

## LITERATURE REVIEW: EFFECTIVENESS OF HEALTH PROMOTION MEDIA ON THE LEVEL OF MATERNAL KNOWLEDGE ABOUT STUNTING

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### Abstract

Stunting is a condition of malnutrition that occurs when a child's growth and development is disrupted due to chronic malnutrition, frequent infections, and/or inadequate psychosocial stimulation. This results in children being shorter than expected for their age, with long-term consequences for their physical and cognitive development, as well as their future health and economic prospects. Maternal knowledge about stunting is considered very important in the prevention and control of stunting in children. One of the influencing factors is maternal knowledge about stunting, so efforts need to be made to increase maternal knowledge through health promotion media. *This Literature Review* aims to collect and evaluate the latest literature related to the effectiveness of health promotion media on the level of maternal knowledge about stunting. The literature study was conducted using three scientific publication search engines, namely Pubmed and Google Scholar. From the search results, 13 articles were selected published between 2019-2023 and can be accessed for free that health promotion media are considered to have good effectiveness in increasing maternal knowledge about stunting, media that can be used in providing health promotion about stunting are *Leaflets*, *Booklets*, Brochures, cards and Video while video media is considered more effective than other media in increasing maternal knowledge about stunting.

**Keywords:** Growth Disorders, Mother's Knowledge

### INTRODUCTION

Stunting is malnutrition that occurs in children under 5 years old due to chronic malnutrition so that children are too short for their age. Malnutrition occurs from the baby in the womb to the early days after the baby is born. However, stunting conditions only appear after the baby is 2 years old. Stunting is measured as nutritional status by taking into account the height or length, age, and sex of toddlers.

Stunting can be measured by a Z-index score of Height according to Age (TB/U). A person is said to be stunted if his Z-index TB/U score is below -2 SD (standard deviation). Stunting remains a problem worldwide, especially in low- and middle-income countries. It is characterized by the failure of the child to grow properly.

Most causes of stunting are caused by lack of nutritional intake and are also influenced by various other factors such as frequent infections, lack of psychosocial stimulation, and unhealthy parenting practices. These factors can affect a child's quality of life, academic achievement, and ability to take advantage of future opportunities (Black et al., 2013).

Prevention and treatment of stunting must start early, especially in the first 1,000 days of a child's life, namely from pregnancy to the age of 2 years. During this period, adequate nutrient intake and healthy parenting practices are essential to ensure optimal child growth and development (Victora et al., 2016).

Mothers' knowledge of nutrition and healthy practices in providing food and parenting is essential in preventing stunting. Mothers with good knowledge of nutrition and healthy practices tend to have healthier children with fewer stunting cases (Asfaw et al., 2020). One of the efforts to increase maternal knowledge can be done through health promotion that focuses on increasing maternal knowledge about nutrition and healthy practices that can be an effective strategy in preventing and reducing stunting in children.

Health promotion media is one form of intervention used to increase knowledge, attitudes, and healthy behaviors in the community. One of the health topics that is often discussed in health promotion media is stunting, especially in mothers and children. Stunting is a global health problem that affects millions of children around the world. As part of efforts to prevent and overcome stunting, health promotion media can be used to increase mothers' knowledge about stunting.

Some research results show that health promotion media can increase maternal knowledge about stunting. One study in Ethiopia found that mothers who get information about stunting through health promotion media have better knowledge about stunting compared to mothers who do not get this information (Abate et al., 2020). Another study conducted in Indonesia, found that health promotion media can increase maternal knowledge about stunting (Nugraheni et al., 2019).

Stunting in Indonesia is still a health problem that needs attention. Riskesdas data in 2018 shows that the prevalence of stunting in children in Indonesia is still quite high, which is around 27.6% (Ministry of Health of the Republic of Indonesia, 2018). Therefore, health promotion media can be one of the effective strategies in increasing maternal knowledge about stunting and reducing the prevalence of stunting in Indonesia.

This literature review aims to review literature related to the effectiveness of health promotion media in increasing maternal knowledge about stunting. The research will involve thirteen articles found through searches on PubMed and Google Scholar from 2019-2023. This research is expected to provide deeper insights into how health promotion media can be used to increase maternal knowledge about stunting.

