
The Effect of Health Education Using Video Media on Stunting Prevention Among Mothers of Children Under Five Years of Age at Situ Community Health Center in 2023

Rendi Fahruzi¹, Gita Arisara*², Dini Justian³

¹ Students of Public Health Study Program, Faculty Health Science, Universitas Sebelas April

^{2,3} Public Health Study Program, Faculty Health Science, Universitas Sebelas April

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ABSTRACT

Stunting is one of the manifestations of chronic malnutrition that has become a national nutrition problem. Stunting prevention is a national program based on the issuance of Presidential Regulation of the Republic of Indonesia No. 42 of 2013 concerning the National Movement for the Acceleration of Nutrition Improvement. The purpose of this study was to determine the effect of health education using video media on the prevention of stunting in mothers of toddlers at the Situ Health Center, Sumedang Regency in 2023. This type of research uses pre-experimental research methods in the form of one group pretest posttest. The population in this study were all toddlers in the work area of the UPTD Puskesmas Situ Sumedang Regency in 2023 as many as 1227 mothers of toddlers, with a sample size of 93 people. The sampling technique in this study used purposive sampling. The research instrument used a questionnaire that was valid and reliable. Data analysis techniques using univariate analysis and bivariate analysis. The results showed that. The average score of stunting prevention in mothers of toddlers before health education using video media was 56.85 (95%CI: 53.14 - 60.56). The average score of stunting prevention in mothers of toddlers after health education using video media is 83.4 (95%CI: 81.6 - 85.1). There is an effect of health education in using video media on the prevention of stunting in mothers of toddlers, p value of 0.000 (<0.05). Therefore, it is necessary to carry out health education methods using videos about stunting prevention routinely to mothers of toddlers in an effort to reduce the incidence of stunting.



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Corresponding Author:

Gita Arisara,
Public health Study Program,
Faculty Health Science, Universitas Sebelas April,
Jalan Cipadung No. 54 Kotakaler Sumedang.
Email: gitaarisa@unsap.ac.id

1. INTRODUCTION

Stunting is one of the manifestations of chronic malnutrition from the past which is a nutritional problem defined as a value of height or length for age that is less than 2 standard deviations from the median child growth standard. Stunting is one of the nutritional problems in the world, especially in children under five stunting is one of the factors that can inhibit growth. According to WHO in 2018 there were 165 million toddlers in the world who experienced short or stunting conditions. There are around 80% of stunted toddlers in 14 countries in the world, and Indonesia is also included (Ministry of Health of the Republic of Indonesia, 2021).

According to the Ministry of Health's Indonesian Nutrition Status Survey (SSGI), the prevalence of stunting in Indonesia will reach 21.6% by 2022. This figure is down 2.8 points from the previous year. East Nusa Tenggara (NTT) again occupies the top position with a stunting rate of 35.3%. Although it is still perched at the top, the prevalence of stunted toddlers in NTT has decreased from 2021 which amounted to 37.8%. Furthermore, West Sulawesi is in second place with a prevalence of stunting of 35%. Then, West Papua and West Nusa Tenggara have a prevalence of stunting of 34.6% and 32.7%, respectively. Nationally, the prevalence of stunting this year has decreased from 24.4 percent in 2021 to 21.6 percent in 2022 (Indonesian Ministry of Health, 2022).

According to the West Java Health Office in 2022, the results of 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. Sumedang Regency was recorded as the region with the highest prevalence of stunting in West Java, reaching 27.6% in SSGI 2022. The number of stunted toddlers in this district jumped dramatically from the previous year of 22%. The regions with the next highest prevalence of stunting are Sukabumi District at 27.5% and West Bandung District at 27.3%.

Monitoring the status of stunting toddlers in each Puskesmas in Sumedang Regency in 2022 by the Sumedang Regency Health Office shows that the prevalence of stunting in each sub-district varies, the highest prevalence of stunting is at Puskesmas Situ, North Sumedang District with a percentage of stunting of 17.6% or as many as 217 toddlers with a total of 1227 toddlers weighed. The number of short toddlers is 139 toddlers and very short 78 toddlers. The results of interviews with 10 mothers of toddlers in the UPTD Puskesmas Situ work area showed that as many as 7 people had poor behavior about preventing stunting and as many as 3 people had good behavior about preventing stunting.

