

IMPROVING KNOWLEDGE OF COMMUNITY HEALTH WORKER ABOUT STUNTING'S PREVENTION THROUGH STRUCTURED TRAINING PROGRAM IN MALANG

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ABSTRACT

Stunting is a significant public health issue in Indonesia. Improving the knowledge of community health workers, particularly health cadres, is crucial for effective stunting prevention in Indonesia. This study aims to analyze the effectiveness of structured training program about stunting prevention among health cadres in Sumberpasil Village, Pakis District, Malang Regency. This study employed a one-group pretest-posttest design. A total of 28 health cadres were recruited using a purposive sampling method. Data were collected using a validated questionnaire to assess stunting prevention knowledge. The intervention consisted of a 10-hour structured training program led by the expert (divided into five sessions, with 2.5 hours in each session). Data were analyzed using SPSS version 26. Given the non-parametric nature of the data, the Wilcoxon signed-rank test was used to compare the pretest and posttest scores. The structured training program had a significant positive impact on the participants' knowledge. The knowledge and empowerment of health cadres are fundamental to the success of stunting prevention strategies in Indonesia. By enhancing their training, providing ongoing support, and fostering community engagement, health cadres can play a transformative role in reducing stunting rates among children.

Keywords: community health worker; knowledge; stunting

INTRODUCTION

Stunting is a significant public health issue in Indonesia, affecting a substantial proportion of children under five years of age. The Indonesian government has committed to addressing this challenge as part of its obligations under the Sustainable Development Goals (SDGs), particularly Goal 2, which aims to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture by 2030. Specifically, Target 2.2 focuses on ending all forms of malnutrition, including stunting and wasting in children Sulistyaningsih et al. (2022). In 2018, stunting still reached 30.85% (Kemenkes RI, 2018). SSGI data in 2022 in East Java shows that stunting is 19.2%, with a target of 18.4%. The prevalence of stunting in Malang District is 23%, which means it has not met the target (Kadinkes Provinsi Jatim, 2023; Kemenkes RI, 2018).

Stunting is a child growth and development disorder characterized by less than standard length or height. Stunting is a long-lasting growth disorder that occurs during the first thousand days of life (HPK) due to inadequate nutritional intake for both mother and child. People who suffer from stunting cannot develop and grow properly. In the short term, stunting causes growth failure, metabolic problems, non-ideal body size, and motor and cognitive development problems. Prolonged stunting also leads to decreased intellectual capacity. During school age, permanent defects in the structure and function of nerves and brain cells lead to difficulty absorbing lessons, which impacts their productivity levels as adults. Nutritional deficiencies also lead to abnormal growth, such as being short or thin, and increase the risk of non-communicable diseases such as

diabetes mellitus, hypertension, coronary heart disease and stroke (Kementerian PPN/ Bappenas, 2018; Simbolon et al., 2022).

High stunting rates indicate that health and nutrition care at the family level is not optimal. Family or community empowerment is a strategic step to encourage better parenting behaviour following the health concept. According to the behaviour change model, individuals and the environment influence health behaviour (Pakpahan et al., 2021). The attitude and behaviour of health workers and available facilities also influence and encourage a person's behaviour. Improving the knowledge of community health workers, particularly health cadres, is crucial for effective stunting prevention in Indonesia. Health cadres, who are often the first point of contact for families, play a vital role in educating communities about these issues and implementing preventive measures (Simbolon et al., 2022).

Health cadres' knowledge of stunting, its causes, and prevention strategies can be significantly enhanced through structured training programs. Targeted educational interventions, such as maternal education on parental feeding, focus on practical aspects of nutrition and childcare. Using diverse methods like lectures, discussions, and hands-on demonstrations, interactive elements, and technology integration can enhance learning outcomes and prepare cadres for real-world challenges related to stunting prevention (Ahmad, 2023; Amalia, 2023; Heryani, 2023; Julianti & Elni, 2023; Mediani et al., 2022).

