

The Health Promotion Effectiveness on Mother Knowledge of Stunting Prevention in Toddlers: Literature Review

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Abstract

Background: The goal of public health promotion is to increase people's capacity for action through direct instruction from and for the general public, in order to enable them to take responsibility for their own well-being. It also aims to develop programs based on getting people involved in social activities that support healthy living. Stunting begins to occur when a child is two years old and occurs when the embryo is still inside the womb. Stunting is a condition when someone's normal level of badness is higher than the normal level of badness for someone else. Aim examine the effect of health promotion on mothers' knowledge about stunting prevention in toddlers.

Method: Literature review is done by searching on direct science sites, Pubmed, and google scholar. They used the critical word The effect of health promotion on mothers' knowledge of stunting prevention in toddlers. References were selected based on the criteria of 1) journals related to stunting prevention, health promotion, and maternal knowledge, 2) 2017-2021 published years, and 3) fully accessible journals.

Results: A total of 8362 journals were analyzed, but none of them fit the bill or had anything to do with how health education affects mothers' awareness of how to prevent stunting. The impact of health promotion on mothers' awareness of stunting prevention is then demonstrated from the 25 references found. In order to prevent stunting, health promotion involves a learning process that transforms bad behavior patterns into good ones.

Conclusion: Health promotion is a learning process carried out to change unhealthy behavior patterns into healthy behavior so that stunting can occur.

Keywords: Health promotion, knowledge, mothers, toddlers, stunting

Abstrak

Latar Belakang: Promosi kesehatan masyarakat adalah untuk meningkatkan kapasitas masyarakat untuk bertindak melalui instruksi langsung dari dan untuk masyarakat umum, agar memungkinkan mereka bertanggung jawab atas kesejahteraan mereka sendiri. Selain itu juga bertujuan untuk mengembangkan program yang berbasis pada keterlibatan masyarakat dalam kegiatan sosial yang mendukung hidup sehat. Stunting mulai terjadi saat anak berusia dua tahun dan terjadi saat embrio masih berada di dalam kandungan. Stunting adalah kondisi ketika tingkat keburukan normal seseorang lebih tinggi dari tingkat keburukan normal orang lain. Tujuan mengetahui pengaruh promosi kesehatan terhadap pengetahuan ibu tentang pencegahan stunting pada balita.

Metode: Kajian pustaka dilakukan dengan mencari di situs ilmu langsung, Pubmed, dan google scholar. Menggunakan kata kunci Pengaruh promosi kesehatan terhadap pengetahuan ibu tentang pencegahan stunting pada balita. Referensi dipilih berdasarkan kriteria: 1) jurnal terkait pencegahan stunting, promosi kesehatan, dan pengetahuan ibu; 2) tahun terbit 2017-2021; 3) jurnal yang dapat diakses sepenuhnya.

Hasil: Sebanyak 8362 jurnal dianalisis, namun tidak ada satupun yang sesuai atau berkaitan dengan bagaimana pendidikan kesehatan mempengaruhi kesadaran ibu tentang cara mencegah stunting. Dampak promosi kesehatan terhadap kesadaran ibu tentang pencegahan stunting kemudian ditunjukkan dari 25 referensi yang ditemukan.

Kesimpulan: Untuk mencegah stunting, promosi kesehatan melibatkan proses pembelajaran yang mengubah pola perilaku buruk menjadi baik.

Kata kunci: Promosi kesehatan, pengetahuan, ibu, balita, stunting

INTRODUCTION

Stunting is a condition in adolescents with a body length or height less than average compared to their age. This condition is seen in the size and weight according to age. Stunted adolescents include chronic nutritional problems caused by many factors such as social, economic, and sanitation conditions, illness experienced as a baby, and lack of nutritional intake, which will affect adolescence. The Indonesian Ministry of Health's data and information center (2018) revealed that stunting toddlers in the future would have difficulty experiencing optimal growth and development. This stunting incident will continue when they are teenagers if there is no improvement in good nutrition or treatment of disease from childhood.

