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Research article

Effectiveness Of Healthy Food Education On Motivation And Attitude Of Mothers In Preventing The Risk Of Stunting

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ABSTRACT

Background: Stunting is a health problem caused by chronic malnutrition in children, which affects cognitive and motor growth and development. The role of mothers is very important in preventing stunting, especially through a good understanding of nutritional intake. Education is one of the effective efforts in increasing mothers' motivation and attitudes in providing healthy food to children. This study aimed to evaluate the Effectiveness Of Healthy Food Education On Motivation And Attitude Of Mothers In Preventing The Risk Of Stunting.

Methods: This study used a Quasi-Experimental design with a pre-test and post-test with control group design. The sample consisted of 60 mothers who had toddlers at the Kelapa Gading Sehat Posyandu (animation video group) and the Amalia Posyandu (booklet group), each consisting of 30 people. Data were collected using a questionnaire and analyzed using a paired t-test and an independent t-test to see the effectiveness of the educational intervention.

Results: The results showed a significant increase in mothers' motivation and attitudes after being given education. In the animated video group, the average motivation score increased from 35.8 to 48.9, while in the booklet group it increased from 36.4 to 49.8 (p-value = 0.000). For attitude changes, the animated video group increased from 39.27 to 45.10, while the booklet group increased from 38.03 to 43.93 (p-value = 0.000). However, no significant difference was found in the improvement of attitudes between the two groups (p-value = 0.053).

Conclusion: This study concludes that nutrition education based on animated video media and booklets can be an effective method in increasing mothers' motivation and attitudes in efforts to prevent stunting.

BACKGROUND

Nowadays there are many health problems that are often heard, one of which is the problem of malnutrition that has received a lot of attention from the world is stunting, which is where this condition can be seen from the lack of nutrition that occurs in children or the provision of food that does not meet the nutritional intake needs that should be. There are many cases of stunting today. Stunting itself is a case where chronic malnutrition occurs in children which can cause growth and development failure. Stunting is a condition where a child is declared to have a short height or length and is not in accordance with the general growth standards for children. Usually this happens because of a lack of nutrition or nutrition that is obtained since the baby is in the womb or a newborn baby (Choliq et al., 2020) . Stunting can cause developmental problems in children, especially in children under the age of two, so that cognitive and motor developmental obstacles are disrupted which can affect the child's ability to receive lessons and the effects given in the long term can also affect the child's productivity as an adult (Munanadia, 2022).

The risk factor that greatly influences the risk of stunting is the level of inadequate nutritional intake. Children who have insufficient energy or protein intake have a very high risk of stunting.

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This stunting prevention can be done by conducting comprehensive direct intervention for each stunting risk factor by providing health education to influential parties such as mothers of toddlers, pregnant women, and prospective mothers who can help reduce the risk of stunting. This stunting risk factor can also occur from the parents of toddlers such as general factors, genetic factors, and pregnancy factors. Low education in parents also greatly influences the occurrence of stunting with a lack of knowledge in mothers. In addition, motivation, motivation is a very important element in helping to prevent stunting.
According to the World Health Organization (WHO), the highest prevalence of stunting is 149.2 million (22.0%). The incidence of stunting is most common in Asia, with the first rank being in Timor Leste with a total of 48.8%, the second rank being Indonesia with a prevalence of 31.8%, followed by India with 30.2%, while in Australia it is 2.1%, and Japan is 5.5%. Indonesia is a developing country with a high stunting rate, according to WHO the prevalence limit for stunting is 20%. From data obtained from the Indonesian nutritional status survey (SSGI), the stunting rate in Indonesia is 5.33 million toddlers suffering from stunting (24.7%). In 2022, which was conducted by the Ministry of Health of the Republic of Indonesia, it showed that the prevalence of stunting in Indonesia reached 21.6% compared to the previous year, where in 2021 the prevalence of stunting reached 24.4% (Febriana Sulistya Pratiwi., 2022). Stunting data in East Kalimantan is still high since 2021, reaching 22.8% and in 2022 it will be 23.9%. Based on February 2023 data, Samarinda City found that 2,500 toddlers suffered from stunting, where the highest cases were in Sungai Kunjang sub-district with 390 cases and followed by Loa Janan Ilir with 351 people. Meanwhile, the lowest stunting data was in Samarinda City with 91 people (Bappeda, 2023)

