



Combination Method of Singing and Storytelling to Improve Knowledge of Dental and Oral Health Maintenance in Elementary School Students

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ABSTRACT

Background: Indonesian people have 57.6% dental and oral health problems. Ignorance of dental and oral hygiene is a behavioral element that contributes to dental and oral health problems in the population. This comes from a lack of understanding of dental hygiene and care. One of the most effective ways to instill habits in children in maintaining dental and oral health is through dental and oral health education or counseling efforts, one of which is through singing and storytelling methods. Objective: To analyze the effectiveness of knowledge of dental and oral health maintenance before and after education with a combination of singing and storytelling methods in elementary school students. Method: This study used a quasi-experimental design with a one-group pretest-posttest design. The instrument used was a questionnaire sheet and data analysis using the Wilcoxon test. Results: The results of this study indicate that the average knowledge before counseling was 5, while after counseling it was 9.3, with $p = 0.000$ ($p < 0.05$). Conclusion: The combination of singing and storytelling methods is effective in increasing knowledge of dental and oral health maintenance

INTRODUCTION

Everyone should prioritize maintaining good dental health because dental and oral health can have a major impact on overall body health (Purnama et al., 2022). To achieve optimal dental and oral health, it is essential for children to receive education about dental and oral health from an early age, so that they can maintain dental health in a proper and efficient manner (Syaputri et al., 2023).

Early education about dental and oral health is very important to prevent dental and oral diseases (Puteri & Emini, 2023). Children's behavior related to oral health will continue into adulthood, so it is important to instill good habits and understanding of oral hygiene from an early age to ensure they grow up with healthy teeth. Children's behavior in maintaining dental health can be influenced by their knowledge of dental and oral health, thus helping them avoid dental growth problems and prevent cavities (Gayatri & Ariwinanti, 2016).

Based on basic health research data in 2018, it was stated that as many as 57.6% of Indonesians have dental and oral health problems (Riskasdas, 2018). Ignorance of dental and oral hygiene is a behavioral element that contributes to dental and oral health problems in the population. This stems from a lack of understanding of dental hygiene and care (Anggreni et al., 2022). Determining a person's level of awareness of dental and oral health is by looking at the knowledge they have. When someone has a high level of knowledge, their awareness and attention to maintaining their dental health is also high (RE et al., 2021).

Dental caries is the leading cause of tooth decay in children and can have long-term effects on growth. Children start eating more sticky and sugary foods as they get older, which can lead to cavities and bad breath (Nurilawaty et al., 2021). To prevent tooth decay, children should be taught good brushing techniques and dental health information from an early age (Purnama & Sofian, 2023).

Dental caries in school children is caused by several factors that influence it, including diet, poor dental and oral hygiene habits and also lack of knowledge about dental health (Nguyen et al., 2016). School-age children need to get more attention regarding dental and oral health maintenance behavior, because school age is an important period in the growth and development of children, therefore children must be

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taught to take better care of and pay attention to their dental and oral health. School age is also known as an important period because this is when children begin to form new habits that they will carry into adulthood. One of them is the habit of maintaining their own oral and dental health (Achmad et al., 2021; He et al., 2022).

One of the most effective ways to instill habits in children in maintaining their dental and oral health is through dental and oral health education or counseling efforts (Tauchid et al., 2022). This method can be used as a way to encourage students to more easily understand and accept the information conveyed (Trisnowati et al., 2017). Counseling for school-age children can be done in various ways, one of which is storytelling. This storytelling method is one of the most effective methods because this method tends to be liked, easy to understand, and easy to remember by children (Puteri & Emini, 2023).

In line with (Kurniawan, 2016) in his book, fairy tales have the characteristics of being fun and constructive for the listener. In addition, listening to fairy tales can make the listener think about positive things, which can be used as a guideline for acting positively in everyday life. Strengthened by (Mozartha et al., 2023) which states that the counseling method with storytelling or fairy tales is an effective method for increasing dental health knowledge in elementary school children. This is evidenced by the increased knowledge score after counseling. The learning method with storytelling is divided into several methods, one of which is the storytelling method while singing.

In addition to storytelling, there is also counseling with the singing method, this counseling method is quite effective in making children feel enthusiastic and making counseling fun. Singing is one of the effective methods used in children, because the singing method can improve cognitive abilities and has benefits during the growth and development of children, especially in the education process. Singing can make children happy and can help children's memory become stronger. Singing in learning and counseling methods is intended to help children understand the material, remember, and memorize the words of the song to later be practiced when communicating at school or outside of school (Murni & Hente, 2020). Strengthened by (Widyadhana et al., 2022) the singing method is effective in improving knowledge and tooth brushing skills in elementary school children. In the study, it was stated that respondents were enthusiastic and could answer all evaluations well and correctly.