Stunting prevention is a national program based on the issuance of Presidential Regulation of the Republic of Indonesia No. 42 of 2013 concerning the National Movement for the Acceleration of Nutrition Improvement. This regulation is then translated by each relevant agency as a further elaboration of the relevant regulations. In connection with this, the government launched an integrated stunting prevention intervention program involving cross-ministries and institutions. In 2018, 100 districts in 34 provinces were designated as priority locations for stunting reduction. This number will increase by 60 districts in the following year. This cross-sectoral collaboration is expected to reduce the stunting rate in Indonesia so that the Sustainable Development Goals (SDGs) target in 2025 can be achieved, namely a 40% reduction in stunting rates. According to the Indonesian Ministry of Health (2021), efforts to prevent stunting in children are as follows, meet nutritional needs since pregnancy, give exclusive breastfeeding until the baby is 6 months old, accompany exclusive breastfeeding with healthy complementary foods, continue to monitor child growth and always keep the environment clean.

Efforts to prevent and overcome the problem of stunting, the community needs to be educated to understand the importance of preventing stunting in children. Parents, especially mothers, have a very important role in preventing stunting in children, because children need parental attention and support in facing rapid growth and development. Increasing stunting prevention behavior in children can be done with health education. Health education can be done one of them through health counseling. Counseling is an educational approach to produce individual or community behavior needed to improve health, improve food and nutritional status. The hope of health education efforts is that someone can understand the importance of health and knowledge about nutrition so that they can behave and act following health norms (Nursalam, 2019).

The effectiveness of health education is supported by health education media that is in accordance with the targets of health education conducted. Media plays an important role in the delivery of information. Health education cannot be separated from the media, because through the media the messages conveyed can be more interesting and easy to understand, so that the target can learn the message until deciding to adopt positive behavior (Notoatmodjo, 2016). According to Smaldino et al (2018), videos can also be utilized for almost all topics, types of learners, and every domain: cognitive, affective, psychomotor, and interpersonal. In the cognitive domain, learners can recreate dramatically from past historical events and actual footage of current events, as the elements of color, sound and motion here can make characters feel more alive. In addition, watching videos, after or before reading, can strengthen understanding of the teaching material.

The use of videos involves all five senses and is easier to understand because of the sound and moving images. The use of video is also the right choice for residents who are not too fond of reading. Puskesmas Situ has the facilities and infrastructure of LCD equipment so that there is continuity in the selection of audio visual media (video). Videos can be packaged in the form of VCDs and DVD so that it is easy to carry everywhere, easy to use, can reach a wide audience and is interesting to show. According to research by Permata (2019), the results showed that there was an effect of health education with video and leaflet media on knowledge with (p value 0.000) and attitudes with (p value = 0.001). Health education with video and leaflet media is effective for increasing parents' knowledge and attitudes about stunting. Yanti's research (2022) the results of the Wilcoxon test, obtained a value of $p = 0.004$ (< 0.05), which means that there is a significant effect of providing

health education with poster and video media via WhatsApp on the prevention of stunting by mothers of toddlers in Pupuan Village. Based on this background, it is important to study "The Effect of Health Education in Using Video Media on Stunting Preventing among Mother of Children Under Five Years of Age at Situ Community Health Center Sumedang Regency in 2023".

2. METHOD

The research method used is a pre-experimental research design in the form of one group pretest posttest. The population in this study were all toddlers in the work area of UPTD Puskesmas Situ Sumedang Regency in 2023 as many as 1227 mothers of toddlers. The sampling used in this study was purposive sampling, with a sample size of 93 mothers of toddlers. The instrument used was a questionnaire. Data analysis included univariate and bivariate analysis using paired t-test.

3. RESULTS AND DISCUSSION

3.1. Results

A. Univariate Analysis

- 1) Overview of Stunting Prevention in Toddler Mothers of Children Under Five Years Of at Situ Community Health Center in 2023 before Health Education Using Video Media

Table 1
Overview of Stunting Prevention among Mothers of Toddlers in the Working Area of Situ Health Center in 2023 before Health Education Using Video Media

Pre Test	Frequency	Percent (%)
Good	10	10.8
Moderate	51	54.8
Poor	32	34.4
Total	93	100.0

Source: Primary Data 2023

Based on Table 1, it was found that mothers of toddlers who prevented stunting in good level were 10 people (10.8%), mothers of toddlers who prevented stunting in moderate level is 51 people (54.8%) and mothers of toddlers who prevented stunting in poor level were 32 people (34.4%). These results indicate that less than half of mothers of toddlers prevent stunting.

