



**THE EFFECT OF AUDIOVISUAL AND BOOKLET EDUCATION ON
MOTHERS' BEHAVIOR IN PREVENTING STUNTING**

Farida Renhoran*, Nyimas Heny Purwati, Anita

Faculty of Nursing, Muhammadiyah University of Jakarta, Jl. K.H. Ahmad Dahlan, Cireundeu, Ciputat Timur,
Tangerang Selatan, Banten 15419, Indonesia

[*renhoranfarida75@gmail.com](mailto:renhoranfarida75@gmail.com)

ABSTRACT

Stunting describes a shorter or stunted body condition resulting from a lack of micro and macro nutrients over a long period of time. Stunting in children will have both short and long term impacts. Efforts that can be made to optimize maternal behavior in preventing stunting in children can be done through increasing parental knowledge, positive parental attitudes and good abilities in preventing stunting. This research aims to determine the effect of audio-visual and booklet-based education on mothers' behavior (knowledge, attitudes and psychomotor skills) in preventing stunting in children. This research is an experimental study with a control group. Data were analyzed using independent t-tests. The population in this study were mothers who had toddlers at the Debut Community Health Center, namely 123 people. By using the G*Power application, a sample size of 40 people was obtained. The research results showed differences in the average knowledge (p-value=0.000), attitude (p-value=0.000) and psychomotor (p-value=0.000) of mothers in the audio-visual education group with booklets. Providing audiovisual education has a greater influence on increasing mothers' knowledge, attitudes and psychomotor skills regarding stunting prevention at the Debut Community Health Center.

Keywords: audiovisual; attitude; booklet; knowledge; psychomotor

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INTRODUCTION

Stunting refers to a condition where a child's body is shorter or stunted due to long-term deficiencies in both micro and macronutrients. Additionally, it can be triggered by maternal malnutrition or undernutrition during pregnancy (Andrews-Trevino et al., 2021; Andrews et al., 2018). Stunting in children has both short-term and long-term effects. In the short term, it can lead to cognitive impairment, slow bone growth, muscular atrophy, anemia, digestive issues, recurrent infections, and thinness. In the long term, it can result in reduced work capacity, lower income, and an increased risk of non-communicable diseases such as hypertension and obesity (Soliman et al., 2021; Hanaa et al., 2024).

The United Nations Children's Fund (UNICEF) reported that in 2018, 1 in 3 children under the age of two globally experienced stunting, while 1 in 10 was underweight. Approximately 80% of stunted children were found in developing countries across Asia and Africa (Unicef, 2023). According to WHO data (2021), in 2020, an estimated 149 million children under the age of 5 globally suffered from stunting (being too short for their age), 45 million were considered too thin for their height, and around 45% of deaths among children under the age of 5 were linked to malnutrition. Most cases of stunting occur in low- and middle-income countries, driven by a lack of awareness and inability to meet children's balanced nutritional needs (Soliman et al., 2024).

Indonesia ranks third in the Southeast Asia Region (SEAR) for stunting prevalence. Between 2005 and 2017, the average stunting prevalence in Indonesia was 36.4%. In 2018, Indonesia ranked 6th globally with a prevalence rate of 36%, and 34th globally, compared to the global average of 21.9%. By 2021, Indonesia's stunting prevalence placed it 108th out of 132 countries (BKKBN, 2021). Based on the 2022 National Nutrition Status Survey (SSGI), stunting prevalence in Indonesia reached 21.6%, a 2.8-point decrease from the previous year's 24.4%. However, this number remains high, considering the 2024 target prevalence is 14%, with WHO's standard being below 20% (Kemenkes RI, 2023).

Efforts to optimize maternal behavior in preventing stunting in children can be achieved by increasing parents' knowledge of breastfeeding practices, promoting healthy and clean living behaviors, and ensuring balanced nutrition (Nurjanah et al., 2022). Research by Sari & Sartika (2021) highlights that a strong program to support pregnant women and monitor children's height from birth can prevent intergenerational stunting through health promotion aimed at increasing parental knowledge. The Indonesian government has implemented various measures to prevent stunting in children, such as the Supplementary Feeding Program (PMT) for pregnant women and children under two years old, providing nutrient-rich foods like milk, cereals, or iron- and vitamin-rich meals. Nutritional education is also given to pregnant and breastfeeding women to enhance understanding of nutritional needs during pregnancy and breastfeeding. Additionally, programs for clean water and sanitation provision, as well as regular monitoring of child growth, are conducted to detect stunting risks early and provide timely interventions (Helmyati et al., 2021; Hasanah & Susanti, 2018; Arisjulyanto & Puspita, 2024).

