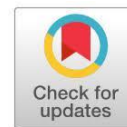


Stop motion video about exclusive breastfeeding on increasing knowledge of third trimester pregnant women



Windu Suciati Rahma¹, Joko Susilo², Hesty Widyasih³

¹Department of Midwifery, Poltekkes Kemenkes Yogyakarta, Indonesia,
windusr02@gmail.com

²Department of Nutrition, Poltekkes Kemenkes Yogyakarta, Indonesia,
joko.susilo@poltekkesjogja.ac.id

³Department of Midwifery, Poltekkes Kemenkes Yogyakarta, Indonesia,
hesty.widyasih@poltekkesjogja.ac.id

ARTICLE INFO

Article history:

Received June 29th, 2022

Revised September 5th, 2022

Accepted October 13rd, 2022

Keyword:

Stop Motion Video, Knowledge, Breastfeeding

ABSTRACT

WHO and UNICEF state that exclusive breastfeeding helps children survive with antibodies they need. Mother's knowledge about exclusive breastfeeding can be increased through health education. Technology makes information easier to access, especially since the current COVID-19 pandemic has made direct contact communication avoided. This encourages the use of electronic-based learning media which contains visual elements and audio elements in the form of stop motion videos. The aim of this study was to know the effect of stop motion video on increasing knowledge of pregnant women on third trimester pregnant women. This research was a quasi- experimental study with Nonequivalent pre- test and post-test with control group design. This research was conducted from September 2021 until January 2022. The population was third trimester pregnant women who met the inclusion and exclusion criteria. Sample are 18 women for experimental groups and 18 women for the control group. Data analysis using Mann-Whitney. The mean rank of knowledge in the experimental group was 21.81 and, in the control, group was 15.19 with p value = 0.046. This shows that there was an effect of giving intervention both in the experimental group and the control group, but the more influential in this study was the experimental group. There was effect of stop motion video about exclusive breastfeeding on increasing knowledge of pregnant women on third trimester pregnant women.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Windu Suciati Rahma

Department of Midwifery, Poltekkes Kemenkes Yogyakarta

Mangkuyudan Street MJ III / 304 Yogyakarta Indonesia 55153, Telepon: (274)374331

Email: windusr02@gmail.com

INTRODUCTION

Starting in 2010 the World Health Organization (WHO) recommends that newborns be given breast milk until they are 6-12 months old without giving other foods or fluids, except vitamins, minerals and drugs which have been permitted for medical reasons. Exclusive breastfeeding is very useful for optimal growth and development of babies both physically, mentally and intelligently.. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) in the 2020 world breastfeeding week stated that in Indonesia, only 1 in 2 babies under 6 months of age are exclusively breastfed, and only 5% of children are still breastfed at the end of the year. 23 months old. This means that almost half of all Indonesian children do not receive the nutrition they need during the first two years of

life. More than 40% of infants are introduced to complementary foods too early, ie before they reach the age of 6 months. ¹ Based on Government Regulation Number 33 of 2012 concerning Exclusive Breastfeeding, it is breast milk that is given to babies from birth for six months, without adding and/or replacing with other foods or drinks (except drugs, vitamins, and minerals).²

In 2019, the coverage of exclusive breastfeeding in Indonesia was 67.74%, with the highest percentage being the province of West Nusa Tenggara 86.25%, and the lowest percentage of West Papua Province being 41.12% while DI Yogyakarta Province had a percentage of 75, 9% and the lowest was in Yogyakarta City at 67.4%.. This shows that the percentage of exclusive breastfeeding coverage in the DI Yogyakarta Province especially in Yogyakarta city has not reached the target set by WHO and the Ministry of Health, which is 80%. ^{2 3}

Lawrence Green discovered the *precede-proceed* that is a theory of behavior change that is used for intervention, implementation and evaluation of behavior in health promotion in the community or society, one of which is knowledge⁵ Mother's knowledge about exclusive breastfeeding can be increased through health education, operationally health education is all activities to provide and improve knowledge, attitudes, the practice of whether individuals, groups or communities maintain and improve their own health. conducting health education, it is necessary to have media that aims to facilitate the delivery of messages.

