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Community Movement Assistance to Prevent Stunting in Wonoayu Village, Sidoarjo.

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ABSTRACT Stunting, a condition of impaired linear growth caused by chronic nutritional deficiency during the first 1,000 days of life, remains a major public health problem in Indonesia, with long-term consequences that include reduced cognitive capacity and increased risk of non-communicable diseases. In Wonoayu Village, Sidoarjo, stunting prevalence reached 18.7% in 2024, exceeding the national target of 14%. This situation was attributed to limited maternal knowledge of balanced nutrition, underutilized local food sources, and insufficient involvement of adolescents and health cadres in community education. This community service program aimed to improve knowledge of stunting prevention among adolescents, posyandu cadres, and community members through community empowerment. Over two months, a counseling-based approach was implemented at the Wonoayu Village Hall and posyandu, comprising training for 25 cadres, counseling for pregnant women, breastfeeding mothers, mothers of toddlers, and women of reproductive age, and the formation and mentoring of a stunting prevention group. Effectiveness was evaluated using pre-tests and post-tests, observation, and interviews. The mean knowledge score increased from 62 to 88, and 90% of trained participants expressed readiness to serve as peer educators. Seventy-eight percent of mothers could name the four pillars of stunting prevention, and complementary feeding practices improved. The stunting prevention group held four meetings and identified seven toddlers at risk of stunting, who were referred to the health center. Overall, knowledge increased by 96%, positive attitudes by 75%, and nutritional practices by 70%. These findings indicate that cadre-centered education combined with community-based mentoring effectively strengthens knowledge, attitudes, and practices related to stunting prevention. Continued cadre mentoring, follow-up support from the health center, and integration with routine posyandu activities are recommended to sustain progress toward zero stunting.

INDEX TERMS Stunting Prevention, Community Empowerment, Health Cadres, Adolescent Education, Nutritional Knowledge

I. INTRODUCTION

Stunting remains a major public health challenge, particularly in low- and middle-income countries, where childhood growth is influenced by nutritional, socioeconomic, environmental, and healthcare-related factors. It is characterized by impaired linear growth resulting from chronic undernutrition and recurrent infections, particularly during the first 1,000 days of life. Its consequences extend beyond physical development, potentially affecting cognitive performance, educational attainment, and long-term productivity [1]–[3]. In Indonesia, stunting continues to require comprehensive prevention strategies because its determinants are multidimensional and vary across geographical and socioeconomic settings [4], [5]. Previous studies have identified maternal education, low birth weight, inadequate dietary diversity, inappropriate complementary feeding, poor sanitation, and limited household resources as important factors associated with childhood stunting [1], [4], [6]–[10].

At the local level, Wonoayu Village, Sidoarjo Regency, faces similar challenges. According to the Wonoayu Health Center data reported in the original manuscript, the stunting prevalence reached 18.7% in 2024, exceeding the national reduction target of 14% established for that year. The underlying issues include insufficient maternal knowledge of balanced nutrition, suboptimal utilization of locally available food resources, and limited participation of adolescents and community health cadres in preventive health education. These conditions indicate that stunting prevention requires interventions extending beyond individual nutritional counseling toward broader community participation and capacity development. Community-based approaches are particularly relevant in Indonesia, where Posyandu cadres serve as important intermediaries in maternal and child health promotion, growth monitoring, and nutritional education [11]–[13].

Recent studies have demonstrated that nutrition education, appropriate infant and young child feeding practices, dietary diversification, and community health worker involvement are important components of stunting prevention. Research in Indonesia has highlighted the importance of improving complementary feeding practices and promoting locally appropriate dietary diversity to support child growth [6]–[9], [14], [15]. Furthermore, community empowerment initiatives involving cadre training, nutritional counseling, food preparation demonstrations, and continuous assistance have

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demonstrated improvements in community knowledge and preventive practices [11]–[13], [16]–[19]. Nevertheless, evidence also indicates that integrated community interventions do not automatically produce measurable reductions in stunting prevalence, emphasizing the importance of sustained implementation, contextual adaptation, and effective coordination among stakeholders [20].