The high prevalence of stunting is primarily due to low socioeconomic status, particularly in marginal areas, and suboptimal preventive behaviors. In Southeast Maluku, the government addresses stunting through a multisectoral approach, integrating prevention efforts across health, nutrition, agriculture, and social sectors to achieve more effective and sustainable outcomes. Research by Salamung et al., (2019) identifies numerous factors influencing stunting prevention behavior, including economic status, knowledge, attitudes, family support, and health worker and community volunteer support. Additionally Mutingah & Rokhaidah (2021) suggest that while attitudes and knowledge significantly affect stunting prevention behavior, other factors such as economic status and income may also play a role. The purpose of this study is to assess the effect of audiovisual and booklet education on mothers' behavior in preventing stunting

METHOD

This research is an experimental study with a control group, conducted at the Debut Community Health Center (Puskesmas Debut). The population consisted of 123 individuals, with 40 respondents selected as the sample. The instruments used in this study included a demographic data questionnaire, a questionnaire to measure mothers' knowledge and attitudes, and an observation sheet to assess mothers' psychomotor skills. The questionnaires used in this study have undergone validity and reliability testing, with a Cronbach's Alpha value of 0.902 for the knowledge questionnaire and 0.917 for the attitude questionnaire, both of which are ≥ 0.7 . This indicates that the questionnaires are valid and reliable, and can be used in this study. The study began with an educational session using audiovisual materials for mothers in Wain Village and booklet-based education for mothers in Debut Village. The mothers then participated in a three-week accompaniment program consisting of an intensive phase (first week), a reinforcement phase (second week), and an independent phase (third week). On the 20th day, mothers from both groups participated in a cooking simulation. At

the end of the session, their knowledge, attitudes, and psychomotor skills were reassessed. Bivariate analysis in this study was conducted using an independent t-test, comparing the effects between the audiovisual education group and the booklet education group. The t-test was used if the data followed a normal distribution. If the data were not normally distributed, the Wilcoxon test was applied

RESULT

Table 1.
Distribution of Respondents Based on Education, Occupation, and Gender (n=40)

Characteristic	Audio visual		Booklet	
	f	%	f	%
Uducation				
Elementary school	18	90	18	90
junior high school	2	10	2	10
Working				
Housewife	15	75	14	70
Fisherman	5	25	6	30
Sex				
Female	12	60	15	75
Male	8	40	5	25

Based on Table 1, the majority of respondents in the booklet group had an elementary school education, with 18 mothers (90%) falling into this category. Similarly, in the audiovisual group, the majority of mothers also had an elementary school education, accounting for 18 respondents (90%). Most mothers in the audiovisual group were unemployed, with 15 mothers (75%), while in the booklet group, 14 mothers (70%) were unemployed. The majority of children in both the audiovisual and booklet groups were female, with 12 children (60%) in the audiovisual group and 15 children (75%) in the booklet group.

Table 2.
Distribution of Characteristics and Homogeneity Test of Respondents Based on Mother's Age, Child's Age, and Child's Height (n=40)

Variable	Mean	SD	Min-Max	P-Value
Audio visual				
Age Mother	28,5	5,889	23-43	0,390
Age Chil	16,8	4,514	8-23	0,323
Height	76,5	8,152	63-90	0,521
Booklet				
Age Mother	29,6	5,345	22-47	0,390
Age Chil	12,45	5,698	2-23	0,323
Height	73,15	9,670	53-90	0,521

Table 2 shows that the average age of mothers in the audiovisual group was 28.5 years, with a standard deviation of 5.889. In the booklet group, the average age of mothers was 29.6 years, with a standard deviation of 5.345. The analysis results indicate that the average age of children in the audiovisual group was 16.8 months, with a standard deviation of 4.514, while in the booklet group, the average age of children was 12.45 months, with a standard deviation of 5.698. The average height of children in the audiovisual group was 76.5 cm, with a standard deviation of 8.152, and in the booklet group, the average height was 73.15 cm, with a standard deviation of 9.670. The homogeneity test results for respondent characteristics, including mothers' age, children's age, and children's height, using the Levene Test, showed a significance value greater than 0.05, indicating that the variables in both groups were homogeneous.

