

Research Article

Testing Mothers' Knowledge in Preventing COVID-19 in Children Through Animated Video Media and Booklets

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Abstract.

Clean and healthy living behavior (PHBS) is where a person practices clean living behaviors both for themselves and for their family. Families play an active role in modeling environmental health and can be a source of prevention of COVID-19 in children. This study aimed to determine the level of maternal knowledge in preventing COVID-19 in children by providing PHBS education through animated video media and booklets. Method: The design of this study uses the quasi-experimental method. The study sample was 40 respondents with 20 intervention groups and control groups. The research instrument was a questionnaire. Analysis of data used the Wilcoxon Test. Results obtained from the intervention group showed a pre-test level of knowledge at 5 or 25.0%, a sufficient level of knowledge of 12 or 60.0%, and no knowledge of 3 or 15.0%, and the post-test results of the knowledge level are either 20 or 100.0%. The control group had a pre-test level of knowledge of 1 or 5.0%, the level of knowledge was sufficient of 7 or 35.0%, and knowledge was less than 12 or 60.0%, as well as in the post-test results became a level of knowledge either by 20 or 100.0%. Wilcoxon test results of both groups with asymp.sig (2-tailed) results = 0.000.

Keywords: level of knowledge, mothers, clean and healthy living behaviors (PHBS)

1. Introduction

Clean and healthy living behavior (PHBS) is a behavior that requires a person with awareness in practicing clean living behaviors both from oneself and from the family to play an active role in realizing health in the community environment. PHBS needs to be instilled early in children aged toddlers to adults so that these behaviors can be carried over to adulthood [1]. Elementary school age is still relatively young, so they need people around their environment such as, parents, teachers and friends to teach good and healthy behaviors. The Covid-19 pandemic is currently spreading in various countries and is infected in humans through hands or touch, inhalation of dust or through the nose and through the membranes of the eyes. The entry of the corona virus in Indonesia has

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a very big impact on people's lives, from the fields of health, economy, social, religion and education [2]. The implementation of PHBS is very appropriate to be carried out during the current pandemic, especially applying it to children. According to [3]. Some things that mothers can teach children such as maintaining personal and environmental hygiene, teaching how to wash hands with soap, increasing immunity, using a clean and healthy latrine, regular exercise, doing activities in the sun ≤ 10 minutes, wearing a mask, using footwear if leaving the house, washing clothes after traveling outside the house, always getting used to cleaning toys, covering your mouth when coughing and cleaning, throwing garbage in its place, consuming fruits and vegetables to maintain clean and healthy living behaviors

Currently, it is very important for a mother or parent to get health education, especially regarding Clean and Healthy Living Behavior (PHBS) 2 which is one way for a mother to teach children to avoid contracting the corona virus or covid-19, and as parents can help fortify both ourselves and our children so that no one gets infected with this coronavirus [3]. .Several studies were obtained there was a significant increase in knowledge in the community, some educational media that are often used are in the form of videos and booklets that are conveyed containing procedures for behavior in a clean and healthy life such as how to wash hands properly and correctly, how to maintain a healthy diet and consume healthy snacks, how to maintain a clean environment and avoid mosquito larvae, dispose of garbage in its place, use jambang cleanly, and do regular exercise.

From the results of a preliminary study conducted by researchers by conducting interviews with 20 mothers and 13 mothers said they did not know about PHBS and some said that during the Covid-19 pandemic, mothers never received education, counseling or provision of health protocols in any form regarding the application of clean and healthy living behaviors (PHBS) in preventing covid-19. In addition, the mother also said that she did not understand the application of clean and healthy living behaviors (PHBS) both in the indicators of the home environment and the school environment and had just heard about the PHBS. The selection of animated video media and booklets is a step taken by researchers with the aim of making understanding the material easy to convey to the mother or respondent. This is evidenced by the benefits of animated videos as a teaching medium that is broadcast and captured hammering the five senses, especially the eyes and ears in capturing the information conveyed and containing materials about health education and displayed with attractiveness so that the audience can capture what can be taken and applied [4].

From the above problems, researchers want to identify more deeply related to the differences and effectiveness of health education by using 2 (two) health education

methods using animated videos and booklets that can be directly applied by vulnerable mothers aged 20-45 years in increasing maternal knowledge of covid-19 prevention in vulnerable children aged 6-12 years through direct studies. And previous research explained that providing education with video media and booklets makes an increase in knowledge.

