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Scrapbook Media On Increasing The Knowledge Of Mother Todders In Stunting Prevention In Lipah Rayeuk Village Jeumpa District, Bireuen Regency

Desita^{1*}, Fatimah Sari², Heru Subaris Kasjono³¹ Master of Midwifery, STIKES for the Nation of Yogyakarta, Indonesia^{2,3} Midwifery Study Program, STIKES for the Nation of Yogyakarta, Indonesia

ABSTRACT

The incidence of short toddlers or often called stunting is one of the main nutritional problems faced by toddlers in Indonesia today. The results of the 2022 Indonesian Nutrition Status Survey (SSGI) for each province throughout Indonesia, Aceh is in the fourth highest position for stunting cases with a percentage (31.2%). The first position is the province, namely West Sulawesi (35.0 %), second is Papua (34.6%), third is West Nusa Tenggara (32.7%). The lowest position is the province of Bali (8.0 %) and followed by the second lowest, namely DKI Jakarta (14.8%). This research method is quantitative using a Quasy Experimental design method with a Two-Group Pretest-Posttest Design. The sampling technique was the total population as 41 people in the intervention group and 41 people in the control group. The research results showed that the average value of knowledge about stunting in the intervention group was 28.1465 and the control group was 21.5854. Thus, from descriptive statistics it can be concluded that there is a difference in the average knowledge of mothers of toddlers about stunting between the intervention group and the control group. Sig value. Levene's Test For Equality of Variances is $0.557 > 0.05$, so it is guided by the value contained in the "Aqual variances assumed" table, namely the Sig value. (2-tailed) of $0.000 < 0.05$, meaning that there is an influence of the use of scrapbook media in health promotion on increasing the knowledge of mothers under five in preventing stunting in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024. The conclusion is that there is an influence of the use of scrapbook media in health promotion on Increasing the knowledge of mothers of toddlers in preventing stunting in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency was declared effective.





Keywords : Health Promotion, Scrapbook, Knowledge, Stunting

Correspondent : Desita

E-mail : desytamc@gmail.com

1. Introduction

Nutrition is one of the factors determining the success of optimal child growth and development. Adequate and balanced nutrition is very necessary in the golden period of children's growth and development. The golden period begins when the child is still in the womb until the age of two years or what is often referred to as "the first thousand days of a child's life". Malnutrition that occurs during the golden period can cause various problems, one of which is the problem of failure to grow so that children become shorter (stunting) than standard (Teja, 2019).

The nutritional status of toddlers is an important thing that every parent must know. The need for more attention to the growth and development of children in the toddler years is based on the fact that malnutrition during this golden age is irreversible, while malnutrition can affect a child's brain development. One of the health indicators whose achievement is assessed is the nutritional status of toddlers. The nutritional status of toddlers is measured based on age, body weight (BB) and height (Solikhah et al., 2017).

Nutritional problems in toddlers aged under 5 years (toddlers) can have serious short-term and long-term impacts. Toddlers who experience malnutrition and malnutrition can have an impact on morbidity, even in developing countries, malnutrition is one of the factors causing child death. In the long term, it will have an impact on chronic nutritional disorders or toddlers growing shorter (stunting) than children their age. This can have an





impact on decreasing intelligence or cognitive ability, increasing morbidity and increasing the risk of non-communicable diseases (NCDs) in the future (Utami, 2019).

Presidential Regulation (Perpres) no. 42 of 2013 concerning the National Movement for the Acceleration of Nutrition Improvement was created as a form of government responsibility to increase public knowledge and awareness of the importance of nutrition and its influence on improving the nutritional status of society. The National Movement for the Acceleration of Nutrition Improvement is a joint effort between the government and the community by raising stakeholder participation and concern in a planned and coordinated manner to accelerate the improvement of community nutrition which is prioritized in the first thousand days of life. Improving community nutrition is expected to have an impact on reducing the prevalence of stunting (Nisa, 2018).

The incidence of short toddlers or often called stunting is one of the main nutritional problems faced by toddlers in Indonesia today. Stunting is a condition in toddlers who cannot develop due to chronic malnutrition, so that toddlers become shorter than their age (Ministry of Health of the Republic of Indonesia 2018). Mothers' lack of knowledge about stunting is a risk factor for stunting in children (Fadyllah and Prasetyo, 2021). With higher knowledge, mothers tend to have children with good nutrition and vice versa. However, the current situation shows that mothers still have wrong perceptions about stunting knowledge and ignore this incident. Misperceptions and lack of maternal knowledge will influence maternal behavior, especially in preventing stunting (Ramdhani et al., 2020).