Table 3.

Differences in Average Knowledge, Attitudes, and Psychomotor Skills of Mothers on Stunting Prevention Before and After the Intervention (n=40)

Standing Prevention Before and After the Intervention (n=40)				
Variable		Mean	MD	p-value
Knowledge				
Audio visual	Pretest	27,15	7,75	0,001
	Posttest	34,90		
Booklet	Pretest	27,60	0,8	0,039
	Posttest	28,40		
Attitude				
Audio visual	Pretest	36,65	9,9	0,001
	Posttest	46,55		
Booklet	Pretest	35,45	0,5	0,309
	Posttest	35,95		
Psikomotor				
Audio visual	Pretest	3,30	4,25	0,001
	Posttest	7,55		
Booklet	Pretest	3,40	1,9	0,001
	Posttest	5,30		

Based on Table 3, there were significant differences in the average knowledge, attitudes, and psychomotor skills of mothers before and after receiving audiovisual education, with a p-value ≤ 0.05 . In the booklet group, there were significant differences in the average knowledge and psychomotor skills of mothers before and after receiving education through the booklet, also with a p-value ≤ 0.05 . However, there was no significant difference in the average attitude of mothers before and after receiving education through the booklet, with a p-value > 0.05 .

Table 4.

Differences in Average Knowledge, Attitudes, and Psychomotor Skills of Mothers After Receiving Education Using Audiovisual and Booklet Methods (n=40)

Variable		Mean	P Value
Knowledge	Audio visual	34,90	0,001
	Booklet	28,40	
Attitude	Audio visual	46,55	0,001
	Booklet	35,95	
Psikomotor	Audio visual	7,55	0,001
	Booklet	5,30	

Based on Table 4, there were significant differences in the average knowledge, attitudes, and psychomotor skills of mothers after receiving education through audiovisual and booklet methods, with a p-value of 0.001 (p-value ≤ 0.05).

DISCUSSION

Differences in Mothers' Knowledge Before and After Education Using Booklet Media

The research results show an increase in mothers' knowledge after being provided with education through a booklet, compared to before the intervention. However, when compared to the group that received audiovisual education, the mean difference in the group receiving audiovisual education was greater. A study by Pratiwi & Pertiwi, (2022) demonstrated that audiovisual education can improve mothers' knowledge about stunting in toddlers. Similarly, research by Ramadhanty & Rokhaidah (2021) found that health education using audiovisual media increased mothers' knowledge about stunting in toddlers at Posyandu Melati 1, Pisangan Timur, East Jakarta. Audiovisual media has several advantages over other media. It allows information to be disseminated to a large audience and does not require complex equipment to convey the information. Another advantage is that audiovisual media delivers

information through both sound and images, which can be processed by both hearing and sight, making it easier for respondents to understand and retain the information. Audiovisual media also serves several functions in health education, including educational, social, and economic functions (Pratiwi & Pertiwi, 2022).

Education for mothers using booklet media has been shown to significantly enhance their knowledge about various health topics, including breastfeeding, stunting, and nutrition. This improvement is supported by several studies employing pre-test and post-test designs to measure changes in knowledge. A study focusing on postpartum mothers revealed that health education through booklet media significantly increased their knowledge about exclusive breastfeeding, with a notable pre-test to post-test difference ($p < 0.05$) (Azhari et al., 2024). Another study indicated that education using booklets effectively improved mothers' knowledge about stunting, with a significant p-value of 0.002, highlighting the potential of booklet media in addressing public health issues (Hany et al., 2024). Additionally, a study on pregnant women found that digital booklets significantly improved their knowledge about diet and prevention of low birth weight, with a p-value of 0.000 for improvements in knowledge and attitudes (Lubis et al., 2024). Conversely, while booklet media has proven effective, some studies suggest that combining various educational methods, such as audiovisual aids, can yield greater knowledge gains among mothers (Supriatin et al., 2024).