The role of mothers is very much needed in helping to prevent stunting today. There are many factors that can influence the motivation and attitude of mothers in helping to prevent the risk of stunting. Based on research conducted by Heni Wulandari, there is a significant relationship between motivation and prevention of stunting. With the results of 228 respondents (83.8%), most of the mothers who have toddlers get a lot of support from their families as many as 234 respondents (86.0%), and the mother's motivation is partly positive 225 respondents (82.7%) (Wulandari & Kusumastuti, 2020). The motivation that exists within an individual will trigger the individual to try to achieve the goals that will be achieved as much as possible and with the support of someone it can also encourage individuals to try to become better and more useful people. One of them is that mothers must be smart in preparing food, choosing food ingredients, to the food menu that will be given. mothers who usually consume nutritious food will usually have children with good nutrition. therefore, to increase motivation, learning in the form of education is needed to help someone learn. Based on research conducted by Niken Ayu, it shows that the mother's attitude in providing balanced nutrition to toddlers as an effort to prevent stunting from 70 respondents, the results were 15 respondents (21.4%) in the good category, 38 respondents (54.3%) in the sufficient category and 17 respondents (24.3%) in the less category (Ayu & Niken, 2021). This illustrates that the mother's attitude, which is reflected through her response and perspective on fulfilling nutrition, has a significant impact on preventing stunting in toddlers. Considering that mothers are the main figures responsible for fulfilling children's daily nutrition, their role is very vital in efforts to prevent stunting. To carry out this role effectively, mothers need to have a comprehensive understanding of the various components of balanced nutrition which include providing breast milk, fulfilling the needs of carbohydrates, protein, fat, vitamins, minerals, and adequate water in the daily intake of toddlers.
Education or what is usually called health education, is a learning process that can be given to individuals, communities, groups or families that aims to change a person's behavior from unhealthy to healthier lifestyles. In an effort to prevent stunting, it is important to provide health education related to this problem. In providing education, the delivery of health information requires media that can help the audience receive information easily and interestingly. Providing education using media in the form of animated videos that can be used to make it easier for a mother to understand the material provided. Booklet media is also one of the options that can be used, booklets themselves are media that contain health messages in the form of writing or pictures. With the presence of both media, it is hoped that it will be able to increase a person's motivation to learn.

Motivation is a basic drive that can move someone to behave, this drive is in a person who moves to do something that is in accordance with the drive within him. According to the theory of adult learning motivation expressed by Knowles, adults have a concept of themselves where adults have experience so that most of them want to be more involved in activities if there is something new that can deepen and broaden their experience. Maternal motivation is very much needed in preventing stunting by consuming foods that contain balanced nutrition, providing additional food for pregnant women, consuming blood-

boosting tablets, clean and healthy living behavior, always providing access to clean water and sanitation facilities and maintaining environmental cleanliness (Aulya et al., 2022). According to the results of data obtained from the Indonesian Ministry of Health in 2017, efforts to prevent stunting problems during pregnancy can be achieved if mothers are motivated to seek higher and more balanced nutritional needs. Therefore, it is important to provide education using both animated video media and booklets to provide information that can be well received. with the occurrence and phenomenon of stunting so as to be able to increase the motivation of mothers by providing education using both media at the Amalia and Kelapa Gading Sehat Posyandu.

METHODS

This study was conducted on September 25 and October 8, 2024 at the Kelapa Gading Sehat and Amalia Posyandu in the Wonorejo Health Center area, Sungai Kunjang District, Samarinda City. This study usedIn this study, a Quasi Experimental method design was used with a pre-test and post-test with control design. With this, the researcher will observe one main group and observe the control group to see if there is a difference before and after the intervention. Where a pre-test will be conducted before the intervention is given and a post-test after the intervention is given. The sample used in this study was PosyanduKelapa Gading Sehat (Animation Video Group) and Amalia (Booklet Group) where each consists of 30 people using a sampling techniqueis non-probability sampling with purposive sampling type which is the determination of samples using certain considerations or criteria. The instrument that will be used in this study is a questionnaire using a Likert scale. In this design, both groups will be given a pretest, then after that they will be given education in the form of animated videos and booklets to each group. After 7 days of being given a pre-test, a questionnaire will be given again with the same questions (post-test) with the same questions to compare the pre-test and post-test in both groups. Based on the hypothesis and objectives to be achieved in this study, all instruments used have been tested previously. In conducting the validity test, this study uses the Pearson Product Moment (PPM) correlation technique formula. Furthermore, a normality test is carried out using Shapiro-Wilk.

