

# The Effect Of Health Education Video Media On Pregnant Women's Prevention Knowledg Stunting In The Work Area Of Regional Public Service Agency Public Service Agency (BLUD) Puskesmas Selajambe Kuningan Regency In 2023

# Rokaesih<sup>1</sup>, Nunung Mulyani<sup>2</sup>, Herni Kurnia<sup>3</sup>

<sup>1,2,3</sup> Undergraduate Applied Midwifery Study Program, Ministry of Health Tasikmalaya Health Polytechnic

| ARTICLE INFO       | ABSTRACT   |
|--------------------|--|
| Keywords:          | (1) Background: Stunting is a chronic nutritional problem  |
| Educational Video; | caused by many factors, especially malnutrition during   |
| Knowledge;         | pregnancy. Kuningan Regency, from the results of the   |
| Stunting           | Toddler Weighing Month (BPB) from 2020 to 2022, the prevalence of stunting from 2020 was 7.38 percent, and |
|                    | dropped to 5.35 percent in August 2021. Meanwhile, the BPE   |
|                    | results in August 2022, rose again to 6.6 percent, or found  |
|                    | 4,798 stunted toddlers out of a total of 72,169 toddlers   |
|                    | measured. The BPB results of the Selajambe Health Center in  |
|                    | 2021 were 5.1 percent, rising again in 2022 to 6.9 percent   |
|                    | Education for mothers has a significant effect on increasing   |
|                    | mothers' knowledge about stunting prevention. (2) Purpos   |
|                    | of the Study: To analyze the effect of health education vide   |
|                    | media on pregnant women's knowledge about stuntin  |
|                    | prevention in the working area of the Regional Public Servic   |
|                    | Agency (BLUD) Puskesmas Selajambe Kuningan Regency in  |
|                    | 2023. (3) Methods: This study used a pre-experimental desig  |
|                    | with the One Group Pretest Posttest model. The sampling  |
|                    | technique was total sampling with a total of 48 pregnan  |
|                    | women. (4) Results: The knowledge of pregnant wome   |
|                    | before being given education was found to be mostly goo  |
|                    | knowledge, namely 39 respondents (81.3%). After bein   |
|                    | given education through videos from 48 respondent  |
|                    | studied, most of the knowledge was good, namely 4  |
|                    | respondents (87.5%). (5) Conclusion: There is an effect of   |
|                    | health education video media on the knowledge of pregnan   |
|                    | women about stunting prevention in the Working Area o  |
|                    | the Regional Public Service Agency (BLUD) Puskesma   |
|                    | Selajambe Kuningan Regency in 2023 (P-value 0.000).  |

## 1. INTRODUCTION

Stunting is short or very short based on length or height for age that is less than -2 standard deviations (SD) on the WHO growth curve that occurs due to irreversible conditions due to inadequate nutritional intake or repeated infections that occur in the first 1000 days of life or the golden period.1 Referring to the WHO report, around 149.2 million or 22 percent of children under the age of 5 worldwide are estimated to be stunted in 2020. This figure decreased by 27 percent compared to two decades ago in 2000 (WHO, 2020).

Regionally, Africa is the region with the highest prevalence in 2020 with a percentage reaching 31.7 percent followed by the Southeast Asia region with a stunting prevalence of 30.1 percent and the Eastern Mediterranean region with 26.2 percent. (WHO, 2020) Based on data from the National Nutrition Status Survey (SSGI) in 2022, the prevalence of stunting in Indonesia was 21.6 percent. This number decreased compared to the previous year, which was 24.4 percent. Although declining, this figure is still high, considering that the stunting prevalence target in 2024 is 14 percent and the WHO standard is below 20 percent. The results of the Indonesian Nutrition Status Survey (SSGI) stunting prevalence in Indonesia decreased from 24.4 percent in 2021 to 21.6 percent in 2022. (Ministry of Health, 2022)

Reducing the incidence of stunting can be done by referring to mindsets in order to increase knowledge and change attitudes through health education. Research conducted by Astuti S et. al in 2018, stated that there was an increase in the knowledge of pregnant women after health promotion. (Ministry of Health, 2017)

