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Effectiveness of Education and Supplementary Feeding Interventions in Stunting Prevention: A Systematic Review

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ABSTRACT

This coverage review aims to identify the effectiveness of educational interventions and supplementary feeding as preventive measures against stunting among children aged 6 to 59 months in various countries. The methodology applied in this study follows the PRISMA guidelines to ensure a systematic and transparent review process. A comprehensive literature search was conducted through relevant electronic databases, including Google Scholar, PubMed, and ScienceDirect, focusing on articles published between 2020 and 2024. Only studies written in English and examining supplementary feeding practices for children within the specified age range were included. From the total number of articles initially identified, 11 studies met all eligibility criteria and were analyzed in depth. The findings indicate that educational interventions for parents and the provision of diverse supplementary foods such as milk-based products, eggs, lipid-based supplements, and locally sourced nutrient-dense foods play a significant role in improving weight and height outcomes in young children. These foods, which are rich in protein, vitamins, minerals, and other essential micronutrients, contribute substantially to supporting growth and preventing nutritional deficiencies. Furthermore, the results highlight that appropriate feeding practices by caregivers, particularly mothers, are crucial for the successful prevention of stunting. Overall, this review concludes that proper supplementary feeding strategies, combined with strengthened parental education on nutrition, can effectively promote optimal growth and development in children under five. Continuous efforts to improve community awareness, enhance feeding practices, and ensure accessibility of nutritious supplementary foods are essential strategies to reduce stunting prevalence globally..

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INTRODUCTION

One of the nutritional health issues faced by toddlers worldwide is stunting (Tri 2023). In 2022, the World Health Organization (WHO) stated that stunting is the most serious health problem because it impedes children's growth. Globally, it affects around 148.1 million. Children (22.3%) under the age of 5 who experience stunting (WHO 2022). If this problem continues, it is predicted that 162 million children under 5 years old will suffer from stunting (Who 2022). More than 56% of stunted children are in Asia, and more than 37% are in Africa (UNICEF 2023). According to WHO data, more than 55% of stunting occurs in Asia, while 39% of stunting is more common in Africa. Among the 83.6 million stunted toddlers in Asia, the largest number comes from South Asia, at 58.7%, while the smallest proportion is in Central Asia (0.9%). Indonesia ranks third in terms of stunting prevalence in Southeast Asia. From 2005 to 2017, the average stunting rate in Indonesia was 36.4% (Salmar 2013 in Triwikrama 2023).

The stunting rate decreased to 30.8% in 2018 (Indonesian Ministry of Health 2018; Riskesdas National Report 2019). This continued, with the stunting rate recorded at 21.6% in the 2023 Indonesian Health Survey, showing a decrease of around 0.8% from the previous year. In 2022, the stunting rate was almost a quarter of the total number of toddlers in Indonesia; however, it decreased by 2.8% from 2021, when the stunting rate was 24.4%. According to WHO standards, if the stunting rate is below 20%, the region is considered to be managing child health well (WHO 2017). West Bandung Regency was selected as a stunting intervention focus area supporting the National Medium-Term Development Plan (RPJMN) for 2020 to 2024 (RPJM 2019).

Stunting is one of the growth disorders in children. Stunting before the age of 2 can affect cognitive abilities and lead to poorer educational outcomes in childhood and adolescence (Apriluana G 2018). The impact of malnutrition during the first 1000 days of life includes malnutrition and stunting, both of which are interconnected issues. Decreased cognitive and motor skills in children can be affected by growth and developmental disorders. Children with stunting typically have an average IQ score 11 points lower than non-stunted children (Kurniati et al. 2022).

The short term impacts experienced by a stunted toddler include disturbances that can affect brain development, which in turn impacts the child's intelligence, disrupt physical growth, and cause metabolic disorders in the child's body (Septy Nurfahilah 2023). In the future, a child with stunting will undoubtedly experience suboptimal growth and development (Kholia trisyani 2022; Yunita Rahmaniar 2022).

