

Nutrition Education Strategies in the Effort to Reduce Stunting by Health Workers in Lalangon Village, Sumenep

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ABSTRACT

This study aims to analyse healthcare workers' strategies to reduce stunting through nutrition education in Lalangon Village, Sumenep. This research employs a descriptive, qualitative approach, utilising in-depth interviews and observation. The research results indicate that nutrition education for the first 1000 days of life is vital in reducing stunting in Lalangon Village. Specific strategies are necessary in nutrition education to effectively communicate information to the public. Healthcare workers in Lalangon Village employ a combined socialisation method, utilising group communication through antenatal classes, posyandu, and toddler classes, as well as socialisation during PKK meetings. In addition, healthcare workers also provide education through personal counselling or Interpersonal Communication via home visits, self-examinations, and counselling via WhatsApp and telephone.

INTRODUCTION

Currently, stunting is a significant issue, particularly in Indonesia. The Indonesian government even made stunting one of the national programs included in the 2020-2024 National Medium-Term Development Plan (RPJMN). In this program, the government aims to reduce stunting from 24.4% in 2021 to 14% in 2024. In addition, the reduction of stunting in Indonesia is already governed by specific regulations, as outlined in Government Regulation No. 72 of 2021 concerning the Acceleration of Stunting Reduction (Eko, 2022). According to the Global Nutrition Report, Indonesia's stunting prevalence ranks 108th out of 132 countries. In Southeast Asia, Indonesia has the second-highest prevalence of stunting, after Cambodia. East Java is one of the provinces with a high prevalence rate (26.86%). According to data from the 2021 SSGI, the prevalence of stunting in 4 districts in Madura is very high. The prevalence of stunting in Bangkalan Regency is the highest in East Java, at 38.9%. The second one is by Pamekasan (38.7%), Sumenep (29.0%), and Sampang (17.2%) (A et al., 2023; Ariyani et al., 2022; Faizah et al., 2023; Kurniasari, 2021; Kurniasari et al., 2018; Kurniasari, Ariyani, et al., 2022; Kurniasari, Susanti, et al., 2022; Muslihah et al., 2022; Royali, Putri Auliya; Ismail Iriani; Kurniasari, 2023).

The mother's limited knowledge can pose risks to the child's health and development. This happens during pregnancy and after childbirth. Therefore, it is essential to provide pregnant women and mothers of young children with knowledge of the importance of a balanced, varied nutritional intake. This is supported by research conducted by Qoyimah (2024), which indicates that young mothers whose toddlers are stunted tend to have low dietary knowledge. Therefore, raising public awareness about the importance of maternal nutrition from pregnancy through to the child's second year is a significant task for the government at both regional and central levels. Efforts or steps are needed to reduce stunting rates through sensitive and specific interventions. These interventions focus more on cross-sectoral involvement, with everyone involved, including families, communities, community organisations, and central and local government. The target groups for this intervention are pregnant women, breastfeeding mothers with children aged 0-6 months, and mothers with children aged 7-23 months.

Meanwhile, sensitive interventions focus on several health efforts, including the availability of clean water, access to healthcare and family planning (FP) services, nutrition education, sexual and reproductive health education, and assistance to low- and middle-income communities. Nutrition education is considered one of the most effective, efficient, and impactful efforts in reducing stunting rates. A communication strategy is needed to educate the public about nutrition. Communication strategy can be briefly defined as the planning of message delivery by the communicator, healthcare personnel, and the communicant, including pregnant women and mothers with young children. This research was conducted in Lalangon Village. Lalangon Village is one of the villages located in the Manding District of Sumenep Regency. The village's location is relatively close to the city. Just like other areas, Lalangon once had a high stunting rate, according to Ibu Endang, the village midwife. However, based

on data from the researcher's fieldwork at the Sumenep District Health Office, the stunting rate in Lalangon Village has decreased sharply and is now approaching zero. Based on June 2024 data, there were only 2 cases of stunting among the 325 infants in Lalangon Village. That achievement is undoubtedly outstanding.

LITERATURE REVIEW

Core Components of Social and Behaviour Change Communication (SBCC)

Social and Behaviour Change Communication (SBCC) is an essential framework within public health that integrates communication strategies and social learning theories to encourage positive health behaviours. SBCC initiatives are particularly pertinent in contexts such as disease prevention, nutrition enhancement, and overall community well-being.

Defining the SBCC Framework

The SBCC framework encompasses several stages crucial for effectively instigating behaviour change. At its core, it involves a comprehensive **situational analysis**. This stage involves collecting and analysing data to identify health behaviours that need modification. Subsequent steps involve developing and disseminating tailored communication strategies based on these insights (Solihin et al., 2024; Kaur, 2022). By integrating principles from communication theory and social psychology, SBCC seeks to craft messages that resonate with target populations and address both individual and community-level changes (Solihin et al., 2024; Kaur, 2022).