WHO says that stunting becomes a public health problem if the prevalence of stunting reaches 20% or more.² The figure reached 36.4. According to the Indonesian Ministry of Health, in 2020, 8.7% of adolescents aged 13-15 had thin and fragile conditions. The age most experienced stunting is the age of 13-15 years, including the category of early adolescents, where this category is teenagers who have paid attention to their physical form. Social relationships in adolescents often spend more time with their peers than with their parents.³

Stunting in the social environment will cause mental problems in adolescents. Usually, peers' views are considered very important, so adolescents will do anything to be accepted by their peer group. Their behavior also hopes to be the same as their peer group. If there are teenagers who are ostracized and ridiculed by their friends, it will cause sadness and anxiety experienced by the teenager.⁴

Mother's knowledge is one of the factors associated with failure to prevent stunting in children. Based on a study entitled the relationship between learning and breastfeeding behavior in a tertiary care center in India.⁵ An adequate level of knowledge is the basis for developing one's reasoning power and a way to make it easier to receive motivation and subsequently to have implications for one's attitudes and behavior. Various methods and tools have been developed in education to convey messages aimed at increasing maternal knowledge, attitudes, and skills regarding stunting.⁶

Research on the effect of health promotion on the influence of health promotion on knowledge and attitudes with stunting prevention actions by posyandu cadres can be carried out in-depth in further research⁷. The results of this study can provide

benefits in providing referrals in solving the problem of failure in health promotion regarding stunting prevention. Health promotion aims to empower people to maintain and improve to protect their health.⁸ Aim examine the effect of health promotion on mothers' knowledge about stunting prevention in toddlers.

METHODS

Data Search

The current study used the literature review method, which is a research methodology intended to gather and analyze prior studies' findings as well as analyze a few common images used by people who are cited in texts.⁹

Keywords

The researcher conducted a literature review by looking for articles about the effect of health promotion on mother's knowledge about preventing stunting in infants. Search databases include ProQuest, SciVerse Science Direct, Scopus, Pubmed, Cochrane Library, and Google Scholar. Search for articles using the keywords the effectiveness of health promotion on mothers' knowledge about stunting prevention in toddlers.

Study stage

The stages or protocols carried out in the literature search are: formulating problems, objectives and identifying keywords; searching for library sources/articles that discuss critical terms by using a library search engine or library database; narrowing the criteria for selecting criteria by establishing standards, eligibility criteria for reports and inclusion and exclusion criteria using the PICOS criteria (population or problem, intervention, compare, outcome and study design); record the name of the selected library, read the entire contents of the article and summarize to understand the main content of the paper; presenting a summary of all the articles obtained in a summary table; synthesize the results of the summary trying to conclude the ideas that have been read by looking at the similarities and differences, see the advantages and disadvantages and finally draw conclusions; make a literature review report.

Data collection

The data were taken from the literature review in the research group and examined by all researchers. The article reviewed by the researcher is adjusted to the main task of the researcher with its settings, which include health promotion, maternal knowledge, and prevention of stunting in toddlers.

RESULTS

Study characteristics

A total of 585 articles were obtained as literature from Scencedirect (essays), Scopus (articles), PubMed (Articles), and SpringerLink (articles). There were 94 similar articles on big data to be excluded, and 302 articles were left. Of the 585 pieces, 267 were excluded because 65 did not contain a methodology, 50 were only theory and discussion, and 157 were unrelated to the topic and were not original. The results of article screening obtained 25 related articles. Of the 25 articles that will be analyzed, 1 article has a qualitative research design, while 25 articles have a quantitative method. Among the 25 articles that will be explored, all discuss the effect of health promotion on knowledge. The population in

the articles analyzed consisted of patients and their families.

Summary of findings in the literature.

All the analyzed articles found that health promotion was applied to various cases, including the age group involved in the study, which includes the effect of health promotion by comparing the control and treatment groups.

This article looks at the effect of health promotion on knowledge about disease and health information in general. A review of 25 articles showed that the impact of health promotion on knowledge was effective in increasing knowledge about health because it was interesting, easy to understand, and informative.