Ensuring adequate nutrition can be one of the strategies to tackle stunting. One approach is the provision of complementary foods that focus on foods high in protein, iron, vitamins, minerals, and other micronutrients essential for children's growth (Wang et al. 2022). Parents who play a role in ensuring adequate nutrition for their children must have a good understanding of the provision of complementary foods. Parents with low education levels are 1.6 times more likely to have stunted children compared to those with higher educational attainment (Suratri et al. 2023; Costa & Oliveira 2023).

Several studies conducted in Indonesia have shown associations with stunting, such as babies born with abnormal birth lengths, families with low income, babies not exclusively breastfed, the presence of other diseases or infections, and incomplete immunization (Kusunawati 2015). In addition to these factors, there are also factors such as mothers with short

stature, male children, breastfeeding duration, geographical location, low family income, parental education, maternal age at childbirth, prenatal, childbirth, and postnatal care, child age gaps, infections, optimal complementary feeding, family size, and smoking parents (Akombi 2017). Based on the explanation above, the author is interested in conducting a Systematic Literature Review on the use of complementary food education (PMT) for stunting prevention.

METHOD

Design, Location, Timing

This study followed the standards of The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The article review process was conducted based on the following basic framework steps: 1) Scoping; 2) Planning; 3) Searching; 4) Screening; 5) Eligibility; and 6) Interpretation. This study focused on educational initiatives to prevent stunting through supplementary nutrition interventions for children under five. It evaluated education and supplementation approaches used in community contexts across different countries.

The analysis exclusively recognizes that supplementary feeding education in stunting prevention. The availability of sufficient data will be analyzed using the CAT (Critical appraisal tools) instrument from CASP for Randomized Control Trial and CrossSectional articles while for Quasi Experimental studies using JBI Tools. Data searches were conducted for publications from 2020 to 2024, with a focus on data from the last decade to ensure validity, reliability and relevance of research findings.

Sampling

Research data were obtained through literature searches using databases such as Google Scholar, Pubmed, ScienceDirect. Inclusion criteria were full-text, English-language articles published within 2020 to 2024 with the main topic of stunting prevention education with supplementary feeding involving children aged 6 to 59 months. PRISMA 2020 guidelines were used to guide the performance and explanation of this review's citation.

Data collection

Relevant article publications were determined by using appropriate keywords tailored to each data base. The data collection strategy involved using the keywords “education”; “supplementary feeding”; “stunting”; “stunting prevention”.

Data analysis

Analysis was carried out using instruments according to the type of Critical Appraisal Skills Program research. CASP for Randomized Controlled Trial studies has 11 questions and Cross Sectional has 11 questions, and JBI Tools has 9 questions for Quasi Experimental studies. The assessment included aspects of methodological validity, relevance of results, and potential bias. Answers were categorized into “Yes”, “No”, or “Unclear” to determine study quality (high, medium, low). Analysis was conducted in a descriptive narrative. High-quality studies were the main basis for inferring the effectiveness of stunting prevention education through supplementary feeding, taking into account the target group, duration, and nutritional indicators measured.