Based on the results of the SAA Putri research, entitled the effect of health education with video media on increasing knowledge and attitudes towards exclusive breastfeeding in pregnant women in the working area of the Umbulharjo I Health Center in 2019, it showed that there was a significant increase in knowledge and attitudes after being given health education with media. videos.⁹ In line with Herlinadiyaningsih's research, entitled the difference in leaflet and video media on the knowledge of breastfeeding mothers at Datar Kotou Health Center, Palangkaraya, it shows that there is a difference in knowledge between the group given leaflet media and video, the group given video media has higher knowledge results with higher results. $p\text{-value} = 0.008$.¹⁰

Stop Motion Video is different from other electronic media such as e-books, e-booklets, and e-leaflets which only use the sense of sight. Stop motion videos are videos that come from a collection of photographs which are then put together so that it looks like it is moving on its own. Media in the form of videos can provide comfort for pregnant women because they can see and listen to them. Therefore, researchers are interested in examining the effect of stop motion videos about exclusive breastfeeding on increasing the knowledge of third trimester pregnant women, which is expected to add to the scientific repertoire in the field of midwifery and can be a reference for health promotion and further research, especially regarding exclusive breastfeeding.

METHOD

The type of research used in this study is a quasi-experimental or *quasi-experimental*. The design of this research is *Nonequivalent (pre-test and post-test)* with control group design, which will be carried *pre-test* then intervention in the experimental group and control group then *post-test* on the experimental group and control group. The sampling technique used in this research is *non-probability sampling*. More specifically, the study used a *purposive sampling technique* with inclusion and exclusion criteria. The inclusion criteria in this study are third trimester pregnant women who have smartphones, third trimester pregnant women who check pregnancy at the Pakualaman Health Center, and Willing to be respondents. The exclusion criteria in this study are third trimester pregnant women who could not read, third trimester pregnant women who with drew during

the study, and Pregnant women who did not complete the questionnaire filling to the end. sample size calculated using the formula Lemeshow et al (1997) obtained the results of 14 respondents, then to anticipate the possibility of a selected subject that drops out, loses to follow up, or a disobedient subject then the sample size becomes 18 for each group, so that the respondents in this study were 36 third trimester pregnant women for experiment group and control group. This research began in September 2021 until January 2022. The research was carried out after obtaining an ethical clearance letter from the Yogyakarta Ministry of Health Poltekkes Ethics Committee with letter number e-KEPK/POLKESYO/0711/IX/2021 published on September 20, 2021. The data obtained by researchers is primary data via *google form* so as to minimize crowds during the COVID-19 pandemic. The media used were *e- leaflets* as the control group media and *stop motion* as the experimental group media. Researchers set an acronym to facilitate the mention of *stop motion* about exclusive breastfeeding, namely VIMOASIF (*Video Motion ASI Eksklusif*). The normality test has been carried out and shows that the data are not normally distributed, so the analysis used is nonparametric univariate and bivariate analysis, namely the Wilcoxon test and the Mann-Whitney test.

RESULTS

The Characteristics of Third Trimester Pregnant Women

The results of the characteristic frequency distribution in this study areas follows

Table 1. The Subject Characteristics

N o	Characteristics	Respondent Group			
		Eksperiment		Control	
		N	%	N	%
1.	Age				
	< 20 years	1	5,56%	2	11,1%
	20-35 years	13	72,2%	11	61,1%
	>35 years	4	22,2%	5	27,78%
2.	Last Education				
	No School	0	0%	0	5,56%
	Primary School	1	5,56%	2	11,1%
	Secondary School	10	55,56%	11	61,1%
	Higher Education	7	38,89%	5	27,78%%
3.	Occupation				
	No Working	13	72,2%	15	83,3%
	Working	5	27,78%	3	16,67%
4.	Number Of Children				
	No having children	4	22,2%	6	33,3%
	Already having children (<4)	14	77,78%	12	66,67%
	Already having children (>4)	0	0%	0	0%
5.	Sources of Information				
	Print Media	0	0%	0	0%

