



## DOMIKADO GAME METHOD AS A MEDIA FOR BRUSHING TEETH'S EDUCATION FOR STUDENTS OF 02 TANGGULANGIN STATE ELEMENTARY SCHOOL

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### ABSTRACT

**Background:** Dental and oral health problems based on RISKESDAS 2018 data were recorded at 57.6%. In Wonogiri, the most common dental and oral health problem is regarding the lack of knowledge of brushing teeth. Efforts to improve knowledge of brushing teeth through education activities with the Domikado game method. **Aims** to determine the Domikado Game **Method** as a education's media to increase Toothbrushing Knowledge Improvement in 02 Tanggulangin Elementary School Students.

This type of research uses quantitative descriptive with a pre-experimental research method and the research design used is one group pre-test post-test design. The sample in this study was taken using a saturated sample technique totaling 54 students. Knowledge measurement was carried out using pre-test and post-test questionnaires. Data analysis used quantitative descriptive analysis.

**The results** of the study showed an increase in knowledge of brushing teeth which was originally in the moderate category of 41 (76%) students to a good category of 43 (80%) students. **The conclusion** of this study is that education using the Domikado game tends to be effective in increasing knowledge about brushing teeth because the Domikado game is very interesting for elementary school students, most of whom are very enthusiastic about the game, trains students' concentration and the game is very exciting to play.

Keywords: Domikado game, media education, brushing teeth

### Introduction

Dental and oral health is part of general health that must be considered because it can affect overall body health, so it is important to maintain dental and oral health<sup>1</sup>. Based on RISKESDAS 2018 data, there are 57.6% dental and oral health problems. Data on proper tooth brushing behavior in Central Java Province shows a figure of 1.82%. Meanwhile, in Wonogiri Regency, the prevalence of proper tooth brushing time is 0.73%, which is ranked 7th in Central Java. Based on age groups in Central

Java, the correct tooth brushing time in the 5-9 year age range is 0.734%, 10-14 years 1.036%, where these 2 age groups are in the top 3 among other age groups. Judging from the percentage, further efforts are still needed to increase knowledge about brushing teeth<sup>2</sup>. Lack of knowledge about brushing teeth is often found in elementary school children aged 7-11 years, such as at SD N 174 Kel. Murni Jambi who do not care about their own health, lack of knowledge on how to brush their teeth properly, children feel that brushing their teeth is not fun. The habit of

brushing their teeth in elementary school children who are still wrong, is partly due to the lack of knowledge about brushing their teeth<sup>3</sup>.

This was found in the research of Hamidah, et al. which stated that knowledge and behavior of brushing teeth in children are included in the moderate category which means that the high def-t score in children is caused by knowledge and behavior about brushing their teeth which is still lacking<sup>4</sup>.

Based on the description of the problem, to increase knowledge about brushing teeth, effective health promotion/education activities need to be carried out. Health education is a health education activity carried out by spreading messages, instilling beliefs, so that the community is not only aware, knows and understands, but also wants and can carry out a recommendation that is related to health<sup>5</sup>.

Traditional game method, can be used widely played by school children, namely the Domikado game. The results of learning media experts, counselling experts and prospective users show that the Domikado game has high validity with the first validator index or very good acceptance. Playing Domikado motivates students to create their own reality, develop their ability to interact with others, invite students to adapt to the environment, encourage cooperation in groups, and show the importance of social skills for each individual. When children enjoy playing Domikado with their friends, positive interactions are created<sup>6</sup>.

Based on the results of a preliminary study conducted on 10 students of SD Negeri 02 Tanggulangin, Jatisrono, Wonogiri through interviews about brushing teeth, it was found that 7 of them did not really understand about brushing their teeth, 3 of them already understood.

The purpose of this study was to determine the increase in knowledge of brushing teeth in students of SD Negeri 02 Tanggulangin aged 8-11 years using the Domikado game as a medium for providing counseling on brushing teeth.

## Methods

The type of research is quantitative descriptive, with a pre-experimental research design. This instrument of this research used

questionnaires to check the pre test and post test examinations. The number of samples was 54 people from SD Negeri 02 Tanggulangin aged 8-11 years.

