Animated Video Displaying Frequency To Changing Of Behavior In Consuming Fruit And Vegetable On The Students Of Baitul Izzah Islamic Elementary School Bengkulu

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Abstract*: *Consumption of enough vegetables and fruits is a simple indicator of balanced nutrition. Efforts to increase public awareness to consume vegetables and fruits, which ideally should begin to be familiarized from an early age (school age) through the family approach and the Healthy Living Community Movement (GERMAS). This study aims to influence the frequency of animated video display on behavioral changes in fruit and vegetable consumption in children of Baitul Izzah Islamic Elementary School in Bengkulu. This study uses a method quasi-experimental with pre and post-test with a sample of 60 third graders in Baitul izzah elementary school, divided into intervention and control groups. Data were analyzed using The Paired-Samples T-Test and Wilcoxon Signed Ranks Test. There is significant influence between the frequency of displaying animated video eating fruits and vegetables with changes in children's behavior in consuming fruits and vegetables.

Keywords: audiovisual media, fruit, and vegetable consumption behavior.

I. INTRODUCTION

The World Health Organization (WHO) generally recommends the consumption of vegetables and fruits for a healthy life of 400 grams per person every day. The paradigm shift leads to the understanding that not only does our body need healthy protein and calories, but also vitamins and minerals. The implementation of the health paradigm is carried out through two efforts, namely through the family approach and the Healthy

Living Community Movement (GERMAS) which focuses on three main activities namely checking health routinely, carrying out physical activities, and consuming vegetables and fruits. [1]

The program to increase public awareness of consuming vegetables and fruit ideally has begun to be familiarized from an early age (school age). One simple indicator of balanced nutrition is to consume enough vegetables and fruits so that it can reduce the

Risk of painful bowel movements (constipation) and obesity and provide a role in preventing chronic non-communicable diseases. [1]

There are still many people who do not consume enough vegetables and fruits (Riskedas 2010), and in 2013 the same data was obtained as many as 93.5 percents of the population aged more than ten years consumed vegetables and fruit under recommendation. Until 2007, consumes vegetables and fruits of Indonesian people just 95 kcal/capita/day or 79% from recommended minimum needs of 120 kcal/capita/day.[2]

One strategy that can be used to attract children's attention is through audiovisual media in the form of animated videos. Audiovisual media is a medium that is suitable for the characteristics of elementary school students where the learning process becomes more interesting; students will be more active, creative and innovative so that learning achievement will be achieved better and can bring changes in knowledge, attitudes, and behavior. It is related to the result of research by Krisnana (2014) showed that there is increased knowledge and respondent attitude after being given health educati

Audiovisual media such as animated videos contribute significantly to changes in people's behavior, especially in the aspects of information and persuasion, because the senses that channel the most knowledge to the brain are eyes (approximately 75-87%); while 13-25% of learning is obtained or

directed through other senses (Maulana, 2009). Another advantage of this media is that it can provide a more realistic picture and increase ease of remembering because it is more exciting and easy to remember (Sadiman, et al. 2009).

II. METHODS

The method used in this study is *quasi-experiment* with pre and post-test TO find out changes in knowledge, attitudes, and behavior of eating fruits and vegetables by being given the animated video for four times in a month. The extensive sample collection with a total sampling method is 60 students in 3rd-grade Baitul Izzah Islamic Elementary School, consisting of two Groups, the intervention group (30 people) using animation video and the control group using leaflets (30 people). Data analysis using *Paired-Samples T-Test* and *Wilcoxon Signed Ranks Test*. In the intervention group using media audiovisual.