Many mothers do not know about stunting, especially in developing countries. Data on the prevalence of stunting under five children collected by the World Health Organization (WHO), 2019 states that the South East Asia region is still the region with the highest stunting prevalence rate (31.9%) in the world after Africa (33.1%). Indonesia is included in the sixth country in the South-East Asia region after Bhutan, Timor Leste, Maldives, Bangladesh and India, namely 36.4% (WHO, 2019). Based on the Indonesian Toddler Nutrition Status Survey (SSGBI).





The government through the National Team for the Acceleration of Poverty Reduction (TNP2K) has determined 100 priority districts/cities for stunting reduction. Priority areas or areas that are the main locus of stunting intervention are areas that have a high stunting prevalence rate compared to other areas. This is related to the budget allocated for stunting prevention. Priority areas for stunting reduction have special budgets which are intended for programs to accelerate stunting reduction and prevention (Saputri, 2019).

The problem of stunting is one of the problems faced in the world, especially in poor and developing countries. Stunting is a problem because it is associated with an increased risk of morbidity and death, suboptimal brain development so that motor development is hampered and mental growth is hampered (Arsyati, 2019).

Many studies show that poverty, sanitation and environmental health are other factors that have consequences for stunting in children under five. Apart from that, low maternal education and knowledge also have a big influence on the incidence of stunting in toddlers. The socio-economic conditions of the community, the characteristics of the mother during pregnancy, parenting patterns as well as the environment and geographical conditions (population density, climatic conditions and inadequate sanitation) are also influencing factors (Teja, 2019).

Other factors that influence the incidence of stunting are the ability of health workers to detect stunting conditions early, cleanliness of water and the environment, parenting patterns, place of birth and genetics (Sewa, 2019). Family economic factors, mother's knowledge, exclusive breastfeeding, age at first giving MP-ASI have an influence on the incidence of stunting. Another factor is energy adequacy as a direct effect of stunting, while the birth length of the baby, the mother's height and the mother's age during pregnancy are an indirect effect of stunting. Therefore, preventing stunting starts with women preparing themselves for pregnancy and raising their children in the future (Rosmiati, 2020).

In responding to the high prevalence of stunting, prevention needs to be carried out. Stunting prevention can be done through nutritional and non-nutritional approaches,





the importance of improving the nutrition and health of teenagers, prospective brides (catin), pregnant women and young people, as well as children under five, including PAUD children. It is necessary to strengthen and expand the scope of sensitive nutrition programs related to stunting (water, food, sanitation, education, infrastructure, access to services and the economy) (Arsyati, 2019).

Efforts to prevent stunting early must be made so that women of childbearing age who will prepare for pregnancy so that the child's first 1000 days of life (HPK) are well prepared. Efforts to prevent stunting need to be made for mothers to improve their nutritional status during pregnancy. Maternal knowledge indirectly influences the health status of the mother, the fetus being conceived, and the quality of the baby to be born. So far, efforts to improve nutrition have been carried out when the mother is already pregnant, so that nutritional education, especially in preventing stunting, will be better carried out when the mother is not yet pregnant and is preparing for her pregnancy (Fauziatin et al., 2019).

In developing countries, stunting is a serious public health problem and its prevalence remains high. Stunting is caused by a lack of nutritional intake for a long time during the first 1000 days of life (HPK), which is a critical period. Toddlers after measuring their length or height according to their age, when compared with the 2005 WHO-MGRS (Multicentre Growth Reference Study) standard, the z-score value of less than -2SD is categorized as short, and categorized as very short if the z-score value is less than -3SD (Sewa et al., 2019).

The incidence of stunted toddlers in 2017, 22.2 % or around 150.8 million toddlers in the world experienced stunting. In 2017, more than half of the world's stunted children came from Asia (55%) while more than a third (39%) lived in Africa. Of the 83.6 million stunted children under five in Asia, the largest proportion comes from South Asia (58.7%) and the lowest proportion in Central Asia (0.9%) (Saputri, 2019).