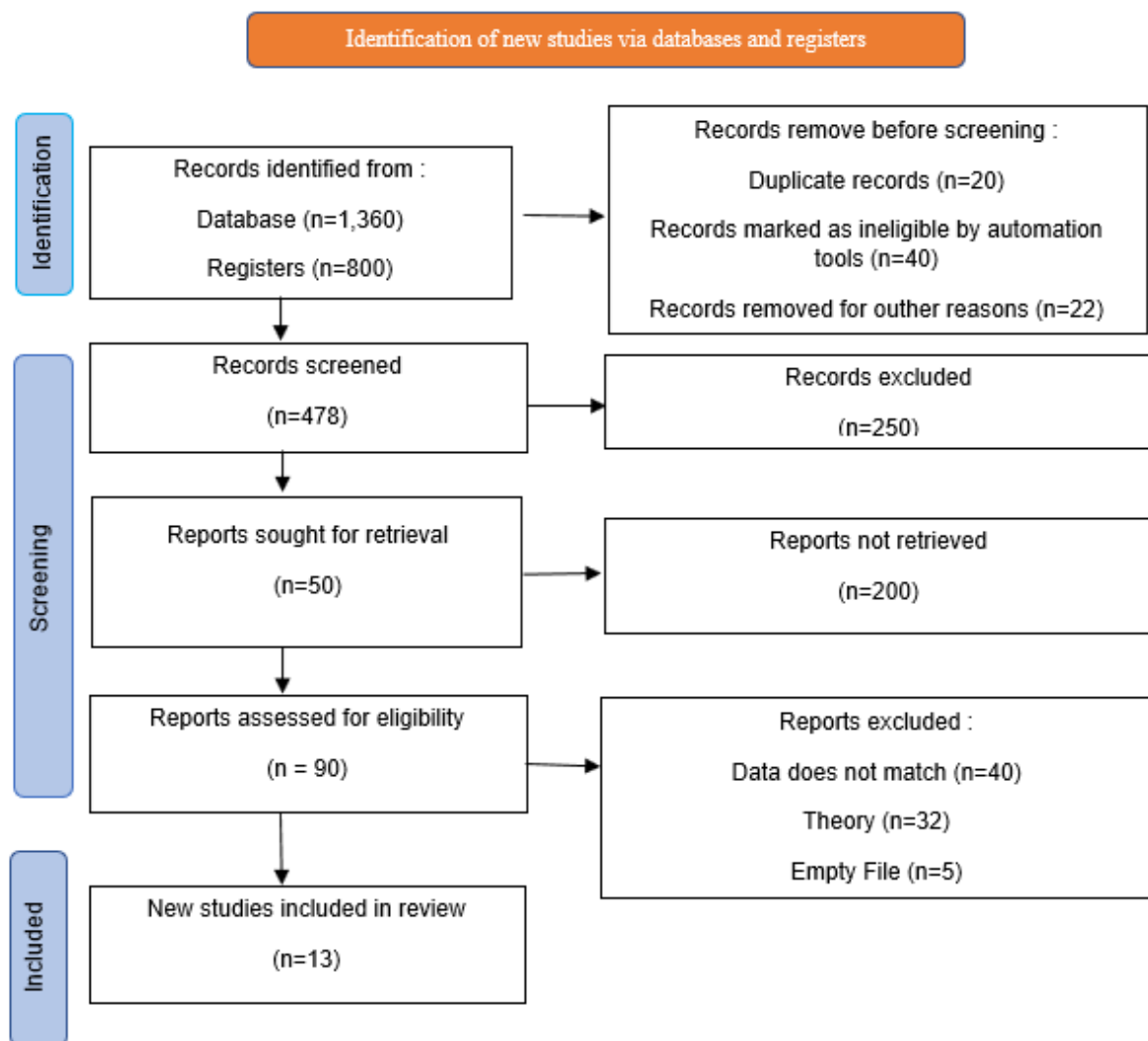
## **METHOD**

The method used in this writing is a literature review which is a research technique carried out to collect, evaluate, and analyze literature related to the research topic. Literature studies are conducted using two scientific publication search engines, namely PubMed and Google Scholar. From the search results, 13 articles were selected that were published between 2019-2023 and can be accessed for free, with the following inclusion criteria:

- a. Article published in Indonesian and English
- b. Original Articles published in the last 5 years, namely 2019-2023 and can be accessed in full text for free
- c. articles that discuss the effectiveness of health promotion using media such as Videos, Audio Visuals, Leaflets, Posters etc. that show results related to mothers' knowledge about stunting.