Despite these developments, a practical research gap remains in translating individual nutrition education into an integrated, locally driven prevention movement. In particular, the simultaneous involvement of adolescents, Posyandu cadres, mothers, and other community members, combined with the utilization of locally available nutritious food resources, requires greater attention at the village level. Existing interventions have frequently emphasized specific educational or nutritional components, whereas the development of coordinated community groups, peer education mechanisms, and continuous community assistance has received comparatively less attention in localized implementation. Therefore, a context-specific empowerment approach is needed to strengthen community ownership and improve the sustainability of stunting prevention activities.

This study aims to strengthen community capacity in preventing stunting through an integrated community movement in Wonoayu Village, Sidoarjo Regency, involving adolescents, Posyandu cadres, and families. The specific objectives are to improve knowledge and skills concerning stunting prevention, establish and assist community-based stunting prevention groups, and evaluate changes in knowledge, attitudes, and nutritional practices among program participants.

The contributions of this study are threefold: (1) strengthening the capacity of adolescents and Posyandu cadres as community-based health educators through structured training and nutritional counseling; (2) developing a participatory community empowerment model that connects families, adolescents, cadres, and local health services through organized stunting prevention groups; and (3) promoting the utilization of local food resources and sustainable nutrition education to support improved household feeding practices and community independence. These contributions provide practical insights into implementing locally adapted and participatory approaches to stunting prevention.

The remainder of this article is organized as follows. Section II describes the methods and implementation stages of the community empowerment program. Section III presents the results and discussion, including the outcomes of training, counseling, group formation, and program evaluation. Finally, Section IV presents the conclusions and recommendations for sustaining and expanding community-based stunting prevention initiatives.

II. METHODS

A. STUDY DESIGN

This study employed a community-based participatory empowerment approach combined with a one-group pretest–posttest evaluation to assess changes in community knowledge, attitudes, and nutritional practices related to stunting prevention. The intervention was designed to strengthen the capacity of adolescents, Posyandu cadres, and families through structured health education, nutritional counseling, group formation, and community assistance. The evaluation involved collecting information before and after the educational activities, complemented by observations and interviews to document participants' responses and program implementation. Similar community-based interventions have been implemented in Indonesia to strengthen nutritional knowledge, improve maternal feeding practices, and enhance the capacity of community health workers [21]–[25].

The program was non-randomized because participants were involved through the existing community and health-service structures. No intervention and control groups were established. Therefore, the evaluation focused on changes observed among participants following program implementation rather than estimating causal effects through a controlled experimental comparison.

B. STUDY SETTING AND DURATION

The community empowerment program was conducted in Wonoayu Village, Sidoarjo Regency, East Java, Indonesia, in collaboration with the Wonoayu Community Health Center (Puskesmas) and the village government. Activities were organized at the village hall and Posyandu facilities to facilitate participation and provide direct access to the target community. The manuscript describes an implementation period of two months and identifies May 18, 2026, as the activity date. The exact starting and completion dates should be confirmed against the original activity records before publication.

C. STUDY POPULATION AND PARTICIPANTS

The target population comprised community members involved in maternal and child health promotion, including adolescents, Posyandu cadres, women of reproductive age, pregnant women, breastfeeding mothers, and mothers of children aged 0–59 months. The reported training cohort consisted of 25 participants, who received education and capacity-building activities related to stunting prevention. The counseling activities also involved 25 cadres, as reported in the program documentation.

Five community-based stunting prevention groups were initially specified as the program target, with five members planned for each group. The reported implementation results, however, describe the establishment of the Sehat Wonoayu group consisting of five members. The participants were involved through community-based recruitment and coordination with local health services. The original manuscript does not specify formal inclusion and exclusion criteria, the sampling technique, or the total number of unique beneficiaries. These details should be clarified using the attendance records and participant registration documents.

D. MATERIALS AND EDUCATIONAL INSTRUMENTS

The intervention used educational and administrative materials to support the delivery and evaluation of the program. These included a stunting prevention training

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module, educational leaflets, counseling materials, attendance records, activity documentation, meeting minutes, and community group work plans. The educational content covered the definition and determinants of stunting, the first 1,000 days of life, balanced nutrition, maternal nutrition, exclusive breastfeeding, appropriate complementary feeding (MP-ASI), and child growth and development monitoring.

