

Nutritional Care for 18-Month-Old Female Toddlers and the Risk of Stunting

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Article Information

Received: August 05, 2026
Revised: August 31, 2026
Online: September 22, 2026

Keywords

Stunting, Complementary Feeding, Nutritional Care, Toddler Growth and Development

ABSTRACT

Stunting is a manifestation of nutritional problems, as nutrition is a crucial part of toddler growth and development. Toddlers who are stunted have a height-for-age below the standard.. Two types of factors contribute to stunting: sensitive and specific factors. The common sensitive factors is parenting practices, particularly mothers' knowledge of preparing and processing complementary foods for toddlers at risk of stunting. The purpose of this study was to determine how to provide appropriate nutritional care for toddlers at risk of stunting in Mulyorejo Village. This qualitative research used a case study approach on 18-month-old female toddlers at risk of stunting in Mulyorejo Village. The case study was conducted from November to December. Data collection was conducted through interviews and recording anthropometric measurements. Data were analyzed by monitoring changes in height and weight and calculating the adequacy of the toddlers' nutritional intake. Based on the case study, there was an increase in mothers' knowledge of toddlers regarding stunting and the preparation and processing of complementary foods for toddlers according to their needs. The mothers' knowledge score during the evaluation was 4, categorized as very good. The results of the toddlers' anthropometric measurements also improved, with the toddlers' height reaching 75.4 cm and their weight reaching 8.3 kg at the end of the measurement. The toddler's energy intake increased by the end of the intervention, while protein intake fluctuated and remained slightly below the daily requirement. This study concluded that increasing mothers' knowledge of appropriate preparation and processing of complementary foods for their toddlers can support their growth.

INTRODUCTION

Indonesia, as a developing country, still faces serious nutritional challenges. Indonesia faces the triple burden of malnutrition, a condition in which undernutrition, micronutrient deficiencies, and overnutrition occur simultaneously (UNICEF Indonesia, 2025). While Indonesia's nutritional challenges remain unresolved, the government continues to implement efforts to improve the nutritional status of the population. Nutritional problems are strongly related to the level of community welfare, in line with the 2020-2024 National Medium-Term Development Plan (RPJMN),

which states that improving the nutritional status of the community is one of the development priorities, with the prevalence of *stunting* and wasting reported at 14% and 7%, respectively, in 2024 (KEPALA BADAN PERENCANAAN PEMBANGUNAN NASIONAL 2021-2024, 2024). *Stunting* remains a serious nutritional problem in Indonesia. The prevalence of *stunting* with the highest value is >30%, which mostly occurs in Asian and African countries, and one of them is in Indonesia (Sari et al., 2025) .

Factors that cause *stunting* include maternal knowledge, *hygiene* and sanitation, exclusive breastfeeding, complementary feeding (MP-ASI), immunization, access to health facilities, and family economic conditions (Zahra et al., 2023) . Factors associated with *stunting in toddlers* within the family and household environment include inadequate complementary feeding (MP-ASI), breastfeeding problems, infections, and endocrine disorders (Wandini et al., 2021) . The most ideal provision of MP-ASI is when the child is 6 months old, If complementary feeding is not introduced at the appropriate age or is provided inadequately, it may contribute to *stunting* (Hasibuan et al., 2025) .

Inappropriate introduction of complementary foods may contribute to picky eating and inadequate nutritional intake (Kopa et al., 2021) . Toddlers who receive a variety of natural complementary foods are more likely to choose healthy foods with a balanced diet to meet their nutritional needs (Tambunan et al., 2026) . Therefore, an emphasis must be placed on providing appropriate complementary foods in accordance with WHO and UNICEF recommendations (Amah et al., 2021).

The problem of *stunting* may persist if appropriate preventive measures are not immediately implemented. In addressing *stunting*, the most effective time to take preventive measures is when the child is under 2 years old (24 months) or the child is still in the First 1,000 Days of Life (HPK) (Marlina et al., 2026) . The First 1,000 Days of Life (HPK) is a critical point as the beginning of *stunting growth*, so interventions with nutritional improvements in the First 1,000 Days of Life (HPK) are very important in reducing the prevalence of *stunting* (Atikah et al., 2018).