2. Method

This study used a Quasi-Experimental research design with two groups of pretest-posttest by conducting twice where before and after the experiment. Researchers took measurements and observations of two variables and only performed one performance. The sample in this study was housewives aged 20-40 years and had 40 children aged 6-12. Inclusion criteria are Housewives with vulnerable ages 20-40 years, housewives who have children aged 6-12 years with elementary school education (SD), housewives who are willing to be present in the provision of health education directly, and agree to be respondents. In this study, the analysis used was the Wilcoxon Test.

This research instrument uses a questionnaire / PHBS Behavioral Questionnaire which consists of sub-principles related to health protocols, health protocols, behavior during a pandemic. While the questionnaire about the Level of Maternal Knowledge consists of maternal knowledge, prevention of covid-19, PHBS behavior, cleanliness of the house, how to maintain health on an ordinal scale categorized Good ($\geq 10.5 - 14$) Sufficient ($> 6.3 - 10.4$) Less (< 6.3). The results of the validity and reliability test of the instrument consisting of 2 sub and 22 questions after conducting the validity test were obtained valid and the reliability test with Cronbach alpha 0.6 then concluded the questionnaire it is reliable, Animated video (made by the researcher with adaptation material from the Ministry of Health and the Ministry of Social Affairs modified by the researcher) with the interpretation of a score of $\geq 10.5 - 14 =$ Level of Knowledge of Good Mothers b. Score of $> 6.3 - 10.4 =$ Level of Mother's knowledge is sufficient Number of points $\times 100\%$ Maximum points 39 c. Score $< 6.3 =$ mother's level of knowledge is less. Booklet (adaptation of the booklet material of the Promkes of the Ministry of Health of the Republic of Indonesia and the Ministry of Social Affairs modified by researchers [5].

3. Results

3.1. Demographic Data

TABLE 1: Demographic Data.

No	Variables	Intervention Group		Control Group	
		N	%	N	%
1	Age				
	20-35	8	40.0	5	25.0
	36-40	4	20.0	7	35.0
	41-45	8	40.0	8	40.0
	Total	20	100	20	100.0
2	Parent's educational background				
	Elementary	8	40.0	14	70.0
	Junior High	5	25.0	5	25.0
	Senior High	5	25.0	0	0
	University	2	10.0	1	5.0
	Total	20	100.0	20	100.0
3	Occupation				
	Household	16	80.0	17	85.0
	Private	2	10.0	2	10.0
	Teacher	2	10.0	1	5.0
	Total	20	100.0	20	100.0
4	Marital Status				
	Married	19	95.0	19	95.0
	Unmarried	1	5.0	1	5.0
	Total	20	100.0	20	100.0
5	Children's age				
	6-8 Years old	10	50.0	3	15.0
	9-12 Yaers old	10	50.0	17	85.0

3.2. Effectiveness of Animated Video Media with Mother's Knowledge Level

The results of the study conducted on 20 respondents in the intervention group conducted pre with the results of a knowledge level of either 5 or 25.0%, a sufficient level of knowledge of 12 or 60.0% and knowledge is less by 3 or 15.0% while in the post-test results with the results of the knowledge level either by 20 or 100.0 %. This shows the result that there is an increase in the level of knowledge in the mother.

4. Discussion

TABLE 2: Effectiveness of Animated Video Media with Mother's Knowledge Level.

	Pre-Test		Post-Test	
	N	%	N	%
Less	3	15.0	-	-
Enough knowledge	12	60.0		
Good	5	25.0	20	100.0
Total	20	100.0	20	100.0

4.1. Mother's Level of Knowledge Regarding PHBS

Maternal Knowledge About PHBS Maternal knowledge about PHBS averaged in the range of knowledge levels less than or below < 6.3 in the pre-test results in both groups. This is influenced by various things according to the general characteristics in the respondents. One of them is that the age of the respondent can affect the level of knowledge of a person, this is because the characteristics of the respondent can be a benchmark for the maturity of the respondent and become an insight in the get by respondents. This is not in line with research by (Mubarak,2007) that the level of education can have an effect on PHBS in the household or family, Employment and status affect the level of knowledge as much asg. This is in line with research (Windarti & Zuwariah, 2016) states that individuals who have a job with a good economic status can encourage families to carry out PHBS by meeting all needs for the implementation of PHBS.