III. RESULTS

TABLE 1 DESCRIPTION OF RESPONDENTS' LEVEL OF KNOWLEDGE AND ATTITUDES BEFORE THE INTERVENTION IN EACH GROUP

Knowledge of	5.73[a] + 1.92	6.77[a] + 2.17	0.051[c]	6.20[a] + 1.21	7.63[a] + 1.65	0.000[a]
attitude	31.8[a] + 2.69	36.7[a] + 3.64	0.001[d]	49.6[c] + 3.94	49.9[c] + 2.56	0.762[c]

Table 1 shows that the average level of knowledge of children given intervention 5.73 standard deviation of 1.92; the control group is an average level of expertise is 6.20 standard deviation of 1.21. The typical attitude of respondents who were given intervention was 50.17 standard deviations of 3.43, the reaction of the control group respondents was 49.63 with a standard deviation of 3.94.

TABLE 2 DIFFERENCES IN KNOWLEDGE AND ATTITUDES BEFORE AND AFTER INTERVENTION IN EACH GROUP.

Respondents efforts	Group: Treatment — Before the treatment	Group: Treatment — Intervention on first treatment	P	Group: Control — Before treatment	Group: Control — After treatment	P
	Average	Average		Average	Average	
Knowledge of	5.73[a] + 1.92	6.77[a] + 2.17	0.051[c]	6.20[a] + 1.21	7.63[a] + 1.65	0.000[a]
attitude	31.8[a] + 2.69	36.7[a] + 3.64	0.001[d]	49.6[c] + 3.94	49.9[c] + 2.56	0.762[c]

ket:
a = Average ± Standard Deviation b = Median ± Standard Deviation c = Paired t test
d = Wilcoxon Signed Ranks test

The results of statisticaltests of knowledge and attitudes of the intervention group obtained p <0.05, then the conclusion there is a difference significant between the knowledge and attitudes of respondents before and after the intervention, while the control group had no influence)> 0.05, for the reaction there was an influence of p <0.05.

TABLE 3 DIFFERENCES IN KNOWLEDGE AND ATTITUDES BETWEEN INTERVENTIONS I AND II, INTERVENTION II AND AFTER INTERVENTION IN THE INTERVENTION GROUP.

Variable	Intervention I	Intervention II	P	Intervention II	After Treatment	p
Knowledge	6.77[a] +/- 2,17	6,90[a] +/- 2,35	0.847[a]	6,90[a] +/- 2.35	7.47[a] +/- 2.09	0.281[a]
Attitude	36, 73[a] +/- 3.648	36.70[a] +/- 2.706	0.968[a]	36.70[a] +/- 2.706	35.70[a] +/- 46.84	0.342[a]

Remarks:
a = average +/- Standard Deviation Medianb = +/- Standard Deviation c =Paired t test

The results of the statistical analysis of knowledge and attitudes of the intervention group on the comparison of interventions I and II, intervention II and after intervention obtained p value> 0.05, it can be concluded that there were no significant differences in the knowledge and attitudes of respondents in the intervention I, II and after the intervention.

TABLE 4 DIFFERENCES IN BEHAVIOR BEFORE AND AFTER INTERVENTION IN THE INTERVENTION GROUP.

No	Pre Behavior / Behavioral	PostTest		Total	*P*
		No Eating	Eating		
1.	Not Eating	3	10	13	0.002
2.	Eating	0	17	17	
Total		3	27	30	

The results of analysis of behavioral differences before and after intervention in the intervention group that has been given intervention two times obtained that at the time before the intervention 17 respondents ate fruit and vegetables and 13 respondents who did not eat fruit and vegetables. At the time after the intervention, there was an increase of 27 respondents who ate fruits and vegetables and three respondents who did not eat fruit and vegetables. Statistical test results obtained p-value = 0.002, it can be concluded that there is an effect of the frequency of displaying fruit and vegetable animation videos on changes in children's behavior towards consumption of fruit and vegetables in the intervention group.

TABLE 5 DIFFERENCES IN BEHAVIOR BEFORE AND AFTER INTERVENTION IN THE CONTROL GROUP

No	Pre	Post Behavior		Total	p
		No Eating	Eating		
1.	No Eating	5	13	18	0,000
2.	Eating	0	12	12	
Total		5	25	30	

The results of the analysis of behavioral differences before and after intervention in the. The Control group which is only given leaflets after pre-test it is found that at the time before the intervention 12 respondents ate fruit and vegetables and 18 respondents who did not eat fruits and vegetables. After the intervention, there was an increase of 25 respondents who ate fruit and vegetables and five respondents who did not eat fruit and vegetables. Statistical test results obtained p-value = 0,000 it can be concluded that in the control group there is an effect of giving fruit and vegetable leaflets to changes in children's behavior in the consumption of fruits and vegetables.

