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Promotive and Preventive Efforts of Health Workers in Reducing Stunting: A Scoping Review

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A B S T R A C T

The role of health workers in increasing information related to stunting prevention and meeting the information needs of families is very important. Health promotion that is effective in preventing stunting can improve public health status. The purpose of this study is to find out the promotive and preventive efforts of health workers in reducing stunting. This study is a scoping review. Four databases were used to search the literature: PubMed, ScienceDirect, ProQuest, and Willey. The articles were selected using Prisma-Scr based on predetermined inclusion and exclusion criteria, and the critical appraisal was done using Mixed Method Appraisal Tool (MMAT). Ten articles that fit the objectives and criteria of the established literature study were found from 2,014 articles. The articles come from various countries: cross-sectional studies, quasi-experimental studies, case-control studies, and qualitative articles. Four themes were obtained, namely promotive and preventive efforts of health workers in pregnant women, promotive and preventive efforts of health workers in postpartum and breastfeeding mothers, promotive and preventive efforts of health workers in toddlerhood, and influencing factors. The conclusion is that promotive and preventive efforts of health workers in reducing stunting are needed, namely preventing anemia in pregnancy, nutritional counseling, exclusive breastfeeding, and feeding practices for toddlers.

Kata kunci:

Tenaga Kesehatan
Promotif
Preventif
Penurunan Stunting

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A B S T R A K

Peran tenaga kesehatan dalam meningkatkan informasi terkait pencegahan stunting dan memenuhi kebutuhan informasi keluarga sangat penting. Promosi kesehatan yang efektif dalam pencegahan stunting dapat meningkatkan derajat kesehatan masyarakat. Tujuan dari studi literatur ini untuk mengetahui upaya promotif dan preventif tenaga kesehatan dalam penurunan stunting. Metode yang digunakan dalam studi literatur ini adalah *scoping review,* pencarian literatur dalam studi ini menggunakan 4 database (*PubMed, SciencDirect, ProQuest, Willey*). Untuk seleksi artikel yang didapat berdasarkan kriteria inklusi dan eksklusi yang telah ditentukan, menggunakan *Prisma-Scr* untuk alur penyeleksian artikel, serta dilakukan *critical apparaisal* dengan menggunakan *Mixed methods Appraisal Tool* (MMAT). Hasil *review* dari total pencarian sebanyak 2.014 artikel, kemudian ditemukan 10 artikel yang masuk kedalam tujuan dan kriteria studi literatur yang ditetapkan. Artikel yang didapat berasal dari berbagai negara yang terdiri dari cross-sectional study, quasi-eksperimental study, case-control study dan kualitatif. Diperoleh 4 tema yaitu upaya promotif dan preventif tenaga kesehatan pada ibu hamil, upaya promotif dan prefentif tenaga kesehatan pada ibu postpartum dan menyusui, upaya promotif dan prefentif tenaga kesehatan pada masa balita dan faktor yang berpengaruh. Kesimpulan adalah dalam penurunan stunting diperlukan

upaya promotif dan preventif dari tenaga kesehatan yaitu pencegahan anemia dalam kehamilan, konseling gizi, ASI eksklusif, dan praktik pemberian makan pada balita.

INTRODUCTION

In 2015, the world committed to the SDGs including eliminating malnutrition in all its forms by 2030. Therefore, the SDGs included a World Health Assembly target to reduce the proportion of children suffering from waste (UNICEF et al., 2020). Stunting is defined as low height for age z-score (HAZ) starting prenatally and continuing up to the first 2 years of life which is generally irreversible (Roediger et al., 2020). Stunting begins in the first 1,000 days, starting from conception to years old. Poor nutrition during pregnancy and not carrying out routine pregnancy checks can result in unhealthy pregnancies, then causes abnormal fetal growth (Maravilla et al., 2020)

Indonesia has experienced a decline in the prevalence of stunting every year. However, the prevalence of stunting is still far from the target of 14% which will be achieved in 2024. Nowadays there are still 5.33 million children under five are still stunted (Teja, 2022). According to the 2021 Indonesian Nutrition Status Survey (SSGI) by the Ministry of Health of the Republic of Indonesia (BPKP), stunting was most common in East Nusa Tenggara (37.8%), West Sulawesi (33.8%), and Aceh (33.2%) (Kementrian Kesehatan RI, 2022). Article 2 of the 2013 Presidential Decree stated that the First 1,000 Days of Life movement (HPK) consists of special nutrition interventions, namely activities specifically designed for the First 1,000 Days of Life (HPK) group (Kementrian Kesehatan RI, 2018).