Communication Strategies

Effective SBCC employs a variety of communication strategies. Recent studies have emphasised the use of digital platforms and social media to disseminate health messages, particularly in crisis situations such as the COVID-19 pandemic. These channels have proven effective in reaching broader audiences and fostering community engagement by utilising celebrity endorsements and transparent risk communication strategies (Issahaku et al., 2024; Hauer, n.d.). In addition, the Care Group model has shown promise in delivering SBCC, especially in programs focused on improving child nutrition. This model relies on community volunteers who visit caregivers, thereby leveraging interpersonal communication to enhance the effectiveness of health and nutrition messages (Wilner et al., 2017; Wilner et al., 2017).

Engagement and Empowerment

Central to SBCC is the principle of active community engagement. Programs that successfully invoke community participation tend to achieve more significant behavioural changes. The active involvement of local institutions, such as schools and health advocacy teams, strengthens message dissemination and fosters a sense of ownership among community members (Abamecha et al., 2021). This participatory approach not only enhances message reception but also encourages collective action towards shared health goals (Abamecha et al., 2021; Kang et al., 2022).

Sustainability and Evaluation

A key consideration in implementing SBCC strategies is their sustainability. Research indicates that strategies embedded within existing healthcare and educational systems are more likely to endure over time. Evaluating the fidelity of these interventions, their adoption, and their overall effectiveness in changing health behaviours is critical (Eze et al., 2025; Gizaw et al., 2025). Instruments developed from theories such as the Information-Motivation-Behavioural Skills (IMB) model provide structured frameworks for assessing the impact of SBCC interventions in diverse health contexts (Eze et al., 2025).

Challenges and Future Directions

Despite the effectiveness of SBCC, challenges such as resource limitations, varying levels of community literacy, and sociocultural barriers often hinder successful implementation (Solihin et al., 2022; Akseer et al., 2025). Future SBCC strategies should focus on utilising blended approaches that combine traditional methods with innovative technologies. Emphasis on robust evaluation methodologies will better elucidate the factors underpinning effective behaviour change (Sood et al., 2021; Linder et al., 2018).

METHODOLOGY

The data collection techniques employed in this study include interviews and observation, which are supplemented by research documentation. Interviews were conducted before observations. The purpose is to see the synchronisation between the information provided by the informant and the facts on the ground. Interviews were conducted with healthcare teams, pregnant women, and mothers with children under 2 years old. At the same time, observations were made during the implementation of posyandu (integrated health posts) and antenatal classes. The final technique used was documentation, which will be attached later to strengthen the research. The documentation consists of photographs, videos, and audio recordings.

RESEARCH RESULT & DISCUSSION

Stunting Rates in Lalangon Village

According to information obtained from the Lalangon Village midwife, the stunting rate in Lalangon Village is considered safe. Despite a relatively high birth rate, the stunting rate in Lalangon Village is very low. This is undoubtedly due to the role of healthcare workers in providing education about stunting, which makes pregnant women very careful and vigilant to prevent their babies from experiencing stunting at birth. This aligns with what our informant, Mrs Endang, the Lalangon Village Midwife, stated. "Stunting cases here are considered minimal, sir. The mothers are already well-informed and take good care of their children." As healthcare workers and cadres, we are also promoting stunting prevention, sir. That is one of the government's programs, so it must also be implemented to create the golden generation of 2045." (Interview with informant, Mrs E, 2024).

According to the annual year-end report from Lalangon Village, the stunting rate has decreased each year, accompanied by a corresponding decline in stunting cases among children and toddlers. That achievement is undoubtedly remarkable. In 2021, it was known that there were 7 cases of stunting in toddlers in Lalangon Village. This number decreased in 2022 to 5 toddlers with stunting. The decline in stunting cases continued, with three children in 2023 and 2024, according to data from the Simultaneous Stunting Prevention Intervention (ISPS) provided by the health department in June 2024. The data stated that there were only two cases of stunting in Lalangon Village out of a total of 335 infants and children. The village midwife of Lalangon also mentioned that during her time as a village midwife, Lalangon Village had never been categorised as a Special Location (LOKUS) for stunting. According to him, this is again due to the perfect collaboration between healthcare workers, village officials, the community, and the support of the Manding Health Centre. All parties play their roles and move according to their respective parts or tasks, but with the same goal. According to Mrs Endang, everything requires cooperation because if only one party moves, the results will not be optimal. For example, when healthcare workers provide education, such as socialisation, to the community, but the community shows no desire to participate or is indifferent to the information provided. That information will be useless and have no impact.