According to the Indonesian Nutritional Status Study (SSGI) conducted by the Ministry of Health, the prevalence of *stunting in* Indonesia reached 24.4% in 2021 (Ministry of Health, 2021) . Therefore, nearly a quarter of Indonesian toddlers are *stunted*. This prevalence decreased, with SSGI results indicating that the *stunting* prevalence in Indonesia was 19.8% in 2024 (Ministry of Health, 2025) . This figure is 0.3 percentage points lower than the 2024 *stunting* prevalence target of 20.1%.

Based on the above description, efforts to prevent or manage *stunting* require support and consultation regarding the status of children and toddlers. Nutrition staff will follow up with support through home visits (*home care*) after data collection and *assessment* . *Home care* refers to health and social services provided in a patient's or client's home. To develop the competencies of students as prospective nutrition professionals, case studies involving *home care* can be used as a learning method. This case study involved a toddler at risk of *stunting*.

METHODS

This research used a qualitative approach with a case study design. The study was conducted in Mulyorejo District, involving an 18-month-old female toddler who met the criteria for *stunting* based on the height-for-age (H/A) indicator with a z-score between -3 SD and < -2 SD and had an



energy intake adequacy level below 90%. The case study approach was chosen because it was able to provide a comprehensive picture of the subject's condition, factors that influence nutritional status, and the effectiveness of individual interventions. The interventions included education to the toddler's mother about stunting, growth monitoring, provision of appropriate complementary foods (MP-ASI), and implementation of a high-energy and high-protein diet to support the acceleration of toddler growth.

Data were collected through in-depth interviews, direct observation, and the Nutrition Care Process (NCP) using the PAGT (Standardized Nutrition Care Process) format. Data collected included respondent characteristics, anthropometric data (weight and height), physical and clinical conditions, nutritional history, and personal history. The knowledge assessment was divided into four categories: excellent if the score is 86–100%, good if 76–85%, fair if 56–75%, and poor if <56%. Anthropometric measurements were conducted using a digital scale and stadiometer with calibration 0.001 cm, while food consumption data were obtained through the 24-hour Food Recall method five times during the mentoring period and a Food Frequency Questionnaire (FFQ) to determine previous consumption patterns. In addition, information on immunization status, disease history, and social conditions was obtained through interviews with mothers of toddlers and review of records in the Health Card Book (KMS).

Data analysis was conducted descriptively by comparing conditions before and after the mentoring intervention. The nutritional status of toddlers was evaluated using anthropometric indicators based on z-score values, while the level of nutritional adequacy was calculated by comparing energy, protein, fat, and carbohydrate intake to the Recommended Dietary Allowance (RDA) using the consumption level formula (%RDA). Changes in physical condition, consumption patterns, and development of nutritional status during the mentoring were analyzed narratively to illustrate the effectiveness of the nutritional intervention provided. Furthermore, nutritional problems were identified and formulated as nutritional diagnoses based on the Nutrition Intake (NI), Nutrition Clinical (NC), and Nutrition Behavioral-Environmental (NB) domains, so that interventions and evaluations could be designed according to the needs of the research subjects.

RESULTS

1. Anthropometric Status of the Toddler

The results of anthropometric measurements at the beginning of the mentoring showed that the research subject was an 18-month-old female toddler with a body weight of 8.0 kg and a height of 73.1 cm. Based on the nutritional status assessment using WHO anthropometric indicators, the weight-for-age (WFA) value was in the z-score range of -1 SD to -2 SD which is included in the good nutrition category. Meanwhile, the height/age indicator showed a z-score value between -2 SD to -3 SD so that the toddler was categorized as short (stunting), while the weight-for-height (WHZ) indicator was in the range of -1 SD to -2 SD which indicates a normal weight status according to height. These results indicate that the main problem of the toddler lies in long-term linear growth disorders, not in wasting or acute malnutrition conditions.