Efforts to prevent stunting by health workers can be carried out by providing nutritional counseling, exclusive breastfeeding, and child-feeding practices (Eshete Tadesse et al., 2020). The results of the study stated that health workers such as nutritionists, midwives, and obstetricians have a central role in educating evidence-based antenatal nutrition because they are trusted and often interact with pregnant women (Rahmawati et al., 2021).

The role of health workers in reducing stunting is urgently needed, especially in increasing knowledge about nutritional information in families. Health workers make people more aware of stunting (Mistry et al., 2019). Health workers can provide effective health promotion in preventing stunting and can improve public health status (Warren et al., 2020). Promotive and preventive efforts can increase the ability of families to support the health, growth, and development of children because the family is an important part that can affect individual health status (Oktaviana et al., 2022). Based on this background, the purpose of conducting this scoping review study is to find out how promotive and preventive efforts of health workers are in reducing stunting.

METHOD

This study is a scoping review. Scoping review is a design that allows the assessment of emerging evidence and is the first step in research development (Peterson et al., 2017). Scoping review is a relatively new approach to reviewing the literature because its objectives, methodological processes, terminology, and reporting vary widely (Pham et al., 2014). The steps used in compiling a scoping review are identifying research questions, identifying relevant articles, selecting articles, mapping data, summarizing, and reporting study results (Arksey & O′ Malley, 2005)

STEP 1. Identifying Research Questions

The authors used the PEO framework to identify research questions (Arksey & O′ Malley, 2005).

Table 1. PEO Framework

P (Population)	E (Exposure)	O (Outcome)
Health worker OR Midwife* OR Nurse* AND*	*Promotional effort* Preventive effort* OR Health promotion* AND*	*Stunting reduction OR Stunting prevention AND*

Based on the framework above, the research question is "what are the promotive and preventive efforts of health workers in reducing stunting?"

STEP 2. Identifying Relevant Articles

The next step is a literature search based on inclusion and exclusion criteria.

Table 2. Criteria

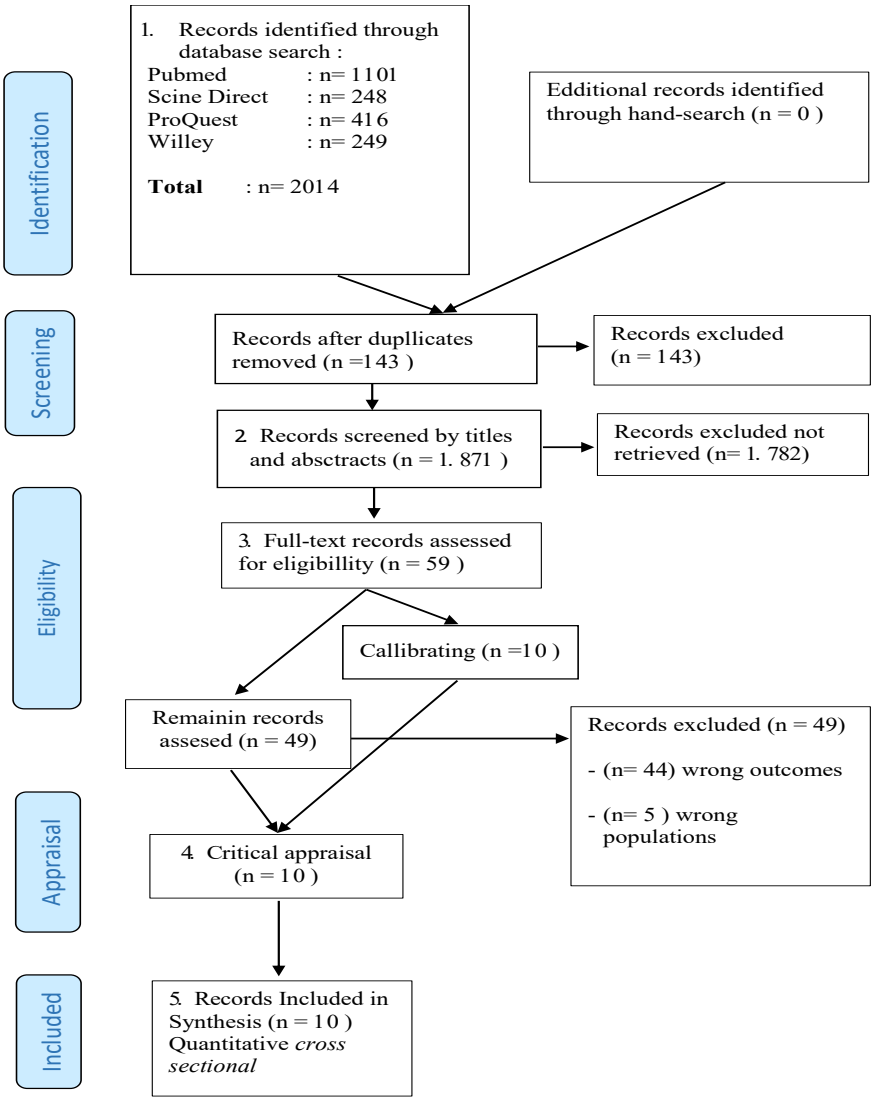
Inclusion Criteria	Exclusion Criteria
1. Articles published in English 2. Articles published in 2013-2022 3. Articles from developing and developed countries 4. Original Research 5. Qualitative and quantitative articles 6. Free full-text accessed articles 7. Articles focused on promotive and preventive efforts of health workers in reducing stunting 8. WHO documents, reports, and guidelines	1. Opinion articles 2. Commentary articles 3. Letters and book reviews 4. Thesis research