According to the village midwife of Lalangon, preventing stunting is essential because it is related to human resources in our country. The country's future will depend on the quality of its human resources. Currently, Indonesia also has one of its goals: creating Golden Indonesia 2045. One way to address this is to prepare the nation's generation as early as possible, including preventing stunting. This aligns with what our informant stated: "In my opinion, preventing stunting is very important because it affects the future of our human resources, sir" (Interview results with informant, E, 2024). The socialisation of stunting in Lalangon Village falls into the well-executed category, particularly in terms of nutrition education for the community. Based on the researcher's observations, the people of Lalangon Village are categorised as a society that has kept up with the times. However, some individuals still maintain traditional customs while embracing modern trends. This condition is also likely caused by the village's proximity to the city. Additionally, pregnant women and mothers with young children in Lalangon Village are, on average, women with upper secondary or even higher education. Therefore, it is no surprise that they are already becoming sensitive to information around them. According to the observation results, most pregnant women and mothers with young children are active social media users, thereby indirectly obtaining information from these platforms. This will undoubtedly impact their curiosity about the information they receive, and they will feel that staying informed and keeping up with the times is essential in the present.

The above was also conveyed by the nurse from Lalangon Village, who stated that the process of delivering information about stunting or providing nutrition education to the community was well received. This information is usually delivered during posyandu sessions and antenatal classes. Those present

will listen carefully to the information being presented, and they are very enthusiastic about attending the meeting. According to information from the nurses in Lalangon Village, pregnant women or mothers of young children who are unable to attend the meeting due to their circumstances will often request information from other pregnant women or mothers of young children who are attending the socialisation. They even ask the village midwife or village nurse, as well as the posyandu cadres in the village. The question can be asked not only face-to-face but also through social media, such as WhatsApp, and by making a direct call.

"If there is a socialisation event here, people are already enthusiastic, even if they cannot attend, they will send a representative, like their parents or in-laws, or they will usually ask those who are present. Sometimes they even text Bu Endang or me." (Interview with Informant T, 2024)

Communication Strategies of Healthcare Workers in Nutrition Education for Stunting Reduction.

Many factors contribute to stunting in young children, including inadequate nutrient intake during the first 1000 Days of Life (1000 HPK). Several factors can cause stunting. Some of these include insufficient nutritional intake during pregnancy, exclusive breastfeeding, introducing complementary foods (CF) too early, and young children's exposure to infectious diseases (Millward, 2017; Uwiringiyimana et al., 2019)(Supadmi et al., 2024) (Kalinda et al., 2024) A mother's knowledge of nutrition affects nutritional fulfilment during this important period. People often view short stature as genetic and unrelated to health. Compared to environmental factors and healthcare services, genetics has a negligible impact on stunting and health problems. Stunting is a growth disorder caused by malnutrition. Stunting is not visible until the child is two years old. This happens while the foetus is still in the womb (Prasetyo et al., 2023; Saleh et al., 2021)(Monikasari et al., 2023) (Saleheen et al., 2021)

The first thousand days of life refers to the early period that begins while the baby is still in the mother's womb and lasts until the child's second birthday. That period is a significant time for meeting nutritional needs. Meeting nutritional needs during that time will support the child's future growth and development. Sudargo stated this (Pujokaroni et al., 2023) In the Journal of Health Services, Hamidatus et al. explain that the First 1000 Days of Life (HPK) period encompasses the early stages of life, from pregnancy to the first two years after birth. This period is often referred to as the Golden Period. The presence of 1000 HPK is crucial because it can significantly affect a child's rapid growth and development, which, in turn, will have a significant impact on their future.

The fulfilment of a child's nutritional needs naturally requires support and knowledge about nutrition for mothers, both for pregnant women and mothers of young children. A mother's nutritional knowledge will undoubtedly affect a child's nutritional needs. Based on research conducted by Seri & Irma (Afifa, 2019)(2023) in Bireuen Regency, titled "Educational Counselling on the Importance of the First 1000 Days of Life in Efforts to Improve Children's Nutritional Status in Ceubarek Village," it was found that community education can increase their knowledge. This contributes to mothers' awareness of the

importance of the first 1000 days of life and of implementing the information they receive. Education and knowledge significantly impact a mother's parenting style. These two factors also significantly influence lifestyle, including the choice of healthy, nutritious foods, during labour, postpartum, and the child's growth and development phases (Agustina et al., 2023).

In community nutrition education, especially for pregnant women and mothers of young children, the role of healthcare professionals is undoubtedly needed, as they are the ones who genuinely understand nutrition and that golden period. This finding aligns with Cindy's research. (A et al., 2023), which suggests that healthcare workers have a significant impact on stunting. Providing adequate facilities has been shown to improve healthcare workers' ability to reduce stunting rates significantly. Through education about stunting, the provision of protein-rich supplementary foods, and services from mother and child health posts (posyandu KIA), the community is becoming more aware and vigilant about the risks of stunting. The respondents reported that healthcare workers have a significant influence on reducing stunting, further strengthening the findings of this study. Health education has been proven to increase young people's awareness of how to prevent stunting. (Haryani et al., 2023).