According to data from the Indonesian Ministry of Health in 2017, the factor that causes stunting is poor nutrition experienced by mothers during pregnancy. Lack of knowledge of pregnant women about health and nutrition before pregnancy. Maternal health attitudes and knowledge are also very influential on the incidence of stunting in Indonesia. (Kristiyanti, 2021) Analyzing the knowledge and attitudes of pregnant women towards stunting is very necessary, especially in areas with high stunting rates. Through an adequate understanding of the knowledge and attitudes of pregnant women in preventing stunting, relevant stakeholders can determine the direction of work programs that will be carried out in order to prevent and handle stunting. (Sukmawati et. al., 2019)

According to the Ministry of Health's Indonesian Nutrition Status Survey (SSGI), the prevalence of stunting in West Java reached 20.2 percent in 2022. This figure decreased by 4.3 points from the previous year, where in 2021 the prevalence of stunted toddlers was 24.5 percent. (Ministry of Health, 2022) Stunting will affect the level of immune intelligence in the body and the level of productivity, so that it can hamper economic growth which has an impact on long-term poverty for himself, his family and the government. If stunting growth can be overcome properly, it is expected that economic growth will be better without being burdened by the cost of treating degenerative diseases. According to the World Health Organization, stunting results in suboptimal cognitive, motor and verbal development. It can also increase the risk of obesity due to unproductivity and other degenerative diseases. (Herman H. et. al., 2021)

The results of the Basic Health Research (Riskesdas) in 2018, showed a decrease in the prevalence of stunting at the national level. While at the Kuningan Regency level, from the results of the Toddler Weighing Month (BPB) from 2018 to 2022, it shows fluctuations (ups and downs), namely an increase in the prevalence of stunting from 8.2 percent in 2018 to 8.4 percent in 2019, while in 2020, the figure dropped to 7.38 percent, and fell back to 5.35 percent in August 2021. While the BPB results in August 2022, rose again to 6.6 percent, or found 4,798 stunted toddlers out of a total of 72,169 toddlers measured. (Veranita, 2021) The BPB results of the Selajambe Health Center in 2021 were 5.1 percent, increasing again in 2022 to 6.9 percent.

Knowledge is one of the factors that influence a person in health behavior. If someone has sufficient knowledge in health, it is expected that they can have good health behavior as well. Meanwhile, attitude is a tendency to take action or behavior. Attitudes related to stunting prevention include efforts made by pregnant women to improve nutrition in children since pregnancy. Good maternal knowledge about stunting since pregnancy is expected to increase positive attitudes and behaviors to prevent stunting. (Sukmawati et. al., 2019)

Inadequate intake of proper nutrition over a long period of time is the main cause of stunting, steps that can be taken to prevent the threat of stunting rates that continue to rise. (Sukmawati et. al., 2019) Maternal education has a significant effect on increasing maternal knowledge about stunting prevention. Maternal attitudes and behavior during pregnancy are supported by maternal knowledge about stunting. Children's growth, development and health are determined by the condition of the fetus while in the womb. Generally, health education is not directly delivered but uses media assistance. Providing knowledge about stunting prevention in pregnant women requires a health education method with an interesting concept, namely health education using health media so that the delivery of material can be done effectively and efficiently. (Herman H. et. al., 2021)

Video is an attention-grabbing educational media that can simulate more senses so that it can provide optimal results, videos can be played repeatedly without changing the material. it is hoped that it can increase the effectiveness of educational activities, so that people can easily understand what is conveyed during the education or learning process. Herman 2020 research where there is a difference in the knowledge of pregnant women about stunting before and after being given education through video media, with a median difference between pre-test and posttest, from 9.19 to 14.16 with a P value of 0.028 <0.05 proves that there is an effect of video media on increasing the knowledge of pregnant women about stunting prevention. (Veranita, 2020)