Audiovisual education can help parents understand the causes, effects, and prevention of stunting in children. In audiovisual education, parents are able to both see and hear information about stunting, which makes it easier for them to understand and remember the content. The combination of audio and visual elements aids in simplifying the understanding of concepts or information. By watching images or videos while listening to explanations, individuals are more likely to comprehend and retain the information. Presenting information through multiple senses enables audiovisual education to facilitate a holistic learning experience that engages hearing, sight, and conceptual understanding simultaneously (Lubis et al., 2024). The connection between the research findings and Nola J. Pender's Health Promotion Model is that the primary goal of health education programs is to bring about changes in health behaviors. Behavioral change begins with an increase in knowledge or cognition, which forms the foundation for altering attitudes and behaviors towards a particular health condition.

Differences in Mothers' Attitudes Before and After Education Using Booklet Media

Research results indicate that there was no significant difference in mothers' attitudes before and after the intervention using booklet media. Various studies have shown mixed results regarding changes in attitudes after receiving booklet education. aodah et al. (2023) found that booklet media was effective in improving mothers' knowledge and attitudes related to stunting. Information about stunting provided through booklet education on parenting offers guidance on how to properly care for toddlers as part of efforts to prevent stunting. Research indicates that parents who received audiovisual education about stunting experienced a significant positive change in their attitudes compared to before. Audiovisual education helps parents understand the causes, effects, and prevention methods for stunting in children. Through this format, parents can both see and hear information about stunting, making it easier for them to comprehend and retain the information.

Studies show that parents who received audiovisual education on stunting developed a more positive attitude toward the importance of paying special attention to their child's health and nutrition. This includes providing nutritious food, maintaining cleanliness and sanitation, and

accessing adequate healthcare services (Kristiyanti et al., 2021). Additionally, other research indicates that after receiving audiovisual education, parents were better able to decide on actions to prevent stunting, such as ensuring maternal health during pregnancy, reducing gender discrimination in food and healthcare provision, and accessing adequate health resources and services (Suryagustina et al., 2018).

Education for mothers using booklet media has significantly influenced their attitudes and knowledge regarding various health issues. Studies show that such educational interventions lead to measurable improvements in mothers' awareness and behavior. A study on pregnant women revealed that health education through booklets significantly improved knowledge and attitudes toward HIV prevention, with 73.3% showing a positive attitude after the education (Nikmah et al., 2024). Similarly, education on diet to prevent low birth weight demonstrated a significant increase in knowledge and positive attitudes among participants, with a p-value indicating strong statistical significance ($p = 0.000$) (Lubis et al., 2024). Research focused on stunting also confirmed that booklet education effectively improved mothers' knowledge, with a significant p-value of 0.002 (Hany et al., 2024). The findings suggest that educational interventions using booklets can be a powerful tool in public health, especially in improving maternal health practices and child outcomes. However, it is important to consider that while booklet media is effective, integrating diverse educational methods, such as video, can yield even greater results in certain contexts (Padila et al., 2023).

However, other studies have indicated that there is no change in mothers' attitudes after receiving education through booklet media. However, other studies have indicated that there is no change in mothers' attitudes after receiving education through booklet media (Kurniatin, 2023). The results of these studies suggest that the effectiveness of booklet media in changing mothers' attitudes may vary depending on the context and research methods used. Booklet media may not provide sufficient interaction to influence mothers' attitudes. Additionally, the content in the booklet may not be engaging enough or may lack motivation for mothers to change their attitudes regarding stunting. This can lead to a lack of interest in reading and paying attention to the information presented in the booklet.

Improvements in knowledge and attitudes are forms of effect resulting from the learning process respondents undergo after perceiving certain objects and becoming aware of evaluations. Perception can occur through single senses or a combination of sight, hearing, touch, and even smell. Video media combines the use of visual and auditory senses, thereby enhancing an individual's interest in learning. Increases in knowledge and attitudes are likely to be more significant when there is a combination of booklet and audiovisual media, as this greatly influences the improvement of knowledge and attitude scores by facilitating and expediting the delivery of information. The results of these studies suggest that the effectiveness of booklet media in changing mothers' attitudes may vary depending on the context and research methods used. Booklet media may not provide sufficient interaction to influence mothers' attitudes. Additionally, the content in the booklet may not be engaging enough or may lack motivation for mothers to change their attitudes regarding stunting. This can lead to a lack of interest in reading and paying attention to the information presented in the booklet.