Similarly, Rachmah et al. stated that nutrition education for mothers influences their knowledge about preventing stunting during the golden period. (Atmaka et al., 2022). The provision of healthcare services influences changes in knowledge about stunting. Low levels of maternal education and knowledge are a risk factor for stunting (A, 2022). It can be concluded that nutrition education influences changes in knowledge about stunting in Kelampaian Village, Pontang District, Serang Regency. The more people who are aware of stunting, the more the prevalence of stunting in Kelampaian Village, Pontang District, Serang Regency is expected to decrease year by year, so that stunting is no longer a nutritional problem. (Pakhtigian et al., 2022).

Given the crucial role of healthcare workers in preventing and managing stunting, it is clear that adequate knowledge and skills are essential. This can certainly be realised through the empowerment of healthcare workers. Empowering healthcare workers can support their role and tasks in addressing stunting cases (A et al., 2023). The research findings indicate that the roles of healthcare workers and empowerment efforts have a significant impact on stunting. This aligns with the respondents' statements, which indicate that community empowerment makes it easier for them to understand the issue of stunting. Additionally, the presence of healthcare workers is beneficial, especially by providing counselling on stunting, protein-rich supplementary foods, and posyandu services for maternal and child health (KIA). This finding is also supported by the results of the F-test, which confirm that medical personnel and empowerment efforts together have a significant impact on stunting and malnutrition.

Therefore, appropriate educational strategies are needed to ensure that the information or message conveyed is maximised and can impact changes in mothers' knowledge and behaviour regarding nutrition during the first 1000 days of life. This study examines the communication strategies employed by

healthcare workers in Lalangon Village, a village with a low stunting rate and equipped with a sub-health centre, and with a relatively high level of community participation in health. This nutrition education strategy, led by healthcare workers, focuses on pregnant women and mothers of children under five, who are included in the 1000 HPK group. Some communication strategies used by healthcare workers in Lalangon Village for nutrition education are as follows:

Antenatal Class

The primary focus of stunting prevention by healthcare professionals is to target pregnant women starting from the first trimester and new mothers. The goal is for their children to avoid stunting. According to Mrs E, the village midwife of Lalangon, the stunting prevention efforts in the village are being promoted or focused on pregnant women. If the mother receives good nutrition and care while still pregnant, it will minimise the risk of stunting in the child. "If you are here, sir, it is better to take care of and maintain your health while still pregnant, because if you get good nutritional intake while still pregnant, the baby will be born healthy, and there is no chance of stunting. So, it is better to prevent it from the time you are pregnant, sir" (Interview results with informant, E, 2024). The pregnancy period is indeed the primary focus for preventing stunting in babies and children. However, healthcare workers in Lalangon Village will continue to monitor the health and nutritional intake of babies born until they are 2 years old. The healthcare workers will continue to monitor the growth of babies and children through monthly posyandu sessions.

Postpartum Visit

When the delivery process is complete, the village midwife or the midwife from the community health centre (if the delivery takes place there) will usually conduct an examination and administer vitamin A. (J. M. Oliveira-Menegozzo, D. P. Bergamaschi, P. Middleton, 2010) This vitamin A is usually given immediately after the mother has given birth. The mother will first be cleaned, then asked to eat before taking a Vitamin A capsule. In addition to being administered after delivery, Vitamin A is also typically given to pregnant women to take the following day. (Silva et al., 2022). Vitamin A is beneficial for pregnant women's health, including preventing blindness. (World Health Organization, "Vitamin A supplementation: policy guidelines and global coverage," WHO Nutrition Guidance, 2021) In addition, this vitamin A is also very beneficial for promoting breast milk production, thereby maximising exclusive breastfeeding for toddlers. (T. M. Martines, I. S. Ferraz, n.d.) When a baby is born, healthcare professionals typically visit the new mother's home to monitor the baby's growth and health, as well as the mother's postpartum health. Additionally, healthcare professionals usually provide education on what pregnant women can and cannot do, and educate them about the importance of exclusive breastfeeding for babies until they are 6 months old. (Carrie D Patnode 1, Caitlyn A Senger 1, Erin L Coppola 1, n.d.) According to information from the posyandu cadres in Lalangon Village, newborns up to 6 months old should not be given anything other than exclusive breastfeeding because exclusive breastfeeding is perfect for the baby's development.

"Usually, my brother and the cadres visit the homes of new mothers to check on the baby's development and health. We conduct health checks and examinations for both the baby and the mother, and we also provide them with education." Usually, they also have family, so we educate them as well. If the baby is newborn, we usually emphasise exclusive breastfeeding, so we try our best to promote exclusive breastfeeding over formula milk." (Interview with Lalangon Village Nurse, Mrs T, 2024).

After the baby is about 1 month old, healthcare professionals usually recommend bringing the baby to a posyandu (community health post) for height and weight measurements and immunisation to maintain the baby's immunity and health. (R. Prameswari and E. Sulistyorini, n.d.) Additionally, several examinations are performed on the baby at the posyandu to assess their growth and development. (E. H. Kurniati, D. S. Rachmawati, 2022).