Table 1. Chart Literature Analysis Schematic

No	Author, Title, Journal, Page	Research design	Literature Analysis
1	- Stunting Among Under 5YearOlds in Nepal: Trends and Risk Factors - The Journal Of Maternal and Child Health Journal - 39-47	- Using a questionnaire, they asked about education level, place of residence, media exposure, history of pregnancy, child mortality, breastfeeding and infant feeding practices, charisma, childhood illnesses, marital status, sexual activity, employment status, background characteristics, consumers and awareness. ¹⁰	Stunting or wasting is a common problem among children who are accepted into school. Children with stunting tend to score very low on the entrance test compared to average height and weight.
2	- Determinants of stunting among under-five children in Ethiopia: a multilevel mixed-effects analysis of 2016 Ethiopian demographic and health survey data - The Journal Of Fantasy Gebru BMC Pediatrics - 176	The total sample includes 8,855 children under the age of five, and 60 community groups are included in the current analysis. The proportional sample is 15,683 households from 6 - 5 clusters are included in the data distribution. Samples were stratified, grouped and divided into two stages. ¹¹	Model 2 (individual model) also found significant community-wide variation in the likelihood of hiding logs. Model-3 (community model) community level interest factors. Model examining individual and community level interest factors.
3	- Prevalence and determinants of stunting and wasting among public primary school children in Gondar town, northwest Ethiopia - The Journal Of Getaneh BMC Pediatrics - 207	An institutional-based cross-sectional study was conducted with schoolchildren aged 6-1 year. Sociodemographic information, nutritional status and eating habits of children were collected using a structured questionnaire. ¹²	Possible reasons for this may be due to socio-economic differences and the variability of risk factors in different geographic environments. In this study, extravagance was higher among the lower SAC (Community Index) socioeconomic classes than among the higher classes. Factors causing stuttering are the age of the child, source of drinking water, DDS, etc.; and anaemia. On the other hand, risk factors for wasting are childhood, education, mother's age, family poverty, and alcohol consumption.

No	Author, Title, Journal, Page	Research design	Literature Analysis
4	<ul style="list-style-type: none"> - The burden of moderate to severe anemia and severe stunting in children < 3 years in conflict-hit Mount Cameroon: a community-based descriptive cross-sectional study - The Journal Of Sumbele BMC Pediatrics - 396 	For continuous variables, the mean and standard deviation are determined. The normal distribution of the population (by age) is checked by the Shapiro-Wilk or Kolmogorov-Smirnov tests. In contrast, comparisons of means were tested by independent sample t-test. Categorical variables were analyzed using Chi-square or Fisher tests. ¹³	Anemia is common in 8.0% (55) children, most of them had microcytic anemia (59.3%). Attachment, fatigue, and exhaustion occurred in 31.3, 13.1, and 6.3 percent of the children, respectively. In general, it has an important protective effect
5	<ul style="list-style-type: none"> - Risk factors of stunting among children living in an urban slum of Bangladesh: findings of a prospective cohort study - The Journal Of Islam et al. BMC Public Health - 197 	Anthropometric data were analyzed using software WHO introduction (Geneva, Switzerland). The mean and standard deviation of a continuous variable that is normally distributed and ranged median and interquartile (IQR) of a continuous variable that is not normally distributed is presented. ¹⁴	This decline was the result of the synergy of various factors. The aim of this study was to assess usual macronutrient intake from complementary foods and to investigate factors associated with stunting in a cohort of children under 2 years of age living in vulnerable slums.
6	<ul style="list-style-type: none"> - Mapping the effects of drought on child stunting - PNAS - 17219-17224 	<ul style="list-style-type: none"> - Nutritional information. We use georeferenced child nutrition data from the DHS program and various geographic datasets.¹⁵ 	We incorporate geographic factor effect modeling. Based on the results of the LOESS model, we identified places where low and high rainfall were associated with poorer nutritional outcomes for children, and in subsequent analyzes we focused on comparing children observed in the dry season. In addition, the effect of drought on food production in drought areas is very real. Conversely, excessive rainfall, such as floods and landslides, can occur due to rainfall that is far from the child nutrition monitoring location.
7	<ul style="list-style-type: none"> - A review of the evidence linking child stunting to economic outcomes - International Journal of Epidemiology - 1171-1191 	We review the literature on the relationship between childhood growth and malnutrition and economic outcomes in adulthood. At the country level, we also assess evidence linking the slowdown to economic growth. ¹⁶	In our review of the evidence assessing the economic impact of childhood stunting and malnutrition, we found that results from intervention studies and quasi-experimental studies consistently demonstrate large economic benefits from linear growth and reduction of stunting at the individual level.
8	<ul style="list-style-type: none"> - How countries can reduce child stunting at scale: lessons from exemplar countries - American Journal of Clinical Nutrition - 894S-904S 	Conduct in-depth interviews with national experts within and outside health (10-20 participants per country), in-depth interviews with community-level stakeholders (10-15 participants), and focus group discussions with community women (2-15). Four target groups in each country, each with 10-15 participants). ¹⁷	Several countries have dramatically reduced the prevalence of child stunting, with or without closing other geographic, economic, and population disparities. The government is making progress through interventions from within and outside the health sector. Despite significant heterogeneity and context differences, the contribution of the health sector is comparable, previously termed nutrition-specific and strategy-sensitive.
9	<ul style="list-style-type: none"> - Determinants of the Stunting of Children Under Two Years Old in Indonesia: A Multilevel Analysis of the 2013 Indonesia Basic Health Survey - Nutrients 	In this study, children's height was measured using a multifunctional radiometer designed for this study. ¹⁸	The null model suggests that district and province MORs are more important. High MOR reflects cluster effect. When individual-level factors (household, mother/father, prenatal care and child variables) were added to the null model (Model 1), they were more important than other individual-level variables for growth rate.