Audio media has a fairly high level of effectiveness, according to research on average above 60% to 80%. Teaching through audio visual is clearly characterized by the use of hardware greeting the learning process, such as film projector machines, televisions, tape recorders, and wide visual projectors. Audiovisual media consists of Audio visual still is a media that displays sound and still images such as sound frame films (sound sliders), sound films, sound prints. Motion audio visual is a medium that can display elements of sound and moving images such as sound films and video tapes. (Veranita, 2020)

Based on interviews conducted with several pregnant women in the BLUD Puskesmas Selajambe Working Area, it was found that mothers did not know much about stunting. They only know the meaning of stunting is "short". The results of the interview explained that these pregnant women did not know clearly about the causes of stunting, and how to prevent stunting. Thus, to increase knowledge and insight in pregnant women, it is necessary to have health education about preventing stunting. With the hope that after being given health education about preventing stunting in pregnant women, it is hoped that there will be an increase in the knowledge of pregnant women, so that it will help reduce stunting rates.

Based on these health problems and considering the importance of the problem and the impact caused by stunting, the researcher intends to examine the effect of health education video media on pregnant women's knowledge about stunting prevention in the working area of the Regional Public Service Agency (BLUD) Selajambe Health Center, Kuningan Regency in 2023.

#### 2. METHODS

This study used a pre-experimental design with the One Group Pretest Posttest model. The sampling technique was total sampling with a total of 48 pregnant women. The data analysis used is test statistics correlation *spearman rank* Because data from the second variable scale ordinal.

#### 3. FINDINGS AND DISCUSSION

Overview of Pregnant Women's Knowledge about Stunting Prevention Before and After Education at Selajambe Health Center in 2023

| Table 1 Overview of Pregnant Women's Knowledge about Stunting Prevention Befor | e and |
|--|-------|
| After Education at Selajambe Health Center in 2023                             |       |

| Versuladas | Variable                |      |                 |      |  |  |
|------------|-------------------------|------|-----------------|------|--|--|
| Knowledge  | <b>Before Education</b> | %    | After Education | %    |  |  |
| Good       | 39                      | 81,3 | 42              | 87,5 |  |  |
| Fair       | 9                       | 18,7 | 6               | 12,5 |  |  |
| Less       | 0                       | 0    | 0               | 0    |  |  |
| Total      | 48                      | 100  | 48              | 100  |  |  |

The table above shows that before being given education, most of the knowledge was good, namely 39 respondents (81.3%). After being given education through videos, most of the knowledge is good, namely 42 respondents (87.5%).

The Effect of Health Education Video Media on Pregnant Women's Knowledge about Stunting Prevention in the Working Area of the Regional Public Service Agency (BLUD) Puskesmas Selajambe Kuningan Regency which was conducted in September 2023

Table 2 Relationship between knowledge and attitudes of Eligible Women regarding breastself-examination in Sukasari Village, Mandirancan District, Kuningan Regency, 2023

| V l. l    | E  | Educational Video<br>Media |    |      | P-<br>Value | Correlation<br>coefficient |
|-----------|----|----------------------------|----|------|-------------|----------------------------|
| Knowledge | Be | Before After               |    | fter |             |                            |
|           | n  | %                          | n  | %    | -           |                            |
| Good      | 39 | 81,3                       | 42 | 87,5 | 0,000       | 0,625                      |
| Fair      | 9  | 18,7                       | 6  | 12,5 |             |                            |
| Less      | 0  | 0                          | 0  | 0    |             |                            |

Based on the table above, it shows that the Spearman hypothesis test conducted in this study has a significance of 0.000 <0.05 so Ho is rejected. Correlation coefficient obtained 0.625, it can be concluded that there is a significant influence between knowledge before education and knowledge after education is given to pregnant women about stunting prevention in the Working Area of the Regional Public Service Agency (BLUD) Selajambe Health Center, Kuningan Regency

Based on the results of the research that has been carried out, the following discussion was obtained:

a. Pregnant women's Knowledge About Stunting Prevention Before Education

The results of the analysis obtained knowledge of pregnant women with good criteria before education as much as (81.3%). One of the factors that influence the incidence of stunting in toddlers is the lack of maternal knowledge about toddler nutrition. (Rahmatillah, 2018)

