



COMBATING STUNTING THROUGH CULTURAL HERITAGE: A STUDY ON COMMUNITY HEALTH WORKERS' KNOWLEDGE IN KLATEN, INDONESIA

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ABSTRACT

Stunting remains a major public health concern in Indonesia, with long-term implications for child development and national productivity. Community health workers (CHWs) play a key role in promoting and preventing stunting at the community level. Cultural traditions such as *bancaan*, a Javanese communal gathering, present unique opportunities to convey health messages in a culturally resonant manner. This study aimed to assess the level of knowledge among CHWs regarding stunting prevention, both from biomedical and local wisdom perspectives, with particular attention to the *bancaan* tradition. A quantitative, cross-sectional study was conducted involving 53 CHWs in the working area of Ceper Primary Health Center, Klaten Regency, selected through total sampling. A validated structured questionnaire was employed, and data were analyzed descriptively. The majority of CHWs (84.9%) demonstrated a high level of knowledge concerning stunting prevention, including awareness of *bancaan* as a culturally rooted educational medium. CHWs in the study area possess strong knowledge of both biomedical and cultural approaches to stunting prevention. Integrating local traditions such as *bancaan* into CHW training and community health interventions is recommended to enhance the cultural relevance and effectiveness of public health messaging.

Keywords: community health worker; knowledge; local wisdom; stunting

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INTRODUCTION

Stunting continues to pose a significant public health challenge in Indonesia. Characterized by impaired linear growth due to chronic malnutrition, stunting primarily develops during the critical window of the first 1,000 days of life (Kemenkes RI, 2021). Despite ongoing governmental interventions, the national stunting prevalence in 2022 remained at 21.6%, exceeding the World Health Organization's threshold of 20% (Kemenkes RI, 2022). Beyond physical impacts, stunting contributes to poor cognitive development, reduced adult productivity, and increased risk of non-communicable diseases. Addressing this issue demands a comprehensive, sustainable, and community-based approach (Kemenkes RI, 2021).

Community health workers (CHWs), particularly those operating at integrated health posts (*Posyandu*), serve as pivotal agents in health promotion and disease prevention at the grassroots level. They are often the primary source of health information for mothers, especially in underserved areas. The effectiveness of their role is largely influenced by their knowledge of balanced nutrition, childcare practices, and environmental hygiene. Prior research indicates that improved CHW knowledge contributes significantly to behavioral change within communities (Kurniasih et al., 2023; Novianti et al., 2021). However, reliance solely on biomedical interventions may not suffice. Cultural-based educational efforts tailored to local values are essential, as they enhance community acceptance and engagement (Anggraheni & Lismanda, 2021). Integrating elements of local wisdom, such as traditional food, herbal remedies, and maternal care practices, can strengthen modern health programs (Wulandari, 2024).

One form of Javanese local wisdom with potential for health education is the *bancaan* tradition. *Bancaan* is a communal gathering for spiritual, social, and cultural purposes such as celebrations for childbirth, circumcision, harvest, or commemorative events. This tradition not only strengthens social cohesion but also serves as a strategic space to deliver health messages informally yet effectively. The values of togetherness, openness, and mutual cooperation within *bancaan* make it a relevant educational medium, especially for promoting childcare practices, balanced nutrition, and stunting prevention. However, current stunting prevention programs are still heavily focused on biomedical approaches and lack accommodation of cultural dimensions in health education. Despite growing attention to community participation, few studies have specifically explored the extent to which community health workers understand and utilize local wisdom in their outreach activities. This gap is particularly significant in areas where traditional values remain deeply upheld. Understanding how community health workers perceive and apply cultural values in the health context is crucial to ensure the acceptance and effectiveness of health messages delivered. This study investigates the knowledge of CHWs regarding stunting prevention through both biomedical and cultural lenses, particularly utilizing *bancaan* as an educational strategy. Unlike previous studies focused primarily on clinical, economic, or dietary aspects, this research emphasizes the cultural competence of CHWs as a key component in effective stunting prevention.