Learning is more fun and memorable in children's memories, by combining two learning methods, one of which is storytelling while singing, this method can increase the effectiveness of learning because these two methods are the most preferred by children because they are fun so that children can be enthusiastic and cheerful during learning or counseling. Strengthened (Putri et al., 2018) which states that children feel happy and find it easier to understand lessons with a learning approach that involves more interaction, for example, storytelling and singing. Based on the initial interview conducted by the researcher with the UKGS administrators of SDN Caringin I on Friday, January 26, 2024 at SDN Caringin I, it was explained that during the examination, 35 out of 38 grade 1 students had cavities, both in the front teeth and in the back teeth, and when the UKGS officers conducted an interview with all grade 1 students, it was found that almost all grade 1 students of SDN Caringin I did not know how to brush their teeth properly, the right time to brush their teeth, and how to maintain dental health other than brushing their teeth.

METHOD

The design of this study is a quasi-experimental design with a one-group pretest-posttest design, to analyze the effect of using the counseling method by singing and storytelling to improve knowledge of maintaining dental and oral health in grade 1 students of SDN Caringin I. This study will use a total sampling of 38 people. Total sampling is a sampling technique where the number of samples is the same as the number of populations, namely taking the entire population in the study. Data collection was carried out in April 2024 by conducting a test using a questionnaire sheet before being given education about dental and oral health with the storytelling and singing methods, after the education was carried out, the target would be evaluated using a questionnaire sheet to see the increase in knowledge. Data analysis using SPSS with the Wilcoxon test

RESULT

Education on how to maintain dental and oral health using storytelling and singing methods for 20 minutes using props, namely hand puppets and phantoms. Then for the post-test assessment, it was carried out after 5 days to see if there was any development in knowledge. On the 5th day, the researcher distributed a questionnaire sheet (posttest) containing 10 questions on how to maintain dental and oral health to respondents after being given education.

Table 1. Frequency distribution of respondent characteristics by age and gender

Characteristics	Frequency	Percent (%)
Age		
7	34	89
8	4	11
Total	38	100
Gender		
Male	12	32
Female	26	68
Total	38	100

Table 1 shows that the characteristics of respondents based on gender are mostly female, namely 26 children (68%), while the gender is male as many as 12 children (32%). Then the characteristics of respondents based on age are mostly 7 years old, namely 34 children (89%), while 8 years old are 4 children (11%).

Table 2. Frequency distribution knowledge of education with combination method of singing and storytelling

Knowledge	Before		After	
	F	%	F	%
Good	2	5	35	92
Sufficient	11	29	3	8
Less	25	66	0	0
Total	38	100	38	100

Table 2 shows that before being given counseling with a combination of singing and storytelling methods, there were 2 students (5%) who had knowledge in the good category, 11 students (62.5%) in the sufficient category, and 25 students (66%) who had knowledge in the less category. While after being given counseling with a combination of singing and storytelling methods, there were 35 students (92%) who had knowledge in the good category, 3 students (8%) who had knowledge in the sufficient category, and there were students with knowledge in the less category.

Table 3. Effectiveness test knowledge of education with combination method of singing and storytelling

Knowledge	Mean	Difference	p-value
Pre-test	5.0	4.3	0.000
Post-test	9.3		

* Wilcoxon

Table 3 shows that there is an increase in knowledge of dental and oral health maintenance in students of SDN Caringin I, Tangerang Regency. The results of the Wilcoxon test obtained $p = 0.000$ with a value before counseling, which was obtained as much as 9.3, which means there was an increase in knowledge of 4.3.

DISCUSSION

Based on the distribution of characteristics (gender and age) the results obtained from a total of 38 students, the most respondents based on gender were female respondents as many as 26 (68%) children and for the most respondents based on age were respondents aged 7 years as many as 34 (89%) children. The results of the initial study showed that before the education was carried out with a combination of singing and storytelling methods, there were 2 (5%) students who had knowledge of maintaining dental and oral health with a good category, 11 (29%) students with a sufficient category, and 25 (66%) students with a less category.

Researchers conducted research using a combination of two methods, namely singing and storytelling because both of these methods are quite effective for learning in children with limited reading and writing skills, as well as limited vocabulary. This is also based on the statement made by (Salim, 2019) that one way children learn is through oral storytelling. Telling stories to children helps foster critical thinking skills and gives them the opportunity to understand the meaning behind the events that occur. In

addition to storytelling, researchers also use the singing method because according to (Kamtini & Sitompul, 2019) a concept will be more easily embedded through songs because it is repeated and even memorized, thus helping children learn to remember things without realizing it. In addition, by memorizing song lyrics, children's intelligence will be stimulated - rhythm can be a form of therapy for the brain's nerves - through something they like. In addition, according to (Poku, 2022) by using the singing method used by teachers to try to increase students' vocabulary; singing makes students excited, and they can add new vocabulary. Corrections and pronunciations that were still less fluent or incorrect have improved after hearing the song lyrics.

