



Counseling Using Animated Video on the Level of Knowledge among Students at State Elementary School 11 of Manado

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ARTICLE INFORMATION	ABSTRACT
<p><i>Article History:</i> <i>Received: May 3, 2023</i> <i>Revised: June 25, 2023</i> <i>Published: May 31, 2023</i></p>	<p>Dental and oral health problems may exist due to several factors, including behavioral factors. Behavioral factors can be managed through certain interventions. Promotive efforts such as counseling can increase knowledge on dental and oral health. This study aims to determine the effect of counseling using animated video on the level of knowledge on how to brush teeth among students at State Elementary School 11 of Manado. This was an analytical study with a One Group Pretest-Posttest design conducted in June 2022 at State Elementary School 11 of Manado. The total population involved 30 people, and the samples were selected using total sampling technique. Data were analyzed using paired sample t-test. Data collection instrument used a questionnaire to assess the level of knowledge on how to brush teeth. The results showed that the mean pre-test level of knowledge on how to brush teeth was 22.9333 with a standard deviation of 1.87. Based on the results of the paired sample t-test, the mean difference in the level of knowledge on brushing teeth between the pre and post-tests was -5.833 with a standard deviation of 2.320. In addition, it was obtained a t count value of -13.768 > t table of 1.699 at df 29, with a p-value of <0.05. It can be concluded that there was a difference in the level of knowledge between before and after counseling using animated video among students at State Elementary School 11 of Manado. Further study is recommended to use other alternative media to increase students' knowledge.</p>
<p>Keywords: Effect Video Media Knowledge How to Brush Teeth</p>	

INTRODUCTION

Dental and oral health are inseparable from body health (Ismaua, et al., 2019). Dental and oral health problems may exist due to several factors, including behavioral factors (Nugroho, Femala, & Maryani, 2019), (Variani, Obi, & Fatima, 2022). Behavior is significantly influenced by knowledge. Behavior-based on correct knowledge will greatly affect the level of dental and oral hygiene (Nurmalasari, et al., 2021).

Knowledge on dental and oral health should be delivered at an early age, namely to school-aged children, since it is important to maintain healthy teeth and mouth in the future (Rismana, et al., 2020). Elementary school age is an ideal time to train children's motor skills, including regarding brushing teeth (Claudiati, Purwaningsih, & Ulfah. (2021). Proper and correct tooth brushing is a quite important factor in maintaining oral health (Agustini, 2019), (Liarian, et al., 2020).

Based on data derived from Basic Health Research (Kementerian Kesehatan Republik Indonesia, 2018), it was revealed that 57.4% of the population in Indonesia experienced dental and oral health problems and 2.8% had good and correct tooth brushing habits. In North Sulawesi, dental and oral health problems were recorded at 66.5% while good and correct tooth brushing habits were recorded at 3.5%. Based on these data, many people, especially school children, still paid little attention to oral health (Kementerian Kesehatan Republik Indonesia, 2018). The spread of COVID-19 in Indonesia is increasing so that it requires specific efforts. Mouth becomes a way for high risk transmission of diseases such as the COVID-19 virus since it is an entering route for viruses. Efforts to deal with the COVID-19 problem in relation to dental and oral health can be performed through dental and oral health counseling (Soesanto, Octarina, & Kusnoto, 2021). Maintaining healthy teeth and mouth during the COVID-19 period is very important to prevent transmission of COVID-19 and may prevent dental and oral health problems (Melaniwati, et al., 2021)

Based on the previous study conducted by Agustina (2019), Animated Toothbrushing Educational Video Media had a significant effect on the Level of Knowledge on How to Brush Teeth among Children Aged 8-9 Years at Palem 1 Elementary School of Pare. Furthermore, a study conducted by Jelita, et al., (2021) found the effect of counseling using the virtual animation video playback method on the level of knowledge on brushing teeth among the 5th grade students. The results of the study found that before counseling, most of the respondents had a low level of knowledge (38% wrong answers) and after counseling, most of the respondents had a high level of knowledge (78% correct answers). Thus, the virtual animation video playback method could significantly increase the level of knowledge on dental health activities among the 5th-grade students at State Elementary School 127 of Palembang. This study aims to determine the effect of counseling using animated video on the level of knowledge on how to brush teeth among students at State Elementary School 11 of Manado.

METHOD

This was an analytical study with a One Group Pretest-Posttest design. The population in this study involved 30 5th-grade students at State Elementary School 11 of Manado. The study samples were selected using total sampling technique. Data were collected using a questionnaire that was delivered before and after counseling interventions. Counseling was provided in the form of knowledge on brushing teeth, including the type and size of toothbrushes for children, the method of brushing teeth, and the frequency and time of brushing teeth. The questionnaire consisted of 16 questions, with 2 alternatives, namely right and wrong. Each correct answer was given a score of 2 and wrong answers were given a score of 1. Assessment criteria consisted of poor knowledge for the score of 16-24 and good knowledge for the score of 25-32.

Data analysis in this study applied two methods: Univariate analysis and Bivariate analysis. Data processing was performed in statistical test through the paired sample t-test by using SPSS 26 software.