No	Author, Title, Journal, Page	Research design	Literature Analysis
10	<ul style="list-style-type: none"> - Perspective: What Does Stunting Mean? A Critical Review of the Evidence - Advances in Nutrition - 916-204 	Linear bends and bends. There is a limit to the number of children affected by the use of the deformity in the Appendix. ¹⁹	The current global focus on malnutrition offers unprecedented opportunities to improve the well-being of billions of people, with positive consequences for their health, development, education and income.
11	<ul style="list-style-type: none"> - A review of child stunting determinants in Indonesia - Maternal and Child Nutrition 	To describe the strength of the association between determinants and inhibition, we present the relative risk (RR), adjusted odds ratio (AOR) or unadjusted odds ratio (UOR), respectively, in descending order of superiority. RR is only available in the cohort/control study design and is the primary measure. ²⁰	Maternal factors that are not considered to be related to stunting or linear growth in children in the Indonesian literature include infection, mental health, short birth spacing, and hypertension. Factors affecting the home environment that were not assessed in relation to stunting or linear growth of children included inadequate child stimulation and activity and inappropriate household food distribution.
12	<ul style="list-style-type: none"> - Agave salmiana fructans as gut health promoters: Prebiotic activity and inflammatory response in Wistar healthy rats - International Journal of Biological Macromolecules - 785-795 	Analysis of variance (ANOVA) was performed using a statistical package Experimental Design 7. The average is compared using the Tukey test, with a Pb probability value of 0.05 which is considered significant. Results are presented as mean \pm standard deviation (SD). All tests were performed in triplicate. ²¹	This study provides direct evidence of the prebiotic effect of Agave salmiana fructans, demonstrating that a diet supplemented with 12.5% fruit promotes significant growth of probiotic bacteria and can be used as a potential prebiotic ingredient under the conditions used in this study. Verall, these results further demonstrate the importance of eliminating agave salmiana fructan as a prebiotic ingredient in the prevention of gastrointestinal diseases and Functional Food.
13	<ul style="list-style-type: none"> - Digital health brand, promoter of quality digital care/Marca digital sanitaria, promotora de cuidados digitales de calidad - Enfermería Neurologica - 3-5 	Social media penetration in the population aged 16-65. ²²	Unrestricted access via search engines such as Google has led to the consideration of some vital aspects of communicating with professionals. The use of social media in the professional field is highly dependent on its relevance in our daily clinical practice. Social media can be a great channel of connection and communication between our professional colleagues and patients.
14	<ul style="list-style-type: none"> - Edible flowers as a health promoter: An evidence-based review - Trends in Food Science & Technology 	The focus is on the composition and nutritional properties of the edible flowers and their extracts, and in addition to their hepatoprotective and microbicidal effects, their health benefits associated with cardiovascular disease, cancer, neurological diseases, diabetes, and obesity. The mechanisms involved in these effects, although several have emerged, and the specific compounds involved in these effects have also been discussed. ²³	Edible flowers have a high concentration of phenolic compounds and a high antioxidant capacity, which has a positive effect on diseases related to oxidative stress.
15	<ul style="list-style-type: none"> - Europe's Refugee Crisis and the Human Right of Access to Health Care - Harvard TH Chan School of Public Health - 1-11 	Tannahill public health and health ethics report of the Nuffield Council on Bioethics. They analyze the situation of refugees in Europe regarding their human rights in accessing health services from the perspective of public health ethics. ²⁴	Better access to health care needs to be achieved during refugee travel in Europe, during their stay in refugee camps, and after their arrival at their final destination. To date, the above ethical principles have not been fulfilled: the principles of kindness and respect, which refugees deserve, and justice for every refugee, can only be achieved if the EU cooperates on a legal basis.