Local food resources, including fish, eggs, mung beans, and vegetables, were identified as potential nutritional resources for community-based prevention activities. These resources were considered in the educational approach to encourage the utilization of locally available nutritious foods. The materials were intended to support knowledge transfer, practical discussion, and the involvement of families in household-level nutrition improvement. The use of structured educational materials and cadre training is consistent with previous community empowerment interventions in Indonesia [21], [24], [25].

E. INTERVENTION PROCEDURES

The intervention consisted of four principal activities. First, adolescent and cadre capacity-building training was conducted for 25 participants. The training covered stunting concepts, the first 1,000 days of life, balanced nutrition, and educational communication techniques. A peer-education approach was introduced to encourage participants to disseminate preventive health information within their respective neighborhoods. Second, stunting prevention counseling was delivered to cadres and mothers, including pregnant women, breastfeeding mothers, and mothers of toddlers. The sessions addressed maternal nutrition, exclusive breastfeeding, nutritious complementary feeding, and the importance of regular child growth monitoring. Educational leaflets and counseling materials were used to support the sessions.

Third, community group formation and assistance were undertaken to establish the Sehat Wonoayu Stunting Prevention Group. The group consisted of five members and conducted four meetings involving toddler screening, nutrition education, and coordination with Posyandu services. Children identified as potentially at risk of stunting were referred to the community health center for further assessment. Fourth, program evaluation and follow-up were conducted through questionnaires, observations, and interviews. These activities were intended to assess changes in participants' knowledge, attitudes, and reported nutritional practices, as well as document community participation and implementation challenges.

F. DATA COLLECTION AND EVALUATION

Data were collected using pretest and posttest questionnaires, direct observations, interviews, attendance records, and program documentation. The knowledge assessment was conducted before and after the educational intervention. The reported mean pretest score was 62, while the posttest score increased to 88. Additional evaluation indicators included participants' readiness to become educational cadres, maternal understanding of stunting prevention, and reported improvements in nutritional practices.

Observations and interviews were used to complement questionnaire findings by documenting participants' involvement, the implementation of educational activities, and the functioning of the community prevention group. Program outputs, including group establishment documents, meeting records, and referral documentation, were also reviewed to assess implementation progress.

G. DATA ANALYSIS

Quantitative findings were summarized descriptively using average scores and percentages to present changes in knowledge, attitudes, and nutritional practices. The pretest and posttest scores were compared to describe the observed improvement following the educational intervention. Qualitative information obtained through interviews and observations was examined descriptively to identify relevant implementation experiences, community participation, and challenges. The findings from the different data sources were considered together to provide an overview of program implementation and outcomes. Because the manuscript does not report inferential statistical testing or a comparison group, the results should be interpreted as descriptive program evaluation findings rather than evidence of statistically established intervention effectiveness.

III. RESULTS

A. IMPLEMENTATION OF COMMUNITY EMPOWERMENT ACTIVITIES

TABLE 1
Summary of Community Empowerment Activities, Participants, Outcomes, and Program Outputs

Activity	Participants /Members	Main Topics	Key Results	Outputs
Youth & Cadre Training	25 participants	Stunting concept, First 1000 Days of Life, balanced nutrition, educational communication techniques	Pre-test 62 → Post-test 88; 90% ready to become educational cadres	Module, attendance list, documentation, 25 certificates
Stunting Prevention Counseling	25 cadres assisting pregnant women, breastfeeding mothers, toddlers	Maternal nutrition, exclusive breastfeeding, nutritious complementary feeding (MPASI)	78% of mothers able to mention 4 pillars; improved MPASI practices	Leaflet, counseling materials, documentation
Stunting Prevention Group "Healthy Wonoayu"	5 members	Toddler screening, nutrition education, posyandu coordination	7 toddlers at risk of stunting identified & referred toCommunity Health Center (Puskesmas)	Meeting minutes, work plan, group establishment
Activity Evaluation	Target community	Questionnaire, observation, interview	Knowledge ↑96%, positive attitude ↑75%, nutrition practice ↑70%	Evaluation report, data analysis, recommendations

The community empowerment program was implemented through several interconnected activities involving adolescents, Posyandu cadres, mothers, and the local community. The activities focused on improving knowledge of stunting prevention, strengthening the capacity of community-based health educators, promoting

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appropriate maternal and child nutrition, and establishing a community prevention group.