Knowledge is what we know about a particular object with the observation of reason and thought we have. Knowledge about health will be the main motivator in maintaining health. The higher people's knowledge or understanding of health, the better. Knowledge is the result of knowing, and this occurs after people perceive a certain object. Sensing occurs through the human five senses, namely the senses of sight, hearing, smell, taste and touch. Most human knowledge is gained through the eyes and ears. (Rahmatillah, 2018)

Parents who have good nutritional knowledge, especially mothers, will greatly affect the level of nutritional adequacy obtained by toddlers. Mothers who have good nutritional knowledge will be able to provide the right nutritional content to meet the nutritional needs of toddlers, especially with

the content of substances in food, food hygiene and eating hours, so that good knowledge can help mothers to determine the quality and quantity of food. (Putri et. al, 2022)

Adequate maternal knowledge about stunting since pregnancy is expected to increase positive attitudes and behaviors in an effort to prevent stunting, including in efforts to fulfill nutrition since pregnancy. Maternal knowledge about nutrition is one of the factors that determine a person's food consumption. People who have good nutritional knowledge will have the ability to apply nutritional knowledge in food selection and processing so that it can be expected that their food intake is more secure, both in using household income allocations to choose good food and being able to pay attention to good nutrition for their children, and parents' knowledge about nutrition can help improve nutritional status in children to achieve growth maturity. (Fitriyani, & Darmawati, 2022) b. Pregnant Women's Knowledge About Stunting Prevention After Education

Based on the results of research that has been conducted that the knowledge of pregnant women after being given education is obtained (87.5%), which means that there is an increase in the knowledge of pregnant women after being given education. Knowledge is the result of what we know, and occurs after people perceive a certain object. A person's knowledge can be seen by digging deeper into what is already known. (Notoatmodjo, 2018)

The material provided through education with video media can change a person's behavior from not knowing to knowing, with interesting material and good preparation. (Masturoh, et. al, 2018) Knowledge is gained through the sensing of objects by the five human senses and can be influenced by age. (Rahma, 2018) The delivery of information by this method, including explanation, demonstration, and redemonstration, stimulates various senses such as sight, hearing, feeling, and behavior, thus increasing the effectiveness of learning. (Juniah, Apriliawati, A., & Sulaiman, S, 2020) Rudy Hartanto and colleagues (2018) found a significant increase of 26% in the knowledge level of cadres after receiving media-based education. Similar results were also found in Sartika's research (2021) which showed that video media was more effective in improving cadres' skills in early detection of stunting. (Sartika, Q. L., & Purnanti, K. D., 2021)

c. Relationship between knowledge and attitudes of Eligible Women regarding breast selfexamination in Sukasari Village, Mandirancan District, Kuningan Regency, 2023

Video is a media that is received through sight and hearing so that it can create conditions that allow a person to gain knowledge, skills or attitudes that can be used to realize learning objectives. (Affrida, 2017).

The results of the analysis show that there is a significant influence between health education video media on the knowledge of pregnant women about stunting prevention in the Working Area of the Regional Public Service Agency (BLUD) Puskesmas Selajambe Kuningan Regency with a P-value (0.000), meaning that mothers who are given education increase their knowledge. Therefore, the provision of education has a very large effect on the knowledge of pregnant women about stunting prevention. Thos it can be concluded that education through videos is effective in increasing the knowledge of pregnant women about stunting prevention.

This is in line with Rini's research in 2020 in Jambi City, which states that there is an increase in knowledge with a p value of 0.000 <0.05, which means that there is an effect of using video media on increasing mothers' knowledge about stunting. (Rini, 2020) The results of Fadyllah & Prasetyo's research (2021) show that there is an effect of using video media in the form of short videos, animated videos and advertisements on increasing mothers' knowledge about stunting. (Fadyllah, M. I., & Prasetyo, Y, 2021)