Search for this article based on predetermined keywords using Boolean operator strategies such as AND and OR (Pham et al., 2014). The keywords in this scoping review are Health worker* **OR** Midwife* **OR** Nurse* **AND** Promotional effort* **OR** Health promotion* **OR** Preventive effort* **AND** Stunting reduction **OR** Stunting prevention. The four databases

namely PubMed, ProQuest, Science Direct dan Willey were used to search the relevant articles. The focus of this study is on the promotive and preventive efforts of health workers in reducing stunting.

STEP 3. Selecting Articles

Based on the specified keywords, 2014 articles were found. 1,101 articles were obtained on PubMed. 248 articles were obtained on Science Direct. 416 articles were obtained on ProQuest, and 249 were obtained on Willey. Furthermore, the article was selected or screened. This selection was based on the suitability of the title, abstract, and content with the objectives of the scoping review regarding promotive and preventive efforts for health workers in reducing stunting. Based on the article search, 10 articles that met the inclusion criteria were obtained. The process of searching for articles in this scoping review is using PRISMA-ScR (Pollock et al., 2021)



Gambar 1. PRISMA-ScR Flow chart (Tricco et al. 2018)

The results of searching articles based on keywords and databases were 2,014 articles. The articles were extracted using the Mendeley Desktop application. 143 of 2,014 articles were deleted through checking for duplication of articles. Then, the filtering of article titles was done manually from 1,782 articles. 1,782 articles were excluded after the screening because they did not meet the inclusion and exclusion criteria. After re-selecting manually, 59 articles were found. 49 of them did not fit the purpose of the review and did not fit the population. Finally, 10 articles were left. These articles fulfilled the requirements for extraction and article quality assessment which then will be included in the charting data.

STEP 4. Charting Data

10 articles have been assessed, then extracted by entering the main criteria including author, year, research title, country, purpose, research design and methods, and research results. Data mapping was carried out through discussion with the second author using a modification of the Mixed Method Appraisal Tool (MMAT). Then the author records and compares the extracted data, which can be seen in table 3.

