



THE EFFECT OF SCRAPBOOK MEDIA EDUCATION ON INCREASING PREGNANT WOMEN'S KNOWLEDGE ABOUT EXCLUSIVE BREAST MILK

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ABSTRACT

The low coverage rate of exclusive breastfeeding at the Sayung II Health Center based on data from the Health Profile of Demak Regency in 2020 is 52.8%, influenced by several kinds of factors, one of which is that educational activities about exclusive breastfeeding have not been maximized. Education is an activity that can provide the ability and knowledge to someone or more by learning. Scrapbook is one of the media used for education and entered into 2-dimensional media whose shape is according to the wishes of the maker by sticking technique. This study aims to determine the effect of scrapbook media education on increasing the knowledge of third trimester pregnant women about exclusive breastfeeding in the working area of the Sayung II Health Center. The research design used a quasi-experimental research design and this research design used a pretest-posttest with control group. This research was conducted from March to April 2022. The sampling method used a total sampling technique with a total sample of 48 people. Data analysis used Paired Sample T-test. The results showed that there was an increase in knowledge of pregnant women about exclusive breastfeeding after being given education in both groups. In the intervention group a p-value of 0.000 <0.05 was obtained and the control group obtained a p-value of 0.000 <0.05. The conclusion of this study is that there is an effect of education with scrapbook media on the knowledge of pregnant women about exclusive breastfeeding.

Keywords: Education; Scrapbooks; Knowledge; Pregnant mother; Exclusive breastfeeding

Introduction

Mother's milk (ASI) is the only best food for babies, is the most abundant source of nutrients and has a very complete nutritional composition that is beneficial for the development and growth of the baby. The composition is also easier to digest compared to formula milk. Therefore, it can be said that breast milk is the main food of the baby in the first 6 months of his life¹

In order to reduce child morbidity and mortality, the United Nations Children's Fund (UNICEF) and the World Health Organization

(WHO) recommend that children only be given breast milk for at least six months. After that, in addition to breast milk, solid and semi-solid foods should be added to the child as additional food. Exclusive breastfeeding is recommended in the first month after the birth of the baby, because breast milk is not contaminated and contains various nutrients. It also helps children build the antibodies needed to protect them from diseases that often attack their children².

The Indonesian Health Profile data notes that the national standard for exclusive breastfeeding is 80%, but the facts on the

ground reveal that the coverage of exclusive breastfeeding in Indonesia is still low because in 2020 the coverage of exclusive breastfeeding is still 66.1%³.

Then according to the data from the National Social and Economic Survey in 2020, it shows that of the 34 provinces in Indonesia, Central Java is included in the regions that have not yet reached the national standard target for exclusive breastfeeding coverage, which is 80%, it can be seen from the coverage of exclusive breastfeeding in Central Java during the last 3 years by 76.30%⁴.

Then based on Demak District Health Profile data in 2020 from 27 Puskesmas in Demak District, Sayung II Health Center has low breastfeeding coverage, where in 2020 Sayung II Health Center was included in the 3rd lowest health center with a value of 52.8% and two years earlier namely in 2018 it was 66.48% and then decreased in 2019 to 36.1%. This shows that the coverage of exclusive breastfeeding at the Sayung II Health Center is still far from the national target⁵

The coverage of exclusive breastfeeding that has not met the national target is triggered by several factors, namely the provision of formula milk to infants aged 0-6 months without clear indications, which is still widespread; the provision of a breastfeeding room in the work environment which is still rare, hinders exclusive breastfeeding; there are limited breastfeeding counselors and educational or counseling activities about exclusive breastfeeding that are less than optimal; and there are still many hospitals that have not implemented the ten steps to successful breastfeeding⁵.

Promotive and preventive actions are carried out in order to improve health status through health education, which will have an influence on increasing mother's knowledge about exclusive breastfeeding. In this step the selection of a media and method has an influence on the success of a health education or counseling⁶.

Health education media are all forms of means to convey information from communicators through various media,

including electronic, print, and outdoor media. Direct media as educational media is media that can be observed as well as seen, which can help the target when studying the educational material so that the target understands the material contained in it. One of the print media that contains visual and interesting messages for health education and can be used to provide education about exclusive breastfeeding is scrapbook^{7,8}.