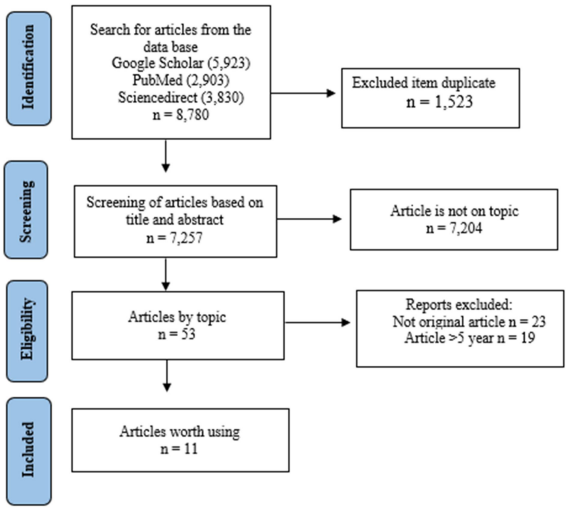

Figure 1 PRISMA flow diagram

RESULTS AND DISCUSSION

Table 1. Charting data

No	Author / Year	Country	Title	Objective	Participant	Method	Findings
1.	Taneja et al / 2022	Delhi, India	Impact of supplementation with milk–cereal mix during 6–12 months of age on growth at 12 months: a 3-arm randomized controlled trial in Delhi, India	Know effect of two types supplement nutrition with level different nutrients to growth toddler 6 months old	1548 Toddlers aged 6 months	Randomized controlled trial	After done intervention for 6 months there is average increase in Body Length Score Z score for body length according to age (LAZ) was 0.08; 95% CI: 0.01, 0.15, Z score for weight according to age (WAZ) was 0.12; 95% CI: 0.06, 0.19, Z score for appropriate weight body length is 0.11; 95% CI: 0.02, 0.19
2.	Bierut et al / 2021	Melawi, East Africa	The effect of bovine colostrum/ egg supplementation compared with corn/soy	Evaluate effect comparison giving supplementation daily cow's milk and eggs	277 Toddlers Age 9 months	Randomized controlled trial	After done study for 12 months obtained results that cow's milk and egg supplementation produce change significant body length Where value (*Length for age Z Score* or LAZ) of -1.74 ± 1.1 compared

			flour in young Malawian children: a randomized, controlled clinical trial	compared to with supplementation corn and soy milk in overcome problem disturbance growth in toddlers in Melawi			group control where value (*Length for age Z Score* or LAZ) of -1.83 ± 1.1
3.	Ririn et al / 2023	Indonesia	The Effect of Giving Jagaq Porridge on Body Weight and Height of Stunted Toddlers Aged 12-24 Months in the Work Area	For know influence giving of universe porridge to weight and height toddler stunting body	11 Stunting toddlers aged 12 to 24 months	Quasi experiment with one group pre post test design	Research result after 2 months intervention show that there is influence giving powder stay safe influential to growth stunting toddlers. The p value analysis is 0.003 for body weight and 0.0001 for height is which shows existence improvement significant after intervention. Increase height is 1.14 cm and weight is 0.69 kg.
4.	Khan et al / 2020	Sindh, Pakistan	Effect Of Lipid Based Nutrient Supplement Medium Quantity On Reduction Of Stunting In Children 6-23 Months Of Age In Sindh, Pakistan: A Cluster Randomized Controlled Trial	Evaluate effectiveness supplement nutrition known lipid based as wawamum dose 50 mg per day in reduce stunting	870 toddlers ages 6 to 18 months. 419 Group intervention and 451 groups control	Randomized controlled trial	After done intervention for 2 years obtained results that is Group intervention show decline risk of stunting significant compared to group control. *Relative risk* (RR) for intervention is 0.91 (with 95% CI value; 0.88-0.94, and p value less than 0.001).
5.	Mutumba et al / 2024	Uganda	Effect Of Lipid Based Nutrient Supplemen	Know effect supplement nutrition lipid -	59 stunted toddlers aged 12 to 59 months	Randomized controlled trial	After done intervention for 3 months obtained results that happen improvement level hemoglobin by 3.8 g/L

			ts On Micronutrient Status And Hemoglobin Among Children With Stunting: Secondary Analysis Of A Randomized Controlled Trial In Uganda	based (LNS) on micronutrient status and levels hemoglobin in stunted children			and reduced anemia by 55% (odds ratio: 0.45)
6.	Tadele et al / 2022	Ethiopia	Stunting and associated factors among 6-23 month old children in drought vulnerable kebeles of Demba gofa district, southern Ethiopia	Identifying factors that influence stunting and practice giving eating in toddlers	362 toddlers age 6 to 23 months	Cross Sectional	After done study for 2 months with results practice giving eating in children toddler only 38.4% of children accept food source of protein and 61.6% not get. In addition only 44.5% of children given fruits and vegetables while 55.5% did not.
7.	Sulistyawati Anton et al / 2022	Indonesia	Effect of Rebon Shrimp Based Supplementary Feeding on Height of Stunted Children	Know effectiveness giving food addition shrimp rebon to improvement height of toddlers who experience stunting	88 toddlers with 44 groups intervention and 44 groups control	Quasi experiment with design a pre post test with group control	After done intervention for 3 months obtained results that in the group average intervention increase height 3.94 cm and group control 2.92 cm. Analysis results show p value < 0.0001 which states that happen significant differences in both group.
8.	Ara et al / 2022	Bangladesh	A comprehensive intervention package improves the linear	Know effectiveness package intervention food based on eggs and	412 toddlers age 6 to 12 months with 206 groups control	Randomized controlled community based cluster	After done 12 months intervention with results in groups intervention show significant improvement that is body length according to age (Length for age Z