As summarized in TABLE 1, the program consisted of four principal activities: adolescent and cadre training, stunting prevention counseling, establishment of a community prevention group, and program evaluation. The training involved 25 participants and addressed stunting concepts, the first 1,000 days of life, balanced nutrition, and educational communication techniques. Following the training, 90% of participants expressed their readiness to become educational cadres in their respective neighborhoods.

The counseling activities involved 25 cadres who assisted pregnant women, breastfeeding mothers, and mothers of toddlers. The educational sessions addressed maternal nutrition, exclusive breastfeeding, and appropriate complementary feeding (MP-ASI). The results indicated that 78% of participating mothers were able to identify the four pillars of stunting prevention. Posyandu cadres also reported improvements in complementary feeding practices among the mothers receiving counseling.

The community assistance component resulted in the establishment of the Sehat Wonoayu Stunting Prevention Group, consisting of five members. The group conducted four meetings involving toddler screening, nutrition education, and coordination with Posyandu services. During these activities, seven toddlers identified as potentially at risk of stunting were referred to the Wonoayu Community Health Center (Puskesmas) for further assessment.

B. EVALUATION KNOWLEDGE, ATTITUDES, AND NUTRTITIONAL PRACTICES

TABLE 2
Evaluation Results of Knowledge, Attitudes, Nutritional Practices, and Community Participation

Indicator	Percentage / Value
Average Pre-Test Score	62
Average Post-Test Score	88
Participants Ready to Become Educational Cadres	90%
Mothers Able to Mention 4 Stunting Prevention Pillars	78%
Increase in Knowledge	96%
Change in Positive Attitude	75%
Change in Nutrition Practice	70%
Children at Risk of Stunting Identified	7 toddlers

The program evaluation was conducted using questionnaires, observations, and interviews to assess changes in participants' knowledge, attitudes, and nutritional practices. As presented in TABLE 2, the average knowledge score increased from 62 in the pretest to 88 in the posttest following the educational intervention.

FIGURE 1 illustrates the comparison between the pretest and posttest knowledge scores, demonstrating an increase of 26 points after the training activities. The figure also presents the reported readiness of participants to become educational cadres and the proportion of mothers who understood the four pillars of stunting prevention.

Furthermore, the evaluation results indicated a reported 96% increase in knowledge, a 75% improvement in positive attitudes, and a 70% improvement in nutritional practices. These indicators represent the program's reported evaluation outcomes. However, the original evaluation documentation does not provide the calculation formulas or detailed scoring procedures used to derive these percentages.

The assessment also showed that 90% of trained participants expressed their willingness to serve as community educational cadres, while 78% of mothers were able to identify the four pillars of stunting prevention. These findings were complemented by observations and interviews documenting the involvement of cadres in nutrition education and community assistance.

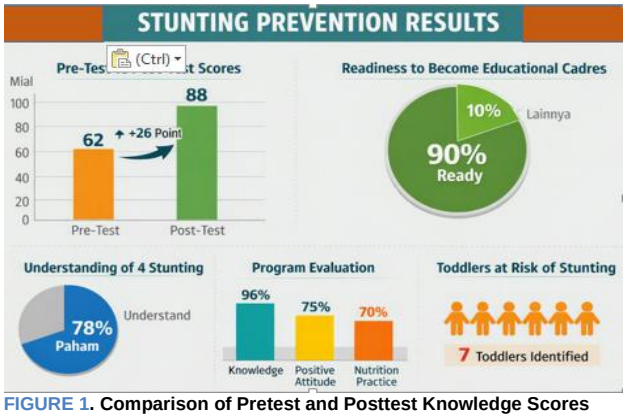


FIGURE 1. Comparison of Pretest and Posttest Knowledge Scores and Selected Educational Outcomes

C. COMMUNITY PARTICIPATION AND PROGRAM OUTPUTS

The implementation generated several outputs, including a training module, educational leaflets, attendance records, participant certificates, counseling documentation, community group establishment records, meeting minutes, and activity evaluation reports.

The establishment of the Sehat Wonoayu group provided a community-based platform for coordinating toddler screening, nutritional education, and communication with local health services. The identification and referral of seven toddlers at potential risk of stunting represented an additional program output related to early identification and follow-up.

