

COMMUNITY - BASED UTILIZATION OF JKN CAPITATION FUNDS TO STRENGTHEN FOOD SECURITY THROUGH PRIMARY HEALTH INNOVATION IN SABANG CITY

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Abstract

This community service program aimed to improve the capacity of primary health care providers in utilizing JKN capitation funds to support food security efforts in Sabang City. The activity was initiated in response to the limited use of capitation funds for promotive and preventive services, particularly in nutrition and food-related programs. Using a participatory action research (PAR) approach, the intervention involved two primary health centers (Puskesmas) through a series of mentoring sessions, workshops, focus group discussions, and joint action planning. Key outputs included improved understanding of JKN policy frameworks, development of nutrition-oriented budget plans, and the initiation of community food initiatives. Pre- and post-assessments showed a significant increase in participants' knowledge scores, with an average improvement of 20.5 points. The program also triggered behavioral changes such as collaborative budgeting, active community involvement, and the emergence of local leaders in health and nutrition. These findings highlight the strategic role of JKN capitation funds in promoting community-based food security through primary health services. The intervention model has the potential to be scaled and adapted in other regions with similar contexts to strengthen intersectoral health governance and local resilience in food and nutrition systems.

Keywords: Capitation Fund, Food Security, JKN, Participatory Action Research, Primary Health Care

INTRODUCTION

Sabang City, situated at the westernmost tip of Indonesia, has distinctive geographical and socio-economic characteristics. Although the city has a relatively small population, it faces significant challenges in ensuring equitable access to quality healthcare and adequate nutrition—particularly in its remote and coastal areas. According to the Aceh Provincial Health Office (Dinas Kesehatan Aceh, 2023), many Puskesmas in Sabang continue to struggle with fully optimizing the use of capitation funds from the National Health Insurance (JKN) program. This is especially true for promotive and preventive services that directly influence community nutrition and food security.

Food security, as defined by the World Health Organization (2022), encompasses not only the availability of food but also its accessibility, stability, and appropriate nutritional use. In Sabang, the prevalence of stunting among children under five reached 18.5% in 2022 (BKKBN, 2023), underscoring the urgent need for integrated interventions that extend beyond food systems to include primary healthcare services. As the first point of contact in the health system, Puskesmas are strategically positioned to advance community-based food security through education, early detection of nutritional problems, and multisectoral collaboration. However, preliminary observations and interviews with Puskesmas staff and local health officials reveal that

capitation funds are still primarily used for curative services, with limited allocation toward nutrition education or community engagement.

This underutilization may stem from limited technical guidance, weak administrative planning, and a lack of awareness regarding the link between health financing policies and food security outcomes. In response to this implementation gap, a community service initiative was launched to integrate health financing strategies with food security efforts at the primary care level. The program targeted health administrators and Puskesmas teams in Sabang key actors in planning and delivering innovative health services. Through structured engagement and technical mentoring, the initiative aimed to empower these stakeholders to better allocate JKN capitation funds for nutrition - related interventions, such as maternal and child health programs, community food gardens, and health promotion activities. Ultimately, the program seeks to strengthen local health governance and contribute to the reduction of malnutrition indicators particularly stunting and underweight prevalence in Sabang. This effort aligns with national priorities outlined in the RPJMN 2020–2024 and the Ministry of Health Regulation No. 21 of 2016 on the strategic use of capitation funds in primary healthcare services

METHODS

This community service program was implemented in the operational areas of two primary health centers (Puskesmas) in Sabang City: Puskesmas Sukajaya and Puskesmas Sukakarya. These sites were selected based on their strategic role in managing JKN capitation funds and their potential to support community-level food security initiatives. The primary participants included Puskesmas management teams (heads of centers, JKN treasurers, program coordinators), community health cadres, and representatives from the Sabang City Health Office. The planning phase adopted a community-based participatory approach, emphasizing collaboration and active involvement of local stakeholders. An initial

coordination meeting was held to identify shared goals and key challenges, which formed the basis for the intervention design. This inclusive approach aimed to ensure local ownership and contextual relevance throughout the process.