And the exclusive criteria of this study are as follows:

- a. Articles that only discuss stunting in children.
- b. An article that only discusses mothers' knowledge of stunting.
- c. Articles published more than 5 years ago



**Figure 1. Article Selection Flow Chart**

The articles used have been selected with PRISMA-Flowchart, the database search was obtained on *PubMed* and *Google Scholar* which were obtained for free with the keywords Health Promotion, Counseling, and Maternal Knowledge about stunting.

## RESULT

Article discussion refers to 13 (thirteen) articles that meet the inclusion criteria. Journal articles that are discussed in writing Literature Review articles are presented in the following table.

Writer	Research Title	Purpose	Method	Subject	Result
(Muslimah et al., 2022)	The Effect of Stop Stunting Video on Increasing Knowledge Pregnant Women about Stunting Prevention	Aims to identify the effectiveness of the use of stop stunting videos on the level of knowledge of mothers about stunting	Quasi-eksperimen	124 pregnant women in Kaliwiro Health Center area and 85 pregnant women in Wadaslintang 1 Health Center	There was a significant increase in knowledge of pregnant women after being given education for stunting prevention in the experimental group. The control group of video media application in health promotion was more effective (77.41%) than using leaflet media (23.3%) To increase the knowledge of pregnant women on stunting prevention.
(Lusiani et al., 2021)	The effectiveness of health education using booklet media on the level of knowledge of mothers about stunting	Identify the effect of health education using booklet media on the level of knowledge of mothers under five about stunting.	Pre-experiments and analytics	Mothers of 30 toddlers	There was an increase in maternal knowledge that was dominant in a positive direction, namely as many as 24 respondents (75%) and 8 respondents (25%) did not experience an increase or decrease in the level of knowledge and no respondents experienced a decrease
(Nuraini et al., 2021)	Effect of Health Education Video on Knowledge about Stunting among Women in Childbearing Age	Aims to explore the influence of health education using video media on knowledge about stunting among women of childbearing age	Quantitative experimental with one group pretest-posttest design	211 women of childbearing age in the working area of Puskesmas (Community Health Center, Puskesmas) Jatinangor, West Java, Indonesia	There is an increase in knowledge. In total, 211 women who were given educational videos about stunting were shown to significantly increase knowledge about stunting ( $p = 0.000$ , $r$ value = 0.690)
Kusumawati, Septiyaningsih & Susilowati (2022)	The Effectiveness of Smart Cards to Prevent Stunting Pregnant Women's Knowledge About Stunting	Aims to determine the effectiveness of smart cards to prevent stunting to increase the knowledge of pregnant women about stunting	Quasi-experiment with the design of one group pre-post test	30 pregnant women who participated in a pregnant women class in Cilacap (June-September 2021)	Smart cards are effective in increasing the knowledge of pregnant women ( $p$ -value = 0.001) with an increase in the average knowledge score of respondents from 23.34 to 27.00