RESULTS

Frequency distribution and results of analysis of characteristics of respondents in the intervention and control groups at the Kelapa Gading and Amalia Posyandu (N=30)

Tabel 1 Demographic Data

No	Variables	Intervention		Control	
		N	%	N	%
1	Age				
	a. 19-30	26	86.7	18	60.0
	b. 31-50	4	13.3	12	40.0
2.	Work				
	a. Housewife	26	86.7	26	86.7
	b. Civil Servants	4	13.3	4	13.3
3.	Education				
	a. Elementary School	1	3.3	3	10.0
	b. Junior High School	2	6.7	5	16.7
	c. Senior High School	22	73.3	17	56.7
	d. DIII	1	3.3	1	3.3
	e. S1	4	13.3	4	13.3
4	Income				
	a. Rp > 3,400,000	15	50.0	27	90.0
	b. Rp < 3,400,000	15	50.0	3	10.0

5	Number of children				
	a.1	6	20.0	12	40.0
	b.2	18	60.0	9	30.0
	c.3	6	20.0	7	23.3
	d.4	0	0	2	6.7
6.	Stunting children				
	a. There is	0	0	0	0
	b. No	30	100.0	30	100.0
Total		30	100	30	100

Based on table 3.1, it is known that most respondents in both age groups are around 19-30 years, namely in the intervention group at the Kelapa Gading Sehat Posyandu as many as 26 (86.7%) and the control group at the Amalia Posyandu as many as 18 (60.0%). The average mother's occupation at both Posyandus is a housewife in the intervention group 26 (86.7%) and the control group 26 (86.7%). The average mother's education is high school in both Posyandus, namely in the intervention 22 (73.3%) and the control group 17 (56.7%). The average family income at both Posyandus, namely in the intervention group 15 (50.0%) and the control group 27 (90.0%). The average number of children at both Posyandus, namely the intervention group 18 (60.0%) and the control group 12 (40.0). The average number of stunted children in both Posyandus, namely the intervention and control, is 30 (100.0).

Statistical Test Results

Table 2 Univariate Data on Motivation

Intervention	Mean	Median	Mode	Min	Max	SD	CI 95%	
							Lower	Upper
Pre-test Animation Video	35.8	36.0	37	29	46	3.73	34.44	37.23
Post-test Animation Video	48.9	49.0	49	45	52	1.83	48.25	49.62
Pre-test Booklet	36.47	37.0	37	31	44	3,026	35.34	37.60
Post-test Booklet	49.8	50.0	49	47	52	1.34	49.33	50.33

The table above shows that the average motivation score of respondents during the pretest was mean 35.8, median 36.0, mode 37, min 29, max 46, Standard Deviation 1.83, CI 95% lower while for the results of the post test Posyandu Kelapa Gading on the results mean 48.9, median 49.0, mode 49, standard deviation 3.73, minimum 45, maximum 52. shows the average motivation score of Posyandu Amalia during the pre-test with the results of mean 36.47, median 37.0, mode 37, minimum 31, maximum 44, standard deviation 3.026 while for the results of the post test motivation Posyandu Amalia with a score value of mean 49.8, median 50.0, mode 49, minimum 47, maximum 52, standard deviation 1.34

Table 3 Univariate Data of Attitudes

Intervention	Mean	Median	Mode	Min	Max	SD	CI 95%	
							Lower	Upper
Pre-Test Animation Video	39.27	40.00	36	29	48	40.50	44.43	4,250
Post-Test Animation Video	45.10	45.00	44	42	48	44.41	45.79	1,845