Counselling Through ANC (Antenatal Care)

ANC is an abbreviation for Antenatal Care, commonly referred to as examinations for pregnant women to monitor the health of both the mother and the fetus. (Messages et al., 2018) Organisation, "Vitamin A supplementation: policy guidelines and global coverage," WHO (Nutrition Guidance, 2021). This ANC examination is typically conducted in stages and should be performed throughout the pregnancy. Whether in the 1st, second, or third trimester. These ANC checkups are very beneficial in preparing pregnant women for childbirth. The health and development of pregnant women and foetuses can be monitored through ANC examinations. The results of previous trimester examinations can determine this development. Is there an improvement or a decline in health? (Oakley et al., 2009) According to the village midwife, ANC checkups in the first trimester or early stages of pregnancy are crucial because this period marks the beginning of preparing for future pregnancies. ANC examinations in the early trimester are also beneficial for identifying areas that are lacking and need improvement for the subsequent ANC examination. Additionally, ANC is highly beneficial for detecting pregnancy complications, enabling prompt identification of preventive or therapeutic interventions. (Dessie et al., 2023) (Goddard et al., 2024).

Besides ANC, examinations for pregnant women are also often referred to as ANCT. ANCT examinations are integrated examinations (Iskandar et al., 2025). According to information from the village midwife, ANCT is usually carried out jointly by midwives, general practitioners, nutritionists, dentists, laboratory staff, and pharmacists. (R. Prameswari & E. Sulistyorini, n.d.). Meanwhile, the Sub-Health Centre (PUSTU) in Lalangon Village provides only ANC services through village midwives. Some of the ANC examinations available at the Pustu in Lalangon Village include the following. (Tolossa et al., 2020). Weight and height measurement, blood pressure measurement, upper arm circumference measurement, uterine fundal height measurement, baby's pulse and heart rate examination, immunisation, administration of iron and calcium tablets, laboratory tests (HB check and packed cell volume test), Body Mass Index

(BMI) examination to detect pre-eclampsia or pregnancy poisoning cases, TB screening, and counselling (Gaspersz et al., 2021).

Village midwives are certainly people who truly understand the first 1000 days of life and stunting. (H et al., 2025). This is what makes village midwives play the role of facilitators or counsellors. The KIA book also includes a monitoring sheet for pregnant women, organised by trimester. (Messages et al., 2018). This monitoring sheet lists several common illnesses that can affect pregnant women. If a specific illness is listed, the village midwife will usually recommend or provide a referral for examination or treatment at a healthcare facility, if necessary. Some of these diseases include fever, dizziness, heartburn, pain when urinating, and others. (Id et al., 2024).

During ANC checkups in the first trimester, pregnant women usually receive a Mother and Child Card (KIA). This book provides information on pregnancy, childbirth, and infant and toddler care, including feeding patterns and routines. (Carrie D Patnode 1, Caitlyn A Senger 1, Erin L Coppola 1, n.d.) Typically, village midwives advise pregnant women to read the book's information to enhance their knowledge and understanding of the subject. (Rumintang et al., 2023). However, the village midwife stated that not all pregnant women are willing to read the information in the KIA book. Therefore, village midwives typically convey this information through classes for pregnant women. (H et al., 2025).

In the first trimester, pregnant women usually undergo all the pregnancy tests listed in the KIA book. (Enticott et al., 2021). After the examination, the village midwife will usually mark the tests with a check. In Lalangon Village itself, all ANC checks are considered quite complete. However, HB and ultrasound examinations are usually conducted at the Manding Community Health Centre, as directed by the village midwife. Occasionally, the village midwife accompanies the patient, typically when they have a duty schedule at the centre or have made an appointment beforehand. In the KIA book, there is also a weight-gain chart for pregnant women that must be completed at every ANC checkup from the first to the third trimester. (Ayer et al., 2016). According to the village midwife, pregnant women's weight must remain within the green line. If there is a decrease in weight from yellow or approaching red, the village midwife will usually give a warning, especially regarding appropriate eating patterns and nutritional intake. (R. Prameswari and E. Sulistyorini, n.d.) Conversely, suppose there is an increase in weight exceeding the green line or on the yellow line. In that case, the village midwife will also issue a warning and educate the pregnant woman about healthy eating patterns, recommending light exercise or physical activity suitable for her.

Posyandu and Toddler Mother Classes.

The Posyandu in Lalangon Village is already included in the Integrated Posyandu for 5 Life Cycles. This Posyandu is a comprehensive health service that covers all stages of life, from infancy and toddlerhood to old age. (Id et al., 2024) Additionally, the Posyandu in Lalangon Village has implemented five processes in its operations. The first step is registration; mothers of young children must

complete it before proceeding to the next stage. The second stage is the measurement process. This measurement process includes measuring height and weight, and the results will be recorded in the third stage, the recording stage. The third stage is the recording stage, where the results of weight and height measurements from the previous stages will be recorded for later evaluation. The fourth stage is the examination stage. A midwife or nurse will examine the baby or child to assess their health. Moreover, the final or fifth stage is counselling. Babies or children who have undergone measurement, recording, and examination will receive results or an evaluation regarding their development and growth from the previous month. When there is good growth, the midwife will usually provide advice on the next steps, such as introducing complementary foods and other relevant matters. Conversely, when there is a decline, the village midwife will usually ask the mother questions about the baby's or child's eating habits and patterns for further evaluation and to provide advice on improving the baby's or child's growth. After counselling, the baby and child will usually receive supplementary foods that support their growth and health, such as quail eggs, milk, and bread.



