



Dental health education with songs as an effort to increase knowledge of brushing teeth in elementary school students

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ABSTRACT

Background: The 2018 Basic Health Research showed that only 2.8% of the Indonesian population had brushed their teeth at the correct time, namely in the morning after breakfast and at night before going to bed. Banten Province showed that the population aged ≥ 3 years in Banten Province had brushed their teeth at the correct time. One of the health promotion efforts is through education, where dental health education is closely related to a media. One of the educational media for elementary school children is children's songs. **Objective:** The purpose of this study was to analyze the effectiveness of increasing knowledge of brushing teeth before dental health education with songs in grade II students of SDN Rengas South Tangerang 2024. **Method:** The design of this study used a quasi-experimental design, with a research sample of 34 grade II A students of SDN Rengas using the total sampling method. The instrument used was a questionnaire sheet on how to brush teeth, then the method and media used were songs about Brushing Teeth. **Data analysis** used the Wilcoxon test. **Results:** Knowledge before and after being given education on Brushing Teeth with songs, in the good category, namely (67%) to (97%), in the sufficient category, namely (30%) to (3%), and in the less category, namely (3%) to none (0%). The average knowledge before education showed a figure of 77 with a good category. While the average knowledge after education was at 95, there was a difference in knowledge of 18 with $p = 0.001$. **Conclusion:** there was an increase in knowledge of brushing teeth with song education in elementary school children.

INTRODUCTION

Dental and oral health in Indonesia is important to be given more attention from dental and oral health workers. This is because quite a lot of Indonesian people neglect their own dental and oral health, including early childhood (Fadjeri et al., 2022). Early childhood is an age group that is susceptible to dental and oral diseases, so it needs to get more attention and be prevented in a good and correct way. This condition can affect the health status of early childhood during the growth, development, and future of early childhood (Pantow et al., 2014).

The most basic thing in maintaining dental and oral health is brushing your teeth properly and correctly (Purnama, 2023). Based on the 2018 Basic Health Research, nationally according to data only 2.8% of the Indonesian population has brushed their teeth at the correct time, in the morning after breakfast and at night before going to bed. Banten Province shows that 2.34% of the population aged ≥ 3 years in Banten Province have brushed their teeth at the correct time (Risikesdas, 2018).

Based on research conducted by (Purnama et al., 2024) the tooth brushing song is effective in improving preschool children's tooth brushing skills. Then research conducted by (Shorayasari et al., 2017) on students of SDS Kartini Banten aged 6-12 years showed data regarding knowledge of brushing teeth with an average value of 50.84 from 32 respondents.

One of the health promotion efforts is through counselling. Counseling is no exception from the media, by using health promotion media, the information to be conveyed can be better understood (Erdiyani et al., 2023). One of the counseling media is children's songs. Singing songs, reading poetry, and playing rhymes is a combination of learning that is very easy and familiar to children (Anisati & Setyawan, 2022). Children's songs are songs sung by children, singing straightforward things that are closely related to play activities that are cheerful and easy for children to understand (Ilmi et al., 2021).

Children's songs have their own function to increase self-confidence, creativity and improve positive attitudes and characters in children (Gutama, 2020). Children's songs are also needed as a method

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to increase interest and motivate students in learning activities as well as to train students' abilities and personalities (Ilmi et al., 2021).

METHOD

The design of this study is a quasi-experimental study with a pretest and posttest design with one group design. The purpose of this study was to analyze the effectiveness of increasing knowledge of brushing teeth before dental health education with songs in grade II students of SDN Rengas South Tangerang 2024. Data collection will be carried out in April to May 2024. This study uses sampling with the total sampling method, so the total sampling in this study was 34 students. The instrument used in data collection was a questionnaire consisting of 25 questions to measure knowledge of brushing teeth and tooth brushing songs. Data collection was carried out by filling out the pretest and posttest questionnaire sheets that discussed brushing teeth. Data analysis used in this study used SPSS with the Wilcoxon test.

RESULT

The data collection process was carried out for 5 days, starting from the initial stage on the first day by distributing pre-test questionnaires and before filling in the researcher explained how to fill out the questionnaire containing 25 questions. Then the respondents filled out the questionnaire. Furthermore, the researcher provided education with songs to make it easier for respondents to sing along with the song so that respondents could easily remember the educational material presented. This activity was carried out repeatedly so that respondents could memorize the rhythm and lyrics of the song. Respondents were also asked to memorize the song at home in order to better remember the material that had been presented and to be able to answer the post-test questions correctly. Furthermore, on the last day of the study, the researcher again provided education by playing the song again and asking respondents to sing along. The last stage was continued by filling in the post-test to measure the level of knowledge of respondents after being given education with songs.