Pre-Test Booklet	38.03	38.50	40	30	48	36.11	42.94	5,143
Post-Test Booklet	43.93	44.00	44	38	48	39.95	44.93	2,664

It is known that from 30 respondents, the mothers' attitudes before and after being given education in the animated video group, the average attitude score increased from 39.27 in the pre-test to 45.10 in the post-test, with standard deviations of 4.250 and 1.845 respectively.
Mothers' attitudes about providing healthy food in preventing the risk of stunting at Posyandu Amalia before and after health intervention with booklet media. Meanwhile, the mothers' attitudes before and after being given education in the booklet group, the average attitude score increased from 38.03 in the pre-test to 43.93 in the post-test, with standard deviations of 5.143 and 2.664, respectively.

Table 4 Results of Dependent T-test Motivation

Motivation	N	Mean	Difference	Std.Deviation	*p value*
Pre-test Animation Video	30	35.8	13.1	3.7	0,000
Post test Animation Video	30	48.9		1.8	
Pre-test Booklet	30	36.4	13.4	3,026	0.000
Post test Booklet	30	49.8		1.34	

Based on data in table 3.4, the average value of respondents before being given animated video education in intervention group A, with an initial value of 35.8 while in intervention group B using booklets, with an initial value of 36.4. After being given animated video education in the form of healthy food in intervention group A increased with a value of 36.,4 and in Intervention group B increased with a value of 49.8. The difference between the intervention group with a total value of 13.1 and intervention group B with a total value of 13.36. The standard deviation before being given education in the intervention group was 3.73 and Intervention group B 3.026 and after being given education in the intervention group 1.837 and Intervention group 1.341. This shows a significant result p-value 0.00 so that the significant value is smaller than the p- value < (0.05) so H0 is rejected and Ha is accepted

Table 5 Results of Dependent T-test of Attitude

Group	**N**	**Mean**	**Difference**	**Std.Deviation**	***p value***
Pre-Test Animation Video	30	39.27	5.83	4,250	0,000
Post-Test Animation Video	30	45.10		1,845	
Pre-Test booklet	30	38.03	5.9	5,143	0.000
Post-Test booklet	30	43.93		2,664	

Based on table 9, the results of the T-Test analysis conducted at the Kelapa Gading Sehat Posyandu and Amalia Posyandu, the data obtained in intervention group A showed a mean pre-test value of 39.27 with a standard deviation of 4.250 and a mean post-test value of 45.10 with a standard deviation of 1.845, where there was a difference in increase of 5.83. Meanwhile, in intervention group B, the mean pre-test value was 38.03 with a standard deviation of 5.143 and the mean post-test value was 43.93 with a standard deviation of 2.664, with a difference in increase of 5.9. Both intervention groups obtained a p-value of 0.000 ($p<0.05$) which indicated a statistically significant difference between the pre-test and post-test values in the two intervention groups, with the number of respondents in each group being 30 people ($F=30$). So being accepted and rejected means that there is an influence of education with booklet media on mothers' attitudes about providing healthy food in preventing stunting.H_aH_0

Table 6 Results of Independent T-test Motivation

Motivation	N	Mean	SD	Mean Difference	T	*Pvalue*
Animated Video	30	48.93	1,837	0.900	-2,167	
Booklet	30	49.83	1,341	0.900	-2,167	0.035

Based on the results of the independent T-test analysis, there was a significant difference between the post-test scores of the Kelapa Gading and Amalia groups, where the Amalia group had a higher average score (M = 49.83, SD = 1.341) compared to the Kelapa Gading group (M = 48.93, SD = 1.837), with the results of the Levene test showing homogeneous variance (F = 1.463, p = 0.231 > 0.05) so that using the assumption of equal variances assumed which resulted in a value of t (58) = -2.167, p = 0.034 < 0.05, with an average difference of -0.900 and a standard error of 0.415, and a 95% confidence interval in the range of -1.731 to -0.069, all of which indicate that the difference in post-test scores between the two groups is real and statistically reliable.