The program employed Participatory Action Research (PAR) as its central methodology. This iterative and collaborative model involved continuous cycles of problem identification, action planning, implementation, and reflection. The goal was to not only address administrative gaps in capitation fund management but also to embed food and nutrition programs within the core operations of primary health services.

RESULTS AND DISCUSSIONS

The implementation of the community service program in Sabang City yielded a variety of outcomes, encompassing both tangible actions and observable social changes. A series of mentoring and capacity-building activities significantly improved the understanding of Puskesmas administrators and community health cadres regarding the appropriate use of JKN capitation funds for promotive and preventive services, particularly those related to food security. During the mentoring sessions, several technical activities were conducted, including the dissemination of Ministerial Regulation No. 21 of 2016, workshops on budgeting for nutrition programs using JKN capitation funds, and practical simulations for integrating food and nutrition education into existing Puskesmas activities. Participants actively engaged in scenario-based budgeting exercises and role-playing simulations, enabling them to practice real-world administrative planning and decision-making

One of the major achievements of the program was the development of a joint action plan between the Puskesmas teams and community health cadres.

This plan included regular nutrition counseling for pregnant women, the establishment of community home gardens coordinated through local health posts (*Posyandu*), and enhancements in data recording and reporting mechanisms for

nutrition-related interventions. These actions represent a significant shift in the perception of capitation funds—not only as a mechanism for reimbursing curative services but also as a strategic tool for community empowerment and food resilience. Throughout the program, signs of social transformation began to emerge. Several community health cadres were recognized by their peers for demonstrating leadership and initiative in organizing local food gardens and conducting nutrition education. This led to the emergence of new local champions in health promotion. Moreover, a noticeable shift in the attitudes of Puskesmas staff was observed; they became more open to collaborative planning and increasingly

embraced cross-sectoral engagement, particularly with the agriculture and education departments.

In terms of awareness, participants reported a heightened understanding of the interconnections between health financing, nutrition, and food security. These realizations fostered a more holistic view of primary healthcare—one that goes beyond clinical treatment to encompass preventive and promotive dimensions. The following table presents the descriptive statistics from the pre- and post-intervention evaluations, which assessed participants' knowledge of capitation fund policies and nutrition programming:

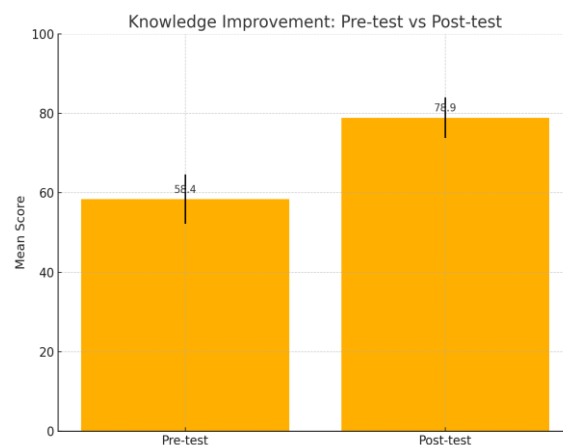
Tabel 1. Descriptive Statistics of Knowledge Assessment Results

N	Minimum	Maximum	Mean	Std. Deviation
Pre-test	32	40	58.4	6.25
Post-test	70	90	78.9	5.12

Source: Field Evaluation, 2025

As shown in Table 1, the pre-test results revealed that participants had a relatively low baseline understanding of the use of JKN capitation funds and their relevance to food security. Scores ranged from 40 to 58.4, with a mean score of 58.4 (SD = 6.25), indicating limited initial knowledge, particularly in budgeting for nutrition-related programs and understanding the regulatory framework for capitation fund utilization.

After the intervention, the post-test results demonstrated a substantial improvement. Scores increased to a range of 70 to 90, with a higher mean score of 78.9 (SD = 5.12). This gain of over 20 points in the average score indicates a significant enhancement in participants' knowledge and comprehension. Additionally, the reduction in standard deviation suggests greater consistency in understanding across participants following the training and mentoring activities.