In line with Ginting's research (2022), there were significant differences in knowledge, attitudes and practices (p<0.05) before and after intervention with video media. (Ginting, S., Simamora, A. C. R., & Siregar, 2021) Ramadhanty & Rokhaidah (2021) that their research obtained an average score with a P value = 0.00 (p < 0.05) which means that there is an effect of health education with video media on mothers' knowledge about stunting in toddlers at the jasmine 1 posyandu in Pisangan Timur village, East Jakarta. (Ramadhanty T., & Rokhaidah R, 2020)

Knowledge is the result of knowing, this occurs after people make senses of a particular object. This sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Knowledge is a very important dominant for the formation of a person's actions. (Rusmini, 2020)

Knowledge is the result of human sensing or the result of someone knowing objects through their senses (eyes, nose, ears and some of them). The higher the knowledge or understanding of people about health, the better the perspective on the concept of healthy sickness, good knowledge about health can ultimately improve the person's health status. (Sary, 2020)

Counseling is one method to improve the knowledge and attitude of pregnant women. (Quraisy, 2022) Research by Sabriana, Riyandani, and Rosmiaty in 2022 at Jongaya Health Center reported that counseling to pregnant women can increase their knowledge. (Sabriana R, Riyandani R, & Rosmiaty R, 2022)

According to theory, health education through counseling with video media can increase a person's understanding because it can clarify messages, overcome time and space limitations, and attract the attention of targets. Meanwhile, print media only affects vision. (Isnaini, 2019)

Providing education can be done effectively if you use educational media that is attractive, right on target, and easy for participants to understand. In this community service activity, a video is used as an educational media that explains about proper feeding for toddlers. In addition, videos can also be shared through social media that can be accessed directly by respondents at any time. Knowledge and behavior change can be improved through health promotion which is realized by providing education so as to increase primary prevention efforts, in accordance with the theory of Laevell and Clark. (Vilcins D & Jagals P, 2018)

There was an increase in respondents' knowledge from the pre-test and post-test. So that educational activities are considered effective in increasing knowledge about stunting in pregnant women in the Selajambe Health Center working area

#### 4. CONCLUSION

Knowledge of pregnant women about stunting prevention in the Working Area of the Regional Public Service Agency (BLUD) Selajambe Puskesmas, Kuningan Regency before being given education was 39 respondents (81.3%). Knowledge of pregnant women about stunting prevention in the Working Area of the Regional Public Service Agency (BLUD) Selajambe Puskesmas, Kuningan Regency after being given education was 42 respondents (87.5%). There is an effect of health education video media on the knowledge of pregnant women about stunting prevention in the Working Area of the Regional Public Service Agency (BLUD) Selajambe Health Center, Kuningan Regency in 2023 (p=0.000).

### REFERENCES

- World Health Organization. (2020). Childhood Stunting: Context, Causes, Consequences. Geneva: WHO.
- Ministry of Health Republic of Indonesia. (2022). *Prevent Stunting, It's Important*. Jakarta: Center for Data and Information; 2022.
- Ministry of Health Republic of Indonesia. (2017). *Nutritional Status Assessment*. Jakarta: Ministry of Health Republic of Indonesia; 2017.
- Kristiyanti, R. (2021). Effectiveness of Parental Assistance in Providing Food on Nutritional Intake Among Children with Malnutrition. *The Indonesian Journal of Nutrition*, 10(1), 15-20.
- Sukmawati, S., Hermayanti, Y., Nurhakim, F., DA, I.A., Mediani, H.S. (2021). Education for Pregnant Women, Families, and Posyandu Cadres About Stunting Prevention. Dharmakarya *Journal of Applied Science and Technology for Society*, 2021.