Scrapbook comes from the word scrap which in English means leftovers, pieces, or cutouts, while book means book. Scrapbook is a scrapbook that contains a collection of pictures, photos, stories, notes that will be arranged and arranged in an interesting way in an album or hand-made book⁹.

The purpose of this study is knowing the effect of scrapbook media education on increasing knowledge of pregnant women about exclusive Breastfeeding in the working area of the Sayung II Health Center, Demak Regency.

Methods

The design of this study used a quasi-experimental research design (quasi experimental designs), this research design used a Pretest-Posttest With Control Group, which is a design in which there are 2 groups consisting of an experimental group (intervention with scrapbook) and a control group (intervention with leaflets). The variables in this study include the independent variable is education with scrapbook media, the dependent variable is the level of knowledge of pregnant women about exclusive breastfeeding, the control variable is education with leaflet media. This research will be conducted in March-April 2022 in the working area of the Sayung II Health Center, Demak Regency. The population in this study were all pregnant women in the third trimester in the work area of the Sayung II Health Center as many as 48 people seen from the cohort data of mothers at the Sayung II Health Center. The sampling technique used was total sampling technique. The instruments used in this research are scrapbook media, leaflets and a questionnaire

containing 22 questions. Univariate analysis resulted in the distribution of the frequency and percentage of respondents based on age, education, occupation, knowledge, and parity, while the bivariate analysis used were Paired samples T-test and Independent Samples T-test. Ethical clearance in this study with code of ethics number No.055/EA/KEPK/2022.

Results and Discussion

The research results are presented in the form of tables and narratives from the results of univariate and bivariate analysis.

1. Univariate Analysis

a. Characteristics of Respondents

Table 1 Frequency Distribution Characteristics Respondents based on Education, Employment, and Parity Scrapbook Group

Characteristics	F	%
Education	5	20.8
SD/MI/Equivalent	4	1.7
SMP/MTS/Equivalent	15	62.5
College	0	0
Amount	24	100
Work		
Doesn't work	14	5.3
Working	10	4.7
Amount	24	100
Parity		
Nulipara	7	29.2
Primipara	8	33.3
Multipara	9	37.5
Amount	24	100

Table 1 showed as many as 5 respondents (20.8%) have the latest education level SD/MI/equivalent, 4 respondents (16.7%) have the latest education level SMP/MTS/Equivalent, 15 respondents (62.5%) has the last education level of SMA/SMK/equivalent, and 0 respondents (0%) have the last education level of Higher Education. Then most of the respondents did not work as many as 14 respondents (58.3%) while there were 10 respondents who worked (41.7%). Then it can be seen in the table that 7 respondents (29.2%) are nulliparas, 8 respondents (33.3%) are primiparas, and 9 respondents (37.5%) are multiparas.

Table 2 Frequency Distribution Characteristics Respondents based on Education, Employment, and Parity Leaflet Group

Characteristics	F	%
Education	0	0
SD/MI/Equivalent	10	41.7
SMP/MTS/Equivalent	10	41.7
College	4	16.7
Amount	24	100
Work		
Doesn't work	19	79.2
Working	5	20.8
Amount	24	100
Parity		
Nulipara	5	20.8
Primipara	5	20.8
Multipara	14	58.3
Amount	24	100

Table 2 showed as many as 0 respondents (0%) have the latest education level SD/MI/equivalent, 10 respondents (41.7%) have the latest education level SMP/MTS/Equivalent, 10 respondents (41.7%) have The last education level is SMA/SMK/Equivalent, and 4 respondents (16.7%) have the last education level in Higher Education. Then most of the respondents did not work as many as 19 respondents (79.2%) while those who worked there were 5 respondents (20.8%). Then it can be seen in the table that as many as 5 respondents (20.8%) were nulliparas, 5 respondents (20.8%) were primiparas, and 14 respondents (58.3%) were multiparas.

b. Frequency Distribution of Exclusive Breastfeeding Knowledge Before and After Education with Scrapbook and Leaflet Media

Table 3 Frequency Distribution Exclusive Breastfeeding Knowledge Before and After Done Education with Media Scrapbook dan Leaflet

Group	Knowledge level	Pre-test	Post-test
		f(%)	f(%)
Scrapbook	Well	12 (50%)	18 (75%)
	Not enough	12 (50%)	6 (25%)
	Amount	24 (100%)	24 (100%)
Leaflet	Well	11 (45,8%)	17 (70,8%)
	Not enough	13 (54,2%)	7 (29,2%)
	Amount	24 (100%)	24 (100%)

Table 3 showed as many as 24 respondents in the scrapbook group before being given intervention with scrapbook media education about exclusive breastfeeding showed that most of the respondents had a good level of knowledge as many as 12 respondents (50%) and 12 respondents (50%) with less knowledge. After being given an educational intervention with scrapbook media about exclusive breastfeeding, it showed that there was an increase in the level of knowledge where respondents who have a good level of knowledge are 18 respondents (75%), and a level of knowledge is less than 6 respondents (25%).