- 2) Overview of Stunting Prevention in Toddler Mothers of Children Under Five Years Of at Situ Community Health Center Working Area, Sumedang Regency in 2023 after Health Education Using Video Media

Table 2
Overview of Stunting Prevention in Toddler Mothers of Children Under Five Years Of at Situ Community Health Center Working Area, Sumedang Regency in 2023 after Health Education Using Video Media

Post Test	Frequency	Percent (%)
Good	66	71.0
Moderate	27	29.0
Total	93	100.0

Source: Primary Data 2023

Based on Table 2, it was found that mothers of toddlers who prevented stunting in good level were 66 people (71.0%), and mothers of toddlers who prevented stunting were 27 people (29.0%). These results indicate that more than half of mothers of toddlers prevent stunting.

- 3) Overview of the Average Prevention of Stunting in Mothers of Children Under Five Years Of at Situ Community Health Center in 2023 before Health Education Using Video Media

Table 3

Overview of the Average Prevention of Stunting in Mothers of Children Under Five Years of Age at Situ Community Health Center in 2023 before Health Education Using Video Media

Variable	Mean Median	elementar y school	Min- Max	95%CI
Stunting Prevention	56.85 56.25	18.01	6.25 – 81.25	53.14 – 60.56

Source: Primary Data 2023

Based on Table 3, the average stunting prevention score for mothers children under five years of age in the Situ Health Center Working Area, Sumedang Regency in 2023 before health education using video media was 56.85 (95%CI: 53.14 - 60.56), median 56.25 with a standard deviation of 53.14. The lowest stunting prevention score was 6.25 and the highest was 81.25. Thus it can be concluded that the average prevention of stunting in mothers of toddlers is 56.85 and with a 95% confidence level it is believed that the average prevention of stunting in mothers of toddlers at the Situ Health Center, Sumedang Regency in 2023 is between 47.3 and 60.56.

- 4) Overview of the Average of Stunting Prevention among Mothers of Children Under Five Years Of at Situ Community Health Center in 2023 after Health Education Using Video Media

Table 4

Overview of the Average of Stunting Prevention among Mothers of Children Under Five Years Of at Situ Community Health Center in 2023 after Health Education Using Video Media

Variable	Mean Median	elementar y school	Min- Max	95%CI
Stunting Prevention	83.4 87.5	8.6	62.50 – 100	81.6 – 85.1

Source: Primary Data 2023

Based on Table 4, the average score of Prevention of Stunting in Mothers children under five years of age in the Situ Health Center Working Area, Sumedang Regency in 2023 after Health Education using Video Media was 83.4 (95%CI: 81.6 - 85.1), median 87.5 with a standard deviation of 8.6. Most Stunting Prevention the lowest is 62.50 and the highest is 100. Thus it can be concluded that the average prevention of stunting in mothers of toddlers is 83.4 and with a 95% confidence level it is believed that the average prevention of stunting in mothers children under five years of age children under five years of age at the Situ Health Center in Sumedang Regency in 2023 is between 81.6 and 85.1.

B. Analysis Bivariate

- 1) Data Normality test results

Table 5

Data Normality Test Results

Variable	Statistics	Sig	Distribution
Pre test	0.169	0.065	Normal
Post test	0.198	0.087	Normal

Source: Primary Data, 2023

Based on Table 5 above, it can be seen that in the significant column (Sig) the pres test data for stunting prevention is 0.065 or the probability is more than 0.05, so H_0 is rejected, which means that the data population is normally distributed and in the significant column (Sig) the post test data for stunting prevention is 0.087 or the probability is more than 0.05, so H_0 is rejected, which means that the population is normally distributed.

- 2) The Effect of Health Education in Using Video Media on Preventing Stunting in Mothers children under five years of age at Situ Community Health Center in 2023

Table 6

The Effect of Health Education in Using Video Media on Preventing Stunting in Mothers children under five years of age at Situ Community Health Center in 2023

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pre Test Pencegahan - Post Test Pencegahan	26,54	17,132	1,7765	30,0741	23,0172	14,942	92	,000

Sumber: Data Primer, 2023

Based on Table 6 above, it can be seen that the average pre-test stunting prevention is 56.85 and the average post-test stunting prevention is 83.4. The average difference between pre-test and post-test stunting prevention is 26.54. These results indicate that there is a significant difference in the average prevention of stunting before and after health education using video media.

This can be seen from the results of the t test obtained a t value of 14.942 and a p value of 0.000 (<0.05) which means that the null hypothesis is rejected. Thus, there is an effect of health education in using video media on the prevention of stunting in mothers of toddlers in the Situ Health Center Working Area, Sumedang Regency in 2023.