Table 3. Charting Data

No	Authors/ Year/ Title	Country	Aim	Design and Method of Research	Research Findings
A1	(Mistry et al., 2019) Maternal nutrition counseling is associated with reduced stunting prevalence and improved feeding practices in early childhood: a post-program comparison study	Bangladesh, Asia	To assess the impact of interventions on the prevalence of stunting and feeding practices in less than 5 years old children	This is a cross-sectional study. The sampling technique is cluster random sampling. The measurement tool is a structured questionnaire analysis using logistic regression.	• Health workers can provide nutritional counseling to toddlers to reduce the incidence of stunting in toddlers. • Nutrition counseling for mothers of toddlers can provide knowledge about the importance of nutrition that must be fulfilled for the growth of toddlers in preventing stunting.
A2	(Oktaviana et al., 2022) Effectiveness of health education and infant therapeutic group therapy on babies aged 0-6 months to prevent stunting risk factors: Maternal depression	Indonesia, Asia	To determine the effect of health education and Group Therapy on infants on risk factors for stunting: postpartum depression of mothers in Indonesia	This is a quasi-experimental study. The sampling technique is purposive sampling using a questionnaire measuring tool. The statistical analysis is the Wilcoxon test.	• Promotion of mental health by conducting early detection of depression in postpartum mothers can improve the growth and development of babies in preventing stunting. • Health education on stunting, nutrition, parenting, depression in postpartum mothers, and infant Therapeutic Group Therapy in the Posyandu program can be used as promotive and early preventive measures against stunting.
A3	(Gope et al., 2019) Effects of participatory learning and action with women's groups, counseling through home visits and crèches on undernutrition among children under three years in eastern India: a quasi-experimental study	India, Asia	To evaluate the effects of two strategies to reduce stunting in children under 3 years namely monthly Participatory Learning and Action (PLA) meetings with women's groups followed by counseling through home visits and crèches for children 6 months to 3 years old combined with PLA meetings and home visits	This is a quasi-experimental study. The sampling technique is simple random sampling with a survey method. The statistical analysis is logistic regression.	• Participatory Learning Action meetings and home visits can reduce stunting among children under three years old in rural eastern India. • This intervention could be scaled up through a government program to strengthen home visits by health workers.
A4	(Gamboa et al., 2020) Interpersonal communication campaign promoting knowledge, attitude, intention, and consumption of iron folic acid tablets and iron-rich foods among pregnant Indonesian women	Indonesia, Asia	To find out how participation in IPC activities affects knowledge, attitudes/intentions, and consumption of IFA and ATIKA supplements in Indonesian pregnant women	This is a cross-sectional study. The sampling technique is cluster random sampling. The measurement tool is electronic questionnaires. The statistical analysis is with logistic regression.	• Education about increasing the consumption of iron-containing foods to prevent maternal anemia during pregnancy and resulting in high stunting rates in Indonesia is needed. • Education from health workers is needed to increase knowledge in improving attitudes/intentions or behavior in consuming folic acid and iron tablets to treat anemia in preventing stunting.
A5	(Eshete Tadesse et al., 2020) Priorities for the intervention of childhood stunting in northeastern Ethiopia: A matched case-control study	Ethiopia, Afrika	To identify the determinants of stunting using a case-control study in 6-59 months old children in Kemissie City, northeastern Ethiopia	This is a case-control study. The sampling technique is simple random sampling using a structured questionnaire with logistic regression statistical analysis.	• Nutrition for pregnant and lactating women, food diversity, exclusive breastfeeding, and lack of consumption of animal protein such as meat and diarrheal diseases are factors that cause stunting in 6-59 months old children. • Promotive and preventive

					actions to prevent stunting in children must include strengthening measures to provide adequate nutrition, providing counseling to parents about a variety of foods for children, counseling on exclusive breastfeeding and, preventing diarrheal diseases in 6-59 months old children.
A6	(Demilew, 2019) Food security is not the only solution to prevent under-nutrition among 6–59 months old children in Western Amhara region, Ethiopia	Ethiopia, Afrika	To assess malnutrition and its associated factors among 6-59 months old children in households with food security in the West Amhara Region, Ethiopia	This is a cross-sectional study. The sampling technique is simple random sampling using a questionnaire as a measurement tool, and logistic regression analysis as the statistical analysis.	• The prevalence of malnutrition is very high. A less diverse diet, litter scattered around the house, mothers who have no formal education, and mothers' poor hand-washing habits are predictors of stunting. • Eating less than four times a day, giving birth at home, not owning a television, getting sick within 2 weeks, and not having ANC visits during pregnancy are positively related to stunting. • Based on the causes of stunting, health workers and health educators can provide nutrition education about the frequency and variety of eating patterns, environmental hygiene, and personal hygiene by emphasizing especially on mothers who have no formal education.
A7	(Permatasari et al., 2021) The effect of nutrition and reproductive health education of pregnant women in Indonesia using quasi-experimental study	Indonesia, Asia	To determine the effect of nutrition education and reproductive health of pregnant women in Bogor District, Indonesia	This is a quasi-experimental study. The sampling technique is simple random sampling using a structured questionnaire with statistical analysis t-test and chi-square.	• Promotive and preventive efforts of health workers in providing education about nutrition to pregnant women and reproductive health are very effective in increasing the knowledge, attitudes, and behavior of pregnant women related to nutrition in pregnant women and reproductive health. • Knowledge, attitude, behavior, immunity, and parenting style regarding nutrition and reproductive health possessed by pregnant women will support reducing the prevalence of stunting in the first 1,000 days of life. • Health personnel need to adjust their educational methods in providing health promotion regarding increasing knowledge, attitudes, and behavior regarding nutrition and reproductive health with the local culture. • Health workers such as midwives, nutritionists, and other health practitioners need to carry out continuous monitoring and evaluation to ensure that nutrition and reproductive health education programs can run optimally