Table 7 Results of Independent T-test of Attitude

Attitude	N	Mean	SD	Mean Difference	T	*Pvalue*
Animation Video	30	45.10	1.84	1.17	1,972	0.053
Booklet	30	43.93	2.66			

Based on table 10 the results of the independent t-test analysis, Levene's Test shows that both groups are equivalent. The results of the analysis show that the average post-test score for the animated video group (M = 45.1, SD = 1.85) is higher than the booklet group (M = 43.9, SD = 2.66). The average difference between the two groups is 1.12 with a standard error of 0.59. The results of the t-test show p value = 0.053 > 0.05. The results show that there is no statistically significant difference between the animated video and booklet methods

DISCUSSION

Relationship between Maternal Age and Stunting Incidence

Based on the age characteristics in the data table that the author took, the majority were aged 19-30, 26 people (86.7%) and 31-50, 4 people (13.3%) in the intervention group and in Intervention Group B with an age range of 19-30, 18 people (60.0%), and at the age of 31-50, 31 people (40.0%). In line with (Pangestu et al., 2021)Based on the table above, it can be seen that from a total of 45 respondents (100%) with maternal age <20 years or >35 years, the majority experienced stunting with the category ≥ -3 SD to -2 SD as many as 27 people (60.0%), while those who experienced stunting with the category ≥ -3 SD amounted to 18 people (40.0%). Meanwhile, from 62 respondents (100%) with maternal age 20-35 years, the majority experienced stunting with the category ≥ -3 SD to -2 SD as many as 43 people (69.4%), and 19 people (30.6%) were in the category of stunting ≥ -3 SD. The results of the chi-square test showed a p-value of 0.426> α = 0.05, which means Ho is accepted and Ha is rejected. Thus, there is no significant relationship between maternal age and the incidence of stunting in Dawe District

Relationship between Mother's Occupation and Stunting Incidence

Based on the data obtained, most mothers chose to become housewives in the intervention group, 26 people (86.7%) and the control group, 18 people (60.0%), and mothers who worked as ASN in the intervention group, 4 people (13.3) and in the control group, 4 people (13.3%). Based on the research results from (Savita & Amelia, 2020) That mothers who do not work are more often found in respondents who experience stunting (cases) than respondents who do not experience stunting (controls) as many as 68 people in cases while mothers who work are more often found in respondents who do not experience stunting (controls) as many as 39 people in cases. Based on the p value of the statistical significance of the t test of 0.000 <0.05, there is a fairly strong correlation between maternal occupation and the prevalence of stunting. The results of further examination obtained an OR value = 5.390 (95% CI: 2.536

- 11.459) which means that children of mothers who do not work are five times more likely to experience stunting than children of mothers who work.

Relationship between Mother's Education and Stunting Incidence

Based on the results of the data obtained in the table above, the mother's education from the intervention group was elementary school 1 person (3.3%), junior high school 2 people (6.7), high school 22 people (73.3), D3 1 person (3.3), and S1 2 people (13.3). And in the
intervention group, elementary school 3 people (10.0%), junior high school 5 people (16.7%),
high school 17 people (56.7%), D3 1 person (3.3), and S1 4 people (13.3). From these results, the majority of the mother's education is high school. According to research Trisyani et al., (2020) There were more highly educated mothers in the stunting group, namely 14 people (53.84%), while mothers with low education levels in the case or control group were 4 people (15.38%). The results of the chi-square test showed that the p-value was 0.-17 (> 0.05), therefore it can be concluded that maternal education and the incidence of stunting do not have a significant relationship.

Relationship between Mother's Income and Stunting Incidence

Based on the data results obtained from the table above with an average family income at the Kelapa Gading Sehat Posyandu and Amalia Posyandu > Rp 3,400,000 in intervention group A 15 people (50.0%), and in intervention group B 27 people (90.0%). Family income below < Rp 3,400,000 in intervention group A 15 people (50.0%) and intervention group B people (10.0%). These results are supported by research Oktalina et al (2023) A total of 50 families (32.9%) with children aged 24-59 months lived in Sukadana Village, the working area of Terara Health Center, and had low income. A total of 17 (34.0%) of the 50 children from low-income households experienced stunting. With p 0.004 (<0.05) and an odds ratio (OR) of 2.238 (95% CI 1.437-27.298), bivariate analysis using the Chi-Square test showed a significant relationship between family income and the frequency of stunting in children aged 24-59 months.