Cases of stunting in children under five are still a health problem that needs to be watched out for in Indonesia. Data on the prevalence of stunted children under five collected by the World Health Organization (WHO) released in 2018 stated that Indonesia





was included in the third country with the highest prevalence in the South-East Asian Region after Timor Leste (50.5%) and India (38.4%) namely 36.4%. The stunting prevalence rate in Indonesia is still above 20%, meaning it has not yet reached the WHO target of below 20% (Teja, 2019).

The results of the basic health publication of the Indonesian Ministry of Health in 2018 showed that the status of children under five experiencing stunting reached 30 percent. This figure is lower than the basic health survey conducted in 2013 which reached 37.2 %. The province with the highest proportion is East Nusa Tenggara, reaching 42.6 percent. This figure is lower than the survey results in 2013 which reached 51.7 %. The prevalence of children under five experiencing stunting in 2019 decreased compared to 2018, namely from 30.8 % to 27.7%. Even though it has decreased, the figure is still quite high because 28 out of 100 toddlers experience stunting (Ministry of Health of the Republic of Indonesia, 2021).

The Ministry of Health announced the results of the Indonesian Nutritional Status Survey (SSGI) at the BKKBN National Working Meeting, Wednesday (25/1) where the prevalence of stunting in Indonesia fell from 24.4% in 2021 to 21.6% in 2022. The results of the SSGI are to measure stunting targets in Indonesia. Previously, SSGI was measured every 3 years to every 5 years. The Minister of Health said that starting 2021 SSGI will be carried out every year.

The results of the 2022 Indonesian Nutritional Status Survey (SSGI) for each province throughout Indonesia, Aceh is in the fourth highest position for stunting cases with a percentage (31.2%). The first position is the province of West Sulawesi (35.0 %), the second is Papua (34.6%), the third is West Nusa Tenggara (32.7%). The lowest position is the province of Bali (8.0 %) and followed by the second lowest is DKI Jakarta (14.8%) (Ministry of Health of the Republic of Indonesia, 2023).

Based on data from the Bireuen District Health Service, the number of toddlers in 2021 will be 36,310 toddlers, in 2022 there will be 33,014 toddlers and in 2023 there will be 35,599 toddlers. Data related to stunting incidents in the Bireuen Regency area in 2021 was 1,771 cases (4.9%), in 2022 there were 1,043 cases (3.2%) and in 2023 there were





739 cases (2.1%). The visible decrease in the number of incidents every year is something that needs to be appreciated. Then the number of incidents in the Jeumpa Health Center Working Area in 2021 was 50 cases, in 2022 there were 25 cases and in 2023 there were 29 cases.

Lack of maternal knowledge about stunting. One of them is a lack of information, which significantly reduces the mother's knowledge. Another cause of mothers' lack of knowledge about stunting is that not all mothers with children under 5 years of age attend Posyandu. To increase mothers' knowledge about preventing stunting, one effort to make mothers aware of the risk factors for stunting is through health education (health promotion) (Ministry of Health of the Republic of Indonesia, 2021; Ramdhani et al., 2020).

The mother's role as the main caregiver of her child is very necessary, from purchasing to serving food. If the mother's knowledge is low, the result is that she is unable to choose and serve food to the family that meets the requirements for balanced nutrition, so the child may be at risk of experiencing stunting (Rahayu and Khairiyati 2020). This is in line with the results of a recent community-based cross-sectional study in rural Ethiopia explaining that mothers with little knowledge about children's diet were 5 times more likely to have stunted children than mothers with good knowledge. This means that the lower the mother's knowledge, the greater the risk of stunting, and vice versa, the higher the mother's knowledge, the lower the child's risk of stunting (Girma, Fikadu and Abdisa, 2019).

In order to reduce stunting rates, the community needs to understand what factors cause stunting, apart from that, mothers' level of knowledge needs to be increased regarding how to prevent stunting (Sinuraya, 2019). One effort to increase knowledge is through health education. Health education will have a good effect if the process uses good methods and media. Health education is a process to increase the community's ability to maintain and improve their health (Kisman et al., 2020).

Efforts that can be made to increase knowledge about health are health education (Notoatmodjo, 2012). Health education can be done in several ways, namely: counseling,





training, counseling, consultation and through the media. These five methods have advantages and disadvantages. One of the media used can be print media, namely by using learning media in the form of scrapbooks, puzzles and robotics.

Scrapbooks, compared to other learning media, are the most frequently used media because they have a significant influence on increasing mothers' knowledge. A scrapbook is a scrapbook containing a collection of pictures, photos, stories, notes arranged and arranged in an interesting way (in an album) or a hand-made book (Hindarto, TC & Honggowidjaja. 2016).