Then the 24 respondents in the leaflet group, before being given an intervention with scrapbook media education about exclusive breastfeeding, showed that most of the respondents had a good level of knowledge as many as 11 respondents (45.8%) and 13 respondents (54.2%) with less knowledge. After being given educational intervention with scrapbook media about exclusive breastfeeding, it showed that there was an increase in the level of knowledge where respondents who had a good level of knowledge were 17 respondents (70.8%), and the level of knowledge was less than 7 respondents (29.2%).

2. Bivariate Analysis

a. Normality test

Table 4 Normality Test Results

Variable	Group	N	p-value	Conclusion
Knowledge	Pre test scrapbook	24	0.136	Normal
	Post test scrapbook	24	0.137	Normal
	Pre test leaflet	24	0.062	Normal
	Post test leaflet	24	0.093	Normal

Table 4 showed the scrapbook group shows p-values of 0.136 and 0.137. So that p-value > 0.05 we can conclude that the data is normally distributed. Then in the pre-test and post-test of the leaflet group, it can be seen that the p-values are 0.062 and 0.093, so that the p-value > 0.05 we can conclude that the data is normally distributed.

b. Paired Sample T-test and Independent Sample T-test

1) Paired Sample T-test Scrapbook and Leaflet Group

Table 5 Test Results Paired Sample T-test Scrapbook and Leaflet Group

Group	N	Δ Mean ±SD	T	Low-Upper	P-Value
Scrapbook	24	-7.375 ±2.634	13.715	8.487-6.263	0.000
Leaflet	24	-6.625 ±1.740	18.654	7.360-5.890	0.000

Table 5 show it can be seen that the results of the Paired Sample T-test in the scrapbook and leaflet groups obtained p-values of 0.000 (p-value < 0.05).

Table 6 Calculation Results of Difference Test

		Levene's Test		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
Scrapbook and Leaflet Post test results	Equal variances assumed	0.015	0.904	2.102	46	0.041	Lower 0.048	Upper 2.202
	Equal variances not assumed	0.015	0.904	2.102	45.596	0.041	0.047	2.203

Table 6 showed the results of the calculation of the difference between the two data averages, it can be seen in the Levene's Test column that it has a significance value of 0.904 ($p > 0.05$). These results indicate that the two variances are the same, so the use of variance to compare the population mean (t-test for Equality of Means) in the t-test must be based on equal variance assumed.

At equal variance assumed, the t value is 2.102 and the p significance level is 0.041. This shows that $p < 0.05$, it means that there are differences in educational knowledge through scrapbook media and leaflet media. So it can be concluded that the level of knowledge of exclusive breastfeeding for pregnant women who received education through scrapbooks and leaflets was different.

Table 7 Calculation Results of Difference Test

	Method	N	Mean± SD	Std. Error Mean
Scrapbook and Leaflet Post test results	Scrapbook	24	19.38±1.765	0.360
	Leaflet	24	18.25±1.939	0.396

Table 7 showed the mean or average value of the scrapbook media post-test results is 19.38. This shows that the average knowledge of pregnant women about exclusive breastfeeding after being given education using scrapbook media is 19.38. Meanwhile, the mean or average value of the post-test results of leaflet media is 18.25. This shows that the average

knowledge of pregnant women about exclusive breastfeeding after being given education with leaflet media is 18.25. So it can be concluded that the level of knowledge of pregnant women about exclusive breastfeeding after being given education using scrapbook media is higher than with leaflet educational media.

Characteristics of Respondents

The results showed that the characteristics of the level of education in the scrapbook group were mostly at the SMA/Equivalent education level with a percentage of 62.5%, while in the leaflet group, the majority were at the SMP/Equivalent and SMA/Equivalent education levels with the same percentage of 41.7%. Education can have an influence on a person's level of knowledge, the higher the level of knowledge, the easier it is to receive the information obtained¹⁰.