					until children are 2 years old.
A8	(Darsene et al., 2017) Magnitude and predictors of undernutrition among children aged six to fifty-nine months in Ethiopia: a cross-sectional study	Ethiopia, Afrika	To determine the prevalence and predictors of undernutrition in 6–59 months old children in Hawassa City	This is a cross-sectional study. The sampling technique is simple random sampling. The measurement tool is a questionnaire that uses statistical analysis and logistic regression.	• The prevalence of malnutrition, stunting, being underweight, and wasting in children under five is very common in the study area. • Improper feeding practices and diarrheal morbidity were found to be major risk factors for malnutrition. • Healthcare providers need to provide quality nutrition interventions and pregnant women need to be informed about nutrition during pregnancy to reduce the impact of malnutrition on their babies.
A9	(Rahmawati et al., 2021) Indonesian antenatal nutrition education: A qualitative study of healthcare professional views	Indonesia, Asia	To find out the views of health workers on nutrition education for pregnant women and the improvements needed to provide more effective antenatal nutrition education	This is a qualitative study. The sampling technique is snowball sampling using structured interviews with thematic analysis.	• Health workers play a central role in the delivery of education in Indonesia. This study highlights the importance of incorporating broad educational models into various strategies for delivering antenatal nutrition education, including optimizing the maternity class system at Posyandu. • Educational guides are needed by health workers in providing information about nutrition during pregnancy.
A10	(Nshimyiryo et al., 2019) Risk factors for stunting among children under five years: a cross-sectional population-based study in Rwanda using 2015 Demographic and Health Survey	Rwanda, Afrika	To identify risk factors for stunting in Rwanda	This is a cross-sectional study. The sampling technique was simple random sampling using a survey method with logistic regression analysis.	• The prevalence of stunting is high in Rwanda, with rates appearing to increase with age starting among infants who are given complementary foods (> 6 months) and through to early childhood. • Stunting can be reduced if integrated interventions are implemented to improve the health of children and families. • Efforts to eradicate poverty, improve maternal nutrition to prevent low birth weight babies, increase access to quality and timely antenatal care services and strengthen community-based nutrition activities to promote exclusive breastfeeding which can be given until the baby is 6 months and which can be continued until the baby is 2 years old with additional quality complementary food for ASI, will accelerate the reduction of stunting.

STEP 5. Article Quality Assessment with the Critical Appraisal Tool

A critical appraisal consists of a systematic and careful examination of studies to ensure they are credible, valid, and reliable (Wachholz et al., 2021). The Critical Appraisal Tool used in this scoping review uses the Mixed Methods Appraisal Tool (MMAT). The MMAT has different evaluation questions that allow it to accommodate multiple study designs (qualitative, randomized controlled trial, non-randomized, quantitative descriptive, and mixed methods) (Hong et al., 2019). Assessment of the quality of articles using MMAT is based on the following assessment criteria:

2: The questions are answered well and explained in detail.
1: The questions are answered but not explained in detail.
0: The questions are not answered and not explained in detail.

After being evaluated, the quality of articles then was classified based on the scale of grade as follows:

A : Very good (final score 14-12)
B : Good (final score 11-8)
C : Good enough (final score 7-4)
D : Less good (final score 3-0)

RESULT AND DISCUSSION

RESULT

Based on the selection of articles, there were 10 international articles from the database. Then the researchers compiled the following research characteristics:

Analysis Based on Article Characteristics

a. Characteristics of articles by country

The ten articles obtained come from various countries, namely one article from Bangladesh, four articles from Indonesia, one article from India, three articles from Ethiopia, and one article from Rwanda.