Relationship between Number of Children and Stunting Incidence

Based on the characteristics of the number of children in the intervention group with the number of child 1 being 6 people (20.0%), child 2 being 18 people (60.0%), child 3 being 6 people (20.0%), child 4 being 0 (0). While in the control group child 1 was 12 people (40.0%), child 2 was 9 people (30.0%), child 3 was 7 people (23.3%), and child 4 was 2 people (6.7). In the research results Wahyu et al (2022) children who experienced stunting were 19 children or 76.2% among the varying number of respondent children (1-3 children) compared to children who did not experience stunting, only five children or 20.8%. Likewise, in families with four to six children, children who experienced stunting were two children or 66.7% more compared to children who did not experience stunting, only one child or 33.3%. The number of children and the frequency of stunting in children during the COVID-19 pandemic in the Titi Papan Medan Health Center Work Area did not correlate significantly, based on the results of the chi square statistical test (p value 0.545> 0.05).

Relationship between Stunting Children and Stunting Incidents

Based on the results of the data above with stunted children, both intervention and control groups did not have stunted children. Based on the results of research that has been carried out on two integrated health posts, namely Kelapa Gading Sehat and Amalia, it can be seen that all respondents do not have stunted children. This can be seen because the fulfillment of nutrition given to children is very good. because stunting can be caused by a lack of nutritious food intake and lack of learning. The success of these two integrated health posts can be an example for other integrated health posts in preventing stunting. The importance of education provided can help mothers in paying attention to toddlers in the future.

Analysis of the Influence Before and After Healthy Food Education on Mothers' Motivation to Prevent the Risk of Stunting in the Animation Video and Booklet Groups

Based on the results of the study on the effectiveness of education about healthy food on mothers' motivation in preventing the risk of stunting in the Animation Video and Booklet Group with 60 respondents divided into the Animation Video group of 30 people and the control group at the Amalia Posyandu of 30 people. In this study, it can be seen from the average value of the respondents in the Animation Video Group before being given education with a score35.8 and after the education was

carried out it increased to a score of 48.9. While in the Booklet group before being given education in the form of Booklets got a score of 36.4 and after the education was carried out it increased to 49.8.
Based on the results of the bivariate analysis of motivation before and after being given to the animated video group, the average motivation of mothers before being given health education was 35.8, while after being given health education, the average motivation of mothers increased to 48.9. Based on the results of the paired t-test, a p value of 0.000 was obtained with an a value of <0.05, meaning that there was an influence before and after being given health education using animated videos on maternal motivation in preventing stunting with an average difference of 13.1. Research results (Hartati et al., 2023) There is a significant influence of health education using audiovisual or animated videos about stunting on mothers' knowledge and increasing the motivation of families with children to routinely check at the Integrated Health Post so that toddlers can be monitored in terms of nutrition and development with age to avoid stunting. In the study (Erika et al., 2023) The results obtained using the Wilcoxon Test obtained p = 0.001 (p <0.005) which means that there is an influence of education about stunting on knowledge which is able to increase the motivation and interest of mothers in learning media and is also able to help respondents improve their understanding, which is presented in the form of image media.
Based on the results of the bivariate analysis of motivation before and after being given to the Booklet group, the average motivation of mothers before being given health education was 36.4, while after being given health education, the average motivation of mothers increased to
49.8. Based on the results of the paired t-test, a p value of 0.000 was obtained with an a value of <0.05. This means that there is an effect before and after being given health education using Booklets on maternal motivation in preventing stunting with an average difference of 13.4. From the data above, there is a difference between the respondent scores before and after the intervention is statistically significant. In other words, the intervention of providing education through booklet media to mothers has a significant impact on increasing the respondent scores in the booklet group.
This is in line with research (Ajeng, 2022) that the impact of health education learning using booklets gets an average value of the experimental group with a p-value it can be concluded that there is a difference between before and after education using booklets is given with pre and post results getting a value of 27.644 and a standard deviation of 14.352 and a p-value of 0.000. In the research conducted Sartika & Purnanti (2021) The results obtained before and after education using booklets showed effective results, where seen from the results of the paired t-test, p <0.000 was obtained, which means that education using booklet media improves cadre skills in detecting stunting. According to research Mediani (2024) cadres in an effort to prevent stunting, it was found that most health cadres have moderate motivation in making efforts to prevent stunting, and some cadres have high motivation in preventing stunting. From the theory, it states that education using this booklet has many advantages, including being able to provide information easily and the material that has been included in it is complete and easy to understand, the design provided will be more attractive so that it can attract someone to read it, besides that booklets are easier to carry anywhere and anywhere (Rimadina & Herdhianta, 2023).
Based on the results of the analysis in both tables, it is concluded that the intervention in providing education through animated videos and booklets to mothers has a significant impact on increasing the score results in both groups. The significant value obtained is below 0.05, therefore there is a real difference between the results of respondents before and after being given education using the two media. Thus, the researcher concluded that education using booklets is more effective in increasing mothers' motivation to prevent stunting compared to using animated videos. The use of this booklet media is able to provide complete, clear, and easy-to-understand information. With a simple form, the information contained in the booklet can help convey material or messages directly and effectively, besides that the booklet can also be read anywhere and anytime.