No	Author, Title, Journal, Page	Research design	Literature Analysis
16	- Evaluation of the impact of the European Code against Cancer on awareness and attitudes toward cancer prevention at the population and health promoters levels - Cancer Epidemiology	Mixed methods were used, involving two independent studies: an online public survey and semi-structured interviews with professionals working in cancer prevention and health promotion (henceforth, 'promoters'). ²⁵	Women are more likely to make lifestyle changes to reduce their risk of cancer. Twenty-eight online semi-structured interviews with professionals were conducted in 25 countries. Regional variations in ECAC promotion and dissemination methods and target groups are reported.
17	- Behavior change communication model enhancing parental practices for improved early childhood growth and development outcomes in rural Armenia – A quasi-experimental study - Preventive Medicine Reports - 1-19	All mothers of children aged 0 to 23 months (1300) living in 43 communities in the province of Gegharkunik (Armenia). A total of 23 intervention communities (680 children) received additional PAUD packages for MCH interventions, and 20 control communities (630 children) only received MCH interventions. ²⁶	Each study group has the same age and gender structure. In 36% of households, the father was absent for three months or more in the past year due to the demands of seasonal labor migration. About half of households (46%) have six to seven members, and 12% do not have access or consistent access to running water. Most of the household variables were similar in the two study groups
18	- Quantifying risks and interventions that have affected the burden of lower respiratory infections among children younger than five years: an analysis for the Global Burden of Disease Study 2017	Four strategies for modeling LRI burden: LRI mortality was modeled using vital registration data, demographic surveillance data, and verbal autopsy data in a predictive ensemble modeling tool. ²⁷	Our findings suggest that there has been a substantial but uneven decrease in LRI deaths among countries between 1990 and 2017. Although improvements in sociodemographic indicators of development may explain some of these trends, changes in exposure to modifiable risk factors are associated with reduced LRI mortality rates.
19	- Dairy consumption and association with nutrition status of Chinese children and adolescent - Biomed environment science - 393-405	Randomization of multi-stage stratification clusters is proportional to the population size of the participant's chosen sampling method. From a total of 150 monitoring locations in 31 provinces, four types of places were selected with different levels of development, namely 34 big cities (metropolis), 41 medium and small cities, 45 rural areas, and 30 poor villages. ²⁸	Of the total sample, 36.1% of children aged 6-17 years reported consuming dairy foods more than once a day (≥ 1 day). The average total milk intake of all participants was 126.7 g/day. For boys, milk consumption had an inverse correlation with stunting and wasting after controlling for confounders. For girls, milk consumption was negatively associated with stunting and obesity after controlling for confounders.
20	- Monitoring and evaluation design of Malawi's Right Foods at the Right Time nutrition program - Evaluation and Program Planning - 1-9	Comparative cross-sectional and longitudinal models to assess effects on anthropometric and nutritional outcomes of infants and young children. Three cross-sectional studies (baseline, midpoint and endpoint) and two longitudinal cohorts. ²⁹	Continuous training, motivation, training and motivation of treatment group volunteers is critical to the success of the program and maintaining high beneficiary rates throughout the program. Due to the voluntary nature of the position, these people often have many competing priorities, so highlighting their critical role within the overall system and providing ongoing support to carry out their work is critical to successful program delivery and impact.