			growth of children under 2 years old in rural Bangladesh: a community based cluster randomized controlled trial	milk in increase growth and reduce risk of stunting.	and 206 groups intervention	trial	Score/LAZ) with value o.37 and decrease stunting risk 73%.
9.	Emad et al / 2023	Yemen	Prevalence of Stunting and Associated Factors among Children Under Five Years in Sana'a City, Yemen	Know mark factor risk related with stunting and wasting in children under 5 years because in that area produce Enough food However from reported results level prevalence lack nutrition more tall than less developed areas productive in Ethiopia.	Population study is all child under 5 years old and mother they are in town there	Research design quantitative with cross-sectional study approach	Children aged under 5 years with stunting of 46.1%. According to analysis multivariable, stunting in general statistics related with child age 13-24 months (AOR 2.04), 25-36 months (AOR 2.27), 37-48 months (AOR 2.38), education middle father (AOR 0.31), number of member House five-person ladder (AOR 0.66), and flush toilets or poured (AOR 1.91). There are a number factor special contributing family to development stunted child.
10.	Tamairu yazew / 2022	Western oramia, ethiopia	Risk Factors of Stunting and Wasting among Children Aged 6–59 Months in	For evaluate factor risk related to stunting and wasting in children aged 6–59	Was conducted on 500 children among children 6-59 months	Cross-sectional study was carried out from December 1 to 28, 2020 in	Analysis regression logistics bivariate and multivariate done For identify factor risk related to stunting and wasting in children in the study area. Findings study This conclude that the prevalence of

			Household Food Insecurity of Jima Geneti District, Western Oromia, Ethiopia: An Observational Study	months in Jima Geneti district, West Oromia, Ethiopia		the Jima Geneti district, Western Oromia, Ethiopia.	stunting and wasting is high in the research area. Therefore that, handle factor risk level family which is booster main nutritional status children are very important for ensure nutritional status child.
11	Mohyadin Abdullahi Ahmed , et al / 2024	Puntland , Somalia	Prevalence of Stunting and Associated Factors Among Under Five Years Children in Galkaio Town, Puntland, Somalia 2023: A cross-sectional study design	For evaluate prevalence and factors related stunting among children aged 6-59 months in Galkaio City,	It was conducted among 362 children aged 6–59 months paired with mother and caregiver	A cross-sectional study with focus community	Research result This show If there is children aged 6 to 59 months who are stunted in the Puntland region of Somalia is quite tall which is 37.3%. There are factors that influence stunting such as amount member family, level education parents, type sex child, time initiation breastfeeding early, breast milk exclusive, type food provided and visits Mother after give birth. =

In table 1 various articles obtained from sources such as Google Scholar, PubMed, and ScienceDirect were used as analytical material in discussing the effectiveness of supplementary feeding for the prevention of stunting in toddlers. A total of 11 articles were reviewed to support this discussion. Based on regional characteristics, most of the articles came from the Asian continent, totaling 6 articles. The countries of origin include India, Indonesia, Pakistan, Bangladesh and Yemen. Meanwhile, the other 5 articles were from the African continent, with research locations in countries such as Uganda, Ethiopia, Malawi and Somalia. This shows that the issue of stunting is a global problem, especially in Asia and Africa, which still face major challenges in fulfilling children's nutrition. In terms of research methods, the majority of the studies reviewed used a quantitative approach with a randomized controlled trial (RCT) design, namely 5 articles. RCT is an experimental method that provides a high level of validity in measuring the effectiveness of interventions, in this case supplementary feeding. In addition, there were 4 articles that used the cross-sectional method, which is a cross-sectional study that aims to identify factors associated with stunting at one specific time. This method is useful for obtaining a broad picture of the prevalence and risk factors for stunting. One other article used a quasiexperiment design with a pretest and posttest approach, which was also able to show changes in outcomes before and after the intervention.