A mother's knowledge is closely related to the knowledge gained from various parties, either from the media read, heard, or seen or delivered by health workers. In line with research [6] mothers who have good knowledge about PHBS will apply it, to be able to maintain optimal child health in supporting child growth and development. Mothers who apply PHBS children accustom children to implement these behaviors, such as always washing hands before and after eating, defecating, and urinating so that they are not easily infected by viruses and bacteria. Providing education about PHBS to mothers with the animated video method as one of the steps chosen to make it easier for mothers or respondents to understand the message or material to be conveyed. This research [7], was conducted in the intervention group by providing animated video media containing clean and healthy living behaviors (PHBS) which were conveyed to respondents and became the chosen media in facilitating PHBS educational activities for mothers. This is done as an effort to prevent COVID-19 in children and increase maternal knowledge about the application of PHBS.

The animated video used has a message or material that is easily conveyed to respondents where the content is more realistic, clear with delivery, equipped with animated images that can be conveyed repeat and stop according to the needs of the respondents, and it is easy to give a good message to the respondents who watched the animated video [8]. An animated video that is approximately 9 minutes long that explains things that are easy to understand and understand to viewers who watch the video effectively[9]. This happens because video media involves two five senses , namely the idea of sight and hearing. In addition, video media is a learning media that is conveyed with a message, including audio-visual or auditory media [10] .

Media booklet is a step in providing education or education related to clean and healthy living behaviors. In this study, it was carried out to the control group where the researcher provided information to the public or respondents through a booklet containing material on the application of clean and healthy living behaviors. such as how to wash hands, consume healthy food, how to prevent covid 19 which is accompanied by pictures that make it easier for respondents to receive and read material in the booklet said. showed a difference between the level of maternal knowledge in the pretest and posttest intervention group with animated video and in the control group with booklet. In addition, the results of the test wilcoxon signed Ranks Test showed positive ranks results in the intervention group (N=19), while in the positive ranks results in the control group (N=20) which showed that the N value of the group was the intervention < from the N value of the control group which means that it shows that the effectiveness of the booklet media shows more results of increasing knowledge in the mother in the application of PHBS in the prevention of covid 19 in children [11].

This data shows a difference in the effectiveness of animated video media and booklets. The effectiveness of the booklet media is to provide results of increasing the level of maternal knowledge with the application of PHBS in preventing COVID-19 in children. This can prove that the booklet media can increase attitudes and thoughts or knowledge to be innovative and encourage respondents to change attitudes and implement the application live clean and healthy.

4.2. Differences in Post-Test Results of Intervention Groups and Control Groups

The results showed that both groups received post-test results of 20 or 100.0%. Which means that there is no difference from the two groups so this proves that both groups of 56 intervened with animated videos and the control group with booklets shows that

the media is very effective in using the media as a means of promoting or providing health education to the public.

5. Conclusion

Based on the results of research on the level of maternal knowledge in preventing covid-19 in children by providing PHBS education with animated video media and booklets where there are intervention groups and control groups showing there are differences in the effectiveness of animated video media and booklets in both groups. This was shown from the results of the wilcoxon test in the intervention group getting a positive ranks value ($N = 0$) in the wilcoxon signed ranks test results, while in the control group a value positive ranks ($N=13$) in wilcoxon signed ranks test results. These results show that the media booklet is more effective in increasing respondents' knowledge. In addition, wilcoxon tests were carried out at the level of maternal knowledge with three categories, namely the level of knowledge both with the results of $\geq 10.3 - 14$, the level of knowledge with the results of $\leq 10.3 - 6.3$ while the level of insufficient knowledge with the results of < 6.3 means that there is an increase in knowledge in both groups with the results of pre- test and post-test values and hypotheses accepted. Meanwhile, the post-test results with each of them getting a knowledge value of 20 or 100.0% showed no significant differences from the two groups; however, this shows that both groups are very effective in providing education to respondents.

6. Authors' Contributions

The title "AUTHORS' CONTRIBUTIONS" should be in all caps.

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