No	Author, Title, Journal, Page	Research design	Literature Analysis
21	<ul style="list-style-type: none"> - Independent and combined effects of improved water, sanitation, and hygiene, and improved complementary feeding, on stunting and anemia among HIV-exposed children in rural Zimbabwe: a cluster-randomized controlled trial - Lancet Child adolescent health - 1-14 	The Sanitation Hygiene Infant Nutrition Efficacy (SHINE) trial was designed to test the independent and combined effects of increasing IYCF. This increases WASH, stunting, and anemia in areas with high antenatal HIV prevalence in rural Zimbabwe. ³⁰	The WASH intervention did not affect hemoglobin length or concentration. No adverse or serious adverse events were associated with the trial because children exposed to the disease were highly susceptible to malnutrition and responded well to complementary foods.
22	<ul style="list-style-type: none"> - Cigarette smoke exposure and increased risks of stunting among under-five children - Clinical Epidemiology and Global Health - 1-6 	This quantitative study uses a cross-sectional approach, statistical tests used are Chi-Square and Fisher's Exact Test, as well as multivariate logistic regression analysis. ³¹	Apart from nutrition, it turns out that there are several other factors that can cause stunting in children aged 25-59 months, such as exclusive breastfeeding, water sources, cleanliness, prolonged exposure to cigarette smoke, and recurrent respiratory infections. This study recommends that health policies in Indonesia in dealing with stunting pay attention to issues of nutrition, sanitation, education, health services, social protection, and handling family members.
23	<ul style="list-style-type: none"> - Revisiting maternal and child undernutrition in low-income and middle-income countries: variable progress towards an unfinished agenda - Maternal and Child Undernutrition Progress 1 - 1388-1399 	Length/height as height, including reclining length for children under two years, and standing height for children aged 2-5 years in 31 low-income and 19 middle-income countries Prevalence of underweight, short stature, and anemia in women aged 15- 49 years in countries with 2000 and 2015 data. ³²	Our series of papers show that progress in reducing malnutrition in women and children has varied. Progress has been made to reduce stunting in children and thin women and address iodine deficiency. The prevalence of wasting has decreased in some countries but not in others. The rate of exclusive but not partial breastfeeding increased slightly after 12 months of age. Anemia in children and women is almost unchanged, because they have low birth weight and zinc deficiency.
24	<ul style="list-style-type: none"> - Vulnerabilities of Syrian refugee children in Turkey and actions taken for prevention and management in terms of health and well-being - Child Abuse & Neglect - 1-13 	Children of Syrian Refugees, This narrative review collates data from a variety of primary and secondary sources on Turkey's refugee framework, including national and international legislation, government and non-government data and reports, and scientific papers. ³³	Syrian refugee children in Turkey face various risks in terms of their health and well-being, including communicable and non-communicable diseases, post-traumatic stress disorder, depression, family violence, child labor and child marriage. Actions taken for prevention and response by governmental and non-governmental entities are multilateral in nature and aim to address the problem from multiple perspectives, including medical, psychosocial, child protection, and legal. The intervention and restructuring of the health system in Turkey contributes to SDG number 3 for child refugees.
25	<ul style="list-style-type: none"> - Community health needs assessment for a child health promotion program in Kyrgyzstan - Evaluation and Program Planning - 1-9 	The descriptive study was conducted using mixed methods which included literature review, regional statistics, focus groups, key person interviews and community surveys. ³⁴	Identify areas that should be prioritized and strategies in community child health promotion programs. These migrant communities do not have sufficient resources. Strategies to address this and improve child health include strengthening the capacity of health service providers, encouraging community participation, and supporting health services. Through this process, important work was done to develop culturally appropriate programs, and further research and implementation is needed to promote child health according to the strategies presented.