Community engagement is crucial for improving health cadres' knowledge. Engaging them in community activities like health fairs and workshops allows them to gain practical experience and understand family nutrition and health challenges. Regular support and supervision are essential for maintaining their motivation and knowledge. Continuous support leads to increased engagement and commitment, benefiting the communities they serve (Ahmad, 2023; Qodir, 2024; Sukmawati et al., 2021). Pakis sub-district is one of the sub-districts in Malang district with a stunting rate of 399 children under five. The causes of stunting in this include poor parental patterns, which causes a diet from parents that does not meet balanced nutrition. This study aims to analyze the effectiveness of structured training program about stunting prevention among health cadres in Sumberpasir Village, Pakis District, Malang Regency. The study results can be considered to develop new strategies to increase cadres' knowledge in preventing and overcoming stunting.

METHOD

This study employed a one-group pretest-posttest design to evaluate the effectiveness of an structured training program on the knowledge of health cadres regarding stunting prevention among children in Sumberpasir Village, Pakis District, Malang Regency, Indonesia. The intervention consisted of a structured training program focused on stunting prevention, and the cadre's knowledge was measured before and after the intervention to measure any improvement. The study participants were health cadres from Sumberpasir Village, Pakis District, Malang Regency. A total of 28 health cadres were recruited using a purposive sampling method. The inclusion criteria for participants were: (1) being an active health cadre at the time of the study, (2) being willing to participate in the educational intervention, and (3) being able to complete both the pretest and posttest assessments. All participants provided informed consent before participating in the study.

Data were collected using a validated questionnaire to assess stunting prevention knowledge. The questionnaire comprised 30 items covering various aspects of stunting prevention, including nutrition, child development, and health education strategies. The same questionnaire was administered as a pretest before the intervention and as a posttest immediately after the intervention to measure changes in knowledge. The intervention consisted of a 10-hour structured training program led by the expert (divided into five sessions, with 2.5 hours in each session), which included lectures, discussions, visual materials and practicals on stunting prevention. Stunting prevention content covers the. The session covered key topics such as the causes, consequences, prevention strategies for stunting, community-level strategies to prevent stunting, effective communication also practical aspects of nutrition and childcare. Data were analyzed using SPSS version 26. Given the non-parametric nature of the data, the Wilcoxon signed-rank test was used to compare the pretest and posttest scores. The statistical significance threshold was set at $p < 0.05$.

RESULT AND DISCUSSION

A total of 28 health cadres participated in the study. The demographic characteristics of the respondents are summarized in Table 1.

Table 1.
Characteristics of Respondents

Characteristic	f	%
Age		
< 35 years	6	25
≥ 35 years	22	75
Employment Status		
Employed	24	94
Unemployed	4	6

Table 1, age if respondents dominated on ≥ 35 years (75%) and employed (94%). The levels of knowledge among health cadres before and after the intervention are presented in Table 2.

Table 2.
Knowledge Levels of Cadres Regarding Stunting Prevention

Knowledge Level	Pretest		Posttest		Z score	p-value
	f	%	f	%		
Poor	3	10.7	1	3.6	-4.546	0.001
Moderate	19	67.9	8	28.6		
Good	6	21.4	19	67.9		

The results of the Wilcoxon signed-rank test indicated a significant improvement in the health cadres' knowledge of stunting prevention from pretest to posttest ($Z = -4.546$, $p < 0.05$). This suggests that the structured training program as intervention had a significant positive impact on the participants' knowledge. The issue of stunting among children in Indonesia has garnered significant attention, particularly regarding the role of health cadres in its prevention. Stunting, a height for age below the standard, is a critical indicator of undernutrition and has profound implications for children's health and development. The Indonesian government has recognized the urgency of addressing stunting, as evidenced by its commitment to global initiatives such as the Scaling Up Nutrition (SUN) movement and the Sustainable Development Goals (SDGs) (Hall et al., 2018). Health cadres serve as community health workers and are pivotal in implementing strategies to reduce stunting rates through education, early detection, and nutritional support.

The effectiveness of health cadres in stunting prevention is closely linked to their knowledge and training. Studies have shown that enhancing the knowledge and skills of health cadres through targeted training programs significantly improves their ability to detect stunting early and provide appropriate interventions (Sulistyaningsih et al., 2022; Tampake et al., 2021, 2022). For instance, training initiatives that focus on the early detection of stunting and the nutritional needs of children under five years old have been implemented. These programs have demonstrated a marked increase in the competencies of health cadres, enabling them to serve their communities better (Sulistyaningsih et al., 2022; Tampake et al., 2021, 2022).