Table 2. Critical Appraisal Of the Selected Studies Using Joanna Briggs Institute (JBI)

No	Author	Study Design	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Total	%

1	Sulistiawati Anton et al 2022	Quasi Experimental	Y	Y	Y	T	Y	Y	UC	Y	-	-	-	8	88.9
2	Ririn et al 2023	Quasi Experimental	Y	Y	Y	T	Y	Y	UC	Y	-	-	-	8	88.9
3	Tadele et al 2022	Cross Sectional	Y	Y	Y	Y	Y	CT	Y	CT	Y	Y	Y	10.5	95.5
4	Emad et al 2023	Cross Sectional	Y	Y	Y	Y	Y	CT	Y	CT	Y	Y	Y	10.5	95.5
5	Taimaru et al 2022	Cross Sectional	Y	Y	Y	Y	Y	CT	Y	CT	Y	Y	Y	10.5	95.5
6	Mohyadin Abdullahi Ahmed et al 2024	Cross Sectional	Y	Y	Y	Y	Y	CT	Y	CT	Y	Y	Y	10.5	95.5
7	Ara et al 2022	Randomized Control Trial	Y	Y	CT	Y	CT	Y	Y	Y	Y	Y	Y	10.5	95.5
8	Taneja et al 2022	Randomized Control Trial	Y	Y	CT	Y	CT	Y	Y	Y	Y	Y	Y	10.5	95.5
9	Bierut et al 2021	Randomized Control Trial	Y	Y	CT	Y	CT	Y	Y	Y	Y	Y	Y	10.5	95.5
10	Khan et al 2020	Randomized Control Trial	Y	Y	CT	Y	CT	Y	Y	Y	Y	Y	Y	11	100
11	Mutumba et al 2024	Randomized Control Trial	Y	Y	CT	Y	CT	Y	Y	Y	Y	Y	Y	11	100

Table 2 is the results of the critical appraisal of eleven scientific articles consisting of quasi experimental, cross sectional, and randomized controlled trial (RCT) studies showed that all studies fell into the excellent quality category, with an assessment score of ≥ 85%. This reflects that the studies have high methodological strength and can be relied upon as a basis for evidence-based decision-making. Each study was systematically assessed using assessment tools appropriate to its research design (JBI for quasi experimental, CASP for cross sectional and RCT). Results showed that all studies met most criteria for internal validity, relevance of methods, and clarity of reporting results. However, some aspects of reporting such as explanation of the randomization process, blinding, and bias control were still not fully explained in detail in some articles.

Education Giving Food Addition

Time of delivery the right food at the right time child enter 6 months old will help child reach grow optimal flower. Information that has ever Mother get and understand it with well, it is very necessary for mothers give various variation type food nutritious (Tadele 2022). Parents must ensure that children get adequate nutritional intake and according to their needs in the amount, frequency, and type of food (Aisyah Bella et al. 2024). Increase parental understanding toddler in practice giving food it is very important. Giving food that is not appropriate like often give child food fast serving can influence on growth and development (Chiwila et al. 2024). During toddlerhood especially age 6 to 24 months need nutrition child will increase along with development physical. So the intake nutrition from breast milk (ASI) alone No enough (Capra et al. 2024). Stunting will easy seen at the age of 12 to 23 months (Modjadji & Mashishi 2020). Another study also stated that prevalence of stunting and underweight in a way gradually increase along increase age > 6 months up to 24 to 36 months (Victora et al. 2021).

Stunting Prevention With Give Food The Right Food

At the age of more from 6 months child Already Ready For accept food that given by parents and with This need its nutrition sufficient so that can support growth and development child optimally. In a study in Ethiopian State stated if 38.4% of a person child accept food sourced from proteins that help grow flower children (Tadele 2022). Based on existing research (Ciptanurani. 2021; Taneja et al. 2022), can concluded that giving food appropriate addition, parental understanding about nutrition, as well as intervention holistic health play a very important role in prevent the occurrence of stunting.