Although an improvement in weight-for-height (WH) was observed during the one-month intervention, this change should be interpreted cautiously. Weight-for-height primarily reflects the proportionality of body weight relative to height and is more sensitive to short-term changes in

nutritional intake, whereas height-for-age (HA) reflects cumulative linear growth and is used to identify chronic growth impairment or stunting. In the present case, the improvement in body weight and WH during the intervention was not accompanied by a change in the HA category, as the child remained classified as short/stunted. Therefore, the observed anthropometric improvement represents a positive early response to nutritional intervention but cannot yet be considered complete catch-up growth. According to the WHO Child Growth Standards, assessment of linear growth should consider height-for-age as well as changes in growth velocity over time, and repeated anthropometric monitoring is required to evaluate the child's growth trajectory (World Health Organization, 2006, 2025). Evidence from nutritional intervention studies also indicates that measurable improvements in linear growth generally require longer follow-up periods. For example, Siswati et al. (2022) demonstrated improvements in weight and height following an integrated nutrition intervention, while Diarsvitri et al. (2026) reported improvements in linear growth after nutritional interventions lasting 6–12 months. Consequently, the one-month increase observed in this case should be regarded as an initial indication of growth improvement rather than evidence of completed catch-up growth. Longer-term monitoring of HA z-scores and height velocity is necessary before concluding that recovery from stunting or complete catch-up growth has occurred.

2. Nutritional Diagnosis Results

The nutrition assessment results indicated that the toddler experienced three major nutritional issues, based on the Standardized Nutrition Care Process (PAGT) terminology. The first diagnosis was NI-2.1 (Inadequate Oral Intake), characterized by reduced food intake associated with decreased appetite during a three-day fever. This condition resulted in a severe food recall deficit, resulting in inadequate energy and macronutrient requirements not being met optimally.

The second diagnosis was NB-1.7 (Food Selection), which indicates that food selection is not in accordance with the toddler's growth needs due to the mother's lack of knowledge regarding providing a balanced, nutritious diet. Furthermore, a diagnosis of NC-3.5 (Growth Below Expected) was found, indicating that the toddler's linear growth is below standard due to insufficient food intake over a long period of time accompanied by a history of recurrent infections. This condition is supported by the results of the Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ), which showed an average consumption level of 80.85%, or categorized as a mild deficit. These three diagnoses were used as the basis for developing individualized nutritional interventions.

3. Nutrition Education Intervention Results

The interventions provided included education on stunting, monitoring toddler growth, providing age-appropriate complementary foods (MP-ASI), and selecting high-protein foods. In addition to education, easy-to-use MP-ASI recipes were also developed at home, including shrimp fried rice and taro balls as alternative high-energy and high-protein menus. Interventions were delivered individually through counseling with mothers of toddlers, allowing for tailoring of the materials to the family's circumstances and needs.

Evaluation results showed that mothers of toddlers were able to understand the basic concept of stunting, understand the importance of growth monitoring, identify nutrients that play a



role in growth, and identify various sources of high-protein foods suitable for toddlers. This improved understanding is an indicator of the success of the education provided during the mentoring process.

4. Nutritional Intake Results

Monitoring of the toddler's food consumption over four weeks showed changes in energy and macronutrient intake following the nutritional intervention. As presented in Table 1, energy intake increased from 806.3 kcal/day (102.4% of daily requirements) in the first week to 888.6 kcal/day (112.9%) in the fourth week. Fat intake also increased from 33.8 g/day to 42.1 g/day, while carbohydrate intake increased slightly from 89.4 g/day to 90.1 g/day. In contrast, protein intake decreased slightly from 37.7 g/day (96.7%) to 37.0 g/day (93.9%).