Graph 1. Knowledge Improvement

Overall, these results confirm that the educational and participatory approach employed in this community service initiative was effective in building the capacity of both Puskesmas staff and community health cadres. This improved knowledge base lays the groundwork for better planning, implementation, and monitoring of nutrition programs financed through JKN capitation funds, ultimately supporting the overarching goal of enhancing food security through primary health service.

The implementation of this community service program in Sabang City

progressed according to the planned stages, starting from the initial needs assessment and culminating in tangible social change at the community level. The use of a Participatory Action Research (PAR) framework proved highly effective in empowering both primary health care (PHC) providers and community health volunteers to better understand and utilize JKN capitation funds for preventive health services, particularly those focused on improving local food security.

The observed improvement in participants' knowledge and planning capabilities following the intervention supports findings from previous studies (Ministry of Health, 2023; UNICEF Indonesia, 2022), which highlight that structured mentoring and community engagement significantly enhance policy comprehension and administrative efficiency. The post-intervention shifts in fund allocation and program planning further reflect broader transformations in governance culture within the Puskesmas system.

Recent evaluations by the Indonesian Ministry of Health (2022) indicate that when frontline health workers are granted decentralized authority and equipped with clear technical guidelines, their capacity to implement nutrition - sensitive programs improves substantially. This aligns with the outcomes of our initiative, where Puskesmas began directing JKN capitation funds toward community food programs and household-level nutrition education.

The integration of food garden initiatives, community-based nutrition classes, and cross-sector collaboration in Sabang exemplifies the ecological model of health promotion, which emphasizes the dynamic interaction between individual behaviors, organizational practices, and environmental conditions. Similarly, reports from the Health Development Policy Agency (Badan Kebijakan Pembangunan Kesehatan, 2023) document best practices in other provinces where localized innovation contributed to improved food access and behavioral change.

The emergence of new local leaders among community health cadres, who actively facilitated nutrition education and

food production programs, serves as further evidence of meaningful social transformation. These outcomes are consistent with Indonesia's 2021–2024 National Action Plan for Stunting Reduction, which underscores the importance of community-driven approaches. From a financing perspective, reports by the World Bank (2022) and National Development Planning Agency (Bappenas, 2023) emphasize that the strategic use of JKN capitation funds, especially in remote and underserved regions, can help reduce disparities in service delivery and improve nutrition outcomes—particularly when such financing mechanisms are integrated with village - level planning and decision - making structures

CONCLUSIONS

This community service initiative has demonstrated that the strategic utilization of JKN capitation funds, when combined with participatory planning and structured capacity-building, can significantly enhance the role of primary health services in promoting community food security. The integration of nutrition education and community-based food initiatives into Puskesmas programs highlights the potential of local health systems to act as key agents in addressing malnutrition and food access challenges—particularly in remote island regions such as Sabang.

From a theoretical perspective, the program reinforces the ecological model of health promotion, illustrating how individual knowledge, institutional support, and community-level interventions interact to produce sustainable health outcomes. It also affirms that when frontline health workers are empowered with technical knowledge and supported through localized mentoring, they can initiate meaningful change in administrative governance and service delivery.

Furthermore, the findings confirm the relevance and applicability of the Participatory Action Research (PAR) approach in community health development. The active involvement of health cadres, local leaders, and multi - sector stakeholders

fostered ownership, strengthened leadership, and catalyzed the emergence of new governance practices rooted in equity, collaboration, and community empowerment.

Based on these outcomes, several key recommendations are proposed:

1. Sustain Capacity-Building Efforts: Ongoing mentoring and monitoring are essential to ensure the sustainable allocation of JKN capitation funds for promotive and preventive services.
2. Encourage Policy Flexibility: Local governments should be granted greater regulatory and administrative flexibility to accommodate innovative nutrition and food security programming.
3. Replicate and Scale the Model: This model should be adapted and implemented in other Puskesmas across remote areas in Indonesia to strengthen national efforts in reducing stunting and improving community resilience in food and nutrition.