METHOD

A quantitative, cross-sectional design was employed in the working area of Ceper Primary Health Center, Klaten Regency, Central Java. The study population comprised all active CHWs who had resided within the health center's jurisdiction for a minimum of six months. A total of 53 CHWs were selected via total sampling. Inclusion criteria included active CHWs residing in the Ceper area for the past six months. Exclusion criteria involved CHWs with a conflict of interest (e.g., participation in concurrent intervention programs or research data collection), prior participation in similar studies within the last six months, or those undergoing intensive training (e.g., government-led, PKK, or cadre training) at the time of data collection. A structured and expert-validated questionnaire was administered in print during Posyandu sessions or regular CHW meetings.

The validity and reliability tests were conducted to ensure that the research questionnaire was suitable as a measurement tool. The trial was carried out on 30 respondents who met the inclusion criteria. Based on the analysis results, the highest r-count value was 0.782 and the lowest was 0.395. When compared to the r-table value at a 5% significance level with $N=30$, which was 0.361, all items were declared valid since the r-count values were greater than the r-table value. Furthermore, the reliability test using the Cronbach's Alpha method produced a coefficient of 0.878, exceeding the minimum threshold of 0.60. Therefore, the research instrument was deemed reliable and demonstrated good internal consistency, making it appropriate for use in data collection for this study. Respondents completed the questionnaire independently and returned it the same day. No compensation was provided. Data collection occurred over one week in June 2025. Data were analyzed descriptively. This study was approved by the Health Research Ethics Committee of Dr. Moewardi Hospital, Surakarta (Ethical Clearance No. 1.385/VI/HREC/2025), and informed consent was obtained from all participants.

RESULT

Table 1 displays the age distribution of respondents. The mean age was 49.09 years ($SD \pm 10.002$), ranging from 27 to 77 years, indicating that most CHWs were in the middle to late adulthood age groups.

Table 1.
Age Distribution of Respondents (n = 53)

Characteristic	Mean	SD	Min	Mx
Age (years)	49,09	10,002	27	77

Table 2 illustrates the distribution of CHWs' knowledge levels. The vast majority (84.9%) exhibited high knowledge, with no respondents falling into the low category.

Table 2.

Knowledge Level of CHWs on Stunting Prevention (n = 53)

Level	f	%
Low	0	0
Moderate	8	15,1
High	45	84,9

These results suggest that CHWs in this setting possess substantial knowledge of stunting prevention, encompassing both biomedical aspects and the relevance of local wisdom such as *bancaan*.

DISCUSSION

This study revealed that the majority of community health workers (84.9%) possessed a high level of knowledge regarding stunting prevention. These findings indicate that community health workers—as front-line providers in community-based health services—demonstrate a comprehensive understanding of the causes, consequences, and preventive measures associated with stunting. Several factors may contribute to this high level of knowledge. First, regular training sessions provided by the local health center likely offer updated and relevant information on maternal and child health. This aligns with the findings of previous study which reported that short-term training programs significantly enhance the knowledge of community health workers (Siswati et al., 2022). Second, participation in community-based activities such as *bancaan* affords these workers practical opportunities to deliver informal yet impactful health messages. This is supported by Muniroh et al. (2025), who highlighted the educational value embedded in such culturally meaningful engagements. Third, cultural approaches are already deeply embedded in the everyday lives of local communities, facilitating greater acceptance and comprehension. A systematic review by Alfianti et al. (2023) of twelve studies concluded that cultural values formed through interpersonal relationships play a pivotal role in shaping individual and collective behavior. Culture-based interventions, therefore, are often more effective due to their deep-rooted social internalization.