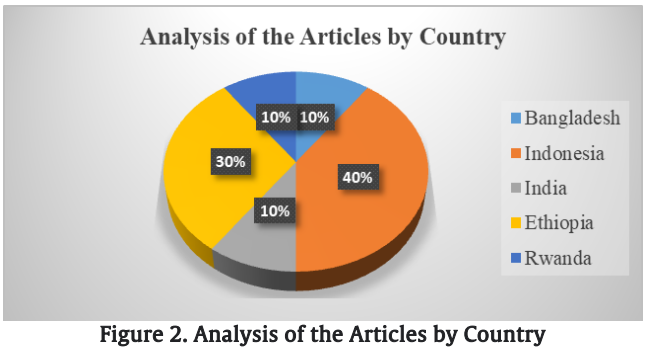


Figure 2. Analysis of the Articles by Country

b. Characteristics of articles based on the type of articles

Based on the ten articles obtained, there are five cross-sectional studies, three quasi-experimental studies, one case-control study, and one qualitative article.

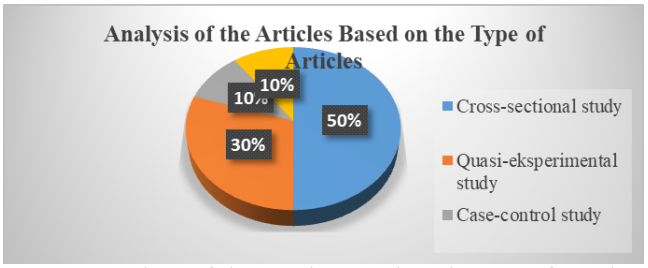


Figure 3. Analysis of the Articles Based on the Type of Articles

c. Characteristics of articles based on MMAT critical appraisal results

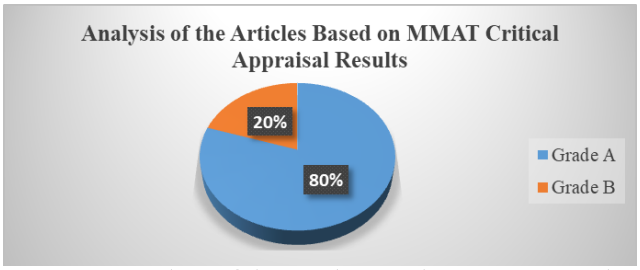


Figure 4. Analysis of the Articles Based on MMAT Critical Appraisal Results

Results of Critical Appraisal Quantitative Non-Randomized Studies

NO	ASSESSMENT ELEMENTS	A1	A2	A3	A4	A5	A6	A7	A8	A10
1	Was the research question clear?	2	2	2	2	2	2	2	2	2
2	Could the collected data answer the research question?	2	2	2	2	2	2	2	2	2
3	Did the participants represent the population?	2	2	2	2	2	2	2	2	2
4	Did the measurement fit the outcome and the intervention (exposure)?	2	2	2	1	1	1	2	2	1
5	Was there a complete result data?	2	1	2	2	2	2	2	2	2
6	Were the confounders considered in the design and analysis?	2	0	1	2	2	2	2	2	2
7	Was the intervention provided (exposure occurred) during the study period as intended?	2	2	2	1	1	1	2	1	0
	TOTAL SCORE/GRADE	14	11	13	12	12	12	14	13	11

Results of Critical Appraisal Qualitative Studies

NO	ASSESSMENT ELEMENTS	A9
1	Was the research question clear?	2
2	Could the collected data answer the research question?	2
3	Were the findings enough from the data?	2
4	Are the qualitative data collection methods sufficient to answer the research questions?	2
5	Were the findings enough from the data?	2
6	Is the interpretation of the results sufficiently supported by the data?	2
7	Is there coherence between the qualitative data sources, collection, analysis, and interpretation?	2
	TOTAL SCORE/GRADE	14

Analysis of Articles Based on Themes

Table 4.
Analysis and Mapping of Research Article Themes

No	Theme	Sub Theme	Research Articles
1	Promotive and Preventive Efforts for Health Workers in Pregnant Women	Nutrition Counseling for Pregnant Women and Reproductive Health	A7, A8
		Administration of Folic Acid and Iron Tablets	A4
		Optimizing Classes for Pregnant Women and Posyandu	A9
2	Promotive and Preventive Efforts for Health Workers in Postpartum and Breastfeeding Mothers	Early Detection of Depression in Postpartum Mothers	A2
		Exclusive Breastfeeding Counseling	A5, A10
3	Promotive and Preventive Efforts for Health Workers in Toddlers	Toddler Nutrition Counseling	A1, A6
		Home Visits	A3
4	Influential Factors	Supporting Factors	A1, A9
		Obstacle Factors	A5, A6, A7, A9