Electronic Media	10	55,56%	9	50%
Health workers	8	44,4%	9	50%

Based on Table 1 above, it can be seen that the respondents in the experimental and control groups were mostly aged 20-35 years, namely 72.2% for the experimental group and 61.1% for the control group. The last education of respondents in the experimental and control groups was mostly in secondary education, namely 55.56% and 61.1%, respectively. Most of the respondents did not work, namely 72.2% in the experimental group and 83.3% in the control group. Most of the respondents' children had less than 4 living children, namely 77.78% in the experimental group and 66.67% in the control group. The main source of information that respondents obtained about health in the experimental group mostly obtained information from electronic sources, which was 55.56% while in the control group had an equal ratio between electronic sources of information and information sources from health workers, which was 50%.

The Stop Motion Video to Increase the knowledge of Pregnant Women

Analysis Bivariate analysis in this study used the Wilcoxon test between the independent variables and the dependent variable on each media, the Mann-Whitney test between the results of increasing knowledge of each media in Table 2 below:

Table 2. Average Knowledge of Pregnant Women in the Third Trimester Before and After given Stop Motion Video and E-Leaflet

Media	Treatment	Minimum	Maksimum	Mean	p-value
Stop Motion	Before	54	100	89,67	0,001
	After	85	100	97,83	
E- Leaflet	Before	54	100	87,22	0,010
	After	69	100	91,0	

Table 2 above shows that most of the respondents experienced increase in value, with an average value before 89.67, increased becomes 97.83 after being given a *stop motion video*, with a p-value of 0.001. and shows that most of the respondents experienced an increase in value, with an average value before 87.22 increasing to 91.0 after being given e-leaflets, with a p-value of 0.010.

Table 3. Differences in Knowledge Increase In Third Trimester Pregnant Women between Group

Group	n	Mean rank	p-value
Experiment	18	21,81	0,046
control	18	15,19	

Table 3 above shows that there is a difference in the average increase in knowledge between the experimental group and the control group. The average increase in knowledge in the experimental group is 21.81 while the average increase in knowledge in the control group is 15.19 and the significance value is 0.046, which means p value <0.05 both have an effecton increasing knowledge of third trimester pregnant women in Pakualaman Health Center.

DISCUSSION

According to the results of the bivariate test conducted with Wilcoxon, the effect of stop motion video and e-leaflet on the knowledge of pregnant women in the third trimester resulted in an average after being greater than before with a p-value of 0.001 in the experimental group and a p-value of 0.010 in the control group. So in these results, it can be seen that there is an increase in knowledge of pregnant women in the third trimester after being given an intervention in both the experimental group and the control group, but it can be concluded that the group given stop motion video about exclusive breastfeeding experienced a higher increase in knowledge about exclusive breastfeeding.

Then to find out which media education or health promotion is more influential between the experimental group and the control group using the MannWhitney analysis test using the average difference between the scores of the experimental group and the control group. The average increase in the experimental group was 21.81 while the average increase in the control group was 15.19, obtained p value = 0.046 (p value <0.05), meaning that there was a difference in knowledge value between the experimental group and the control group. with the average value of the increase in the experimental group was greater than the control group, thus it can be said that the increase in knowledge of pregnant women about exclusive breastfeeding among mothers who were given the effect of stop motion video was higher than that of mothers who were given e-leaflets. This is in line with the research conducted by Herlinadiyaningsih, entitled the difference between leaflet and video media on the knowledge of breastfeeding mothers at Datar Kotou Health Center, Palangkaraya, which showed that video media can increase the knowledge of breastfeeding mothers compared to leaflet media.¹⁰ Another study conducted by Idris with the title of the effect of counseling using audio-visual about exclusive breastfeeding on the knowledge and attitudes of pregnant women at the Singgani Health Center in Palu City also explained that audio-visual media was effective in increasing the knowledge of pregnant women about exclusive breastfeeding.¹² The stop motion video about exclusive breastfeeding in this study is a media in the form of audio-visual video.