This is proven by the increase in knowledge after being given counseling with a combination of singing and storytelling, showing that out of a total of 38 students, 35 students experienced an increase to the good category, 3 students experienced an increase to the sufficient category, and 0 students for the less category. The results of this study also obtained a value of $p = 0.000$ ($p < 0.05$), with an average increase in knowledge from 5 with a less category increasing to 9.3 with a good category, which means that based on the average results, there was an increase of 4.3.

The results of this study are in line with the results of the study (Pariati & Jumriani, 2021) which found that the results of dental health knowledge before counseling with the Storytelling method increased from 59.3% and 60.6% to 75.0% and 78.7%. In line with research from (Widyadhana et al., 2022) it was found that before counseling with the singing method, 25 students (92.5%) were included in the bad category. After receiving counseling with the singing method, the results showed that the majority of students were in the good category. The similarity between previous research and the research to be studied lies in the similarity in one of the counseling methods, namely singing.

Based on this, according to (Yunita, 2018), storytelling to children can help them understand the material being taught, foster their imagination, and broaden their understanding of the importance of virtue. Students are given the opportunity to ask questions and then answer them with short, simple but effective sentences through storytelling (Nurzaman et al., 2019). Meanwhile, in addition to storytelling, a concept will be more easily embedded through songs because it is repeated and even memorized, thus helping children learn to remember things without realizing it. In addition, by memorizing song lyrics, children's intelligence will be stimulated - rhythm can be a form of therapy for brain nerves - through something they like (Kamtini & Sitompul, 2019).

CONCLUSION

Based on the results of the research that has been done, it can be concluded that the combination of singing and storytelling methods is effective in increasing knowledge of dental and oral health maintenance.

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REFERENCES

- Achmad, H., Armedina, R. N., Timokhina, T., Goncharov, V. V., Sitanaya, R., & Riyanti, E. (2021). Literature review: Problems of dental and oral health primary school children. *Indian Journal of Forensic Medicine & Toxicology*, 15(2).
- Anggreni, E., Pudentiana Rr, R. E., Amelia, R., & Purnama, T. (2022). Video Media and Flipchart on Dental Health Knowledge. *International Journal of Multidisciplinary Research and Analysis*. <https://doi.org/10.47191/ijmra/v5-i12-24>
- Gayatri, R. W., & Ariwinanti, D. (2016). Tingkat Pengetahuan Kesehatan Gigi Anak Sekolah Dasar Negeri Kauman 2 Malang. *Preventia: The Indonesian Journal of Public Health*, 1(2), 186. <https://doi.org/10.17977/um044v1i2p186-190>
- He, J., Yuan, B., Zhou, S., Peng, S., Xu, Y., Cai, H., Cheng, L., You, Y., & Hu, T. (2022). Socio-demographic factors, dental status, oral health knowledge and attitude, and health-related behaviors in dental visits among 12-year-old Shenzhen adolescents: a multilevel analysis. *BMC Oral Health*, 22(1), 102.
- Kamtini, K., & Sitompul, F. A. (2019). Pengaruh Metode Bernyanyi terhadap Kemampuan Mengingat Huruf dan Angka pada Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 4(1), 141.
- Kurniawan, H. (2016). *Kreatif mendongeng untuk kecerdasan jamak anak*. Prenada Media.