2. Research Methods

This type of research is quantitative using a Quasy Experimental design method with a Two-Group Pretest-Posttest Design, namely an intervention group and a control group. This research uses the Pre-Experimental method because the conditions for experimental research are not sufficient, because it does not have strict limits on randomization (Notoatmodjo, 2015).

The population is the entire research object or objects to be studied (Riyanto & Hatmawan, 2020). The population in this study was 82 mothers with children under five in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency, in August 2024.

The sample in this research was in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency, namely 82 people. Sampling technique is a sampling technique to determine the sample that will be used in research. In this research, researchers used total sampling. Total sampling is a sampling technique where the number of samples is the same as the population. In this study, the number of samples for the intervention group was 41 people and the control group was 41 people (Hidayat, 2009).

3. Results and Discussion

a. Results

The characteristics of the sample taken in this study included mother's age, age of children under five, education, employment, income and parity.

Table 4.1

*Characteristics of respondents in Lipah Rayeuk Village,
Jeumpa District, Bireuen Regency in 2024.*

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No.	Respondent Characteristics	N (%)			
		Intervention		Control	
		n	%	n	%
1	Mother's Age				
	20-35 Year	34	82.9	29	70.7
	36-45 Year	6	14.7	10	24.4
	>45 years	1	2,4	2	4.9
	Total	41	100	41	100
2	Toddler Age				
	1 year	3	7.3	8	19.5
	2 years	17	41.5	13	31.7
	3 years	8	19.5	8	19.5
	4 years	8	19.5	7	17.1
	5 years	5	12.2	5	12.2
	Total	41	100	41	100
3	Education				
	Base	10	24.4	6	14.7
	Intermediate	25	61.0	27	65.9
	Tall	6	14.6	8	19.5
	Total	41	100	41	100
4	Work				
	IRT	30	73.2	26	63.4
	Trader	6	14.6	5	12.2
	Honorary	1	2,4	1	2,4
	Civil servants	3	7.3	3	7.3
	Private sector employee	1	2,4	6	14.6
	Total	41	100	41	100
5	Income				
	≥ Minimum wage	11	26.8	11	26.8
	< Minimum wage	30	73.2	30	73.2
	Total	41	100	41	100
6	Parity				
	Primipara	17	41.5	12	29.3
	Multiparous	24	58.5	29	70.7
	Total	41	100	41	100

Based on table 4.1, it is known that the majority of respondents in the intervention





group in this study were aged 20-35 years, namely 34 people (82.9 %). The majority had toddlers aged 2 years as many as 17 people (41.5 %). The majority of respondents were educated in the middle category as many as 25 people (61.0%), then also the majority were Housewives (IRT) as many as 30 people (73.2%) and the majority with family income < Minimum Wage was 30 people (73.2%) and had majority parity in the multipara category as many as 24 people (58.5%). the majority of control group respondents in this study were aged 20-35 years, 29 people (70.7%). The majority had toddlers aged 2 years as many as 13 people (31.7 %). The majority of respondents were educated in the middle category as many as 27 people (65.9%), then also the majority were Housewives (IRT) as many as 26 people (63.4%) and the majority with family income < Minimum Wage was 30 people (73.2%) and had the majority parity in the multipara category as many as 29 people (70.7%).

Table 4.2

Test of Differences in Characteristics of Respondents in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024.

No.	Respondent Characteristics	N (%)				P value	CI 95%	
		Intervention		Control			Lower	Upper
		n	%	n	%			
1	Mother's Age							
	20-35 Year	34	82.9	29	70.7	0.366	-4.28057	1.59764
	36-45 Year	6	14.7	10	24.4			
	>45 years	1	2,4	2	4.9			
	Total	41	100	41	100			
2	Toddler Age							
	1 year	3	7.3	8	19.5	0.737	-.67351	.47839
	2 years	17	41.5	13	31.7			
	3 years	8	19.5	8	19.5			
	4 years	8	19.5	7	17.1			
	5 years	5	12.2	5	12.2			
	Total	41	100	41	100			
3	Education							
	Base	10	24.4	6	14.7	0.311	-.50402	.16256
	Intermediate	25	61.0	27	65.9			