In conclusion, this initiative illustrates the transformative potential of linking health financing mechanisms with food security strategies through community-based innovation. It offers a replicable and scalable model for other regions aiming to build healthier, more equitable, and resilient communities through the innovation of primary healthcare services

DAFTAR PUSTAKA

- Badan Kebijakan Pembangunan Kesehatan. (2023). *Laporan Inovasi Daerah dalam Penanggulangan Gizi*. Jakarta: Kementerian Kesehatan RI.
- Bappenas. (2023). *Strategi Nasional Penanggulangan Stunting 2020–2024*. Jakarta: Kementerian Perencanaan Pembangunan Nasional.
- BKKBN. (2023). *Profil Stunting Nasional Tahun 2022*. Jakarta: Badan Kependudukan dan Keluarga Berencana Nasional.
- Dewi, I. R., Wulandari, R. D., & Anindita, R. (2022). The role of health cadres in improving household food security: Evidence from West Java, Indonesia. *Journal of Public Health Research*, 11(2), 156–165. <https://doi.org/10.4081/jphr.2022.2982>
- Hartini, S., & Putri, Y. (2023). Participatory approach to optimize JKN fund utilization in rural Puskesmas. *BMC Health Services Research*, 23(7), 445–454. <https://doi.org/10.1186/s12913-023-09745-x>
- Hasanah, U., & Ramli, A. (2021). Community-based interventions in stunting reduction: A study of Puskesmas strategy. *International Journal of Health Promotion*, 19(3), 207–216.
- Kementerian Kesehatan RI. (2022). *Evaluasi Pemanfaatan Dana Kapitasi JKN untuk Program Promotif dan Preventif*. Jakarta: Pusat Pembiayaan dan Jaminan Kesehatan.
- Kementerian Kesehatan RI. (2023). *Petunjuk Teknis Penggunaan Dana Kapitasi JKN untuk Layanan Gizi*. Jakarta: Direktorat Gizi Masyarakat
- Ministry of Health, Republic of Indonesia. (2022). *Annual Report on Health Financing Reform and Nutrition-sensitive Programs*. Jakarta: MoH.
- Ministry of Health, Republic of Indonesia. (2023). *Policy Review on JKN Implementation at the Primary Health Level*. Jakarta: MoH.
- Nuraini, F., & Widodo, B. (2020). Strengthening food resilience through Puskesmas-based interventions. *Journal of Community Nutrition*, 8(2), 112–120.
- Puspitasari, D., & Kurniawan, D. (2019). Participatory action research in health education: Improving community nutrition through Posyandu. *Asia Pacific Journal of Health Management*, 14(1), 54–61.
- Rachmawati, D., & Fitriani, N. (2021). Integrating nutrition and health promotion into primary health care in Eastern Indonesia. *Global Health Action*, 14(1), 123–132.

- Rahmawati, E. R., & Yuliana, I. (2023). Governance reform in Puskesmas: Using health funds to strengthen food security. *Indonesian Journal of Public Administration*, 10(1), 77–89.
- Setiawan, T., & Agustin, D. (2022). Optimizing nutrition education in remote areas: Lessons from Sabang. *Jurnal Gizi dan Pembangunan Masyarakat*, 7(3), 181–190.
- Sulistiyowati, T., & Prasetyo, B. (2020). Evaluating the effect of mentoring on health cadres' knowledge of food security. *Journal of Rural Health Development*, 5(1), 45–52.
- Suryani, E., & Anwar, L. (2023). Cross-sector collaboration for food security in coastal Puskesmas. *International Journal of Health Policy and Management*, 12(1), 35–42.
- UNICEF Indonesia. (2022). *Strengthening Primary Health Systems to Prevent Malnutrition*. Jakarta: UNICEF.
- World Bank. (2022). *Strategic Financing for Nutrition and Health Equity in Indonesia*. Washington, DC: World Bank.
- World Health Organization. (2022). *Food Security Definitions and Measurement*. Geneva: WHO. <https://www.who.int/publications/i/item/food-security-framework>.