- Mozartha, M., Awalia, H., Sulistiawati, S., Rais, S. W., & Trisnawaty, K. (2023). Efektivitas Penggunaan Media Penyuluhan Dongeng Dulmuluk terhadap Tingkat Pengetahuan Kesehatan Gigi dan Mulut Siswa SD. *JPM (Jurnal Pengabdian Masyarakat) Ruwa Jurai*, 8(1), 41–44.
- Nguyen, T. T., Nguyen, B. B. T., Nguyen, M. S., Olak, J., & Saag, M. (2016). Effect of School Oral Health Promotion Programme on dental health and health behaviour in Vietnamese schoolchildren. *Pediatric Dental Journal*, 26(3), 115–121. <https://doi.org/10.1016/j.pdj.2016.09.001>
- Nurilawaty, V., Purnama, T., & Zahra, M. F. (2021). Carbohydrate Diet during the Covid-19 Pandemic (Case Study: 4 th Grade Students of Elementary School 02 Meruya Utara, West Jakarta). *Int Res J Pharm Med Sci*, 4(4), 37–40.
- Nurzaman, I. G. G., Gandana, G., & Wahidah, A. S. (2019). Developing interactive storytelling model to facilitate young learners' speaking skills. *The 2nd International Conference on Elementary Education*, 2(1), 64–69.
- Pariati, P., & Jumriani, J. (2021). Gambaran pengetahuan kesehatan gigi dengan penyuluhan metode storytelling pada siswa kelas III dan IV SD Inpres Mangasa Gowa. *Media Kesehatan Gigi: Politeknik Kesehatan Makassar*, 19(2). <https://doi.org/10.32382/mkg.v19i2.1933>
- Poku, A. (2022). Upaya meningkatkan kosa kata anak melalui metode bernyanyi pada kelompok b tk negeri bakalinga. *Damhil Education Journal*, 2(1), 16–20. <https://doi.org/10.37905/dej.v2i1.1353>
- Purnama, T., Sasongko, B. G., & Permatasari, L. (2022). Media Animated Video Versus Dental Phantom Dolls on Teeth Brushing Skills in Preschoolers: Which is More Effective? *International Journal Of Drug Research And Dental Science*, 4(3), 20–27. <https://doi.org/10.36437/ijdrd.2022.4.3.D>
- Purnama, T., & Sofian, R. (2023). Dental Phantom Dolls: A Media Innovation in Teaching Brushing Teeth To Preschool Children. *JDHT Journal of Dental Hygiene and Therapy*, 4(2), 160–165. <https://doi.org/10.36082/jdht.v4i2.1296>
- Puteri, A. D., & Emini, E. (2023). Storytelling as increasing knowledge of dental health in kindergarten. *Journal Center of Excellent: Health Assistive Technology*, 1(2), 71–75. <https://doi.org/10.36082/jchat.v1i2.1257>
- Putri, D. R., Sumartini, N. L. P. U., & Suniantara, K. P. (2018). Belajar Bahasa Sambil Bernyanyi dan Bercerita di Panti Asuhan Anugerah Gereja Bala Keselamatan Denpasar. *Widyabhakti Jurnal Ilmiah Populer*, 1(1), 13–18. <https://doi.org/10.30864/widyabhakti.v1i1.4>
- RE, P. R., Purnama, T., Tauchid, S. N., & Prihatiningsih, N. (2021). Knowledge of oral and dental health impacts the oral hygiene index simplified (OHI-S) of primary school children. *Indian Journal of Forensic Medicine & Toxicology*, 15(4), 2179–2183.
- Riskesdas. (2018). *Laporan Nasional 2018, Badan Penelitian dan Pengembangan Kesehatan Departemen Kesehatan*.
- Salim, M. R. (2019). Penerapan Metode Story Telling untuk Meningkatkan Hasil Belajar Mata Pelajaran Bahasa Indonesia Siswa Kelas III SD GMIH LOC Kabupaten Pulau Morotai. *Jurnal Mitra Pendidikan*, 3(7), 921–935.
- Syaputri, O. I., Anggreni, E., Ngatemi, N., & Widiyastuti, R. (2023). Animation cartoon media as an increase in dental health knowledge in elementary school children. *Journal Center of Excellent: Health Assistive Technology*, 1(1), 1–6. <https://doi.org/10.36082/jchat.v1i1.1024>
- Tauchid, S. N., Nabila, A., & Purnama, T. (2022). Dental Health Education: Chewing Gum Containing Xylitol in Junior High School Students. *Asian Journal of Pharmaceutical Research and Development*, 10(5), 15–18. <https://doi.org/10.22270/ajprd.v10i5.1174>
- Trisnowati, T., Keperawatan, A., & Surakarta, I. H. (2017). Penyuluhan Kesehatan Tentang PHBS (Oral Hygiene). *Jurnal Keperawatan GSH*, 6(2), 1–7.
- Widyadhana, A. D., Hadi, S., & Ulfah, S. F. (2022). Pengaruh Penyuluhan Menggunakan Metode Bernyanyi Terhadap Keterampilan Cara Menyikat Gigi. *Jurnal Ilmiah Keperawatan Gigi*, 3(2), 173–182.
- Yunita, N. (2018). Pengaruh Metode Story Telling Terhadap Keterampilan Berbicara Pada Anak Kelompok A1 Tk Taman Ananda Surabaya. *Pedagogi: Jurnal Anak Usia Dini Dan Pendidikan Anak Usia Dini*, 4(1), 104–114. <https://doi.org/10.30651/pedagogi.v4i1.3610>