- Herman H, Citrakesumasari C, Hidayanti H, Jafar N, Virani D. (2020). The Influence of Nutrition Education Using the Ministry of Health's Leaflet on Vegetable and Fruit Consumption Behavior in High School Adolescents. *Journal of Indonesian Community Nutrition*, 9(1), 39–50.
- Ministry of Health Republic of Indonesia. (n.d.). Basic Health Research. Bulletin on Stunting, 1163-1178.
- Affrida, E. N. (2017). Mother's Strategy With Dual Roles in Shaping Preschoolers' Independence. Journal of Early Childhood Education, (2), 114.
- Rahmatillah D. (2018). Relationship Between Knowledge, Attitude, and Action Towards Nutritional Status. Amerta Nutrition, 106.
- Putri N, Lestari R, Ningsih F. (2022). Relationship Between Mother's Knowledge About Nutrition and the Incidence of Stunting in Toddlers. *Surya Medika Journal*, 8(2), 218–21.
- Fitriyani, Darmawi. (2022). Relationship Between Mother's Knowledge and Attitude with the Incidence of Stunting in Toddlers in Arongan Village, Nagan Raya District. *Journal of Biological Education*, 10(1).
- Notoatmodjo. (2018). Health Behavior Science. Jakarta: Salemba Medika.
- Rahma YA. (2019). The Effect of Health Counseling With Audiovisual Media Leaflet About Exclusive Breastfeeding on the Knowledge and Attitudes of Pregnant Women in Preventing Stunting in Lama Village, Pancur Batu Work Area. Poltekkes Medan.
- Juniah, Apriliawati, A., & Sulaiman, S. (2020). Booklet and Audiovisual Media Effective on Parental Knowledge of Stunting. *Journal of Health Sciences*, 9(2), 60–65.
- Rudy Hartono, Mira Andini, Dwi Sartika, B. U. H. (2018). Capacity Building of Posyandu Cadres in Preventing Stunting Through Media-Based Nutrition Education in Biringkanaya and Mamajang Subdistricts. *Media of Health Research Implementation*, 1(1), 22–24.
- Sartika, Q. L., & Purnanti, K. D. (2021). Differences in Education Media (Booklet and Video) on Cadre Skills in Early Detection of Stunting. *Journal of Midwifery Science*, 3(1), 36–42.
- Rini, W. N. E. (2020). The Effect of Audiovisual Media Use on Increasing Mother's Knowledge About Stunting at Rawasari Community Health Center in Jambi City in 2019. *Jurnal Kesmas Jambi*, 4(1), 23–27.
- Fadyllah, M. I., & Prasetyo, Y. B. (2021). Health Education Using Audiovisual Methods to Increase Mother's Knowledge in Caring for Stunted Children. 16(1), 23–30.
- Ginting, S., Simamora, A. C. R., & Siregar, N. (2022). The Effect of Health Counseling with Audiovisual Media on Changes in Mother's Knowledge, Attitudes, and Practices in Stunting Prevention in Doloksanggul District, Humbang Hasundutan Regency in 2021. *Journal of Healthcare Technology and Medicine*, 8(1), 390–399.
- Ramadhanty, T.-, & Rokhaidah, R. (2021). The Effect of Health Education With Audiovisual Media on Mother's Knowledge About Stunting in Toddlers at Melati 1 Posyandu, Pisangan Timur Village, East Jakarta. *Journal of Nursing Widya Gantari Indonesia*, 5(2), 58.
- Rusmini. (2018). Fundamentals and Types of Sciences. Edu-Bio: Jakarta (5), 79–94.
- Sary, Y. N. E. (2020). Health Education to Grandmothers as Caregivers in Preventing Stunting in 36-Month-Old Children in Coastal Areas. *Pratama Widya: Journal of Early Childhood Education*, 5(2), 89–94.
- Quraisy CCRAS, S. DI, Haruni DS, P. HS. (2022). Increased Pregnant Women's Knowledge: Nutrition Counseling with the "Sterile KEK" Food Calendar. *Journal Magistrorum School*, 02(03), 488–503.
- Sabriana R, Riyandani R, Rosmiaty R. (2022). Empowerment of Pregnant Women Through Increased Knowledge About the Importance of Nutrition During Pregnancy to Prevent Anemia. *Journal of Community Service and Science*. 2022;1(1):7–11.
- Isnaini YS, Bahrah. (2019). Effectiveness of Using Video as an Educational Media for Increasing the Knowledge and Behavior of Pregnant Women in Malaria Management. Nurs Arts, XIII(02), 135– 46.
- Vilcins D, Jagals P. (2018). Environmental Risk Factors Associated with Child Stunting: A Systematic Review of the Literature. Annals of Global Health, 84(4), 551