One of factor main in prevention stunting is time giving food additional (Ahmed 2022). Research about education nutrition was also carried out by Teshome et al. (2020) where study This researcher give intervention about giving food companion for toddlers and obtained results Mother group intervention show improvement significant knowledge about benefit giving food addition especially peanut pods and techniques processing the right food. It is highly recommended for parents. For give food for children, if already his age more from 6 months (Wasihun et al. 2024). The results of other studies state that toddler accept food First they are at the age before 6 months will increase 2 times more experiencing stunting (Paramashanti & Benita 2020). The results of other studies show that after done visit home and given information then parents become more understand about nutrition her child (Siswati et al. 2022).

Giving food at the time right time will help growth child optimally (Ahmed 2024). Parental knowledge about food nutritious and time giving the right food own influence big on nutritional status children. Research by Teshome et al (2020), states If giving education nutrition for other can add understanding they about giving proper food, especially in matter diversity food and technique proper processing.

One of the factors that can determine success fulfillment nutrition child is ability Mother in giving food (Ararsa et al. 2023). In Indonesia it self in a study state that level knowledge mother about giving food for toddlers classified as Still low (Pibriyanti et al. 2024). Parents generally only follow habit family and community local in prepare food for children. They often times only introduce One type food just like rice porridge without addition others and ongoing until child age 12 months bulan (Effendy et al. 2020). Only about 32.5% of toddlers ages 6 to 12 months who receive pattern Eat with diversity food (Tello et al. 2022). Research by Mbombela in South Africa also stated that the average level of knowledge mother about giving food for toddlers still less (Masilela & Modjadji 2023). Provision of education nutrition can also given since pregnancy so that later moment child already reach age ready for get food addition mother already have good knowledge about giving food addition (Nyamasege et al. 2021).

Stunting Prevention With Promotion Health Family Focused On Intervention Nutrition

Prevalence stunting in children toddlers in Yemen (Emad et al. 2023), correlated with parent education, age child as well as factors between amount family, sanitation, infection and or health status mother who can influence baby stunting. In a family with residents many houses will more tend child experience malnutrition Because access more small in diversity food and less nutritious (Emad et al., 2023). in Indonesia ever done study by Ciptanurani (2021), found that child inside House ladder big have opportunity more experience stunting. Children under five living in households with more than five members are more at risk of stunting compared to children living in households with <5 members (Piniliw et al., 2021)

Unhealthy health status good and/ or infection can cause distribution disease like diarrhea, malaria and other diseases infectious others (Emad et al. 2023). Diseases this proven

influence growth baby new born. As example diarrhea that can become reason lack nutrition children under five years (WHO 2017). In addition in a family with amount many children Of course just fulfillment nutritious food will limited or No In Indonesia, Ciptanurani (2021) also found that House ladder with amount member family big more tend face problem lack nutrition in children compared to House ladder small. Therefore that, interventions that target parenting education and provision information about fulfillment Proper nutrition at home is very important.

Apart from the factors parent education can influence stunting, poor sanitation and poor health status good is also factor risk significant for occurrence of stunting. Infection like diarrhea, which is often caused by poor sanitation, can bother absorption nutrition and worsen nutritional status children (Emad et al. 2023).

Findings were also found in Kenya and Ethiopia, indicating that limitations economy become factor main moment fulfillment food for family (Okanda et al. 2018; Dake et al. 2019).

Giving Supplementation High In Protein Prevention Stunting

In a study conducted in India which aimed to for know effect growth achieved after giving supplementation milk- cereal mixture containing high protein and multivitamin-mineral (MMN) in children age more from 6 months for 180 days and obtained results there is improvement growth more tall compared to with child without given supplementation (Taneja et al. 2022). Other studies have also been conducted with giving supplement colostrum Beef and eggs in children age more from 9 months effective increase growth children (Bierut et al. 2021). In Pakistan, this was also done study about giving supplement nutrition lipid based in increase growth child age more from 6 months obtained results If given supplement This the impact of stunting will more low rendah (Khan et al. 2020). In the study research by Taneja (2024) where If giving food addition high in protein such as cereal and milk show improvement in score body length according to age with an average difference of 0.08 cm and an average increase in score weight of with body length is 0.12.

Other sources of protein that can given to toddlers that is eggs. For support growth and development child required lots of food contain nutrition high. Supplementation of cow's milk and eggs own effect positive to growth toddlers in Malawi (Margaritha Sustanti et al. 2023).