Overall, the documented results demonstrate improvements in the reported educational indicators, increased participation in community-based prevention activities, and the establishment of a local group to support the continuity of stunting prevention initiatives in Wonoayu Village.

IV. DISCUSSION

A. INTERPRETATION OF THE FINDINGS

The findings indicate that the community empowerment program in Wonoayu Village contributed to improvements in participants' reported knowledge, attitudes, and nutritional practices related to stunting prevention. The increase in the average knowledge score from 62 in the pretest to 88 in the posttest suggests that structured educational activities can strengthen participants' understanding of stunting, particularly its determinants, the importance of the first 1,000 days of life, and appropriate maternal and child nutrition. This improvement highlights

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the relevance of providing accessible and structured health education through community-based platforms.

The reported 96% increase in knowledge further reflects the positive educational outcomes documented by the program. Nevertheless, this percentage should be interpreted according to the original evaluation indicator because the calculation procedure was not described in the available documentation. The difference between the average pretest and posttest scores provides a more directly interpretable measure of the observed change. These findings suggest that educational interventions supported by structured learning materials and direct interaction can facilitate the transfer of nutritional information to community members.

The reported 75% improvement in positive attitudes indicates a favorable response toward stunting prevention activities. Changes in attitudes are important because knowledge alone does not necessarily translate into consistent health-related behavior. Participants must also recognize the relevance of preventive practices and develop a willingness to apply them in their households and communities. In this program, the involvement of adolescents and Posyandu cadres as prospective educational agents provided an opportunity to extend health messages beyond formal counseling sessions. The willingness of 90% of trained participants to become educational cadres represents an encouraging indicator of community participation and potential program continuity.

Furthermore, the reported 70% improvement in nutritional practices indicates progress in the application of nutritional information among participating families. The counseling activities emphasized maternal nutrition, exclusive breastfeeding, appropriate complementary feeding, and child growth monitoring. These topics are relevant because nutritional practices during pregnancy and early childhood influence children's growth and development. The finding that 78% of mothers could identify the four pillars of stunting prevention also demonstrates the educational relevance of the counseling activities.

Another important finding was the establishment of the Sehat Wonoayu Stunting Prevention Group. The group provided a local mechanism for coordinating toddler screening, nutritional education, and communication with Posyandu services. The identification of seven toddlers potentially at risk of stunting and their subsequent referral to the community health center demonstrate the practical role of community participation in supporting early identification. However, these referrals should not be interpreted as seven confirmed stunting cases because further anthropometric assessment was required.

Taken together, the findings suggest that combining education, cadre capacity-building, community group formation, and health-service coordination may strengthen the implementation of stunting prevention activities at the village level. The outcomes primarily demonstrate improvements in educational and organizational indicators rather than direct reductions in stunting prevalence.

B. COMPARISON WITH PREVIOUS STUDIES

The findings of this program are consistent with previous Indonesian studies demonstrating the importance of community participation and health education in stunting prevention. Sutinbuk et al. [27] evaluated the ERKADUTA community-based assistance model among mothers of children under two years of age. Their quasi-experimental study reported significant improvements in knowledge, attitudes, and practices among mothers receiving the intervention compared with the control group. Similar to the Wonoayu program, their approach emphasized direct community assistance and the involvement of local cadres. These similarities suggest that continuous interaction and community-based educational support can contribute to improvements in preventive behaviors.

The improvement in knowledge observed in Wonoayu also corresponds with findings reported by Mardani et al. [28], who evaluated a nutritional education program for mothers of children under two years of age in Indonesia. Their randomized controlled trial demonstrated improvements in maternal nutritional knowledge, self-efficacy, and complementary feeding practices. These findings reinforce the importance of structured nutrition education as an essential component of interventions addressing childhood undernutrition. However, the Wonoayu program involved a broader group of participants, including adolescents and Posyandu cadres, thereby extending the educational approach beyond mothers and caregivers.

The role of Posyandu cadres in community-based stunting prevention is also supported by Wardani et al. [30]. Their community empowerment initiative focused on improving cadre competencies through educational activities, nutritional information, and strengthening Posyandu services. The study highlighted the importance of cadre capacity-building in supporting community knowledge and prevention activities. Similarly, the Wonoayu program provided training in stunting concepts, balanced nutrition, and educational communication techniques to encourage cadres and adolescents to become local health educators. The readiness of 90% of participants to serve as educational cadres suggests the potential of this approach to strengthen community-level health promotion.