Table 1. Frequency distribution knowledge of brushing teeth before education with songs

Knowledge	Before		After	
	F	%	F	%
Good	23	67	33	97
Sufficient	10	30	1	3
Poor	1	3	0	0
Total	41	100	41	100

Table 1 shows that before being given education with songs, there were 23 students (67%) who had knowledge in the good category, 10 students (30%) who had knowledge in the sufficient category and 1 student (3%) who had knowledge in the poor category. While after being given education with a song about brushing teeth, there were 33 students (97%) who had knowledge in the good category, 1 student (3%) who had knowledge in the sufficient category and no students (0%) who had knowledge in the poor category.

Table 2. Effectiveness test knowledge of brushing teeth before education with songs

Knowledge	Mean	Difference	p-value
Pre-test	77	18	0.001
Post-test	95		

* *Wilcoxon*

Table 2 shows that before education with songs, the mean respondent's knowledge was 77 with a good category, while after education with songs, the mean respondent's knowledge was 95 with a good category or an increase of 18. The results of the Wilcoxon test obtained a p value = 0.001 ($p < 0.05$).

DISCUSSION

Learning must be in accordance with the learning material because each media has its own function in the material to be delivered. Improving learning skills can be successful if the media used is appropriate,

then it can have an impact on students' mastery of the material. Innovation is needed that can spur participants' interest in learning. Among others, by using innovative and creative media (Qulub et al., 2022). Songs are truly effective in improving learning outcomes. Singing with songs causes positive behavioral changes which are characterized by children being easier to communicate with and easy to direct to core learning so that learning is more innovative and creative.

Based on the research results, data was obtained on knowledge of brushing teeth before education with a tooth brushing song, with a score of good criteria for 23 students (67%), a score of sufficient for 10 students (30%), and a score of less than 1 student (3%).

Promotive efforts are basic efforts made with the aim of increasing knowledge about dental and oral health. The material for promotional activities must also be in accordance with the intended target (Notoatmodjo, 2012). One of them is the singing method using a tooth brushing song. The singing method is a method in the learning process that can certainly be used in the school age group, in this method students are required to sing songs or song lyrics where the song lyrics contain the material to be conveyed and taught (Humayrah et al., 2022).

Based on the research results, data on the criteria for knowledge of brushing teeth after education with songs obtained scores with good criteria amounting to 33 students (97%), sufficient criteria amounting to 1 student (3%), and no students with poor criteria (0%). The results of this study are also in line with research that has been conducted by (Septiarini et al., 2021) showed that in the intervention group before counseling had an average of 4.83, and after counseling in the intervention group it was 8.83. Then in the control group, the average knowledge before counseling was 4.83, and after counseling in the control group it was 5.46. It was concluded that the singing and singing methods had a significant effect on increasing knowledge in the two target groups of the study.

Based on the research results, the average knowledge of brushing teeth before education with songs was 77 with a good category, while the average knowledge of brushing teeth after education with songs was 95, there was an increase in the difference of 18. The results of the Wilcoxon test showed that $p = 0.001$ ($p < 0.05$)

The results of the study above show that education about brushing teeth with songs is very effective in increasing knowledge of brushing teeth. Brushing teeth is a simple activity that should be introduced and taught to children as early as possible, which is expected to become a good habit in everyday life. Brushing teeth is also an action that is basic and efficient in maintaining the cleanliness of teeth, gums, and oral cavity from plaque and food residue. The correct way to brush your teeth can maximize the cleanliness of the teeth and mouth, and is the first step in preventing health problems in the teeth and mouth (Nurhasanah & Sandy, 2023).

Tooth brushing education with songs conducted in this study can certainly attract attention and increase children's interest in the process. Rhythm, lyrics, and additional movements when singing a song can enliven the learning atmosphere so that children will be more focused because they are asked to listen, see, and practice. Elementary school-aged children naturally enjoy singing, moving, and singing. With the presence of songs, messages or missions in learning can be conveyed in a happy atmosphere (Triatnasari, 2017). Singing is a method that can attract children's interest in learning vocabulary mastery. When singing, children are told to recognize and remember word by word until finally the child understands the meaning of the words spoken. With singing, of course, it can arouse imagination and develop children's thinking power.

CONCLUSION

Based on the results of the research that has been done, it can be concluded that the tooth brushing education with songs is effective in increasing knowledge of elementary school students.

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