Based on the results of SAA Putri's research, entitled the effect of health education using video media on increasing knowledge and attitudes towards exclusive breastfeeding in pregnant women in the working area of the Umbulharjo I Health Center in 2019,¹³ it shows that there was a significant increase in knowledge and attitudes after being given health education with media videos. In this study, stop motion video is used as a medium for education or health promotion. Stop motion video is basically a video form of media. Video is a medium that has audio-visual elements and the message conveyed can be factual or fictitious and can be informative, educative or instructional. Motion video in this study is a video made from a collection of photos or images that are put together so that it looks like it can move on its own.

The use of stop motion video media as a medium for education or health promotion for pregnant women, will make it easier for the target to understand the information conveyed compared to delivering information only in writing or only verbally, because the target of education or health promotion can observe and listen directly to pictures, writing, and audio/sound which is an explanation of the topics in the media. The content of the stop motion video information in this study is a combination of interesting pictures or photos, sentences that are easy to understand, audio that sounds clear, and appropriate intonation or voice emphasis for important words or sentences, as well as language that is easy to understand, so that the delivery of material Exclusive breastfeeding is easier to accept and

understand. Attractive images in both colors and shapes in stop motion videos will attract more interest to listen to the information conveyed to the end. The duration of stop motion videos which are quite short, which is only 10 minutes, can also avoid the emergence of boredom due to watching too long.

The advantages of using video media which is an audio-visual medium include being able to attract attention for short periods from other external stimuli, the audience can obtain information from various experts, demonstrations can be prepared and recorded beforehand, so that when presented the audience can focus their attention, presenter or video presenter can take full control, the room does not need to be darkened, can save time and the recording can be played over and over again; and the volume can be adjusted and adjusted if the comments will be inserted to be heard.¹⁴

CONCLUSION

Based on the results of the study, it can be concluded that the level of knowledge before and after the intervention has increased both the experimental group and the control group at the Pakualaman Health Center. Third, increased knowledge of the experimental group higher in increasing the knowledge of pregnant women in the third trimester compared to with the control group but both are equally influential in increase the knowledge of pregnant women in the third trimester at the Puskesmas Pakualaman with p-value 0.046 (p value <0.05), so there is an effect of Stop Motion Video about exclusive breastfeeding on increasing the knowledge of third trimester pregnant women.

Based on the conclusions of the study, the suggestions that can be given for midwives can apply their competence as implementers and health educators as promotive and preventive efforts using stop motion videos during counseling or classes, for pregnant women are expected to be able to search more, read, and apply information about exclusive breastfeeding when they have free time, which in the current digital era, educational videos are widely available online. Researchers Further researchers can develop research when working on their final project at the end of their graduation by comparing other health education media besides stop motion videos.

REFERENCES

1. WHO. World Breastfeeding Week. World Breastfeeding Week: UNICEF and WHO call on Government and Stakeholders to support all breastfeeding mothers in Indonesia during COVID-19 [Internet]. WHO. 2020 [cited 2021 Jul 20]. Available from: <https://www.who.int/indonesia/news/detail/03-08-2020-pekan-menyusui-dunia-unicef-dan-who-calling-government-dan-pemangku-kepentingan-agar-mendukung-seluruh-ibu-bermakan-during-covid-19>
2. RI K. Indo Case Profile 2019. *Angewandte Chemie International Edition*, 6(11), 951–952. 2019.
3. Health Profile of the Special Region of Yogyakarta. 2019. https://kesehatan.jogjakota.go.id/uploads/dokumen/profil_dinkes_2020_data_2019.pdf
4. Yogyakarta City Health Office. Yogyakarta City Health Service Profile 2020. Yogyakarta City Health Service Profile 2019. 2020;1–234.
5. Sulaeman ES, Murti B. PRECEDE-PROCEED Model in Planning Community Empowerment Program in Health Sector Based on Community Health Needs Assessment. *J Kedokt Yars* [Internet]. 2015;23(3):149–64. Available from: <http://eprints.poltekkesjogja.ac.id/887/>
6. Notoadmodjo, S. *Promosi Kesehatan & Prilaku Kesehatan*. Jakarta: EGC