In addition, Rospiati et al. [31] examined the effectiveness of Posyandu cadre empowerment in improving knowledge related to stunting prevention. Their findings support the use of educational interventions to enhance cadre knowledge and strengthen their contribution to community health services. These results are consistent with the Wonoayu program, in which trained cadres were expected to support maternal nutrition education and disseminate preventive health information within their neighborhoods.

The community empowerment approach also has similarities with the initiative described by Astuti et al. [29], which integrated community participation, food security, and health-related activities to address stunting. Their approach highlights the relevance of combining health education with the utilization of local resources. In Wonoayu, fish, eggs, mung beans, and vegetables were identified as potential food resources that could support household nutritional improvement. Nevertheless, the

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available program documentation does not establish whether these resources were systematically incorporated into food preparation demonstrations or evaluated as part of the intervention outcomes. Therefore, their contribution should be considered a potential area for further program development rather than a demonstrated result.

Although these studies generally support community-based nutrition education and cadre empowerment, evidence also indicates that improvements in intermediate outcomes do not necessarily produce immediate reductions in stunting prevalence. Beatty et al. [26] evaluated a large-scale community-based initiative in rural Indonesia using a cluster randomized controlled trial. Although the intervention improved several maternal and child nutrition practices, it did not demonstrate a statistically significant reduction in stunting. Their findings emphasize the complexity of translating improvements in knowledge and nutritional behavior into measurable anthropometric outcomes.

This distinction is particularly relevant to the Wonoayu program. The observed improvements in knowledge, attitudes, and nutritional practices represent important intermediate outcomes, but they cannot independently establish that the intervention reduced stunting prevalence. Stunting is influenced by multiple interacting determinants, including maternal health, household food security, dietary adequacy, sanitation, infection, and access to healthcare. Consequently, sustained and coordinated interventions may be necessary to achieve measurable improvements in child growth.

C. LIMITATIONS AND IMPLICATIONS OF THE STUDY

Several limitations should be considered when interpreting the findings. First, the evaluation used a one-group pretest–posttest approach without a control group or random allocation. Consequently, the observed improvements cannot be attributed exclusively to the intervention because other factors, including previous health education, external information sources, and participants' prior experiences, may also have influenced the results. The findings should therefore be interpreted as descriptive evidence of changes observed during program implementation rather than definitive evidence of causal effectiveness.

Second, the reported sample consisted of 25 training participants, and the available manuscript does not clearly establish the total number of unique participants involved in all counseling and community assistance activities. The absence of detailed demographic characteristics, recruitment procedures, and inclusion criteria also limits the reproducibility and generalizability of the findings. Future evaluations should document participant characteristics, sampling procedures, attendance, and the number of participants completing both pretest and posttest assessments.

Third, the evaluation instruments and scoring procedures require further clarification. Although the manuscript reports a pretest score of 62, a posttest score of 88, and improvements of 96%, 75%, and 70% in selected indicators, the questionnaire structure, instrument validity, reliability, and percentage calculation methods are not provided. Future studies should use validated assessment instruments and clearly defined outcome indicators. Appropriate statistical tests, including paired-sample analysis where assumptions are satisfied, should also be considered to examine whether observed changes are statistically significant.

Fourth, the evaluation focused primarily on short-term educational and behavioral indicators. No longitudinal anthropometric measurements or follow-up assessments were reported to determine whether the intervention produced sustained changes in child growth. In addition, the identification of seven toddlers at potential risk does not establish the prevalence of confirmed stunting within the intervention population. Further assessment by qualified health personnel is necessary to establish children's nutritional status.

Despite these limitations, the program has several practical implications. The involvement of adolescents and Posyandu cadres offers an opportunity to strengthen local health promotion through peer education and community participation. Training community members as educational agents may support the continuous dissemination of nutrition information and improve communication between families and local health services. The establishment of the Sehat Wonoayu group also provides an organizational foundation for maintaining community screening, nutritional education, and referral activities.

At the village level, the integration of local food resources into future educational activities may help families identify affordable and accessible sources of nutritious food. Fish, eggs, mung beans, and vegetables can serve as examples in developing context-specific nutrition education materials, provided that their nutritional composition and suitability for different age groups are considered. Collaboration between village authorities, Posyandu cadres, and the community health center is also important to ensure that educational activities are supported by appropriate health services and continuous monitoring.