Figure 1. health education and evaluation for toddlers

During the counselling stage, the midwife will usually give advice or inform you that it is time for the child's immunisation. Before immunisation, the village midwife usually asks for consent from the baby's mother or guardian. Additionally, the midwife usually reviews the examination results to determine if the baby or child is eligible for immunisation. If not, the midwife usually schedules the immunisation for the following month. Moreover, when the baby's or child's parents disagree, the midwife will usually provide socialisation or information about the benefits of immunisation. Not only do midwives provide the benefits, but they also usually explain the side effects of the immunisation and provide medication to minimise them. Immunisation for infants or children varies, all adjusted to the infant's age. Not only individual counselling for mothers of young children, but also regular outreach and socialisation are conducted within the community using the presentation method, as observed by the researcher. This socialisation is usually carried out by one of the cadres or delivered directly by the village midwife, using posters to convey the information, making it easier for the community to understand. It is not uncommon for communicators to use the Madurese language when delivering material so that the community better understands the information conveyed.

Here is the data on the implementation of the Lalangon Village Posyandu during 2024. This data was obtained by the researcher from the village midwife's annual report. In the data, several pieces of information were found, including the number of babies who attended the posyandu each month and the number of babies whose weight increased and decreased each month.

Table 1: Lalangon Village Posyandu in 2024

No	Month	Total number of toddlers	Number of toddlers weighed	Number of toddlers weighed for two consecutive months	Number of toddlers whose weight did not increase
1.	January	115	107	90	15
2.	February	119	119	94	15
3.	March	123	123	91	15
4.	April	126	116	95	16
5.	May	128	108	78	14
6.	June	128	87	50	25
7.	July	128	87	50	25
8.	August	128	90	56	25
9.	September	131	90	59	25
10.	October	131	131	65	25
11.	Novermber	131	131	92	39
12.	December	131	129	90	39

Health Program Counselling by the Health Promotion Section and Nutritionist of Manding Health Centre.

In the socialisation activity aimed at reducing stunting through nutrition education, village midwives are typically assisted by the health promotion and nutrition sections of Manding Health Centre. According to the village midwife, the materials delivered to the community are usually from the health promotion and nutrition sectors. Health promotion and the nutrition sector usually hold joint socialisation with village midwives, posyandu cadres, and family assistance teams (TPK) before the material is then delivered to the community. The village midwife also noted that the health promotion team sometimes conveys information directly to the community. Therefore, the communicators, or those who deliver the message, are diverse, not just village midwives.

We usually collaborate with the local health centre on socialisation or nutrition education issues. We obtain the material from them and then deliver it to the community. And the people who fill it are also varied, sometimes directly from the health centre, so that the mothers do not get bored and are enthusiastic about listening" (Interview with posyandu volunteer, Kusmiyati, 2024)

Not only do they socialise and guide on what materials or information need to be conveyed to the community, but during cadre meetings, an evaluation is also usually conducted on the implementation of posyandu and antenatal classes. The obstacles or problems encountered are usually discussed to find solutions or a way out. Additionally, at the cadre meetings, they usually discuss upcoming agendas for posyandu or antenatal classes. Based on the researcher's observations, the health promotion and nutrition staff at the Manding Public Health Centre also frequently participate in posyandu activities and interact directly with the community. Not only at the posyandu, but they also participate

in meetings for pregnant women and sometimes organise special events with pregnant women, assisted by village midwives, village nurses, and posyandu cadres. Based on interviews with the health promotion team at Manding Public Health Centre, their direct involvement in the community is a form of support that encourages people to keep their children free from stunting and other health problems. In addition, they monitor the implementation of posyandu and meetings, and examine pregnant women in the villages, including Lalangon Village. They travel directly to every village in the Manding District according to a special schedule they have created. In one month, they can accompany the implementation of posyandu and pregnant women's classes in 2 or 3 villages, as the implementation of these programs varies from village to village. Some are at the beginning of the month, and others at the end.

"For nutrition socialisation and education, sometimes we go directly into the community to provide education and information. Usually, I go with Bu An from the nutrition department." Besides controlling the implementation of posyandu, we also provide education to the community. So sometimes people ask us, or we directly provide the latest information that we consider important for the community to pay attention to" (Interview with Promkes Puskesmas Manding, Ibu Ri, 2024).

