support systems, consistent funding, and a focus on community involvement to ensure that CHC programs are effective and sustainable. Developing evidence-based strategies informed by this research will promote healthier dietary practices and reduce stunting rates across rural communities in Indonesia.

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