Table 1. Changes in Energy and Macronutrient Intake Before and After Four Weeks of Nutritional Intervention

Nutrient Component	Daily Requirement	Before Intervention (Week 1)	Adequacy Level (%)	After Intervention (Week 4)	Adequacy Level (%)	Absolute Change	Change (%)
Energy (kcal/day)	787 kcal	806.3 kcal	102.4%	888.6 kcal	112.9%	+82.3 kcal	+10.2%
Protein (g/day)	39.4 g	37.7 g	95.7%	37.0 g	93.9%	-0.7 g	-1.9%
Fat (g/day)	30.6 g	33.8 g	110.4%	42.1 g	137.5%	+8.3 g	+24.6%
Carbohydrate (g/day)	88.5 g	89.4 g	101.0%	90.1 g	101.8%	+0.7 g	+0.8%

The weekly monitoring results presented in Table 2 showed fluctuations in energy and protein intake throughout the four-week intervention. Energy intake decreased from 806.3 kcal/day in the first week to 728.1 kcal/day in the third week, before increasing to 888.6 kcal/day in the fourth week. Similarly, protein intake fluctuated, reaching its highest level of 40.7 g/day in the second week and decreasing to 29.3 g/day in the third week, before recovering to 37.0 g/day in the fourth week. These findings indicate that although energy intake improved by the end of the intervention, protein intake remained slightly below the daily requirement.

Table 2. Development of Energy and Protein Intake During Four Weeks of Monitoring

Intervention Week	Energy (kcal/day)	Protein (g/day)	Energy Fulfillment (%)	Protein Fulfillment (%)	Interpretation
Week 1	806.3	37.7	102.4%	96.7%	Energy and protein are in the normal category
Week 2	776.5	40.7	98.7%	103.3%	Normal energy, protein meets requirements

Intervention Week	Energy (kcal/day)	Protein (g/day)	Energy Fulfillment (%)	Protein Fulfillment (%)	Interpretation
Week 3	728.1	29.3	92.5%	74.4%	Normal energy, protein experiences severe deficit
Week 4	888.6	37.0	112.9%	93.9%	Energy increases, protein approaches requirements

In addition to the changes in macronutrient intake, the toddler's dietary pattern showed improvements following the nutritional intervention. The mother began implementing the recommended complementary feeding menus and increasing the variety of ingredients in the toddler's daily meals, including animal- and plant-based protein sources. These changes suggest improvements in daily feeding practices following nutrition education and individual counseling, although fluctuations in nutrient intake indicate the need for continued dietary monitoring.

5. Growth Monitoring Results

The one-month intervention demonstrated positive changes in the toddlers' condition. Increases in weight and height indicated that the intervention had an impact on growth. In addition to anthropometric changes, the toddlers also showed improved food consumption patterns, while mothers became more able to select nutritious foods and prepare complementary foods according to their age.

Overall, the study results indicate that nutrition education, family counseling, growth monitoring, and providing recommendations for high-energy and high-protein complementary feeding (MP-ASI) menus can improve feeding practices and support the nutritional status of stunted toddlers. Although this study involved only one subject, the findings suggest that intensive nutritional support can be an effective strategy for accelerating the growth of toddlers at risk of stunting.

DISCUSSION

1. Anthropometric Status of the Toddler

The results of anthropometric measurements showed that the subject was an 18-month-old female toddler with a body weight of 8.0 kg and a height of 73.1 cm. Based on the WFA index, the subject had a WFA z-score between -2 SD and -1 SD, indicating a normal weight-for-age status. The weight-for-height (WFH) index was also in the range of -1 SD to -2 SD or included in the normal category. However, the height-for-age (HFA) index was in the range of -2 SD to -3 SD so the subject was categorized as short or experiencing stunting. These findings indicate that the primary nutritional problem was impaired linear growth rather than acute malnutrition in the form of wasting. During the one-month mentoring period, there was an increase in body weight and height, although this increase did not change the height-for-age (HFA) category to normal.

The results of this study align with a recent study by Diarsvitri et al. (2026), on 111 children with pre-stunting, stunting, and severe stunting in five community health centers in Surabaya. The



study showed that nutritional interventions for 6–12 months significantly increased children's weight and height. The average height increase reached 0.6 cm per month in the pre-stunting group, 0.7 cm per month in the stunting group, and 0.9 cm per month in the severe stunting group. These findings demonstrate that improvements in linear growth can occur when children receive adequate nutritional intervention and are monitored continuously, although changes in nutritional status categories require a relatively long time.