Differences in Mothers' Psychomotor Skills Before and After Education Using Booklet Media

The research results show a difference in the average psychomotor skills of mothers before and after being educated using booklet media. However, when compared to the audiovisual method, the average difference in the audiovisual group was greater than in the booklet intervention group. A study titled "The Effect of Nutrition Education on Feeding Practices of Mothers with Stunted Toddlers Aged 6-24 Months" found that education using audiovisual media was more effective in improving mothers' knowledge, attitudes, and behaviors regarding nutrition compared to booklets (Hasriani et al., 2022). Audiovisual education presents information through a combination of visuals and sound, stimulating more senses at the same time. This helps mothers to better understand and retain information compared to merely reading text in a booklet.

Research conducted by Simanjuntak et al. (2022) found that there was an improvement in mothers' skills and behaviors in preventing stunting after being provided with education through animated or moving media. This aligns with the current study, which shows that access to information influences a person's knowledge-the better the access to information, the greater the knowledge, and the higher the likelihood of behavioral change. Another study showed that providing information about stunting to mothers was not associated with the incidence of stunting in the working area of Puskesmas Cimpaeun. However, in the group given stunting prevention simulations, there was a noticeable change in mothers' behaviors in preventing stunting (Ramadhan, 2022). A mother's psychomotor skills refer to her physical abilities and motor coordination, which are related to actions and physical responses to the information received.

Education for mothers using booklet media has shown significant improvements in their psychomotor skills, particularly in health-related contexts. Research indicates that structured educational interventions can enhance mothers' abilities to effectively respond to health emergencies involving their children. One study demonstrated that mothers exhibited significant improvements in psychomotor skills after receiving education through audiovisual techniques, including booklets, for first aid in febrile seizures. Pre-test scores were significantly lower than post-test scores, with a p-value of 0.000, indicating the strong effect of the intervention. The simultaneous involvement of both visual and auditory senses in audiovisual learning aids in the retention and application of skills, making it a preferred method for health education. (Girianto & Fuadah, 2024). Another study highlighted that educational booklets increased parents' motivation and attitudes in caring for toddlers with gastroenteritis, demonstrating that booklet media can effectively convey important health information (Padila et al., 2023).

Additionally, other research mentions that non-nutritional approaches, such as brainstorming methods and audiovisual media, can be used to improve mothers' knowledge in preventing stunting (Raodah et al., 2023). Audiovisual media presents information in a more accessible and easily understood manner. Mothers can watch demonstrations, view graphics, and illustrations that help explain complex concepts better than simply reading text in a booklet. The combination of visuals and audio in audiovisual education aids mothers in retaining information in long-term memory more effectively than reading text alone in a booklet.

CONCLUSION

Based on the results of the study, it can be concluded that education through audiovisual and booklet media has different impacts on improving mothers' knowledge, attitudes, and psychomotor skills in preventing stunting. Audiovisual education has proven to be more effective in increasing mothers' knowledge, attitudes, and psychomotor skills compared to booklet media. This is due to the interactive and engaging nature of audiovisual media, making it easier for mothers to understand and retain the information. Although education using booklets also showed improvements in knowledge and psychomotor skills, there was no significant change in mothers' attitudes after receiving education through this medium. Overall, audiovisual media has proven to be more effective in delivering health education, particularly in preventing stunting. This approach better facilitates understanding and behavior change needed to prevent stunting in children.