Analysis of Differences Before and After Healthy Food Education on Mothers' Motivation to Prevent the Risk of Stunting in the Animation Video and Booklet Groups
Based on the results of data analysis using an independent T-test to compare the post-test scores between the animation video and booklet groups, results were found that showed significant differences between the two groups. Descriptive statistical analysis showed that the booklet group obtained a higher average post-test score (M = 49.83) with a standard deviation of 1.341 and a standard error mean of 0.245, while the animation video group obtained a lower average post-test score (M = 48.93) with a standard deviation of 1.837 and a standard error mean of 0.335, with each group consisting of 30 participants. Before

conducting the T-test, a homogeneity of variance test was first carried out using Levene's Test which produced an F value = 1.463 with a significance of 0.231 (p> 0.05), which indicated that the variances of the two groups were homogeneous so that the analysis used the assumption of equal variances assumed. The results of the T-test showed a t value = -2.167 with degrees of freedom (df) = 58 and a significance value (2-tailed) of 0.034 (p <0.05), which means that there is a statistically significant difference between the post-test scores of the two groups, with a mean difference of -0.900 and a standard error difference of 0.415, where the 95% confidence interval is in the range between -1.731 to -0.069, which further strengthens that education using booklets shows better results compared to using animated videos.

It can be concluded from the two groups, namely animated videos and booklets, there is a significant difference by showing sig <0.05 of 0.034, then Ha2 is accepted and H02 is rejected. This means that there is a significant difference between the animated video post-test and the booklet post-test. Based on the researcher's assumption that education using booklets has a significant difference in mother's motivation compared to using animated videos. Researchers optimize the use of booklets as learning media, improve the quality of animated videos, and conduct further research on diverse groups for more general and effective results.

Analysis of the Influence Before and After Healthy Food Education on Mothers' Attitudes towards Preventing the Risk of Stunting in the Animation Video and Booklet Groups

Based on the results of the t-test to compare the response scores in the animated video group before and after the intervention. In this table, the average value (mean) of the respondent's score before the intervention was -5.333333, while after the intervention it was - 3.625. The difference between these two values is -1.708333. The standard deviation value before the intervention was 3.065 and after the intervention was 3.561. This shows that there is quite a large variation in the respondent's scores before and after the intervention. The results show a 95% confidence interval for the difference in the average respondent's scores. This confidence interval ranges from -6.981 to -4.635, which means we can be 95% sure that the difference in the average respondent's scores before and after the intervention is within that range. The t-value obtained is -10.391, with a p-value of less than 0.05. This shows that the difference in the response scores obtained before and after the intervention is statistically significant. In other words, the intervention of providing education through animated video media to mothers has a significant impact on increasing response scores in the animated video group. And in the table presents the results of the t-test, but to compare the response scores in the booklet group before and after the intervention. In this table, the average value of the respondent's score before the intervention is -5,900, while after the intervention is -3,418. The difference between these two values is -2,482. The standard deviation value before the intervention is 3,616 and after the intervention is 3,624. Just like the previous table, this shows a fairly large variation in the respondent's score. The 95% confidence interval for the difference in the average respondent's score is in the range of -4,624 to -2,176. The t-value obtained is -9,456, with a p-value of less than 0.05. This also shows that the difference in response scores before and after the intervention is statistically significant.