The results of the frequency distribution of respondents' characteristics by occupation, most of the respondents did not work with a percentage of 58.3% in the scrapbook group and 79.2% in the leaflet group. One of the factors that influence knowledge is work. The environment in a person's work plays a role in making him gain experience in addition to increasing insight directly or indirectly¹¹.

The results of the frequency distribution of respondents' characteristics based on parity or number of children, most of the respondents had a history of giving birth twice or more with a percentage of 37.5% in the scrapbook group and 58.3% in the leaflet group. The number of children relates to experience as a way to gain knowledge by means of that knowledge being repeated or recalled in order to solve problems that have been passed in the past. Experience makes us learn to solve problems in other ways that are good and right so that we don't repeat the same mistakes¹².

Frequency Distribution of Exclusive Breastfeeding Knowledge Before and After Education with Scrapbook and Leaflet Media

Of the 24 respondents in the scrapbook group in this study, before being given education with scrapbook media about exclusive breastfeeding, there were 12 respondents (50%) who had good knowledge levels and 12 respondents (50%) with low levels of knowledge, then after being given educational intervention using scrapbook media Regarding exclusive breastfeeding there is an increase in the level of knowledge of the

respondents, namely the level of good knowledge to 18 respondents (75%) and the level of knowledge being less than 6 respondents (25%).

Then for the 24 respondents in the leaflet group, before being given education with leaflet media about exclusive breastfeeding there were 11 respondents (45.8%) who had a good level of knowledge and 13 respondents (54.2%) with a low level of knowledge, then after being given an educational intervention with In the scrapbook media about exclusive breastfeeding, there is an increase in the level of knowledge of the respondents, namely the level of good knowledge to 17 respondents (70.8%) and the level of knowledge to less than 7 respondents (29.2%).

Knowledge is the result of human sensing, or the result of someone knowing about objects through the senses (eyes, ears, nose) they have. When the sensing time to produce knowledge is strongly influenced by the intensity of attention and perception of the object¹³.

One way to gain knowledge, one way is through the senses of sight and hearing, education through scrapbook media related to these two senses. Based on the results of the pre-test and post-test, it can be seen that there is an increase in the category of knowledge level, namely the good and sufficient categories.

Effect of Education with Scrapbook Media on Knowledge of Pregnant Women about Exclusive Breastfeeding

Based on the results of the Paired Sample T-test of knowledge between pre-test and post-test in the scrapbook group, a p-value of 0.000 was obtained. This indicates that there is an effect of education with scrapbook media on knowledge about exclusive breastfeeding in pregnant women in the work area of the Sayung II Health Center.

Education is an activity that can provide the ability and knowledge to one or more persons by means of learning, so that individuals or groups of people who initially do not understand become aware and who initially do not understand how to maintain their health become able to independently¹⁴.

Promotive and preventive actions are carried out to improve health status through health education, which will have an effect on increasing mother's knowledge about exclusive breastfeeding. In this step the selection of a media and method has an influence on the success of a health education or counselling¹⁵.

Education with scrapbook media increases knowledge of respondents, because education with scrapbook media is interesting and can be used actively so that respondents are very focused on receiving the material being delivered, fostering enthusiasm, interest, and enthusiasm. stimulation of educational activities⁹.

Conclusion

There is an effect of scrapbook media education on knowledge of pregnant women about exclusive breastfeeding, with p value $0.000 < 0.05$. Then the education of respondents in the scrapbook group, which is mostly at the education level of SMA/Equivalent with a percentage of 62.5%, while in the leaflet group, which is mostly at the education level of SMP/Equivalent and SMA/Equivalent with the same percentage of 41.7% . The majority of respondents' occupations in both groups were not working with a percentage of 58.3% in the scrapbook group and 79.2% in the leaflet group. The parity or number of respondents' children in the two majority groups was that they had given birth twice or more (multipara) with a percentage of 37.5% in the scrapbook group and 58.3% in the leaflet group.

And there is an increase in knowledge of pregnant women about exclusive breastfeeding, before and after being given education using scrapbook or leaflet media, with a mean delta for the scrapbook group of -7.375 while the delta mean for the leaflet group is -6.625. This shows that there is a difference in knowledge before and after being given education using scrapbook media or leaflet media.

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