

EFFECTIVENESS OF COUNSELING WITH ANIMATED VIDEO MEDIA ON INCREASING KNOWLEDGE OF DENTAL AND ORAL HEALTH MAINTENANCE IN GRADE V CHILDREN OF SDN 003/V KUALA TUNGKAL

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ABSTRACT

Background: Dental and oral health is a crucial part of general well-being that enables individuals to perform essential functions such as eating, breathing, and speaking. However, lack of knowledge and awareness, especially among children, can lead to dental problems. One effective way to increase this awareness is through educational interventions using audio visual media. This study investigates the effectiveness of counselling with animated video media in increasing the knowledge of dental and oral health maintenance among fifth-grade students at SDN 003/V Kuala Tungkal.

Methods: This research used a quasi-experimental design with a two-group pre-test and post-test method. The sampling technique employed was simple random sampling with 32 students divided equally into treatment and control groups. The data collection instrument used was a validated knowledge questionnaire. Bivariate analysis was performed using the Paired T-Test and Independent T-Test statistical methods

Results: The average knowledge score in the treatment group increased from 6.56 before the intervention to 13.00 after being given animated video education. Meanwhile, in the control group (which received counselling through lectures), the score changed only slightly from 5.75 to 5.81. The statistical test showed a significant difference in knowledge improvement in the treatment group ($p = 0.000$), proving that animated video media is more effective than traditional lecture methods.

Conclusion: The use of animated video media in health education was found to be more effective in increasing knowledge of dental and oral health maintenance compared to lecture methods among fifth-grade students of SDN 003/V Kuala Tungkal.

Keywords: Animated Video, Dental Health Education, Oral Health Knowledge

INTRODUCTION

Health is an essential aspect of life that supports optimal daily functioning. A healthy condition can be defined as a state of physical, mental, and social well-being free from disease, enabling individuals to carry out activities effectively. Achieving a high standard of health requires managing environmental factors and adopting a healthy lifestyle (Utami, 2023).

Dental and oral health is a crucial part of general health and well-being. It is the condition of the mouth, teeth, and supporting structures that enables individuals to perform vital functions such as eating, breathing, and speaking, as well as psychosocial functions like self-confidence, social interaction, and working

without discomfort or embarrassment (World Health Organization, 2022).

According to the 2023 Indonesian Health Survey (SKI), 56.9% of Indonesians have dental health issues, but only 11.2% seek treatment from healthcare professionals. While 95.6% of Indonesians report brushing their teeth daily, only 6.2% do it properly (Kementerian Kesehatan, 2023). This shows a significant gap in both knowledge and practice related to dental hygiene.

Dental health education is one of the key programs implemented at the primary healthcare level to address these issues. Through educational initiatives, individuals and communities can be motivated to adopt better oral hygiene practices. Knowledge plays

a vital role in shaping behavior. A lack of understanding often leads to poor habits, which contributes to oral health problems such as tooth decay, gum disease, and other related conditions (Budiharto, 2018; Pertiwisari, 2023).

Children, especially those aged 6–12 years, are at a critical stage of dental development. During this period, primary teeth are replaced by permanent teeth. However, many children at this age lack proper knowledge about oral hygiene. This is often compounded by poor dietary habits and a lack of parental or institutional guidance (Meidina et al., 2023).

To effectively convey dental health information to children, the use of educational media is essential. One such media is animated video, which combines visual and auditory elements to enhance attention, comprehension, and retention. Video-based learning can increase motivation, simplify complex concepts, and positively influence behavior (Constantika et al., 2022; Nur Fadillah et al., 2021).

A preliminary survey conducted at SDN 003/V Kuala Tungkal revealed that most Grade V students had dental caries, likely due to poor oral hygiene practices and high consumption of cariogenic foods. The school had never previously implemented a structured oral health education program. Therefore, there is a need to develop an effective method to enhance students' knowledge and habits related to dental and oral health.

METHODS

This study used a quasi-experimental design with a two-group pre-test and post-test approach. The research was conducted in March 2025 at SDN 003/V Kuala Tungkal. A total of 32 fifth-grade students were selected through simple random sampling and divided equally into two groups: a treatment group (received counseling using animated video) and a control group (received counseling through lectures). A

15-item multiple-choice questionnaire on dental and oral health knowledge was used as the instrument, administered before and after the intervention. Each correct answer scored 1 point; incorrect answers scored 0. Data were analyzed using paired t-test to compare pre-test and post-test scores within groups, and independent t-test to compare differences between groups. A Shapiro-Wilk test confirmed the data were normally distributed, allowing for parametric analysis.

RESULTS AND DISCUSSION

Research on the Effectiveness of Counseling with Animated Video Media on Increasing Knowledge of Dental and Oral Health Maintenance in Grade V Children of SDN 003/V Kuala Tungkal, which was conducted on March 8, 2025, with a sample size of 32 people obtained as follows.

3.1. Description of Research Sample Characteristics

This sub-chapter describes the characteristics of research respondents based on gender. The research sample consisted of 32 fifth grade students of SDN 003/V Kuala Tungkal who were divided into two groups: a group given counseling using animated videos (n=16) and a control group given counseling using lectures (n=16). In the animated video group, there were 9 male students (56.25%) and 7 female students (43.75%). Meanwhile, in the lecture group there were 7 male students (43.75%) and 9 female students (56.25%).

3.2 Univariate Analysis

Univariate analysis presents a picture of the knowledge score of dental and oral health maintenance before (pre-test) and after (post-test) counseling was given to both groups. The results showed that the average knowledge score before counseling in the animated video group was 6.56, while in the control group it was 5.75. After being given counseling, there

was a significant increase in the average knowledge score in the animated video group to 13.00. Meanwhile, in the control group, the

average knowledge score only increased slightly to 5.81.