REFERENCES

- Andrews-Trevino, J. Y., Webb, P., Shively, G., Kablan, A., Baral, K., Davis, D., Paudel, K., Shrestha, R., Pokharel, A., Acharya, S., Wang, J. S., Xue, K. S., & Ghosh, S. (2021). Aflatoxin Exposure And Child Nutrition: Measuring Anthropometric And Long-Bone Growth Over Time In Nepal. *American Journal Of Clinical Nutrition*, 113(4), 874–883. <https://doi.org/10.1093/ajcn/nqaa397>
- Andrews, B., Hill, B., & Skouteris, H. (2018). The Relationship Between Antenatal Body Attitudes, Pre-Pregnancy Body Mass Index, And Gestational Weight Gain. *Midwifery*, 56, 142–151. <https://doi.org/10.1016/j.midw.2017.10.012>
- Arisjulyanto, D., & Puspita, N. I. (2024). Pengaruh Pemberdayaan Pmba Terhadap Sikap Keluarga Balita Stunting Di Kabupaten Lombok Tengah. *Jurnal Kesehatan Tropis Indonesia*, 1(4).
- Azhari, I., Widyastutik, D., Putriningrum, R., Study, M., & Student, P. (2024). Influence Of Health Education Through Booklet Media On Pubter. *Journal Of Advanced Nursing And Health Sciences*, 5(2), 11–18. <https://doi.org/10.00000/janhs.1>
- BKKBN. (2021). *Laporan Kejadian Stunting*.
- Girianto, W. P. R., & Fuadah, D. Z. (2024). Audiovisual Education Techniques On Mothers ' Psychomotor Abilities In First Aid For Febrile Seizures In Toddlers. *Journal Of Applied Nursing And Health*, 6(1), 148–161.
- Hanaa, M. S. I., El-Megeed, A. E.-G. A., & Ibraheim, S. G. E. (2024). Mothers' Perception Regarding Health Lifestyle Among Their Primary School Children With Stunting. *Journal Of Nursing Science*, 09(2), 466–477.
- Hany, A., Vatmasari, R. A., Putri, F. O., & Alizain4, A. A. (2024). The Effect Of Booklet Education On Mothers' Knowledge Related To Stunting. *Malahayati Health Student Journal*, 4, 1–23.
- Hasanah, I., & Susanti, H. (2018). Does Water And Sanitation Effects On Children's Physical Development? Evidence From Indonesia Family Life Survey (Ifs) 2014. *E3s Web Of Conferences*, 74. <https://doi.org/10.1051/E3sconf/20187409007>
- Hasriani, S., Ariyana, A., & Pratiwi, W. R. (2022). Pengaruh Metode Brainstorming Dan Audiovisual Terhadap Perilaku Ibu Balita Terhadap Pencegahan Stunting. *Holistik Jurnal Kesehatan*, 16(7), 588–595. <https://doi.org/10.33024/Hjk.V16i7.7608>

- Helmyati, S., Shanti, K. M., Sari, F. T., Sari, M. P., Atmaka, D. R., Pratama, R. A., Wigati, M., Wisnusanti, S. U., Nisa', F. Z., & Rahayu, E. S. (2021). Synbiotic Fermented Milk With Double Fortification (Fe-Zn) As A Strategy To Address Stunting: A Randomized Controlled Trial Among Children Under Five In Yogyakarta, Indonesia. *Processes*, 9(3). <https://doi.org/10.3390/Pr9030543>
- Kemenkes RI. (2023). *Survei Kesehatan Indonesia*.
- Kristiyanti, R., Khuzaiyah, S., & Susiatmi, S. A. (2021). *Gambaran Pengetahuan Tentang Stunting Dan Sikap Ibu Dalam Mencegah Stunting. Proceeding Of The Urecol, 1043-1046*. 1043–1046.
- Lubis, N. F. H., Mahalia, L. D., & Oktaviyani, P. (2024). Pengaruh Edukasi Menggunakan Booklet Digital Terhadap Berat Badan Lahir Rendah Of Pregnant Women About Diet Pattern And Low Birth Weight. *Jurnal Bahana Kesehatan Masyarakat*, 8(1), 27–34.
- Mutingah, Z., & Rokhaidah, R. (2021). Hubungan Pengetahuan Dan Sikap Ibu Dengan Perilaku Pencegahan Stunting Pada Balita. *Jurnal Keperawatan Widya Gantari Indonesia*, 5(2), 49. <https://doi.org/10.52020/Jkwgi.V5i2.3172>
- Nikmah, A. N., Fitriasnani, M. E., Kusumawati, L. S., & Himmah, F. R. (2024). Pengaruh Pendidikan Kesehatan Melalui Media Booklet Terhadap Pengetahuan Dan Sikap Ppia Pada Ibu Hamil. *Womb Midwifery Journal*, 3(1).
- Nurjanah, Roremary, R., Usman, S., & Syarif, H. (2022). *Promosi Kesehatan Dalam Berbagai Perspektif*. Syiah Kuala University Press.
- Padila, P., Andri, J., & Andrianto, M. B. (2023). Edukasi Media Video Dan Booklet Terhadap Motivasi Dan Sikap Orangtua Dalam Merawat Balita Dengan Gastroenteritis. *Journal Of Telenursing (Joting)*, 5(1), 720–731. <https://doi.org/10.31539/Joting.V5i1.5844>
- Pratiwi, A. M., & Pertiwi, E. N. (2022). Pengaruh Edukasi Stunting Menggunakan Metode Audiovisual Dan Booklet Terhadap Pengetahuan Ibu Dengan Anak Stunting. *Jurnal Ilmu Kebidanan Dan Kesehatan (Journal Of Midwifery Science And Health)*, 13(1), 40–43. <https://doi.org/10.52299/Jks.V13i1.95>
- Ramadhan, K. I. (2022). Faktor-Faktor Yang Mempengaruhi Perilaku Penanganan Stunting Di Kelurahan Cimpaeun Tahun 2022. *Jurnal Pengabdian Kesehatan Masyarakat ...*, 2(1), 20–30.
- Ramadhanty, T., & Rokhaidah, R. (2021). Pengaruh Edukasi Kesehatan Dengan Media Audiovisual Terhadap Pengetahuan Ibu Tentang Stunting Pada Balita Di Posyandu Melati 1 Kelurahan Pisangan Timur, Jakarta Timur. *Jurnal Keperawatan Widya Gantari Indonesia*, 5(2), 58. <https://doi.org/10.52020/Jkwgi.V5i2.3173>
- Raodah, Sitti Nur Djannah, & Lina Hadayani. (2023). Efektivitas Media Edukasi Booklet Terhadap Pengetahuan Dan Sikap Ibu Balita Stunting Aceh. *Media Publikasi Promosi Kesehatan Indonesia (Mppki)*, 6(5), 931–937. <https://doi.org/10.56338/Mppki.V6i5.3153>
- Salamung, N., Haryanto, J., & Sustini, F. (2019). Faktor-Faktor Yang Berhubungan Dengan Perilaku Pencegahan Stunting Pada Saat Ibu Hamil Di Wilayah Kerja Puskesmas Kabupaten Bondowoso. *Jurnal Penelitian Kesehatan "Suara Forikes" (Journal Of Health Research "Forikes Voice")*, 10(4), 264. <https://doi.org/10.33846/Sf10404>