Research by Okeyo et al. (2026) in Kenya also showed that providing complementary foods enriched with protein and micronutrients can support the growth of infants aged 6–14 months. The study, with a factorial randomized trial design, showed a difference in length-for-age z-scores in the group receiving fortified complementary foods. The study also found that recurrent illnesses were associated with a higher risk of malnutrition, suggesting that child growth is influenced not only by the quantity of food but also by the quality of the food and the child's health.

The World Health Organization (WHO) defines stunting as a length-for-age or height-for-age z-score below -2 SD from the median of the WHO Child Growth Standards. Stunting is a manifestation of chronic malnutrition or repeated infections that last for a long time, while the WFH index is more indicative of an acute nutritional condition (Senudin et al., 2025). Therefore, a condition of short height/age with normal WFH can occur when a child's weight is relatively appropriate for their height, but their height growth has previously been hampered.

Based on these results, the researchers assumed that the increase in weight and height during the mentoring program was a sign of a positive initial response to the intervention. However, this increase cannot be directly considered successful catch-up growth because the observation period was only one month and was not accompanied by a change in height/age category. Linear growth requires consistent intervention and evaluation for at least several months. Furthermore, height measurements need to be conducted using the same procedure and calibrated equipment to ensure that any changes found are not due to measurement error.

2. Nutritional Diagnosis of Toddlers

The assessment results revealed three main nutritional diagnoses: NI-2.1 (inadequate oral intake), NB-1.7 (inappropriate food selection), and NC-3.5 (below-standard growth). The diagnosis of inadequate oral intake was related to decreased appetite when the subject had a fever for three days, resulting in a severe food deficit in the food recall. The diagnosis of food selection was related to the mother's limited knowledge of the composition of a balanced nutritious diet for toddlers. Meanwhile, the diagnosis of substandard growth was supported by a history of prolonged inadequate intake, recurrent infections, short height/age status, and SQ-FFQ results with an average consumption level of 80.85%, or a mild deficit.

These findings are consistent with those of Mardani et al. (2024), who conducted a randomized controlled trial on mothers and children under two years of age in Indonesia. The study showed that child malnutrition is associated with low maternal knowledge, self-efficacy, and complementary feeding practices. After a four-week educational program, there was an increase in knowledge, self-efficacy, feeding practices, and improvements in children's anthropometric z-scores at weeks 12 and 24. These results confirm that nutritional problems arise not only from the child's condition but also from the caregiver's ability to select, prepare, and serve food.

A study conducted by Duong et al. (2023), on 781 children in Vietnam showed that delays in introducing a variety of foods and an inability to maintain dietary diversity were associated with slower linear growth. Children with unstable dietary diversity patterns had a 1.78-fold higher risk of stunting, while children who were very late in introducing a variety of foods had a 1.98-fold higher risk compared to children who received a variety of foods on time and consistently. These results support the diagnosis of dietary choices in the study subjects, as inappropriate food choices can lead to unmet energy, protein, and micronutrient needs.

In theory, the Nutrition Care Process (NCP) is a systematic approach encompassing nutritional assessment, diagnosis, intervention, and monitoring and evaluation. A nutritional diagnosis is established based on the relationship between the problem, its causes, and measurable signs and symptoms. The intake domain describes issues related to the amount or type of nutrients consumed, the clinical domain describes physical and growth issues, and the behavioral-environmental domain describes knowledge, abilities, access, and practices in food selection (Putra & Mardhiyah, 2026) (Leni Sri Rahayu et al., 2022) .

Researchers assume that these three diagnoses form a mutually influencing chain. Fever and infection can decrease appetite, resulting in reduced oral intake. At the same time, choosing foods that are less energy- and protein-dense leads to increased needs during recovery being unmet. If this condition occurs repeatedly, the child's linear growth can be disrupted. However, food recall results conducted while the child has a fever need to be interpreted with caution, as they may reflect a temporary decrease in intake. The SQ-FFQ finding of 80.85% is more robust, indicating that even before the illness, the subject's consumption did not fully meet needs.