Table 1. Distribution of Knowledge Scores on Dental and Oral Health Maintenance before and after counseling with animated videos and control group with lectures at SDN 003/ V Kuala Tungkal

Group	Pre test				Post test			
	Mean	SD	Min-max	95% CI	Mean	SD	Min-max	95% CI
Treatment	66,56	0,964	5-8	6,05-7,08	13,00	1,506	10-15	12,20-13,80
Control	55,75	1,000	4-8	5,22-6,28	5,81	0,981	4-8	5,29-6,34

3.3 Bivariate Analysis

3.3.1 Normality Test

Before conducting bivariate analysis, a normality test was conducted using Shapiro-Wilk. The test results showed that the knowledge score data in the animation video group and the lecture group, both in the pre-test and post-test, were normally distributed ($p > 0.05$). Therefore, the bivariate analysis was continued using the paired sample t-test and independent t-test.

Table 2. Normality Test of Data on Knowledge of Dental and Oral Health Maintenance

Group	Shapiro Wilk		
	Statistic	DF	Sig.
Pretest animated video	0,892	16	0,061
Posttest animated video	0,932	16	0,264
Pretest Lecture	0,904	16	0,904
Posttest Lecture	0,909	16	0,114

3.3.2 Average Knowledge of Dental and Oral Health Maintenance Before and After Being Given Animated Video Counseling

The results of this study indicate that the average knowledge of dental and oral health maintenance in grade V children of SDN 003/V Kuala Tungkal increased from before being given counseling using animated video media by 6.56 and after being given counseling with animated videos to 13.00. This study is in line with research (Fione et al., 2021) which shows that there is an increase in knowledge of dental and oral health maintenance before and after being given counseling using animated video media from 9.97 to 12.00.

Health counseling is a combination of various activities and opportunities based on

the principles of learning to achieve a state where individuals, families, groups, or society as a whole want to live healthy, know how, and know what can be done by asking for help individually or in groups (Tumurang,2018).

Utilizing media when conveying information is an effective way to promote dental and oral health in children. Video media is one of the media for promoting dental and oral health. The attraction of video media is the ability for images and sound, besides that video also provide information (Nur Fadillah et al., 2021).

3.3.3 Differences in Average Knowledge of Dental and Oral Health Maintenance in Fifth Grade Children Before and After Being Given Animated Video Media and Given a Lecture

The results of this study indicate that there is a difference in the average knowledge of dental and oral health maintenance in fifth grade children of SDN 003/V Kuala Tungkal before and after being given animated video media, namely from 6.56 to 13.00 with a difference in the average knowledge of dental and oral health maintenance before and after being given a lecture, namely from 5.75 to 5.81.

This study is in line with research (Yanti et al., 2012) which shows that there is a difference in the average knowledge of dental and oral health maintenance before and after being given an animated video, namely from 12.16 to 17.31 with a difference in the average knowledge of dental and oral health maintenance before and after being given a lecture, namely 12.16 to 12.20.

The use of animated video media further increases knowledge, this is because the use of the animated video playback method can attract students' attention more, and can increase motivation and help students remember, and accelerate student understanding. This is different from the lecture method which makes students bored more quickly during counseling. Knowledge and actions to care for teeth and mouth properly and correctly are very important to maintain good dental and oral health. Knowledge about dental and oral health should already be possessed when students start school, especially between 6-12 years old when the change from baby teeth to permanent teeth begins to grow, at this stage most children are not fully aware of the importance of maintaining dental and oral health (Pertiwisari, 2023).

3.3.4 Effectiveness of Animated Videos on Increasing Knowledge of Dental and Oral Health Maintenance

Based on table 4.5, it is known that the significant p-value of the experimental variable is $0.000 < 0.05$, so the results of dental and oral health maintenance counseling with animated videos on increasing knowledge of dental and oral health maintenance in grade V children of SDN 003/V Kuala Tungkal are effective.

The results obtained a sig value = 0.000 (p value < 0.05), so it can be concluded that there is a significant difference between knowledge of dental and oral health maintenance before and after being given counseling using animated video media, thus the alternative hypothesis is accepted.

This study is in line with (Rejeki et al., 2023) which shows that the results of sig = 0.000 (p value > 0.05), it can be concluded that there is a significant difference between dental and oral health maintenance before and after being given counseling with animated video media. Animated video media can increase children's curiosity about what is being learned, so that the intent and purpose of the extension

media can be conveyed optimally, the use of media is very important and has a function as an intermediary to channel interesting information so that the information conveyed is understood by respondents.

CONCLUSION

The results of the research that has been conducted regarding the Effectiveness of Counseling with Animated Video Media on Increasing Knowledge of Dental and Oral Health Maintenance in Grade V Children of SDN 003/V Kuala Tungkal, can be concluded that:

1. The average knowledge of dental and oral health maintenance in fifth grade students of SDN 003/V Kuala Tungkal increased from before being given counseling using animated video media by 6.56 to 13.00.
2. The difference in the average knowledge of dental and oral health maintenance in fifth grade students of SDN 003/V Kuala Tungkal before and after being given animated video media was: 6.56 to 13.00 with those given lectures, namely: 5.75 to 5.81.
3. Animated video media is more effective in increasing knowledge of dental and oral health maintenance in fifth grade students of SDN 003/V Kuala Tungkal, compared to lectures, in the statistical test results obtained Sig = 0.000 (p value < 0.05).

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CONFLICT OF INTEREST

No conflict of interest.

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