- (2012)..
7. Annisa D. Current Situation of the Development of Coronavirus Disease (COVID-19) July 20, 2021 [Internet]. Indonesian Ministry of Health. 2020. Available from: <https://infectionemerging.kemkes.go.id/situation-infection-emerging/situasi-terkini-perkembangan-coronavirus-disease-covid-19-20-juli-2021>
 8. Ri Kk. Coronavirus Disease (COVID-19) Prevention and Control Guidelines 5th Revision [Internet]. 2020. Available from: https://covid19.go.id/storage/app/media/Protokol/2020/Juli/REV05_Pedoman_P2_COVID-19_13_Juli_2020.pdf
 9. SAA son. The Effect of Health Education with Video Media on Increasing Knowledge about Exclusive Breastfeeding and Attitudes towards Exclusive Breastfeeding in Pregnant Women in the Working Area of the Umbulharjo Health Center I [Internet]. 2019. Available from: <http://eprints.poltekkesjogja.ac.id/2266/>
 10. Herlinadiyaningsih. Differences in Leaflet and Video Media on Knowledge of Breastfeeding Mothers. 2021;12(2):59–66. <https://doi.org/10.36419/jki.v12i2.496>
 11. Yeni PSI. Factors Relating to Knowledge of Generic Drug Use in Communities in the Work Area of Padang Panyang Public Health Center, Nagan Raya Regency. Teuku Umar University; 2015.
 12. Idris I, Enggar E. The Effect of Counseling Using Audio Visual About Exclusive Breastfeeding on Knowledge and Attitudes of Pregnant Women at the Singgani Health Center, Palu City. *J Smart Midwife*. 2019;2(1):1. <https://doi.org/10.33860/jbc.v2i1.159>
 13. Putr, S. A. A. Pengaruh Pendidikan Kesehatan Dengan Media Video Terhadap Peningkatan Pengetahuan Tentang Asi Eksklusif Dan Sikap Terhadap Asi Eksklusif Pada Ibu Hamil Di Wilayah Kerja Puskesmas Umbulharjo I. (2019).
 14. Widyawati. Health Promotion Textbook for Nursing Students. 2020. 153 p.
 15. Mufdillah, Subijanto, Sutisna, E. & Akhyar, M. Pedoman Pemberdayaan Ibu Menyusui pada Program ASI Eksklusif. *Peduli ASI Eksklusif*; Yogyakarta 8 (2017).
 16. IWattimena, I. & Hapsari, E. Promosi Kesehatan: Efektivitas Intervensi Penyuluhan Dan Bacaan Pada Ibu Menyusui. *J. Ners Lentera* 2, 231983 (2014).
 17. Rahmiyati, R. Pengaruh E-Booklet Tentang Asi Eksklusif Pengaruh E-Booklet Tentang Asi Eksklusif. (2019).
 18. Rosa, R. Pengaruh Pendidikan Kesehatan dengan Media Booklet Terhadap Peningkatan Pengetahuan dan Sikap pada Ibu Hamil Trimester III Tentang ASI Eksklusif di Puskesmas Gedongtengen Kota Yogyakarta Tahun 2019. *Poltekkes Kemenkes Yogyakarta* 37–60 (2019).
 19. Suharsimi Arikunto. *Prosedur Penelitian : Suatu Pendekatak Praktik*. in (Rineka Cipta, 2013).