Mrs An, the nutrition section head at the Manding Community Health Centre, also stated that nutrition for pregnant women, infants, and children is indeed an essential aspect to maintain. Therefore, she and the health promotion team directly approached the community by attending posyandu sessions and meetings for pregnant women, so that people would better understand the importance of nutrition for babies and children in preventing stunting cases. When they go directly into the community, they usually interact directly with the people, so the community can freely express their complaints regarding issues related to the development and growth of their babies or children, and pregnant women can consult about pregnancy issues to receive further education, information, and advice to address their problems.

Supplementary Feeding (PMT)

Not only are they present during posyandu and meetings for pregnant women, but the health promotion and nutrition sections of the Manding Public Health Centre also join in when village midwives, nurses, and posyandu cadres visit residents' homes. Mrs Endang explained that home visits to families are usually conducted when they find a child who is suspected of having or experiencing symptoms of stunting. They usually visit to provide Supplementary Feeding (PMT).

"For stunting resolution here, we usually provide supplementary feeding or PMT to toddlers or children affected by stunting. So, we visit the person's home, sometimes with me, sometimes with Mrs T, and usually with the cadres. Supplementary feeding is typically distributed daily, sometimes for up to 2 months. Therefore, when we administer PMT, we also conduct health checks and wait until the child has eaten the PMT. Moreover, Alhamdulillah, it worked, sir. (Interview results from informant, Mrs E, 2024)

Based on information from the village midwife and cadres, they also visit residents with weak pregnancies. They will educate pregnant women and their families on the steps to maintain a healthy pregnancy and on providing the nutrients necessary to support the baby's health in the womb. They also often talk about certain taboos that should not be done or eaten, especially educating the pregnant woman's parents or in-laws, as most of them still follow traditional customs.

Supplementary Feeding (PMT) is not only given to toddlers or children experiencing stunting, but also to pregnant women experiencing Chronic Energy Deficiency (KEK). The Manding Public Health Centre carries out this program and targets the entire population of Manding District. The Manding Public Health Centre distributes the supplementary feeding to cadres who are specifically assigned by their respective villages as Pregnant Women's Supplementary Feeding Cadres. Then, the cadre handed over the PMT to the pregnant woman experiencing KEK. Supplementary feeding was provided daily for approximately 45 days, with a different menu offered each day. In addition to providing PMT, cadres usually also conduct health checks related to the pregnant woman's health development. In addition, cadres usually also wait for pregnant women to consume the PMT provided to ensure that it is actually consumed.

Based on data from family planning cadres or the Family Companion Team, the menu provided consists of cakes and boiled eggs, both chicken and quail. After pregnant women receive the provided PMT and consume it, and after their health status is checked, they will sign and document receipt of the PMT as proof that it was distributed. Based on information from Mrs Endang, the village midwife, providing PMT to high-risk pregnant women and babies with stunting indicators is indeed necessary because this way their nutritional intake will be regular and precise, thus minimising any dangerous impacts. In addition to providing PMT, accompaniment is also provided to high-risk pregnant women, brides-to-be, and stunted toddlers, with the same hope of helping them recover their health and protecting them and their children from the effects of stunting.

In addition to providing PMT, village midwives and cadres usually visit residents' homes when someone is unwilling to attend the posyandu for specific reasons, such as fear of vaccination. They visit to provide an understanding and explanation of the importance of the posyandu for toddlers and children. Sometimes, they also examine people who are unwilling to come to the posyandu and show them the examination process directly at the posyandu, so that they will be motivated to attend. Mrs E mentioned that the main reason residents are unwilling to come to the posyandu is during immunisation schedules or when their children are advised to be immunised. In fact, neither the village midwife nor the community health workers require them to immunise their children. However, the village midwife is more inclined to advise and educate them about the importance of immunisation for their babies' immunity, so that the babies are healthy and free from all diseases.

Utilisation of Print Media Nutrition

Counselling or education for the first 1000 days of life in Lalangon Village was not delivered solely through word of mouth. Healthcare workers in Lalangon Village also utilised print media such as pamphlets and banners as educational and informational tools. The pamphlet is typically distributed during antenatal classes, posyandu sessions, or classes for mothers of young children. The message or information conveyed is presented in a simple, easy-to-understand manner. Village midwives and community health volunteers typically direct pregnant women or mothers of young children to read the posted posters and ask questions if they do not understand any information. In addition to being posted, community health volunteers or village midwives usually also read the messages or information on the posters to mothers of young children or pregnant women, so that those who cannot read can still learn about them. The information or message in the pamphlet is also delivered with the aim that pregnant women or mothers of young children who are reluctant to read can still learn from it. According to one of the cadres, people sometimes become too lazy to read the poster or even ignore it, despite the important and valuable information it contains.