3. Nutrition Education Intervention

The educational intervention in this study included materials on stunting, growth monitoring, providing age-appropriate complementary foods, and selecting high-protein foods. Education was provided individually to mothers and included easy-to-follow recipe examples, including shrimp fried rice and taro balls as alternative high-energy and high-protein foods. After the intervention, mothers were able to explain the meaning of stunting, the benefits of growth monitoring, nutrients that support growth, and high-protein food sources for toddlers. These findings indicate an increase in mothers' understanding after the counseling process.

The findings are consistent with those of Nur et al. (2026). A four-week nutrition education program significantly improved mothers' knowledge of malnutrition, self-efficacy, and complementary feeding practices compared to a group receiving only standard services. In addition to maternal changes, children in the intervention group also showed improvements in z-scores for stunting, wasting, and underweight at follow-up. These results suggest that education is more effective when structured, repeated, and connected with daily feeding practices.

Kappadan et al. (2026) in India also found that structured nutrition education improved mothers' knowledge and feeding practices. After three months, the intervention group had higher knowledge and practice scores than the control group. Children in the intervention group also had higher HAZ scores, although weight-based indicators did not show significant differences. These findings indicate that changes in knowledge and practices may occur first, while anthropometric changes take longer.



The research results can be explained through Social Cognitive Theory, which states that behavioral change is influenced by the interaction between knowledge, self-efficacy beliefs, the environment, and behavioral experience. Education that only conveys information does not necessarily change practice (Rozianti et al., 2026). Conversely, individual counseling accompanied by menu demonstrations, food samples, and problem-solving tailored to the family's circumstances can improve mothers' ability to apply the information.

Researchers assume that the mothers' understanding improved because the material was presented individually and used concrete menu examples. Mothers not only received information about the risks of stunting but also provided options for actions they could take at home. However, the educational success in this study was still assessed descriptively based on the mothers' ability to re-explain the material. Therefore, future research should use validated pretest and posttest instruments to objectively measure the magnitude of changes in knowledge, attitudes, and practices.

4. Nutritional Intake for Toddlers

Monitoring of the toddler's food intake over four weeks showed fluctuations in energy and protein intake. Although energy intake increased by the end of the intervention, protein intake varied throughout the monitoring period and remained slightly below the daily requirement in the fourth week. Fat and carbohydrate intake also increased between the first and fourth weeks. These findings suggest changes in dietary intake following the implementation of the recommended complementary feeding menus.

Research shows that providing specific nutritional interventions, including adequate food intake, results in significant increases in weight and height in children with pre-stunting, stunting, and severe stunting (Dedeng Nurkholik Sidik Permana et al., 2025). These findings reinforce the findings of this study that improving dietary intake is a critical component in supporting growth. However, the Surabaya study was conducted over 6–12 months, so the anthropometric impacts obtained are more pronounced than in this study, which only provided assistance for one month.

Hayer et al. (2026) reported that complementary foods containing quality protein and micronutrients can support child growth. Furthermore, Asare et al. (2022) found that animal-source food supplementation increased the LAZ and WAZ values of children aged 6–24 months in low- and middle-income countries. This effect is related to the high-quality protein content, essential amino acids, iron, zinc, vitamin B12, and other nutrients that are relatively easily utilized by the body.

The WHO recommends that children aged 6–23 months receive timely, energy-sufficient, diverse, safe complementary foods, tailored to their developmental abilities. A child's diet should include staple food groups, nuts, animal sources, eggs, milk or dairy products, and fruits and vegetables (Ministry of Health of the Republic of Indonesia, 2022). Increasing the quantity of food alone is insufficient if the food has a low energy density or does not contain the protein and micronutrients necessary for growth.

Researchers assume that improved intake occurred because mothers began providing more varied and energy- and protein-dense menus. Providing shrimp, eggs, fish, meat, milk, tofu, tempeh, and nuts can improve the protein quality and micronutrient content of children's food. However, the weekly monitoring results showed fluctuations in energy and protein intake, particularly during

the third week, when energy intake decreased to 728.1 kcal/day and protein intake decreased to 29.3 g/day. Although energy intake increased by the fourth week, protein intake remained slightly below the daily requirement. These findings highlight the importance of continuous dietary monitoring to ensure consistent energy and protein adequacy throughout the nutritional intervention.