One particularly significant finding is the potential of *bancaan* as a culturally anchored platform for delivering stunting prevention messages. As an integral component of Javanese social life, *bancaan* represents a communal space capable of fostering collective awareness. In the context of stunting prevention, *bancaan* can serve as an effective medium to communicate essential information about balanced nutrition, appropriate childcare practices, and monitoring of child growth and development. Astuti et al. (2024) observed that health messages delivered in culturally resonant formats by local facilitators or health professionals were more likely to be accepted and result in behavioral change. Similarly, Vincze et al. (2021) emphasized that culturally tailored nutrition interventions, whether superficial or deeply rooted, enhance community engagement and generate more sustained outcomes.

The values inherent in *bancaan*, such as communal solidarity, mutual assistance, and shared social responsibility, are well aligned with the principles of stunting prevention, which require the active participation of all community members. Utilizing *bancaan* as an educational platform allows community health workers not only to disseminate knowledge but also to cultivate equitable, trust-based dialogues grounded in local cultural contexts. Its inclusive nature which often involving various demographic groups such as elders, youth, and men who are typically underserved by formal health education, offers a broad and participatory channel for spreading health messages. This grassroots, community-driven strategy supports long-term sustainability. Nevertheless, the finding that 15.1% of community health workers exhibited only moderate knowledge levels warrants critical attention. Factors that may influence this variation include educational background,

prior experience, frequency and quality of training, and access to up-to-date health information. Rogers et al. (2023) observed that hands-on training and experiential learning often had a greater impact on knowledge acquisition and performance than formal education alone. Additionally, a scoping review by Sultan et al. (2025) underscored the importance of continuous professional development, mentoring, and the availability of high-quality training materials in improving motivation, knowledge, and confidence among community health workers. This knowledge gap suggests a pressing need to strengthen capacity-building efforts, particularly in integrating local wisdom into stunting prevention strategies. Training programs should not solely emphasize biomedical knowledge but also incorporate traditional practices related to nutrition, infant feeding, and maternal-child care. Such integration is likely to increase the cultural relevance and acceptance of health messages among target populations.

The implications of this study are both theoretical and practical. Theoretically, the findings reinforce the conceptualization of community health workers as culturally grounded agents of change. Practically, they offer a foundation for health centers to design training programs based on local needs and to identify potential peer educators among existing personnel. Moreover, the results highlight the importance of conducting periodic capacity assessments as part of broader stunting program evaluations. Despite its contributions, this study is not without limitations. First, the cross-sectional design provides only a snapshot in time, limiting the ability to infer causal relationships. Second, the study was confined to a single public health center, and therefore, caution is advised in generalizing the findings to other settings. Third, the reliance on closed-ended questionnaires to assess knowledge may not fully capture the depth and nuance of participants' understanding. Nonetheless, this study offers valuable insights for the development of culturally responsive, community-based interventions to prevent stunting. Future research employing qualitative or mixed-methods approaches is recommended to explore how community health workers apply their knowledge in practice and how cultural values influence the effectiveness of health communication, thereby informing more adaptive and sustainable intervention models.

CONCLUSION

The findings indicate that community health workers in Ceper demonstrate a high level of knowledge regarding stunting prevention from both biomedical and cultural perspectives. The inclusion of local wisdom, particularly the *bancaan* tradition within health promotion strategies represents a promising avenue for enhancing the cultural adaptability and sustainability of interventions. Health centers are advised to implement ongoing training programs that emphasize both medical and cultural competencies. Periodic knowledge assessments should be conducted to ensure the effectiveness and continuity of community-based health education.