DISCUSSION

Promotive and Preventive Efforts for Health Workers in Pregnant Women

Article [7] explained that health workers can provide counseling on nutrition and reproductive health to pregnant women which is effective in increasing the knowledge, attitudes, and behavior of pregnant women regarding nutrition and reproductive health during pregnancy (Permatasari et al., 2021). Article [8] shows that healthcare providers need to provide quality nutrition interventions. Pregnant women should be educated about nutrition during pregnancy to reduce the impact of malnutrition on their babies (Darsene et al., 2017). Nutrition counseling is very necessary for pregnant women since the first trimester because it is necessary to increase the intake of energy, protein, and micronutrients before the second trimester of pregnancy to achieve optimal fetal growth (Dhaded et al., 2020). Health promotion and education efforts that focus on increasing basic knowledge about stunting, its causes, and its impact on health since pregnancy need to be carried out (Osaki et al., 2019).

Article [4] states that education from health workers to pregnant women is needed to increase knowledge in improving attitudes, intentions, and behavior in consuming folic acid and iron tablets to treat anemia in preventing stunting (Gamboa et al., 2020). Poor maternal nutritional status can contribute to impaired fetal growth and early postpartum, so nutritional supplements are needed during pregnancy (Hambidge & Krebs, 2018). Increasing the consumption of iron during pregnancy in preventing anemia is a health program for preventing stunting (Matias et al., 2018). Promotive and preventive efforts of health workers in increasing the consumption of iron and folic acid during pregnancy are urgently needed to prevent anemia in pregnancy which can have an impact on stunting in childhood.

It is explained in the article [9] that health workers play a central role in providing education so a broad educational model is needed in various strategies for providing antenatal nutrition education, including optimizing classes for pregnant women and Posyandu (Rahmawati et al., 2021). Health workers and Posyandu cadres can work together in utilizing pregnant women and Posyandu classes in improving community health in reducing stunting (Tumbelaka et al., 2018).

Promotive and Preventive Efforts for Health Workers in Postpartum and Breastfeeding Mothers

Article [2] states that mental health promotion by early detection of depression in postpartum mothers can improve the growth and development of infants in preventing stunting (Oktaviana et al., 2022). Depression in postpartum mothers affects emotional health and psychosocial stimulation so it interferes with the growth and development of children and has an impact on the incidence of stunting (Wemakor & Mensah, 2016).

It is stated in the article [5] that promotive and preventive actions to prevent stunting in children must include strengthening the act of providing essential nutrition, providing counseling to parents about prioritizing food for children, and promoting exclusive breastfeeding (Eshete Tadesse et al., 2020). In article [10], Exclusive breastfeeding for up to 6 months and continuing breastfeeding for up to 24 months with the addition of quality complementary food will accelerate the reduction of stunting (Nshimyiryo et al., 2019). One of the causes of stunting is exclusive breastfeeding which is not optimal, therefore mothers or caregivers must be given education about exclusive breastfeeding (Ekholuenetale et al., 2022). One study stated that stunting was almost 6 times more common in children of mothers who had not exclusively breastfed their children in the previous six months compared to children of mothers who had not exclusively breastfed (Tesfaye & Egata, 2022).

Exclusive breastfeeding can provide babies with antibodies that protect against common illnesses such as diarrhea and pneumonia (WHO, 2021). Breastfeeding education for breastfeeding mothers is urgently needed, which can be provided by health workers, lactation consultants, and peers, and can be provided at health centers or through home visits, both face-to-face and remotely (Fore & Ghebreyesus, 2020). Breastfeeding mothers need the support of health workers such as midwives, nurses, and doctors to ensure optimal exclusive breastfeeding. Exclusive breastfeeding is one of the efforts to reduce stunting.

The support provided by health workers is one of the factors related to exclusive breastfeeding to breastfeeding mothers. Breastfeeding support provided by health workers can increase self-confidence and satisfaction for breastfeeding mothers, as well as increase mothers' knowledge about giving and the importance of exclusive breastfeeding (Fitriani et al., 2021). Exclusive breastfeeding education and breastfeeding techniques are a form of

support provided by health workers, where breastfeeding mothers need it exclusively for breastfeeding success, therefore collaboration between health workers is needed to support breastfeeding mothers (Hanifah & Kartini, 2022).