Based on the results of the analysis in both groups, it was concluded that the intervention of providing education through animated video media and booklets to mothers had a significant effect in increasing the response score in the animated video group and the booklet group. The significance value obtained was <0.05, indicating that there was a real difference between the response scores before and after the intervention was carried out. Overall, the results of this analysis provide strong evidence regarding the effectiveness of education through animated videos and booklets in improving mothers' attitudes towards providing healthy food. Where H01 is rejected and Ha1 is accepted, which shows that there is a significant effect between the two groups.

Providing education plays an important role in shaping a person's attitude, which is the initial response before taking action. Through the guidance process in providing education, a person can obtain new information that can change their attitude to be more positive. When individuals receive education, they will experience increased confidence in carrying out better health care practices. This process begins with the emergence of awareness and recognition of the material received, continues with the development of attitudes to prevent stunting, and finally develops into a positive attitude that encourages a person's actions (Mardan et al., 2023).

Analysis of Differences Before and After Healthy Food Education on Mothers' Attitudes towards Preventing the Risk of Stunting in the Animation Video and Booklet Groups

Based on the results of the independent t-test analysis, it was found that the Levene test showed that both groups were equal (F = 1.906, Sig. = 0.173 > 0.05), which indicated that the variances of both groups were even. Further analysis results revealed that the average post-test score for the Animation Video group (M = 45.1000, SD = 1.84484) > Booklet group (M = 43.9333, SD = 2.66437). The average difference between the two groups was 1.16667 with a standard error of 0.59167, and the t-test results showed a t value = 1.972 with degrees of freedom (df) = 58 and a significance value (2-tailed) = 0.053 > 0.05. Although the results show no statistically significant difference at the α = 0.05 level, the p-value which is very close to 0.05 (0.053) can be interpreted as "marginally significant" or has a tendency for a real difference between the two groups. Where Ha2 is rejected and H02 is accepted which shows there is no significant difference between the two groups.

The researcher assumes that this can happen due to several factors. First, both learning media, both animated videos and booklets, are designed with equivalent materials and content so that both are able to provide relatively the same understanding to respondents. Both media have their own advantages in conveying information to respondents. In addition, the researcher assumes that the equivalent characteristics of respondents, as indicated by the results of the Levene test (F = 1.906, p = 0.173), also contributed to this result. Respondents in both groups have equivalent backgrounds and abilities in absorbing information, both through animated video media and booklets.

Based on the results of the research that has been carried out, the researcher provides suggestions that further researchers are expected to increase the number of research samples in order to obtain more representative results considering the significance value approaching the threshold (p = 0.053).

CONCLUSION

It is concluded that intervention in providing education through animated videos and booklets on mothers' motivation and attitudes has a significant impact on increasing the score results in both groups, namely the animated video and booklet groups. The significant value obtained is below 0.05, therefore there is a real difference between the results of respondents before and after being given education using the two media. The results of the T-test on maternal motivation show a t value = - 2.167 with degrees of freedom (df) = 58 and a significance value (2-tailed) of 0.034 (p <0.05), which means there is a statistically significant difference between the post-test values of the two groups, then Ha is accepted and H0 is rejected. It can be concluded that there is a significant difference between the animated video group and the booklet group. While the results of the T-test on maternal attitudes show a t value = 1.972 with degrees of freedom (df) = 58 and a significance value (2-tailed) = 0.053> 0.05. Although the results show no statistically significant difference at the α = 0.05 level, the p-value which is very close to 0.05 (0.053) can be interpreted as "marginally significant" or has a tendency for a real difference between the two groups. Where Ha2 is rejected and H02 is accepted which shows there is no significant difference between the two groups.

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CONFLICTS OF INTEREST

The authors declare that this study is free from any conflicts of interest

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