REFERENCES

- Alfianti, K. Z., Yunitasari, E., & Armini, N. K. A. (2023). Cultural perspectives of stunting prevention: A systematic review. In *Pedimaternatal Nursing Journal* (Vol. 9, Issue 1). <https://doi.org/10.20473/pmnj.v9i1.37242>
- Anggraheni, I., & Lismanda, Y. F. (2021). Partisipasi Masyarakat untuk Kesehatan Anak Berbasis Local Wisdom Melalui Rumah Gizi di Desa Kucur Kecamatan Dau Kabupaten Malang. *JPM (Jurnal Pemberdayaan Masyarakat)*, 6(2), 710–716. <https://doi.org/10.21067/jpm.v6i2.4698>
- Astuti, Y., Paek, S. C., Meemon, N., & Marohabutr, T. (2024). Analysis of traditional feeding practices and stunting among children aged 6 to 59 months in Karanganyar District, Central Java Province, Indonesia. *BMC Pediatrics*, 24(1). <https://doi.org/10.1186/s12887-023-04486-0>
- Kemendes RI. (2021). *Buku Saku Kader Pintar Cegah Stunting*. Kementerian Kesehatan RI. <https://repository.kemkes.go.id/book/313>

- Kemenkes RI. (2022). Buku Saku Hasil Survei Status Gizi Indonesia (SSGI) 2022. <https://stunting.go.id/buku-saku-hasil-survei-status-gizi-indonesia-ssgi-2022/>
- Kurniasih, A. T., Widyawati, W., Akhmadi, A., & Haryanti, F. (2023). Cadre Knowledge And Self-Efficacy Following Care For Child Development Post Intervention: A Four-Year Prospective Follow-Up Study. *JKG (Jurnal Keperawatan Global)*. <https://doi.org/10.37341/jkg.v8i2.790>
- Muniroh, L., Nadhiroh, S. R., Socadevia, A., Rahmah, A., Julia, I., & Tetasa, S. (2025). Peningkatan Kapasitas Kader dalam Pencegahan Stunting Melalui Pemanfaatan Sumber Pangan Lokal Suku Tengger Desa Wonokitri Kecamatan Tosari Kabupaten Pasuruan. 5(3). <https://doi.org/10.59818/jpm.v5i3.1432>
- Novianti, R., Purnaweni, H., & Subowo, A. (2021). Peran Posyandu Untuk Menangani Stunting Di Desa Medini Kecamatan Undaan Kabupaten Kudus. *Journal Of Public Policy And Management Review*, 10(3).
- Rogers, A., Goore, L. L., Wamae, J., Starnes, J. R., Okong'o, S. O., Okoth, V., & Mudhune, S. (2023). Training and experience outperform literacy and formal education as predictors of community health worker knowledge and performance, results from Rongo sub-county, Kenya. *Frontiers in Public Health*, 11. <https://doi.org/10.3389/fpubh.2023.1120922>
- Siswati, T., Iskandar, S., Pramestuti, N., Raharjo, J., Rialihanto, M. P., Rubaya, A. K., & Wiratama, B. S. (2022). Effect of a Short Course on Improving the Cadres' Knowledge in the Context of Reducing Stunting through Home Visits in Yogyakarta, Indonesia. *International Journal of Environmental Research and Public Health*, 19(16). <https://doi.org/10.3390/ijerph19169843>
- Sultan, M. A., Miller, E., Tikkanen, R. S., Singh, S., Kullu, A., Cometto, G., Fitzpatrick, S., Ajuebor, O., Gillon, N., Edward, A., Moleman, Y. P., Pandya, S., Park, I., Shen, J. Y., Yu, Y., Perry, H., Scott, K., & Closser, S. (2025). Competency-Based Education and Training for Community Health Workers: A Scoping Review. *BMC Health Services Research*, 25(1). <https://doi.org/10.1186/s12913-025-12217-7>
- Vincze, L., Barnes, K., Somerville, M., Littlewood, R., Atkins, H., Rogany, A., & Williams, L. T. (2021). Cultural Adaptation of Health Interventions Including A Nutrition Component in Indigenous Peoples: A Systematic Scoping Review. In *International Journal for Equity in Health* (Vol. 20, Issue 1). <https://doi.org/10.1186/s12939-021-01462-x>
- Wulandari, S. (2024). Pengantar Kearifan Lokal Berbasis Bukti dalam Bunga Rampai Kearifan Lokal dalam Perawatan Bayi, Neonatus, dan Balita. www.nuansafajarcemerlang.com