One of the key components of structured training programs is the incorporation of comprehensive educational content that covers the causes, consequences, and prevention strategies for stunting. Research indicates that training initiatives significantly improve health cadres' understanding of nutritional needs and the importance of early intervention (Amalia, 2023; Murcittowati, 2023). For instance, a study found that health cadres who received training on maternal education concerning parental feeding demonstrated increased knowledge about nutritional practices that can prevent stunting (Amalia, 2023). This highlights the importance of targeted educational interventions that focus on practical aspects of nutrition and child care. Moreover, the effectiveness of training programs can be enhanced through the use of diverse educational methods. Incorporating interactive elements such as workshops, discussions, and hands-on demonstrations can facilitate better learning outcomes (Ahmad, 2023; Fristiwi, 2023). For example, training programs that utilize multimedia resources, including videos and visual aids, have been shown to engage health cadres more effectively and improve knowledge retention (Heryani, 2023).

This result of this study suggests that the structured training program as intervention had a significant positive impact on the participants' knowledge. One of the primary objectives of structured training programs is to enhance the knowledge and skills of health cadres regarding the causes, consequences, and prevention strategies for stunting. Research has demonstrated that effective training can lead to significant improvements in health cadres' understanding of nutritional needs and the importance of early intervention (Lukman et al., 2023). For instance, a study found that health cadres who participated in structured training programs exhibited increased knowledge about proper food processing and nutritional practices for toddlers, which are essential for preventing stunting (Lukman et al., 2023).

Moreover, the empowerment of health cadres is essential for fostering community engagement in stunting prevention. Health cadres are tasked with monitoring children's growth and play a crucial role in educating parents about proper nutrition and health practices (Masita, 2023; Mediani et al., 2022). This dual role enhances their capacity to influence community health outcomes positively. Research indicates that when health cadres are well-supported and motivated, they can significantly impact the nutritional status of children in their communities (Juliанти & Elni, 2023). The provision of moral support from health workers and the community is vital in maintaining the enthusiasm and commitment of health cadres in their roles (Juliанти & Elni, 2023).

In addition to training and empowerment, the socio-cultural context in which health cadres operate must be considered. The effectiveness of stunting prevention programs is influenced by the community's understanding of nutrition and health practices. Studies have highlighted the importance of maternal knowledge regarding child nutrition, as it directly affects household dietary choices and practices (Hall et al., 2018; Sari et al., 2023). Therefore, health cadres must focus on educating parents and engaging with the broader community to foster a supportive environment for healthy practices (Beal et al., 2018; Winarningsih, 2023). Community-based initiatives that involve health cadres in educational outreach have shown promise in increasing awareness and understanding of stunting and its prevention (Novitasari et al., 2023).

Furthermore, integrating health education into existing community structures, such as Posyandu (integrated health posts), is crucial for enhancing the reach and impact of stunting prevention efforts. Health cadres are often the first point of contact for families seeking health services, ideally positioning them to disseminate information and resources related to stunting prevention (Mediani et al., 2022; Tampake et al., 2021, 2022). By leveraging these community structures, health cadres can facilitate regular monitoring of children's growth and provide timely interventions when stunting is detected (Nasution et al., 2022).

Moreover, the sustainability of stunting prevention efforts hinges on the continuous development and support of health cadres. Regular training updates, ongoing supervision, and community feedback mechanisms are essential to ensure that health cadres remain informed about best practices and emerging challenges in stunting prevention (Ahmad, 2023). Establishing a supportive network among health cadres, health workers, and community members can foster a collaborative environment that enhances the effectiveness of stunting prevention initiatives (Julianti & Elni, 2023). This collaborative approach is critical for building community resilience and ensuring that stunting prevention efforts are sustained over time.

CONCLUSION

The structured training program had a significant positive impact on the participants' knowledge. The knowledge and empowerment of health cadres are fundamental to the success of stunting prevention strategies in Indonesia. By enhancing their training, providing ongoing support, and fostering community engagement, health cadres can play a transformative role in reducing stunting rates among children. The integration of health education into community structures, coupled with an understanding of socioeconomic determinants, will further strengthen the impact of these efforts. As Indonesia continues to prioritize the reduction of stunting, the role of health cadres will remain central to achieving this public health goal.

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