

Knowledge and Motivation of Cadres in Efforts to Prevent Stunting During Postpartum and Breastfeeding Periods in Leminggir Village, Mojosari District, Mojokerto Regency

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ABSTRACT

Maternal and child nutritional and health status are critical determinants of human resource quality. The periods of postpartum and breastfeeding are particularly vulnerable stages in the prevention of stunting. Posyandu cadres play a strategic role as frontline community health workers who directly assist postpartum and breastfeeding mothers through health education and community-based services. Adequate knowledge and strong motivation among cadres are essential to effectively support stunting prevention efforts. This study aimed to examine the relationship between knowledge and motivation of cadres in stunting prevention during the postpartum and breastfeeding periods in Leminggir Village, Mojosari District, Mojokerto Regency. This study employed a cross-sectional design. The population consisted of all maternal and child health cadres in Leminggir Village, with a total sampling technique involving 30 respondents. Data were collected using structured questionnaires measuring cadres' knowledge and motivation. Statistical analysis was conducted using the Spearman Rank test with SPSS. The results demonstrated a statistically significant association between cadres' knowledge and their motivation to prevent stunting during the postpartum and breastfeeding periods ($p = 0.02$; $p < 0.05$). Cadres who possessed greater knowledge were more likely to exhibit higher levels of motivation in carrying out stunting prevention interventions. Knowledge and motivation among Posyandu cadres are significantly associated with stunting prevention efforts during the postpartum and breastfeeding periods. Strengthening cadres' knowledge through continuous education and enhancing their motivation may improve the effectiveness of community-based stunting prevention programs.

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1. INTRODUCTION

Maternal and child health and nutritional conditions play a fundamental role in shaping the quality of human capital. A mother's nutritional status, from pre-pregnancy through pregnancy, postpartum, and breastfeeding, is a critical period because it directly impacts a child's growth and development. Nutritional deficiencies during this period can have long-term consequences, including stunting. Stunting, a form of growth failure caused by chronic, long-term malnutrition, differs from acute malnutrition. This condition can begin during pregnancy due to inadequate

nutritional intake, suboptimal parenting patterns, poor dietary quality, and a high frequency of infections, all of which hinder a child's linear growth.(1) The effects of stunting generally begin to appear when a child is over two years old. Factors contributing to stunting include dietary intake, birth weight, medical history, breastfeeding, parental education level, the toddler's age, and the family's socioeconomic status.(2) Stunting continues to be a major global nutrition challenge. According to the World Health Organization (WHO), an estimated 148 million children under five years of age were affected by stunting in 2022, representing a global prevalence of 22.3%, while approximately 45 million children experienced wasting, with a prevalence of 6.8%. These figures underscore the persistent burden of malnutrition during early childhood. In Indonesia, the prevalence of stunting has demonstrated a consistent decline, decreasing from 24.4% in 2021 to 21.6% in 2022, and further to 15.8% in 2023. Similarly, East Java Province recorded a reduction in stunting prevalence from 23.5% in 2021 to 19.2% in 2022, and based on the 2023 Indonesian Health Survey (SKI), the rate further declined to 13.8% (3,4) Meanwhile, At the district level, Mojokerto Regency showed a marked improvement, with stunting prevalence falling sharply from 27.4% in 2021 to 11.6% in 2022, indicating substantial progress in addressing child undernutrition.

The impact of stunting is very serious because it not only inhibits physical growth but also affects a child's cognitive development, learning ability, and future productivity. In the short term, stunting can cause impaired brain development, intelligence, physical growth, and metabolism. In the long term, stunting increases the risk of cognitive decline, low academic achievement, weakened immune systems, and the risk of degenerative diseases such as diabetes, cardiovascular disease, obesity, and disability in adulthood. These impacts indirectly reduce the quality of human resources and the nation's competitiveness.(5)