No.	Respondent Characteristics	N (%)				P value	CI 95%	
		Intervention		Control			Lower	Upper
		n	%	n	%			
	Tall	6	14.6	8	19.5			
	Total	41	100	41	100			
4	Work							
	IRT	30	73.2	26	63.4	0.110	-1.03485	.10802
	Trader	6	14.6	5	12.2			
	Honorary	1	2,4	1	2,4			
	Civil servants	3	7.3	3	7.3			
	Private sector employee	1	2,4	6	14.6			
	Total	41	100	41	100			
5	Income							
	≥ Minimum wage	11	26.8	11	26.8	0.371	-.31354	.11842
	< Minimum wage	30	73.2	30	73.2			
	Total	41	100	41	100			
6	Parity							
	Primiparas	17	41.5	12	29.3	0.254	-.33297	.08906
	Multiparous	24	58.5	29	70.7			
	Total	41	100	41	100			

The characteristics of maternal age, toddler age, education, employment, income and parity were evenly distributed in the control and intervention groups, as evidenced by the results of the P value statistical test (>0.05).

1. Knowledge

a. Intervention group knowledge



**Table 4.3.**

Pre-test and Post-test Results of the Intervention Group Using Scrapbooks in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024

Intervention Group	N	Std. Deviation	Mean	P	CI 95%	
					Lower	Upper
Pre-Test	41	6.39912	20.5854	0,000	-	-6.43824
Post-Test	41	4.70936	28.1463		8.68371	

Based on the research results above, it is known that the summary of descriptive statistics results from the average of the two samples studied, namely *the pre-test* and *post-test*, *the average pre-test* score was 20.5854 and *the post-test* was 28.1463. Because the average value of *the pre test* < *post test* means that descriptively there is a difference in the value of mothers' knowledge about stunting prevention before and after health promotion using *scrapbooks*. The p value is $0.000 < 0.05$, so H_0 is rejected and H_a is accepted so it can be concluded that there is an influence of health promotion using *scrapbooks* on increasing mothers' knowledge about stunting prevention in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024.

b. Control Group Knowledge

Table 4.4.

Pre-test and Post-test Results of Control Group Using PPT in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024

Intervention Group	N	Std. Deviation	Mean	P	CI 95%	
					Lower	Upper
Pre-Test	41	4.38609	19.6341	0,000	-2.50674	-1.39570
Post-Test	41	4.41008	21.5854			

Based on the research results above, it is known that the summary of descriptive statistical results from the average of the two samples studied, namely *the pre-test* and *post-test*, *the pre-test* score obtained was an average of 19.6341 and *the post test* was 21.5854. Because the average value of *the pre test* < *post test* means that descriptively there is a difference in the value of mothers' knowledge about stunting prevention before and after health promotion without using *scrapbooks* and using *PPT*. The p value is





$0.000 < 0.05$, so H_0 is rejected and H_a is accepted so it can be concluded that there is an effect of health promotion without using *scrapbooks* on increasing mothers' knowledge about preventing stunting in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024.

2. Differences in Knowledge After Health Promotion Between the Intervention Group and the Control Group

Table 4.5.

Delta Post-test Scores for Both Groups in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024

Group	N	Std. Deviation	Mean	P	CI 95%	
					Lower	Upper
Intervention	41	4.70936	28.1463	0,000	4.55576	8.56619
Control	41	4.41008	21.5854			

Based on 4.5, it is known that the total data on knowledge results from the intervention group was 41 and the control group was 41. The average value of knowledge results about stunting for the intervention group was 28.1465 and the control group was 21.5854. Thus, from descriptive statistics it can be concluded that there is a difference in the average knowledge results of mothers of toddlers about stunting between the intervention group and the control group, then the average value of the intervention group is greater than the control group. The significant value of *Levene's Test for Equality of Variances* is $0.557 > 0.05$, so it can be interpreted that the data *variance* between the intervention group and the control group is homogeneous or the same, so the interpretation of the *Independent Sample Test output table* above is guided by the values contained in the " *Aqual variances* " table. *assumed* ", namely a *p value* of $0.000 < 0.05$, meaning that H_0 is rejected and H_a is accepted. Thus, it can be concluded that there is an influence of health promotion using *scrapbook media* on increasing the knowledge of mothers of toddlers in preventing stunting in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024.