Pratiwi & Pratiwi (2022)	The Effect of Stunting Education Using Audiovisual Methods and Booklets on the Knowledge of Mothers with Stunting Children	Aims to determine the effect of providing education with audiovisual methods and booklets on mothers' knowledge about stunting in Jekani Village, Mondokan District Sragen	to the <i>Non equivalent control group design</i>	60 mothers with stunted children in Jekani Village, Mondokan Sragen District	There was a difference in mothers' knowledge about stunting after being given counseling with audiovisual media (p-value = 0.000) and booklet (p-value = 0.000)
Ginting dkk., (2022)	The Effect of Health Counseling with Audio Visual Media on Changes in Knowledge, Attitudes and Practices of Mothers in Stunting Prevention in Doloksanggul District, Humbang Regency Hasundutan Year 2021	Aims to know and analyze the influence of health counseling with audio-visual media on changes in knowledge, attitudes and practices of mothers in <i>stunting</i> prevention in Doloksanggul District, Humbang Regency in 2021	<i>Quasi eksperiment</i>	35 Couples of childbearing age (mothers of childbearing age) in Doloksanggul sub-district	Audiovisual methods can increase maternal knowledge in stunting prevention (p = 0.000)
Masitah (2022)	The Effect of Nutrition Education on Maternal Knowledge Related to Stunting, Exclusive Breastfeeding and Complementary Food	Aims to determine the influence of nutrition education on the knowledge of mothers with stunting, exclusive breastfeeding and complementary foods	to the <i>Quasi Experiment</i> with one group pre-test and post-test design	Pregnant women and mothers under five aged 0-59 months in Seberang Ulu II Sub-district, Kelurahan 13 Ulu RT 19 with a total of 30 people	There is an influence of maternal nutrition education with a combination of poster and flyer methods on maternal knowledge related to stunting, exclusive breastfeeding and complementary foods (p-value = 0.000)
Uliyanti & Anggraini (2022)	Stunting Prevention Through Nutrition Counseling to Mothers Using Flipchart in Kayong Continent District	Aims to prevent stunting in Kayong Continent sub-district through nutrition education to mothers through flip chart media	<i>Quasy experimental study</i>	65 Mothers with toddlers	Flipchart media can increase maternal nutrition knowledge (p-value = 0.000)

Siagian, Herlina & Qomariah (2022)	Media Leaflet Counseling on Mother's Knowledge About 1000HPK in Rokan Hilir	Aims to determine the effect of counseling with leaflet media on knowledge about 1000 HPK	to the effect of with leaflet media on knowledge about	<i>Quasi Experiment with pre and posttest design</i>	Cadre mothers, infants and toddlers totaled 31 people	There is an effect of providing counseling with leaflet media on increasing the knowledge of mothers of toddlers and cadres about the first 1000 days of life (p-value = 0.000)
Kurniatin & Zakiyya (2022)	Health Education with Video Media and BookletAssistance for the First 1000 Days of Life on the Level of Knowledge and Attitudes of Pregnant Women in Efforts to Prevent Stunting	Aims to analyze the effect of health education with video media and 1000 HPK assistance booklets on the level of knowledge and attitudes of mothers	to analyze the effect of health education with video media and 1000 HPK assistance booklets on the level of knowledge and attitudes of	<i>Quasi experiment with an approach pre test andpost test nonequivalent control group</i>	87 pregnant women in Sambas Health Center Area	There are differences in knowledge of pregnant women before and after being educated with video media (p-value = 0.000), booklet media (p-value = 0.002) and a combination of video media and booklet (p-value = 0.000)
Harleni, Yanti & Diana (2022)	The Influence of Health Education with the Brainstorming Booklet and Leaflet Method on the Knowledge and Attitudes of Stunting Toddler Mothers at the Malalak Health Centerin 2021	Aims to determine the influence of health education with the brainstorming method of booklets and leaflets on the knowledge and attitudes of stunting mothers in the malalak health center	to determine the influence of health education with the brainstorming method of booklets and leaflets on the knowledge and attitudes of stunting mothers in the malalak health center	<i>Quasi experiment) with pretest-posttest design</i>	All mothers who have balitastunting in Malalak Village are 112 people	There are differences in maternal knowledge before and after being given health education with media booklet (p-value = 0.000) media leaflet (p-value = 0.000)
Melati & Afifah (2021)	Nutrition Education for Stunting PreventionBased on Whatsapp Group to Increase Knowledge and Attitudes of Pregnant Women	Aims to determine the effect of stunting prevention nutrition education through WhatsAppgroup as a tool in increasing nutritional knowledge and attitudes of pregnant women	to determine the effect of stunting prevention nutrition education through WhatsAppgroup as a tool in increasing nutritional knowledge and attitudes of pregnant women	<i>True Eksperimental with pretest posttest research design with control grub</i>	19 out of 30 pregnant women in Kuripan Sari village, Mojokerto	The use of Whatsapp groups has an influence in increasing the knowledge of pregnant women about stunting (pvalue = 0.000)
Sutrisno & Rendi Ariyanto Sinanto (2022)	The Effectiveness of Using Turning Sheets as a Health Promotion Media : A Systematic Review	Aims to determine the effectiveness and effect of using the turning sheet as a	to determine the effectiveness and effect of using the turning sheet as a	<i>Systematic review</i>	10 articles out of 32 articles according to the specified keywords	Health promotion media in the form of adequate feedback sheets for health learning and education to the public on the health themes studied. There is an

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health promotion  
medium

influence of the use of  
worksheets as a medium of  
health promotion on  
changes in people's  
knowledge, attitudes, and  
behavior about nutrition  
and other health problems.