- Sari, K., & Sartika, R. A. D. (2021). The Effect Of The Physical Factors Of Parents And Children On Stunting At Birth Among Newborns In Indonesia. *Journal Of Preventive Medicine And Public Health = Yebang Uihakhoe Chi*, 54(5), 309–316. <https://doi.org/10.3961/jpmph.21.120>
- Simanjuntak, M., Yuliati, L. N., Rizkillah, R., & Maulidina, A. (2022). Pengaruh Inovasi Edukasi Gizi Masyarakat Berbasis Social Media Marketing Terhadap Pengetahuan, Sikap, Dan Perilaku Dalam Upaya Pencegahan Stunting. *Jurnal Ilmu Keluarga Dan Konsumen*, 15(2), 164–177. <https://doi.org/10.24156/jikk.2022.15.2.164>
- Soliman, A., De Sanctis, V., Elsiddig, S., Alyafei, F., Alaaraj, N., Itani, M., Jour, C., & Elawwa, A. (2021). Impact Of Oral Nutritional Supplements (Ons) On Growth Outcomes And Igf-1 Level In Underweight Older Children And Young Adolescents (5-14 Years) With Short Stature And No Systemic Disease: High Versus Normal Calories Density Formula. *Acta Biomedica*, 92(4), 1–9. <https://doi.org/10.23750/abm.V92i4.11868>
- Soliman, N., Soliman, A., Alyafei, F., Elsiddig, S., Alaaraj, N., Hamed, N., Mohamed, S., & Itani, M. (2024). Persistent Global Burden Of Stunting Among Children. *European Journal Of Medical And Health Sciences*, 6(2), 15–20. <https://doi.org/10.24018/Ejmed.2024.6.2.2080>
- Supriatin, C., Korawati, D. D., Yanti, K. D., Patimah, P., & Samsiah, S. (2024). Pengaruh Media Booklet Dan Audio Visual Terhadap Pengetahuan Akseptor Kb Tentang Kontrasepsi Jangka Panjang Di Wilayah Bogor Utara Tahun 2023. *Protein: Jurnal Ilmu Keperawatan Dan Kebidanan*, 2(2). <https://doi.org/10.61132/Protein.V2i2.350>
- Suryagustina, Araya, W., & Jumielsa. (2018). Pengaruh Pendidikan Kesehatan Tentang Pencegahan Stunting Terhadap Pengetahuan Dan Sikap Ibu Di Kelurahan Pahandut Palangka Raya. *Dinamika Kesehatan*, 9(2).
- Unicef. (2023). *Mal Nutrition*.