IV. DISCUSSION

The results of the above research show that the level of knowledge in the intervention, group before intervention is the mean of 5.73. After the first animated video display of fruit and vegetables was increased with an average of 6.77. Then again the second video was shown again; there was a return from the first video display of 6.90. In the last video presentation, there was a significant increase from the second video display, which was 7.47. The conclusion that can be seen from the results of the study that every video presentation was given a slight increase in knowledge in Baitul Izzah elementary school children.

Knowledge is obtained through the five senses of man, namely the senses of sight, hearing, smell, taste, and touch. Most human knowledge is achieved through the eyes and ears. This increase was influenced by the frequency of repeated animated video of fruit and vegetables. Repeated animated video broadcasts make children pay more attention and follow each process because according to the child the videos that are shown are new things they have never seen.[3]

This is consistent with the theory of Sudjana and Rivai that one of the benefits of media in the child's learning process is that it can foster children's learning motivation because the learning process they follow will be more interesting.[4]

The results showed that the attitude in the intervention group before the intervention was an average of 31.8. After the first animated video display of fruit and vegetable was increased by an average of 36.73, during the second animated video presentation there was a slight decrease of 36.70, and the last animation video was given a reduction of 35.70.

The decline and improvement of children's attitudes are due to the unstable nature of children. Knowledge possessed by a person can support a person's attitude towards something, but sometimes the knowledge that a person has is not applied through his approach in daily life.[5] The eating habits of a person are formed from the learning process (*Learned Behavior*). If parents have familiarized and introduced to children from an early age to eat vegetables and fruit, then this will have an impact until adult children from a non-vegetable and fruit-eating attitude. This attitude is known as a negative preference for the type of vegetable food.[6]

It can be concluded that all the results obtained a p-value of the value> 0.05 then there is no significant effect of the frequency of displaying fruit and vegetable animation videos before the intervention, the intervention I, II and after the intervention to changes in children's knowledge about eating vegetables and fruit.

Sudjana and Rivai (1992) also pointed out that one of the benefits of media in children's learning process is that it can foster Children's learning motivation because teaching will attract their attention. But in reality, the child is easy to feel bored or bored. This is also due to the lack of recognition of children to repeated video shows. Besides, most children do not participate in each process and are less actively involved and tend to do other activities when viewing animated videos of eating fruits and vegetables.[4]

The results showed that the p-value of attitudes between before intervention and first intervention was 0.001, in the early intervention and second intervention the p-value was 0.968, and in the second intervention and after the intervention, the p-value was 0.342. So it can be concluded that there is no significant effect of the frequency of displaying fruit and vegetable animation videos before the intervention, intervention I, II and after the intervention on changes in children's attitudes about eating vegetables and fruit.

The results of the analysis of behavioral differences before and after the intervention in the intervention group can be concluded that there is an effect of the frequency of displaying fruit and vegetable animation videos on changes in children's behavior towards consumption of fruit and vegetables in the intervention group. The More children know the more interested they are. Knowledge of nutrition is one of the essential factors in determining a person's behavior towards food. The more knowledgeable nutrition is proper, the more individuals will consider the type and quality of food that will be chosen for consumption.[7]

Many factors influence the pattern and the behavior of fruit and vegetable consumption in The community. Vereecken et al. (2004) stated those children began to get a lot of influence from the outside environment when they entered school age, including from teachers, peers, other people at school, and including influences from the media

. CONCLUSION

Child behavior increases after being given an animated video of eating fruits and vegetables. There is significant influence between the frequency of displaying animated videos of eating fruits and vegetables on changes in children's behavior in consuming fruits and vegetables.

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