Stunting prevention efforts are carried out through specific and sensitive nutrition interventions, with a primary focus on the First 1,000 Days of Life (HPK), which includes pregnancy, postpartum, and breastfeeding, up to 23 months of age. This period is considered a golden period (window of opportunity) because appropriate nutrition interventions have proven to be most effective in preventing stunting.(6) The government has launched various stunting prevention programs, including providing iron supplements to pregnant women, fulfilling the nutritional needs of pregnant and breastfeeding mothers, delivering babies by health workers, early initiation of breastfeeding, exclusive breastfeeding, providing appropriate complementary feeding (MP-ASI), complete basic immunizations, monitoring growth at integrated health posts (Posyandu), and implementing clean and healthy living behaviors.(2) In Mojokerto Regency, various regional innovations such as the Sehat Program (Selasa Sehat Turunkan AKB dan AKI/Healthy Tuesdays Reduce IMR and MMR) and Sejoli (Selasa Sehat Jaga Lansia Mandiri/Healthy Tuesdays Protect Independent Elderly) have been developed as an effort to accelerate stunting reduction.

Integrated health post (Posyandu) cadres play a strategic role at the forefront of public health services, interacting directly with postpartum and breastfeeding mothers through Posyandu activities and mothers' classes. Cadres' success in stunting prevention is strongly influenced by their knowledge and motivation. Strong knowledge enables cadres to convey health information accurately and comprehensively, while strong motivation encourages them to actively provide ongoing support and education. Cadres serve as extensions of community health centers (Puskesmas) in optimizing promotive and preventive programs in the community. (7) Therefore, increasing the knowledge and motivation of cadres is an important factor in supporting the success of stunting prevention programs, especially during the postpartum and breastfeeding periods.

Based on this background, this study aims to determine the relationship between knowledge and motivation of cadres in efforts to prevent stunting during the postpartum and breastfeeding periods in Leminggir Village, Mojosari District, Mojokerto Regency, which until now has not been widely studied in this area.

2. METHOD

This research is a quantitative study using a cross-sectional design. The population of this study were maternal and child health cadres in Leminggir Village, Mojosari District, Mojokerto Regency. The sample was taken using a total sampling technique with 30 respondents. The study was conducted on July 12, 2025. The independent variable was the cadres' knowledge in efforts to prevent stunting during the postpartum period and breastfeeding. The dependent variable was the

cadres' motivation in efforts to prevent stunting during the postpartum period and breastfeeding. The instrument used was a questionnaire about the cadres' knowledge and motivation. Data processing was carried out by editing, coding, scoring, data entry, and data tabulation. Bivariate analysis was performed using the Spearman Rank test.

3. RESULTS AND DISCUSSION

This research was conducted in Leminggir Village, Mojosari District, Mojokerto Regency, involving 30 health cadres as respondents. The variables studied included their knowledge and motivation in preventing stunting during the postpartum and breastfeeding periods. The following are the research results.

3.1 Knowledge of Cadres in Efforts to Prevent Stunting During Postpartum and Breastfeeding Periods in Leminggir Village, Mojosari District, Mojokerto Regency

Table 1. Cadres' Knowledge in Stunting Prevention During the Postpartum and Breastfeeding Period in Leminggir Village, Mojosari Subdistrict, Mojokerto Regency

No	Cadres' Knowledge	Frequency	Percentage (%)
1	Good	8	26.7
2	Fair	19	63.3
3	Poor	3	10.0
	Total	30	100

Based on Table 1, it can be seen that the majority of health cadres in Leminggir Village, Mojosari Subdistrict, Mojokerto Regency had a fair level of knowledge regarding stunting prevention during the postpartum and breastfeeding period, accounting for 63.3% of the respondents.

The results of this study demonstrate that the majority of community health cadres possessed a fair level of knowledge regarding stunting prevention during the postpartum and breastfeeding period. This finding indicates that cadres generally have sufficient baseline knowledge to support stunting prevention activities, particularly related to maternal nutrition during the postpartum period, optimal breastfeeding practices, and early monitoring of infant growth and development. These aspects are widely recognized as key determinants in preventing stunting during the first 1,000 days of life (8)(9).

The predominance of cadres with fair knowledge aligns with previous studies conducted in Indonesia, which reported that most health cadres demonstrate moderate knowledge levels as a result of routine training provided by primary healthcare centers and experiential learning in the community (10). However, moderate knowledge may not always translate into optimal performance, especially when cadres are required to provide individualized counseling or address complex maternal and infant nutrition problems (11,12).