DISCUSSIONS

Nutritional problems are a life cycle starting from pregnancy, infancy, toddlers and adolescents to the elderly. Feeding problems can occur in all age groups; even in certain age groups, nutritional problems affect nutritional status in the next life cycle.³⁵ The success factors of health promotion are many factors that need to be considered against the target in the success of health promotion, including the level of education, socioeconomic status, customs, public trust, and availability of time from the community³⁶. A person's level of education affects knowledge. Knowledge is closely related to education, and it is hoped that very high education will expand knowledge and make it easier to receive information that will affect behavior.³⁷

Advocacy is a decision-making activity that forms assistance from decision-makers in health and other fields affecting health. Health promotion aims to change the economy, customs and culture, surrounding environment, and individual behavior to benefit public health through this strategy. This advocacy activity addressed policymakers and decision-making contact with the health department. Health education is an activity in a way conveys health information to the public, individuals as well as groups. Counseling is also considered an effort to increase the knowledge and abilities of someone who aims to change human behavior individually to achieve healthy life goals.

Anthropometric assessment and evaluation are carried out to measure toddlers' nutritional status. Anthropometric measurements are closely related to body size based on age and dietary needs. Anthropometry aims to determine the imbalance between protein intake and energy intake. Judging from the indicators of classification of height and weight according to age is a way of measuring the nutritional status of children based on Zscore value. Below are the indicator limits based on the value Zscore.

Stunting in childhood can have a fatal impact on productivity in adulthood. Children who experience slow growth will find it difficult to learn compared to other children. Children experiencing stunting tend to have the potential for growth failure or slow growth, low productivity capabilities, and a higher risk of suffering from non-communicable diseases.

The health promotion media used are very diverse,

such as animation media, leaflet media with film media, video media, and food model media.³⁸ Increasing knowledge requires providing information, which, according to WHO, is one strategy to obtain information change. One of the efforts to provide information is to use health promotion media. Health promotion media will be beneficial so that the messages conveyed in health promotion can be given clearly so that the target can receive clear and precise statements that can increase the value of knowledge.³⁹ This shows that the health promotion delivered can change the mother's knowledge about stunting. Parents play an essential role in regulating the fulfillment of their children's nutrition and eating habits⁴⁰. Even though mothers receive nutrition education, if their parents will not change a healthy diet, they tend to provide unbalanced nutrition. In addition, the family's socioeconomic level also affects food availability at the family level.⁴¹

The use of health promotion media in learning activities is a tool and a carrier of information and messages that can positively impact respondents or listeners.⁴² The health promotion media developed are media that promise to support changes in children's lives.⁴³ Further researchers can focus on optimizing the health promotion model on maternal knowledge about stunting.⁴⁴

The results of this study are not following the theory of Edgar Dale (1964) in Nursalam and Efendi (2009), which is described in Edgar Dale's cone, stating that reading will remember 10% (printed media) of the material read, listening will retain 20% of what is heard. , seeing will remember 30% of what is seen, hearing and seeing will remember 50% (audio visual) of what is heard and seen⁴⁵. This is possible due to the limited time respondents have in implementing health promotion, both the audio-visual and pocketbook methods.

The health promotion intervention was carried out in stages, starting from the empowerment stage, namely through mass counseling and counseling in groups with message contents covering stunting, the impact of stunting, and how to prevent stunting carried out by researchers. This strategy positively impacts reducing the number of stunting.⁴⁶

The increase in public knowledge in the intervention group is understandable because the information in health promotion interventions tends to be easily internalized by the community, and routine data can be obtained by the community from some banners,

leaflets, and stickers affixed to strategic places in the hospital.⁴⁷

The effectiveness of health promotion on knowledge and public attitudes also changed after the health promotion intervention carried out in the hospital environment. This change is a tangible manifestation of the adoption of information that shapes general knowledge about stunting, the impact of stunting, and behavior to stop stunting. Positive and negative attitudes towards stunting will significantly affect whether a person exhibits high stunting behavior.⁴⁸

CONCLUSION

A total of 25 articles show that the strategy for increasing knowledge and preventing stunting in toddlers is health promotion, such as food model media, film media, animation media, leaflet media, booklet media, and short story books. So other researchers are expected to be able to carry out further research regarding the effectiveness of using health promotion media for pregnant women with knowledge in preventing stunting in toddlers.

Conflict of Interest

In this study there is no conflict of interest.

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