b. Discussion

1. Respondent Characteristics





The results of research conducted in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024 showed that the majority of respondents in the intervention group in this study were aged 20-35 years, 34 people (82.9%). The majority had toddlers aged 2 years as many as 17 people (41.5 %). The majority of respondents were educated in the middle category as many as 25 people (61.0%), then also the majority were Housewives (IRT) as many as 30 people (73.2%) and the majority with family income < Minimum Wage was 30 people (73.2%) and had majority parity in the multipara category as many as 24 people (58.5%). the majority of control group respondents in this study were aged 20-35 years, 29 people (70.7%). The majority had toddlers aged 2 years as many as 13 people (31.7 %). The majority of respondents were educated in the middle category as many as 27 people (65.9%), then also the majority were Housewives (IRT) as many as 26 people (63.4%) and the majority with family income < minimum wage was 30 people (73.2%) and had the majority parity in the multipara category as many as 29 people (70.7%). The characteristics of maternal age, toddler age, education, employment, income and parity were evenly distributed in the control and intervention groups, as evidenced by the results of the P value statistical test (>0.05).

Based on the research results, it was found that the characteristics of respondents in the intervention group and the majority of the control group were in the same category so that the research results were more optimal because they had homogeneous or the same respondents. In this study, the results showed that the age of mothers under five was in the 20-35 year age category, where this age is a productive age and is not at risk for pregnancy and childbirth.

The majority of respondents in this study also had high education, so this really optimizes the research results because this research is related to health promotion so that education is related to the health promotion process. Then the majority of respondents are housewives, this is very supportive because by being a housewife, mothers are more focused on looking after their children because they





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don't have other activities. Then the majority of respondents have family incomes above the minimum wage, this also really supports stunting prevention behavior. The majority of respondents in this study have children in the multiparous category, so respondents who have more than 1 child really need knowledge about stunting prevention to optimize monitoring of their children's growth and development.

This is in line with Lawrence Green's theory in Notoatmodjo (2012) that predisposing factors in a person's health behavior are determined by a person's characteristics in the form of age, education, work, attitudes, knowledge and culture (tradition). Behavior is the result of individual characteristics and the environment which is created when trust and confidence in an object supports the behavior and is formed through a positive attitude towards the behavior. Behavior is also greatly influenced by good knowledge, then knowledge is influenced by several factors such as education, mass media / information sources, socio-economics, environment and age.

Research conducted by Ansori, M (2022) found that the majority of counseling participants had secondary school education (45%) followed by (30%) high school education, while 10% of counseling participants had elementary school education and 10% had tertiary education) by 15%. In this outreach, changes in the level of knowledge possessed by the community after this activity can be understood because the respondents have sufficient educational background. and the term stunting is often obtained from Posyandu activities and outreach provided by health workers at community health centers. So this can influence public knowledge so that it will have an impact on efforts to control stunting. Maternal education has a significant relationship with the incidence of stunting ($p < 0.05$) Hizni in Cirebon City, which shows that mothers with low education are at risk of having stunted children 2.22 times greater than mothers with higher education. The level of education, especially the mother's education level, influences the level of health. This is related to the role that plays the most





in forming children's eating habits, because it is the mother who prepares the food, starting from arranging the menu, shopping, cooking, preparing food, and distributing food.

2. Knowledge

Based on the results of research conducted in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024, in the intervention group, it was found that the summary of descriptive statistical results from the average of the two samples studied, namely pre-test and post-test, the pre-test score obtained was an average of 20.5854. and the post test was 28.1463. Because the average value of the pre test < post test means that descriptively there is a difference in the value of mothers' knowledge about stunting prevention before and after health promotion using scrapbooks in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024. The correlation coefficient value is 0.837 with The significance value (Sig.) is $0.000 < 0.05$ so it can be said that the effectiveness of health promotion using scrapbooks in increasing mothers' knowledge about preventing stunting is effective.

Based on the results of research conducted in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024 in the control group, it is known that the summary of descriptive statistical results from the average of the two samples studied, namely the pre test and post test, the pre test score obtained was an average of 19.6341 and the post test was 21.5854. Because the average value of the pre test < post test means that descriptively there is a difference in the value of mothers' knowledge about stunting prevention before and after health promotion without using scrapbooks in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024. The correlation coefficient value is 0.837 with a significance value (Sig.) of $0.000 < 0.05$ so it can be said that there is an effect of health promotion without using scrapbooks on increasing mothers' knowledge about stunting prevention.