Furthermore, the presence of cadres with poor knowledge, although limited in number, is a critical concern. Previous research has shown that inadequate knowledge among community health workers is associated with reduced effectiveness in delivering health education and lower confidence in counseling mothers during the postpartum and breastfeeding period (13). This gap may ultimately hinder the success of stunting prevention programs at the community level, particularly in rural settings where cadres serve as the primary source of health information for mothers (14).

These findings are consistent with behavioral health theory, which emphasize that knowledge functions as a predisposing factor influencing attitudes, motivation, and health-related behaviors (15). In the context of stunting prevention, cadres with better knowledge are more likely to provide accurate information, encourage appropriate breastfeeding practices, and promote adequate maternal nutrition, thereby supporting improved maternal and child health outcomes (8), (9).

Therefore, strengthening cadres' knowledge through continuous, structured, and needs-based training programs is essential. Evidence suggests that regular refresher training, supportive supervision, and the use of standardized educational materials significantly improve cadres' competencies and effectiveness in maternal and child health interventions (15). Enhancing cadres' knowledge is also expected to reinforce their motivation and commitment, which are crucial for sustaining community-based stunting prevention efforts during the postpartum and breastfeeding period.

3.2 Motivation of Cadres in Efforts to Prevent Stunting During Postpartum and Breastfeeding Periods in Leminggir Village, Mojosari District, Mojokerto Regency

Table 2. Cadres' Motivation in Stunting Prevention During the Postpartum and Breastfeeding Period in Leminggir Village, Mojosari Subdistrict, Mojokerto Regency

No	Cadres' Knowledge	Frequency	Percentage (%)
1	Good	13	43.3
2	Fair	15	50
3	Poor	2	6.7
	Total	30	100

Based on Table 2, half of the cadres (50.0%) demonstrated a fair level of motivation in implementing stunting prevention efforts during the postpartum and breastfeeding period in Leminggir Village, Mojosari Subdistrict, Mojokerto Regency.

Furthermore, most of the other cadres demonstrated good motivation, so it can be generally said that cadres have a relatively positive drive in carrying out their roles at the integrated health post (Posyandu). The adequate to good motivation of cadres in this study can be influenced by several factors. First, intrinsic motivation, namely the cadres' desire to voluntarily participate in Posyandu activities. Second, age, as most cadres are adults and older, still possess a high work ethic and commitment to carrying out their duties. Third, almost all cadres have participated in cadre training, which contributes to increased self-confidence and readiness in carrying out their role as health cadres. Furthermore, most cadres have more than five years of work experience, thus understanding their duties and responsibilities in Posyandu services. This is reinforced by the respondents' educational level, the majority of whom have a high school diploma or equivalent, which allows cadres to more easily access and understand information related to maternal and child health, including stunting prevention (16).

Good cadre motivation is a crucial factor in the successful implementation of Posyandu activities. Motivated cadres will be more active in Posyandu (Integrated Health Post) visits, more consistent in providing services, and more optimal in carrying out their educational and promotive roles for postpartum and breastfeeding mothers. Positive impacts of high motivation include improved quality of Posyandu services and a tangible contribution to improving the health of mothers, infants, and toddlers in the community (16), (17)

Empirical evidence suggests that work experience and age are associated with increased practical skills, confidence in clinical and counseling tasks, and consistency in task performance; these, in turn, contribute to stronger motivation and improved performance in public health services. Cross-site studies and systematic reviews have found that demographic factors such as age and experience influence CHWs'/posyandu cadres' ability to record, use work aids, answer mothers' questions, and effectively implement maternal-child health interventions. (18)

Overall, motivation is a key driving factor influencing cadre behavior and performance in integrated health post (Posyandu) services. Cadres with high motivation tend to exhibit more active, enthusiastic, and responsible behavior in efforts to prevent stunting during the postpartum and breastfeeding periods. Therefore, efforts to increase cadre motivation need to be continuously implemented through training, ongoing coaching, and support from community health centers and relevant policymakers to achieve optimal cadre performance.