## Results and Discussion

**Table 1. Frequency Distribution of Knowledge Level Before Being Given Education Using the Domikado**

Criteria of Knowledge	Frequency	
	N	%
Good	6	11
Enough	41	76
Less	7	13
Total	54	100

Based on table 1, it shows that the level of knowledge of brushing teeth in students of SD Negeri 02 Tanggulangin aged 8-11 years before the counseling using the Domikado game was the most with sufficient criteria of 41 (76%) students, while the least with good criteria was 6 (11%).

**Table 2 Frequency Distribution of Knowledge Level After Being Given Counseling Using the Domikado Game Method**

Criteria of Knowledge	Frequency	
	N	%
Good	43	80
Enough	11	20
Less	0	0
Total	54	100

Based on table 2, it shows that the level of knowledge of brushing teeth in students of SD Negeri 02 Tanggulangin after counseling using the Domikado game was the highest with good criteria, namely 43 (80%) students, while none had poor knowledge (0%).

**Table 3 Distribution of Differences in Knowledge Levels Before and After Counseling Using the Domikado Game Method**

Criteria	Before		After		Difference
	N	%	N	%	
Good	6	11	43	80	69%
Enough	41	76	11	20	-56%
Less	7	13	0	0	-13%
Total	54	100	54	100	0%

Based on table 3, it can be seen that the results obtained show that most of the students' knowledge has increased, namely the good category, which was originally 6 (11%) students, has become 43 (80%) students, and the poor category has decreased, which was originally 7 (13%) students, has become 0 (0%) students.

There are respondents who do not understand about brushing their teeth, including the purpose of brushing their teeth and the techniques and methods of brushing their teeth, so it is necessary to provide information that can increase knowledge by providing information about brushing their teeth. Respondents who have a behavior of brushing their teeth that does not meet the established standards are shown in 50 respondents who have low knowledge of dental and oral health and methods of brushing their teeth that do not meet the established standards. Seeing this, it is necessary to provide information about brushing their teeth so that there is an increase in knowledge of brushing their teeth, namely by means of counseling<sup>7</sup>.

Efforts to facilitate the delivery of information during counseling should use one of the various existing methods, one method that can be used is the traditional game method<sup>8</sup>. This is because the play method is very suitable for children, games are an effective and efficient means and are important for entertaining, educating, providing positive impacts, and raising each individual, play activities as a means of socialization. Through play, it is hoped that it can provide opportunities for students to explore, create and learn in a fun way<sup>9</sup>. In addition, playing is something that should be obtained naturally from children, therefore this method is very familiar to children and playing is also a fun way for children. One of these games is the Domikado game<sup>10</sup>.

Based on data, that most students can understand the material that has been packaged using the Domikado game method, and there was

an increase after counseling using the Domikado game method, because playing Domikado can train children to concentrate, interact with their friends and create togetherness in their relationships<sup>11</sup>.

However, students whose level of knowledge of brushing their teeth remained in the sufficient criteria due to lack of attention during the implementation of counseling on brushing their teeth using the Domikado game method because some of these students felt bored, did not like the game and did not understand how to play it. This happened because the Domikado game was only played by sitting in a circle and singing the same song for 14 rounds with an estimated time of 35 minutes.

Children consider traditional games to be old-fashioned games (old times) and prefer to play modern games which according to the perpetrators are sophisticated games and do not require much energy. Because we know that when we play traditional games we will often play the game outside the house and sometimes our bodies will be wet with sweat, this is very different from modern games, they can play the game wherever they want<sup>12</sup>.

The level of knowledge about brushing teeth before and after education using the Domikado game method increased, which initially mostly increased from the sufficient category to the good category, this was caused by several things, namely the Domikado game really attracts the attention of elementary school students, most of whom are very enthusiastic about the game, trains students' concentration and the game is very exciting to play so that the material on brushing teeth that has been packaged in this Domikado game can make students understand the material on brushing their teeth. Therefore, this game tends to be effective to use. Traditional games can improve knowledge of brushing teeth as shown by the increasing average value. In addition, the implementation of the Domikado game for elementary school students is effective in providing encouragement to students to create their own reality, developing students' abilities<sup>11,13</sup>.

## Conclusion

Education using the Domikado game method that has been carried out can increase knowledge about brushing teeth so that this game tends to be effective to use

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