RESULTS AND DISCUSSION

The current study was conducted among State Elementary School 11 students of Manado located in the North Wenang Sub-district, Wenang sub-district, Manado City, North Sulawesi. The geographical boundaries of State Elementary School 11 of Manado include to the north by Korem 131/ Santiago, to the east by Elementary School 124 of Manado, to the south by residents' houses and to the west by State Elementary School 06 of Manado.

Table 1. Distribution of Respondents by Gender.

Gender	n	%
Male	12	40%
Female	18	60%
Total	30	100%

Table 1 above showed that most of students were female by 18 students (60%) and there were 12 male students (40%).

Table 2. Distribution of Respondents by Age.

Age (Years)	n	Percentage
10 years	14	47%
11 years	16	53%
Total	30	100%

Table 2 above showed that most students were in the age group of 11 years by 16 students (53%) and 14 students (47%) in the age group of 10 years.

Table 3. Frequency Distribution of the Level of Knowledge in the Pre-Test.

Category	Number (n)	Percentage (%)
Good	4	13%
Poor	26	87%
Total	30	100%

Table 3 above showed that in the pre-test, 4 respondents (13%) had good knowledge and 26 respondents (87%) had poor knowledge.

Table 4. Frequency Distribution of the Level of Knowledge in the Post-Test

Category	Number (n)	Percentage (%)
Good	30	100%
Poor	0	0%
Total	30	100%

Table 4 above showed that 30 respondents (100%) had good knowledge in the post-test, and no respondent (0%) had poor knowledge.

Table 5. Results of the Paired Samples Test on the Effect of Counseling Using Animated Video on the Level of Knowledge on How to Brush Teeth based on the Pre Test and Post Test

		Mean	SD	SEM	t	df	p-value
Pair 1	Pre-Test – Post-Test	-5.83333	2.32057	0.42368	-13.768	29	0.000

Table 5 presents the results of the paired samples test. It was revealed that the mean difference in how to brush teeth between the pre-test and post-test in knowledge was -5.833, with a standard deviation of 2.320. Furthermore, a t count value of -13.768 > t table of 1.699 at df 29 was obtained, with a p-value of 0.000 < α 0.05. Thus, hypothesis (H_1) was accepted.

DISCUSSION

Counseling is an explanation that emphasizes a particular object and attempts to provide a message or material. The expected result is a change in the behavior of individuals, groups of people, or society. Counseling has a very good effect for children. Dental and oral

health education for children is an effort to instill understanding in children from an early age that dental health is no less important than general body health (Setyaningsih, 2019; Hikmah, & Laut, 2020). Dental and oral health counseling aims to empower individuals and communities for the future good health status.

Conducting dental health counseling to children with various media is considered as a more innovative effort which can attract the children attention, for example, animated video on how to brush teeth in class learning (Hikmah, & Laut, 2020). Such counseling using animated video is considered to significantly increase the knowledge and encourage behavior change in maintaining the respondents' oral and dental health after counseling.

Based on the result of research that had been conducted among the 5th grade students at State Elementary School 11 of Manado using animated video media, there was an increase in the level of knowledge on how to brush teeth. In the pre-test, 4 respondents (13%) had good knowledge and 26 respondents (87%) had poor knowledge. Most of respondents answered incorrectly at numbers 4 and 5. Such condition might be because State Elementary School 11 of Manado had never received dental and oral health counseling on brushing teeth using animated video media. Meanwhile, in the post-test after being given dental health counseling using animated video media on how to brush teeth, 30 respondents (100%) had good knowledge and no respondent (0%) had poor knowledge.

It is explained that the progression of learning experience in the form of absorption or understanding of messages varies (Siregar, Harahap, & Aidha, 2020). Through reading, one can remember 10%, by listening, one can remember 20%, by seeing, one can remember 30%, by listening, seeing and hearing, one can remember 50%, by doing or demonstrating something, one can remember 70%, and through real experience, one can remember 90%. Thus, it can be concluded that a person's memory can receive better when utilizing more than one sense in counseling (Arista, et al 2021).

The results of the paired samples test revealed that the mean difference on how to brush teeth between the pre-test and post-test in knowledge -5.833 with a standard deviation of 2.320. Furthermore, a t count value of -13.768 > t table of 1.699 at df 29 was obtained, with a p-value of 0.000 < α 0.05. Thus, it can be concluded that there was an effect of counseling with video media on the level of knowledge on how to brush teeth (Fitriana, 2018; Hamid, Ramadhani, & Juliana, 2020; Kustandi, & Darmawan, 2020; Sitanaya, 2019). The animated video media contain audio and visuals with clear materials. Therefore, it is easy to understand, can attract students' attention to learning, and can be watched many times. The study finding is in accordance with a pervious study conducted by Jelita, et al., (2021) which found the effect of counseling using the virtual animation video playback method on the level of knowledge on brushing teeth among the 5th grade students. Thus, virtual animation video playback method could significantly increase the level of knowledge on how to brush teeth among children.

CONCLUSION

It can be concluded that there was a difference in the level of knowledge between before and after counseling with video media among students at State Elementary School 11 of Manado. Further study is recommended to use other alternative media to increase students' knowledge.

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