"Yeah, that is how it is sometimes, sir. There are people in the community who are too lazy to read and do not care about the posters we put up, so if we do not tell them, the posters are useless. However, many read or take photos of the posters, sir." (Interview with a cadre, SN, 2024)

The information and messages on the poster are also presented to provide detailed explanations to the public, focusing on what is considered important and packaged in a way the community can easily understand. The message is also typically delivered in the Madurese language to assist those who do not understand Indonesian very well. Based on information from village health workers and midwives, when posyandu is held, not all toddlers come with their mothers; sometimes they are brought by grandmothers or mothers-in-law. Therefore, delivering messages in Madurese can help them understand the messages or information provided. Besides using posters, healthcare workers also utilise banners as an educational and socialisation medium to reduce stunting in Lalangon Village. The banners come in various sizes and are adjusted to the location where they are placed.



Figure 2. Nutritional awareness banner image to prevent stunting

Educational banners are typically displayed in strategic locations where the public can easily see them. For example: roadside, in front of the health post, at the village hall, inside the health post, specifically in the examination waiting room. By choosing that location, the public will, intentionally or unintentionally, see and read the information or messages on the banner. For example, when people visit the puskesmas for check-ups, they will see the banner. Another example is when people are waiting or queuing for checkups in the waiting room, they will often read the messages or information on the banner indirectly. For installation on the roadside and at the Village Hall, the aim is for all members of the community, whether they are not currently pregnant, do not have young children, or do not wish to have health checks at the village health post, to also be able to learn about stunting and the importance of nutrition during the first 1000 days of life. This information can then be shared with family and friends or used for personal knowledge.

Online Consultation via WhatsApp and Phone

Regarding the eating habits or patterns of pregnant women who still follow traditional customs, such cases are also still frequently found in Lalangon Village. Some pregnant women remain cautious about their eating patterns, adhering to the prohibitions or taboos of their ancestors. The occurrence of such events is also, on average, due to restrictions from parents or in-laws, even though pregnant women already have some information about which foods are allowed and which are not. According to information from one of the residents who served as an informant in this study, most of the rules came from their parents, even though they themselves no longer paid much attention to the myth.

"For my own diet, yes, there are some foods that my parents say I should not eat. There are usually certain myths, for example, that one should not eat shrimp because the baby will have difficulty coming out when it is born. However, when I searched on the internet, it was actually fine, as long as I did not overeat." (Interview with community member, SM, 2024)

They also informed us that when they are prohibited from consuming certain foods, they immediately ask the village midwife or village nurse to verify the information. They usually ask directly at the auxiliary health centre or Pustu, or by phone or WhatsApp chat. In fact, according to the village midwife and village nurse, some people ask them to explain to their parents which foods are allowed and which are not for pregnant women to consume, as they believe these are essential nutritional intakes. From the results of observations and interviews, it can also be known that healthcare workers usually directly provide examples of cases that have occurred to babies or children experiencing stunting, both those in Lalangon Village itself and those outside the area, so that the community pays more attention to the health of their babies and children to avoid stunting. "For the strategy, we usually also tell them about some recent cases of stunting so they are more vigilant and pay more attention to the health and nutrition of their babies and children, sir" (Interview with the Village Midwife, Mrs E, 2024).

CONCLUSIONS AND RECOMMENDATIONS

Based on the discussion above, it can be concluded that healthcare workers play a crucial role in reducing stunting. Besides healthcare workers, good cooperation is needed among several parties, including the community, village officials, and various partners. As this study shows, village midwives are assisted by personnel from the Puskesmas, specifically the health promotion and nutrition sections. Nutrition education is one of the most important aspects in managing and preventing stunting cases. Nutrition education can help the public understand the importance of nutrition, especially during the first 1,000 days of life. A healthy diet can support the health of infants and children and help prevent stunting. Healthcare workers in Lalangon Village use several communication strategies in nutrition education for the community, including group and individual communication through counselling. Education for pregnant women and mothers of young children is usually conducted during the integrated posyandu program, which both groups attend. In addition, healthcare professionals also utilise print media as an educational tool for the public. The print media consists of posters and banners placed in strategic locations such as the Sub-Health Centre and the Lalangon Village Hall. Additionally, healthcare workers facilitate communication with the community via phone or WhatsApp for discussion and education. Healthcare workers also conduct self-education through home visits to pregnant women or children under five with certain health risks that can lead to stunting. During the visit, the village midwife also participated in educating the families, including both husbands and parents, to help maintain the health of pregnant women and young children.

ADVANCED RESEARCH

This study has several limitations. First, the study was conducted at only one location (Lalangon Village), which has a relatively specific context and a very low stunting rate. Hence, the findings are better understood as a best-practice case and cannot be automatically generalised to other villages with different characteristics. Second, because it uses a qualitative design (interviews, observations, and documentation), this study is well-suited to describing the SBCC strategies implemented. However, it is not designed to establish a causal relationship between educational strategies and reduced stunting. Finally, data sourced from informant narratives and observational situations has the potential to contain bias (e.g., answers tend to be "ideal" or behaviour is more orderly when observed), and the influence of external factors beyond education, such as socioeconomic conditions, sanitation, and other programs, cannot yet be clearly separated.

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