3.2. Discussion

A. Overview of the Average Prevention of Stunting in Mothers of children under five years of age at Situ Community Health Center in 2023 Before Health Education Using Video Media

Based on the results of the study, it is known that the prevention of stunting in mothers of toddlers in the Situ Health Center Working Area of Sumedang Regency in 2023 before health education using video media with an average of 56.85%. Prevention of stunting before being given health education in using video media is still found to be below average, this is because there has been no socialization about preventing stunting in mothers of toddlers from health workers and lack of information about preventing stunting in toddlers.

These results are in line with Harizal's research (2021) that before health education using video media was carried out, it was found that an average of 51.3% of mothers of toddlers were not good at preventing stunting and the post-test value was found to be an average of 75.5% at the Pagaden Health Center, Subang Regency. The results of statistical tests using the Wilcoxon test found the effect of health education on the prevention of stunting in toddlers. The pre-test and post-test values of the respondents obtained a significance value of p value $0.000 < 0.05$, so the hypothesis H1 is accepted, meaning that there is a difference in knowledge before and after being given health education.

The results of this study are not in line with research by Masruroh et al (2021) in the Pesaggrahan South Jakarta Puskesmas work area, which states that there is no effect of health education using video media on the incidence of stunting in children under five (p value = $0.087 > 0.05$). Nutritional problems, especially stunting in toddlers, can hinder the development of children, which will take place in later life such as intellectual decline, vulnerability to non-communicable diseases, decreased productivity to cause poverty and the risk of giving birth to babies with low birth weight (National Team for the Acceleration of Poverty Reduction, 2017: 05). To reduce the incidence of stunting, health workers need to make promotive efforts, namely providing health education about stunting to mothers, so that with health education, mothers can take an attitude in order to prevent stunting.

According to Nursalam, (2019) states that to prevent and overcome the problem of stunting, the community needs to be educated to understand the importance of preventing stunting in children. Parents, especially mothers, have a very important role in preventing stunting in children, because children need parental attention and support in facing rapid growth and development. Increasing stunting prevention behavior in children can be done with health education. Health education can be done one of them through health counseling. Counseling is an educational approach to produce individual or community behavior needed to improve health, improve food and nutritional status. The hope of health education efforts is that someone can understand the importance of health and knowledge about nutrition so that they can behave and act following health norms.

Another impact of stunting is the disruption of brain development, and the occurrence of degenerative diseases in the future (Rahayu et al., 2018). This causes the need for an effort to improve maternal actions in preventing stunting in children. Mothers have an important role in caring for and maintaining the health of their children, so providing health education to mothers is important to do to increase mothers' understanding of stunting. Providing health education is a way to improve health status and healthy behavior by influencing or inviting others (Widodo, 2019).

Health workers' efforts in preventing stunting in mothers of toddlers by conducting health education using video media such as video media that shows directly the steps to prevent stunting. Mothers of toddlers should be able to follow the recommendations of health workers to be active in counseling and counseling activities regarding the prevention of stunting in toddlers.

B. Overview of the Average Prevention of Stunting in Mothers of Children Under Five Years of Age in the Working Area at Situ Community Health Center in 2023 After Health Education Using Video Media

Based on the results of the study, it is known that the prevention of stunting in mothers of toddlers in the Situ Health Center Working Area, Sumedang Regency in 2023 after health education using video media with an average of 83.4. Stunting prevention is included in the good category. Based on these results, there was an increase in the average stunting prevention action after health education using video media. These results are in line with the research of Firdawsi Nuzula (2020) that there are significant differences in the behavior of mothers of toddlers after receiving health education about specific nutritional interventions in preventing stunting with a value of 0.039, and there are differences in the practice of mothers of toddlers on specific nutritional interventions in preventing stunting after receiving health education using video media with a value of 0.002.

However, Fadhilah's research (2017) shows different results, namely the absence of the effect of health education using video media on the prevention of stunting in toddlers. In this study, the WA group feature was utilized as a forum in delivering health education material, this is because through the WA Group participants or respondents can obtain information about stunting.

The effectiveness of health education is supported by health education media that is in accordance with the targets of health education conducted. Media plays an important role in the delivery of information. Health education cannot be separated from the media, because through the media the messages conveyed can be more interesting and easy to understand, so that the target can learn the message until deciding to adopt positive behavior (Notoatmodjo, 2016).