Giving Food Additional Food Ingredients Local For Prevent Stunting

One of material food local in Indonesia, namely plant jagaq that produces seeds containing carbohydrates 60-80% and contains more protein, minerals and calcium Good from rice and wheat. Intervention this given to children age more from 12 months with results there is increase body length and body weight (Ririn et al. 2023). In a research conducted in East Kalimantan with utilise material local for prevention of stunting. Provision of intervention to toddler age 12 to 24 months done for 2 months and got results, there are effect after intervention that is weight before average intervention was 8.33 kg and increased to 9.02 kg after intervention. So that an average increase of 0.69 kg. Then height 71.3 cm before intervention and 72.47 cm after intervention. Interventions Given give influence growth child.

Food ingredients local other that is shrimp lots of rebon found in the area Coastal. Food made from from shrimp rebon lots contains good protein and calcium for need nutrition children (Sulistyawati et al. 2022). Other food ingredients that have value its nutrition high also found in shrimp rebon. High protein, calcium, fat and mineral content can help increase growth and development children. Sulistyawati et al., 2022 in his research give food from nuggets, fish sticks,

meatballs and fried otak-otak made from from shrimp for child age more from 6 months. Types of materials other that is leaf Moringa which contain lots very good nutrition for growth child.

Stunting due to economy and prevention of stunting with IMD, Exclusive Breastfeeding, Diversity Food and Drink and Visits Postpartum

Stunting can due to from a number of predictor among them economy, in research conducted by Ahmed (2024) in Somalia showed that child under five years with a polygamous father own risk more big from the child with marriage monogamy. This is caused by limitations the economy resulting from from head family (father) supports family other.

Once done research in Kenya (Okanda et al. 2018) and Ethiopia (Dake et al. 2019), showed consequence the rise marriage polygamy in the research area (Somalia) can cause growth hampered and lacking nutrition in children under five years old. Findings This in line with research conducted by Tamiru (2022) economics influence variation from food in the family. Economic factors with low income no can fulfil need nutrition child.

Other factors that contribute to the prevention of stunting are baby after born direct done Initiation early breastfeeding in the first hour and thereafter given exclusive breastfeeding (Ahmed et al., 2024). Very important in prevent infections that can hinder development babies, especially in the area with poor sanitation need given exclusive breastfeeding (Muldiasman et al. 2018).

In research in Indonesia by Muldiasman et al. (2018) and Ethiopia by Gebreayohanes et al. (2022), it was shown results, IMD (initiation breast-feed early) causes improvement secretion and production of breast milk so that can give nutrition for babies. Findings this consistent with Tanzania (Chairande et al. 2015), Bangladesh (Gaishanuddin et al. 2003 in Ahmed et al. 2024) and Ethiopia (Gabreayohanes et al. 2022), showing time that is not right on the giving food breast milk companion will affect nutritional status child when. Giving exclusive breastfeeding important For prevent infections that can hinder development babies, especially in the area with poor hygiene levels. Therefore that, mother appealed For utilizing breast milk and a supportive environment Optimal exclusive breastfeeding should be given created.

Lack nutrition can reduced with use more Lots variation food companion (Ahmed et al. 2024). Parents must trained for provide proper and varied food so that can fulfil need energy and nutrition baby. Frequency Eat the child who eats food remainder and pattern Eat bad can become factor risk stunting (Tamiru 2022). Visit postpartum relate in a way significant with stunting (Ahmed et al. 2024), mother postpartum period without regular visits postpartum will potential own stunted toddlers than mother who attended visit postpartum.

CONCLUSIONS

Education and supplementary feeding interventions play an important role in preventing stunting in children aged 6-59 months. Nutrition education to parents, especially mothers, improves understanding of the timing, type, frequency, and proper administration of complementary foods. Supplementary feeding that is high in protein, both from local foods and nutritious supplements, has been shown to be effective in increasing child growth. Healthy environmental support, exclusive breastfeeding and early breastfeeding initiation also strengthen stunting prevention efforts. Therefore, a holistic approach through nutrition education and improved diet is essential to reduce the prevalence of stunting.

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