Based on the results of research that has been conducted, it was found that the intervention group and control group experienced an increase in the knowledge of mothers of toddlers after health promotion, whether using scrapbooks or not using scrapbooks. However, in this study, health promotion using scrapbooks increased knowledge more significantly than without using scrapbooks. This can be proven by the average values before and after health promotion which can be seen in table 4.10 and table 4.13 which can show clear figures. This increase in knowledge is because when health promotion uses scrapbooks, respondents are more enthusiastic because they are also equipped with interesting books and have pictures and writing that are easy to remember and interesting in terms of pictures and the writing is more concise and clear.

This is in line with the theory of Azyura, EN & Mulyani (2018) regarding the advantages of scrapbooks, including that scrapbook media has an attractive appearance, because scrapbooks are made from various images that are combined and arranged in such a way that beauty is paid attention to. Scrapbooks are made from materials found in the surrounding environment, the materials are easy to obtain, the method of making them is also not difficult so everyone from children to adults can make scrapbooks. In general, scrapbooks are the same size as books, this makes it easier for scrapbooks to be carried and stored. However, scrapbooks themselves have various shapes. It is realistic in showing the subject of discussion. Scrapbooking can show an object that looks real through pictures and photos. That way it will be easier for us to remember it. Having a scrapbook can be a solution to the many events or objects that are difficult to see directly.

This is in line with the research of Nur'afaizah, H (2023) on the effect of nutrition education using scrapbook media on knowledge of food planning and consumption levels of pregnant women with anemia in the Harapan Baru Health Center Work Area. The results obtained were that there was an effect of nutrition education using scrapbook media on knowledge of food planning in the Harapan Baru Health Center Work Area ($p = 0.000$), and there was no effect of nutrition





education using scrapbook media on the consumption levels of pregnant women with anemia in the Harapan Baru Health Center Work Area ($p = 0.131$). This study also found that the knowledge of pregnant women after being given education using scrapbooks increased by an average of 87.5 % from the previous 66.7%.

3. The Effect of Health Promotion Using Scrapbook Media on Increasing the Knowledge of Toddler Mothers About Stunting Prevention

Based on the results of research conducted in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024, the Sig. Levene's Test For Equality of Variances is $0.557 > 0.05$, so it can be interpreted that the data variance between the intervention group and the control group is homogeneous or the same, so the interpretation of the Independent Sample Test output table above is guided by the values contained in the "Aqual variances assumed" table. namely the Sig value. (2-tailed) of $0.000 < 0.05$ means that H_0 is rejected and H_a is accepted. Thus, it can be concluded that the use of health promotion using scrapbook media to increase the knowledge of mothers of toddlers in preventing stunting in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency is declared effective.

The results of this research show that scrapbooks are very effective as health promotion media for mothers of toddlers, because they are proven to increase their average knowledge score. This is because scrapbooks can also be used as educational games for creativity. Educational games are games that train physical abilities, stimulate thinking abilities (Azyura, EN & Mulyani, 2018). The scrapbook that the researcher presented contained very interesting pictures and narratives with bright colors so that it could increase respondents' interest in reading. This interest then made respondents feel at home holding the book for a long time, so that what they read could be remembered and increase their knowledge.

This is in line with research by Hartateana, R (2022) regarding the influence of scrapbook media education on increasing pregnant women's





knowledge about exclusive breastfeeding. There was an increase in pregnant women's knowledge about exclusive breastfeeding after being given education through scrapbook media in both groups.

Scrapbook media has been proven to have an influence in increasing mothers' knowledge about preventing stunting, so the use of scrapbook media needs to be increased in the process and health education or promotion programs carried out especially by health workers, whether about stunting or also about other materials that must be promoted to the community. Effective media like this can increase public knowledge, with increased knowledge it will influence changes in attitudes and health behavior to become more positive, in this case regarding stunting prevention.

4. Conclusion

- a) The characteristics of maternal age, toddler age, education, employment, income and parity were evenly distributed in the control and intervention groups.
- b) Based on the results of research conducted in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024, it was found that there was an influence of health promotion using scrapbook media on increasing the knowledge of mothers of toddlers in preventing stunting.
- c) In the intervention group, it was found that the average pre test score < post test means that there is a difference in the value of mothers' knowledge about stunting prevention before and after health promotion using scrapbooks in Lipah Rayeuk Village, Jeumpa District, Bireuen Regency in 2024.

5. Compliance with ethical standards

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Disclosure of conflict of interest





This research is a positive thing for all researchers so that conflicts, problems and so on do not become obstacles for researchers at all.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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