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## DISCUSSION

Based on the results of the study above, there is an increase in maternal knowledge about stunting after being given stunting information through Health Promotion media so that health promotion media is effective in increasing maternal knowledge about stunting.

According to researchn (Muslimah et al., 2022) the average value of subject knowledge before getting education in the experimental group was 17.23 and in the control group was 16.85. While the p-value of 0.510 or greater than 0.05 means that there is no significant difference in maternal knowledge about stunting prevention in the experimental group and control group pretests. Similarly, this study found that respondents with junior high school education level and below were 87 people (63.5%) from 137 respondents. This is in accordance with the results of the study before getting education, the level of knowledge of respondents showed a significance value of t test on the pretest of  $0.510 > 0.05$  which means that this shows the knowledge of mothers before being educated in the control group and experiments classified as less and the average value of the experimental group was 17.23 and 16.85 in the control group.

In this study, the average knowledge of pregnant women after getting education in the experimental group was 23.33 and in the control group was 18.10. While the p-value of  $0.000 < 0.05$  means that there is a significant difference in maternal knowledge about stunting prevention.

Providing information to mothers who have toddlers about stunting there was a dominant increase in knowledge in a positive direction, namely as many as 24 respondents (75%) and 8 respondents, (25%) did not experience an increase or decrease in the level of knowledge and no respondents experienced a decrease (Lusiani et al., 2021).

This is in line with research conducted by Kurniawan and Fitriani (2019), print media such as leaflets, flipcharts, and small books are effectively used to increase maternal knowledge about stunting. This is evident from the increase in maternal knowledge after receiving counseling through the print media.

Audiovisual or Video media compared to leaflets, brochures, poster, booklets and cards have more effectiveness to increase maternal knowledge about stunting, this is contained in Muslimah research., et al, 2022 That video media in Health Promotion is more effective (77.41%) than Using leaflet media (23.3%) to increase pregnant women's knowledge of stunting prevention and research that Sriwayanti 2022 stated that the results of the study showed a significant difference between mothers' knowledge about stunting prevention through health counseling with web-based audiovisual media and print media, with  $p = 0.009$ . In this case, health promotion media in the form of videos or interactive presentations can be an effective alternative to increase maternal knowledge about stunting. For example, research conducted

by Syafitri et al. (2021) shows that interactive presentations through smartphone applications are effective in increasing maternal knowledge about stunting.

Video or audiovisual media can depict a more real and clear picture of the topic discussed. A well-made educational video can illustrate the real situation and provide a clear example of the right ways to maintain health. This can help the audience to better understand and practice the health information conveyed.

One study that supports this statement is a study conducted by Egbuonu, Umeh, and Emenyonu in 2016, where they found that the use of video media in health counseling has a significant effect on increasing health knowledge and attitudes in the community.

The effectiveness of health promotion media depends not only on the type of media used, but also on the quality of the information delivered and the way the information is delivered. According to research conducted by Nisa and Sholikhah (2021), interactive and participatory information delivery is more effective in increasing maternal knowledge about stunting, compared to delivering information that is only informative.

## **CONCLUSION**

1. Health promotion media is considered to have good effectiveness in increasing maternal knowledge about stunting.
2. Media that can be used in providing health promotion about stunting are print media in the form of *Flipcharts*, *Leaflets*, *Booklets*, *Flayers*, *Cards*, *Brochures*, and *Posters*. Electronic media, namely through *Video* and *Whatsapp* social media.
3. Video media is considered more effective than other media in increasing maternal knowledge about stunting.

## **SUGGESTION**

It is expected to provide education for the success of promoting health to mothers about stunting because interactive and participatory information can increase the effectiveness of providing health information about stunting.



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