Promotive and Preventive Efforts for Health Workers in Toddlers

In article [1], maternal nutritional counseling is effective in reducing childhood stunting along with improving optimal feeding practices in under 5 years old children (Mistry et al., 2019). Article [6] states that health workers and health educators can provide nutrition education about the frequency and diversity of diets, and environmental and personal hygiene by emphasizing especially on mothers who have no formal education (Demilew, 2019). The research states that there was a significant relationship between minimal dietary diversity and stunting. The likelihood of stunting was almost 7 times higher among children who consumed a less diverse diet compared to their peers (Tesfaye & Egata, 2022). Health workers can be trained to advise mothers on optimal child-feeding practices which can help reduce the prevalence of stunting.

Article [3] states that home visits by health workers can reduce stunting in toddlers (Gope et al., 2019). Intensive nutrition counseling and home visits by health workers can be effective in changing eating behavior, thereby reducing the prevalence of stunting (Galasso et al., 2019). Home visits can be carried out by health workers together with cadres in monitoring the growth, development, nutritional intake, and food diversity of toddlers (Siswati et al., 2022).

Influential Factors

Supporting factors are stated in the article [1]. The existence of government policies in monitoring programs that are effective in education programs for the community shows that nutrition counseling by health workers can effectively motivate mothers to ensure proper feeding practices for toddlers (Mistry et al., 2019). Supporting factors are stated in the article [9]. Health workers have a central role in providing antenatal nutrition education. Nutritionists, midwives, and obstetricians have an important role in providing evidence-based nutrition education because they are trusted and often interact with pregnant women (Rahmawati et al., 2021).

Nutrition education aimed at mothers to increase exclusive breastfeeding, healthy complementary food, immunization of infants and children, and treatment of diarrhea in infants is programmed and advocated using a multilevel approach involving health workers (Sartika et al., 2021). In addition, there is support from the government which has implemented a nutrition program for children and provides nutritional food supplement packages containing protein, vitamins, and minerals every day for every child aged 6-24 months and provides education on child nutrition (Huangfu et al., 2022)

The inhibiting factors are explained in the article [7]. Providing education about nutrition and reproductive health to pregnant women, continuous monitoring and evaluation by health workers, such as midwives, nutritionists, health workers, or other health practitioners, is necessary to ensure that the nutrition education program and reproductive health runs optimally and continues until the child is 2 years old (Permatasari et al., 2021). Article [9] describes the majority of health workers reporting barriers in providing nutrition education, including a lack of time, guidelines, and training. So health workers identified some possible elements to improve antenatal nutrition education, such as developing guidelines, quality training, stronger collaboration, and digital education (Rahmawati et al., 2021).

Midwives have an important role in providing nutrition counseling to pregnant women in the context of health promotion. But midwives need help, support, and guidance to provide holistic nutritional advice that helps women achieve healthy pregnancies. A collaborative approach between midwifery organizations, nutritionists, and healthcare facilities could provide an effective way (Arrish et al., 2017). A strategy is needed to reduce stunting, including nutrition counseling and intensive home visits by health workers (Galasso et al., 2019).

STRENGTHS AND WEAKNESSES OF THE STUDY

Based on the results of the study, the strengths and weaknesses of this study were obtained. The strength of this study was the participation of the authors as a whole in this study, starting from determining the method, and selecting articles up to the critical assessment. As stated by (Pollock et al., 2021) that the strength of the research is the participation of researchers in the process of compiling the research as a whole. Meanwhile, the weakness in this research is based on article selection. There are 2 articles on critical appraisal results with less-than-perfect values. One of the articles is cross-sectional, with the lowest level of confidence, so it has implications for bias, and the article does not describe confounding factors and strategies for managing them.

CONCLUSION AND SUGGESTIONS

In reducing stunting, promotive and preventive efforts from health workers are needed, namely preventing anemia in pregnancy, nutritional counseling, exclusive breastfeeding, and feeding practices for toddlers. This is done to improve the ability of families to support the health needs, growth, and development of children because the family is an important part that can affect individual health status. The government can improve health and nutrition service programs at the community level by increasing supervision of promotive and preventive efforts to reduce stunting. The government can provide assistance and support to health workers by developing educational guidelines, quality training, stronger collaboration, and digital education to reduce stunting.

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Conflict of Interest

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