For future program development, regular cadre mentoring, stronger involvement of community leaders and schools, and integration with routine Posyandu activities should be prioritized. Follow-up evaluations over longer periods are also recommended to assess the sustainability of knowledge and behavioral changes. In particular, subsequent studies should consider comparison groups, larger participant samples, validated instruments, and repeated anthropometric assessments to provide stronger evidence regarding the effectiveness of community-based interventions.

Overall, the Wonoayu experience demonstrates the practical potential of integrating health education, community capacity-building, and local organizational support in stunting prevention. Although the findings do not establish a direct reduction in stunting prevalence, they provide useful evidence of progress in community knowledge, preventive attitudes, nutritional practices, and local participation. Strengthening these components through sustained collaboration and systematic evaluation may support more comprehensive and sustainable stunting prevention initiatives.

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V. CONCLUSIONS

This study aimed to strengthen community capacity in preventing stunting through an integrated community empowerment movement involving adolescents, Posyandu cadres, and families in Wonoayu Village, Sidoarjo Regency. The findings demonstrate that the implementation of structured health education, nutritional counseling, cadre training, and community-based assistance contributed to improvements in the reported educational and behavioral indicators related to stunting prevention. The average knowledge score increased from 62 in the pretest to 88 in the posttest, representing an improvement of 26 points. Furthermore, the program evaluation reported a 96% increase in knowledge, a 75% improvement in positive attitudes, and a 70% improvement in nutritional practices. In terms of community participation, 90% of trained participants expressed their readiness to become community educational cadres, while 78% of participating mothers were able to identify the four pillars of stunting prevention. The program also facilitated the establishment of the Sehat Wonoayu Stunting Prevention Group, consisting of five members, which conducted four meetings focusing on toddler screening, nutrition education, and coordination with local health services. In addition, seven toddlers identified as potentially at risk of stunting were referred to the Wonoayu Community Health Center for further assessment. These findings highlight the potential of participatory community empowerment to strengthen local health education, encourage preventive nutritional practices, and improve coordination between families, community cadres, and healthcare providers. Nevertheless, the findings should be interpreted within the limitations of the one-group pretest–posttest evaluation design, the relatively small number of training participants, and the absence of longitudinal anthropometric assessments. Therefore, the observed improvements should not be interpreted as direct evidence of reduced stunting prevalence. Future initiatives should prioritize continuous mentoring of community educational cadres, strengthen collaboration among village authorities, educational institutions, Posyandu services, and healthcare providers, and integrate locally available nutritious food resources into practical household nutrition education. Further research should employ larger participant samples, validated measurement instruments, appropriate comparison groups, and longer follow-up periods to evaluate the sustainability of behavioral changes and their potential effects on children's nutritional status. Overall, the community movement provides a practical foundation for developing sustainable, locally driven, and participatory stunting prevention initiatives.

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DATA AVAILABILITY

The data supporting the findings of this study are available from the corresponding author upon reasonable request, subject to applicable institutional requirements and participant confidentiality.

AUTHOR CONTRIBUTION

Sherly Jeniawaty: Conceptualization, Methodology, Investigation, Project Administration, and Writing – Original Draft Preparation. Yuni Ginarsih: Supervision, Validation, Resources, and Writing – Review and Editing. Sukesi: Conceptualization, Supervision, Methodology, and Writing – Review and Editing. All authors contributed to the development of the manuscript, critically reviewed the final version, and approved the manuscript for publication.

DECLARATIONS

ETHICAL APPROVAL

The community empowerment activities were conducted in collaboration with local community health services and the Wonoayu Village Government. Ethical approval information should be provided in accordance with the requirements of the authors' institutional ethics committee. If formal ethical approval was not required, the applicable institutional determination should be stated.

CONSENT FOR PUBLICATION PARTICIPANTS

Informed consent was obtained from participants before their involvement in the educational and community empowerment activities. For participants under 18 years of age, parental or legal guardian consent should be confirmed where applicable.

COMPETING INTERESTS

The authors declare that they have no competing interests that could have influenced the research, its findings, or the preparation of this manuscript.

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