According to Smaldino et al (2018), videos can also be utilized for almost any topic, type of learner and every domain: cognitive, affective, psychomotor and interpersonal. In the cognitive domain, learners can have dramatic recreations of past historical events and actual footage of current events, as the color, sound and motion elements here can bring characters to life. In addition, watching videos, after or before reading, can strengthen understanding of the teaching material. The use of video involves all five senses and is easier to understand because of the sound and moving images. The use of videos is also the right choice for residents who are not too fond of reading. Puskesmas Situ has the facilities and infrastructure for LCD equipment so that there is continuity in the selection of audio-visual media (video). Videos can be packaged in the form of VCDs and DVDs so that they are easy to carry around, easy to use, can reach a wide audience and are interesting to watch.

Based on the above results, health education efforts in using video media are one of the efforts that can be made to increase the prevention of stunting in mothers of toddlers, who should be able to follow the recommendations of health workers to be active in counseling and counseling activities on stunting prevention.

C. The Effect of Health Education in Using Video Media on Preventing Stunting in Mothers of children under five years of age at Situ Community Health Center in 2023

Based on the results of the study, it is known that there is an effect of health education in using video media on the prevention of stunting in mothers of toddlers at the Situ Health Center, Sumedang Regency in 2023, with a p value of 0.000. This is understandable because mothers of toddlers who are given video media treatment get material, input and knowledge about preventing stunting in toddlers.

These results are in accordance with Permata's research (2019), which found that there was an effect of health education with video and leaflet media on knowledge with (p value 0.000) and attitudes with (p value = 0.001). Health education with video and leaflet media is effective for increasing parents' knowledge and attitudes about stunting. Yanti's research (2022) the results of the Wilcoxon test, obtained a value of $p = 0.004$ (<0.05), which means that there is a significant effect of providing health education with poster and video media via WhatsApp on the prevention of stunting by mothers of toddlers in Pupuan Village.

These results are in line with the research of Firdawsi Nuzula (2020) that there are significant differences in the behavior of mothers of toddlers after receiving health education about specific nutritional interventions in preventing stunting with a value of 0.039, and there are differences in the practice of mothers of toddlers on specific nutritional interventions in preventing stunting after receiving health education using video media with a value of 0.002. According to Notoatmodjo (2016) explains that the effectiveness of health education is supported by health education media that is in accordance with the targets of health education conducted. Media plays an important role in the delivery of information. Health education cannot be separated from the media, because through the media the messages conveyed can be more interesting and easy to understand, so that the target can learn the message until deciding to adopt positive behavior.

According to Ifika (2017), it states that health education has a strong enough influence on positive behavior. behavior is an evaluative action towards objects, people, or events. Behavior is also a learned predisposition to respond positively or negatively to an object situation, concept, or person. Factors that influence behavior are personal experiences. Personal experience is the basis for the formation of behavior, personal experience must leave a strong impression.

According to Widodo (2018) in the current era of technological and communication advances, the use of social media such as WA can be utilized as a medium for health education. The advantage of using WA social media is that it can cover all types of media such as the ease of sending text messages, images in the form of posters, videos, files, and others in unlimited quantities, besides that the group feature can also facilitate the process of delivering and receiving information at one time, so that it can collect a large number of respondents. The many conveniences obtained make WA social media effective as a medium for delivering health education information.

Based on these results, it shows that there is no gap between theory and the results of field research that the assumption of the influence of health education in using video media on increasing stunting prevention in mothers of toddlers at the Situ Health Center, Sumedang Regency in 2023, is hypothetically proven. Based on the results of this study, to improve stunting prevention, health workers should apply innovative video media in health education activities. Implementation of health education in using video media to be more interesting with a variety of video models by adding audio-visual media and media images of endorsed artists for stunting prevention video making programs. For mothers of toddlers to actively participate in singing method activities carried out by health workers to improve stunting prevention measures and also diligently seek information about stunting prevention from various media that can broaden the horizons of mothers of toddlers.

4. CONCLUSION

Based on the results of research and discussion of the Effect of Health Education in Using Video Media on Preventing Stunting in Toddler Mothers in the Situ Health Center Working Area, Sumedang Regency in 2023, it can be concluded that:

1. The picture of stunting prevention in mothers of toddlers in the Situ Health Center Working Area, Sumedang Regency in 2023 before health education using video media was 56.85 (95%CI: 53.14 - 60.56).
2. The picture of stunting prevention in mothers of toddlers in the Situ Health Center Working Area, Sumedang Regency in 2023 after Health Education using Video Media was 83.4 (95%CI: 81.6 - 85.1).
3. There is an effect of health education using video media on the prevention of stunting in mothers of toddlers in the Situ Health Center Working Area, Sumedang Regency in 2023, p value of 0.000 (<0.05).

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