3.3 Knowledge and Motivation of Cadres in Efforts to Prevent Stunting During Postpartum and Breastfeeding Periods in Leminggir Village, Mojosari District, Mojokerto Regency

Table 3. Relationship between Cadres' Knowledge and Motivation in Stunting Prevention During the Postpartum and Breastfeeding Period in Leminggir Village, Mojosari Subdistrict, Mojokerto Regency

		Good Motivation		Fair Motivation		Poor Motivation		Total	
No Cadres' Knowledge		Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
1	Good	5	62.5	3	37.5	0	0.0	8	100
2	Fair	8	42.1	11	57.9	0	0.0	19	100
3	Poor	0	0.0	1	33.3	2	66.7	3	100
Total		13	43.3	15	50.0	2	6.7	30	100

Based on the results of the study on table 3, cadres with good knowledge were predominantly found to have good motivation (62.5%). Cadres with a fair level of knowledge were mostly found to have fair motivation (57.9%). Most cadres with low levels of knowledge also exhibited low motivation (66.7%). Moreover, the Spearman rank correlation analysis performed using SPSS yielded a p-value of 0.02 ($p < 0.05$), indicating a statistically significant association between cadres' knowledge and motivation in stunting prevention efforts during the postpartum and breastfeeding periods in Leminggir Village, Mojosari Subdistrict, Mojokerto Regency.

The findings of this study indicate that the majority of community health cadres possessed a fair level of knowledge and fair to good motivation in implementing stunting prevention efforts during the postpartum and breastfeeding period. Furthermore, statistical analysis demonstrated a significant association between cadres' knowledge and motivation, indicating that higher levels of knowledge tend to be accompanied by stronger motivation in carrying out cadre roles.

Knowledge is widely recognized as a fundamental determinant influencing motivation and behavior in health service delivery. Cadres with adequate knowledge are better equipped to understand the importance of maternal nutrition during the postpartum period, optimal breastfeeding practices, and early monitoring of infant growth. This understanding fosters confidence and internal motivation to actively engage in counseling, education, and community outreach activities related to stunting prevention (15), (8). Conversely, cadres with insufficient knowledge may experience uncertainty and reduced self-efficacy, which can negatively affect their motivation and performance in providing maternal and child health services (19).

The results of this study are consistent with previous research showing that moderate knowledge alone does not always translate into optimal performance, particularly when community health workers are required to deliver individualized counseling or manage complex maternal and infant nutrition issues. Studies conducted in low- and middle-income countries have reported that cadres with limited or moderate knowledge often struggle with problem-solving and effective communication during counseling sessions, leading to reduced confidence and motivation (12), (19), (20). This finding underscores the importance of strengthening cadres' technical knowledge to support sustained motivation and effective service delivery.

Overall, the significant relationship between knowledge and motivation observed in this study supports behavioral health theories that identify knowledge as a predisposing factor for motivation and action. Improving cadres' knowledge through structured training, regular refresher courses, and supportive supervision is therefore essential not only to enhance technical competence but also to strengthen motivation and commitment. Integrated capacity-building approaches that address both knowledge and motivational aspects are likely to improve cadres' performance and contribute to more effective stunting prevention during the critical postpartum and breastfeeding period.

4. CONCLUSION

This study concludes that the majority of community health cadres in Leminggir Village, Mojosari Subdistrict, Mojokerto Regency demonstrated a fair level of knowledge and fair to good motivation in implementing stunting prevention efforts during the postpartum and breastfeeding

period. These findings indicate that cadres generally possess adequate baseline capacity to support postpartum and breastfeeding interventions aimed at reducing the risk of stunting.

The results also reveal a statistically significant relationship between cadres' knowledge and motivation, suggesting that improved knowledge is associated with stronger motivation to actively engage in stunting prevention activities. Cadres with better knowledge tended to demonstrate higher motivation, while those with limited knowledge were more likely to exhibit lower motivation in performing their roles.

Overall, the findings highlight the importance of strengthening cadres' knowledge as a key strategy to enhance motivation and optimize their contribution to stunting prevention during the critical postpartum and breastfeeding period. Continuous education and capacity-building initiatives are therefore essential to ensure effective and sustainable community-based stunting prevention efforts.

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