5. Results of Growth Monitoring and Mentoring

One month of mentoring demonstrated positive changes in weight and height, increased consumption quality, and mothers' ability to select and prepare complementary feeding (MP-ASI). The intervention combined education, family counseling, anthropometric monitoring, and recommendations for high-energy and high-protein menus. This approach demonstrated that mentoring focused not only on providing information but also on observing the implementation of recommendations and the child's progress. However, although improvements in feeding practices and energy intake were observed, protein intake was not consistently adequate throughout the monitoring period, with a notable decrease in the third week and remaining slightly below the daily requirement at the end of the intervention.

Siswati et al. (2022) reported in a study conducted in Yogyakarta showed that an integrated nutrition package delivered through home visits improved maternal knowledge and behavior, as well as the weight, height, and development of stunted children. By the eighth week, the intervention group showed greater weight and height gains than the control group. Home visits provide health workers or cadres with the opportunity to tailor counseling to the family's circumstances, identify feeding barriers, and directly monitor the implementation of recommendations.

Rahman et al. (2023) in Bangladesh also found that home visits by community health workers were associated with improved complementary feeding practices. During program implementation, the proportion of children receiving dietary diversity increased from 46% to 54%, the minimum meal frequency increased from 82% to 91%, and the minimum acceptable diet increased from 41% to 53%. Caregivers who received home visits were 1.51 times more likely to maintain dietary diversity and 1.57 times more likely to meet the minimum acceptable diet.

In theory, UNICEF's conceptual framework explains that a child's nutritional status is directly influenced by the quality of food and care services, which are further influenced by the family's access to food, health services, knowledge, time, and resources (Hulu et al., 2022). Therefore, family mentoring can serve as a link between nutrition recommendations and actual practices at home. Mentoring allows for problem identification, goal setting, behavioral reinforcement, monitoring, and intervention refinement based on the child's response.

Researchers assume that the success of the mentoring program is influenced by the intensity of communication between the mentor and the mother, the provision of realistic recommendations, and monitoring that encourages family compliance. However, because the study involved only one subject and lacked a comparison group, the weight and height increases cannot be fully attributed to the intervention. Some changes may be influenced by the child's natural growth, recovery from fever, or changes in health conditions. Therefore, mentoring should continue for at least three to six



months, with regular anthropometric measurements, dietary evaluations, recording of infection events, and monitoring family compliance.

CONCLUSIONS

This case study shows that the implementation of nutritional care through maternal education, growth monitoring, improvement of complementary feeding practices, and recommendations for high-energy and high-protein menus has a positive response on the nutritional status of stunting-risk toddlers. During the one-month mentoring period, there was an improvement in mothers' understanding of stunting and the selection of nutritious foods, as well as changes in consumption patterns indicated by an increase in energy adequacy from 806.3 kcal/day (102.4% of needs) at the beginning of the monitoring to 888.6 kcal/day (112.9% of needs) at the end of the intervention. Protein intake was relatively close to the requirement, from 37.7 grams/day (95.7%) to 37.0 grams/day (93.9%), although it still showed variation during the monitoring period and was not consistently adequate throughout the intervention.

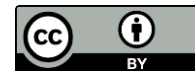
Anthropometric evaluation showed an increase in weight and height after the intervention, indicating an initial response to improved intake and nutritional support. However, these changes have not yet resulted in a shift in the height-for-age category (HA/Z), so the stunting condition still requires long-term monitoring. Thus, the results of this case study indicate that individual nutritional care can support the improvement of feeding practices and nutrient adequacy in stunting-risk toddlers, but the success of linear growth recovery (*catch-up growth*) cannot be concluded based solely on a one-month evaluation. Continuous support with anthropometric monitoring and regular intake evaluation, particularly monitoring of protein adequacy, is necessary to assess the sustainability of children's growth improvement.

ACKNOWLEDGMENT

The researcher extends sincere gratitude to all respondents and everyone who contributed to this study, both through participation and valuable feedback, which greatly supported the successful completion of this research.

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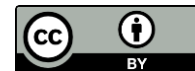
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