

“Meriah: Mari Sikat Gigi Untuk Senyum Yang Cerah” As An Effort To Improve Children's Tooth Brushing Skills

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Abstract

This dental and oral screening activity is part of our efforts to increase students' awareness and knowledge about the importance of maintaining dental and oral health from an early age. In addition, this activity aims to identify dental and oral health problems that students may face, as well as provide appropriate education so that they can maintain better dental and oral hygiene. This report contains a series of activities, screening results, and recommendations for follow-up actions that can be taken to improve dental and oral health among students of Al-Azhar Syifa Budi Surakarta Elementary School. Based on the def-t index category, it shows that the prevalence of caries is quite high. There are several factors that influence the screening results, including: 1. Oral care habits in children.. 2. The level of understanding of parents and children about the importance of dental and oral health has a direct impact on children's oral hygiene habits. 3. Children's fear or anxiety about dental examinations can affect cooperation during screening. 4. The accuracy of the tools and the expertise of medical personnel in conducting screening affect the accuracy of the results. We hope that with this activity, students can be more concerned and responsible for their dental and oral health. We also express our gratitude to all parties who have supported the implementation of this activity, both from the school, health workers, and all participants who have actively participated in this activity.

Keywords: *Meriah, tooth brushing, children, school*

1. INTRODUCTION

Oral health is an integral part of overall body health and plays an important role in supporting children's growth and development. At elementary school age, children are in a critical phase of forming healthy living habits, including maintaining dental and oral hygiene and health. However, many children still do not understand the importance of maintaining dental and oral health, so that the prevalence of problems such as cavities and gum disease is quite high among them. Al Azhar Syifa Budi Solo Elementary School is one of the educational institutions that pays great attention to character building and healthy habits in students. Therefore, promoting dental and oral health in this school is a strategic effort to improve students' knowledge, attitudes, and practices related to dental and oral health. This program is expected to not only build healthy living habits in children, but also provide a long-term positive impact on their health.

Dental and oral health issues are an important concern in health development, one of which is due to the vulnerability of school-age children to dental health problems. School age is an important age in children's physical growth and development. This period is also called a critical period because during this period children begin to develop habits that tend to persist into adulthood. One of them is the habit of maintaining dental and oral hygiene. Indonesian children's behavior in maintaining oral health is still low. Dental care is considered not too important, even though its benefits are very vital in supporting health and appearance. According to the results of the 2013 Basic Health Research, most Indonesians brush their teeth when taking a morning or evening shower (76.6%) and those who brush their teeth correctly are after breakfast and before going to bed at night, 2.3%. Meanwhile, in children aged 10-14 years who brush their teeth every day 95.7% and those who brush their teeth correctly, namely after breakfast and before bed, only 1.7%. One of the causes of dental and oral health problems in society is behavioral factors or attitudes that ignore dental and oral hygiene. This is based on a lack of knowledge about dental and oral health and its care. A person's awareness of the importance of dental health can be seen from the knowledge they have. When someone has a high level of knowledge, the attention to maintaining their dental

health is also high. School children tend not to like vegetables because vegetables have an unpleasant taste. There are several problems that are often experienced by school children in consuming food, including children consuming food with limited types, it is very difficult to regulate children's eating habits, children do not like foods such as vegetables and fruits, children prefer to consume snacks such as junk food, like to be picky about food, do not want to try new foods or are afraid of certain foods ([Sari, 2020](#)). School children also tend to like sweet foods such as candy, ice cream and bread.

Maintaining proper dental and oral hygiene every day is the most important preventive measure against dental and oral diseases, especially dental caries and periodontal disease. Al Azhar Syifa Budi Solo Elementary School as a partner have several problems; 1) Lack of Knowledge about the Importance of Dental and Oral Health. Many 1st grade elementary school students and their parents do not understand the importance of maintaining dental and oral health from an early age. This can be caused by minimal information received at home or a lack of integrated health education at school. 2) Students tend to have bad habits, such as rarely brushing their teeth, consuming excessive sweet foods, and not using the correct toothbrushing technique. This can worsen dental health conditions and cause various problems, such as dental caries or toothache. 3) Some parents are less involved in ensuring that their children carry out daily healthy habits, especially in terms of maintaining dental hygiene. This is often caused by the busyness or lack of parental knowledge. 4) Impact of Dental Health on General Health and Academic Achievement. Dental health problems, such as caries or infections, can interfere with students' concentration in class, cause absenteeism, and impact academic achievement. However, many people are still unaware of the close relationship between dental health and students' overall health and well-being.

The objectives of this health promotion are; to 1) increase knowledge about the importance of maintaining dental and oral health. 2) Encourage healthy behavior by brushing teeth twice a day with the correct technique. 3) Increase early awareness of the importance of regular check-ups with a dentist as a preventive measure and early detection of dental and oral health problems. 4) Build an environment that supports the implementation of good habits related to dental and oral health through collaboration between students, teachers, and parents. 5) Reduce the prevalence of dental and oral health problems.

2. METHODS

Health promotion activities at Al-Azhar Syifa Budi Elementary School with the theme "MERIAH: Let's Brush Our Teeth for a Bright Smile" were held on Friday, November 22, 2024. This activity targeted 4th graders at the elementary school, the activity started at around 08.00. The activity was carried out with the following series: a) Opening containing introductions, attendance, pre-test and ice breaking from the MC b) Delivery of material regarding the impact of not maintaining dental health through drama c) A quiz session with prizes was held based on the material that had been presented d) Games with prizes were held e) A quiz session with prizes was held based on the material that had been presented f) Implementation of the Post Test g) Screening activities using the def index. The individual DMF-T index = Total sum of D + M+ F, and the population DMF-T index is DMF-T index = total sum of D+M+F/total number of samples examined. h) Brushing teeth together i) Closing and photo session together.

Dental and oral health promotion that has been carried out using a behavioral change approach. The purpose of this approach is to change children's attitudes and behavior towards better behavior, so that they can implement a healthy lifestyle to improve the quality of health of each individual. The targets of health promotion are given knowledge about the importance of dental and oral health, how to brush their teeth properly and correctly and what foods are good and bad for health. This needs to be done because children are prone to dental and oral

diseases, especially in cases where children's habits of eating sweet foods are very high. So, it is necessary to increase awareness of dental and oral hygiene. After gaining new knowledge, it is hoped that children can realize it in their daily routines. Next, the speaker provided some knowledge about:

- a. The consequences of being lazy about brushing your teeth
- b. Education about when the right time to brush your teeth is, which is 2 minutes after breakfast and before going to bed
- c. Explanation of how to brush your teeth properly
- d. Mentioning foods that are good for dental health, such as fruits, vegetables and milk
- e. Foods that can threaten dental health, such as candy, chocolate and donuts
- f. How to choose a toothbrush according to your needs and when is the right time to replace your toothbrush
- g. Education on how to brush your teeth properly

Health promotion materials will be delivered through story books that are poured into dramas and songs and there will also be prizes for participants who dare to answer questions that have been prepared by the committee. When the event started, the participants seemed interested because of the drama performance about the consequences of being lazy about brushing their teeth. Participants looked very enthusiastic, namely during the question and answer session, they scrambled to answer questions posed by the committee on duty. Although the presence of health promotion participants was incomplete, the participants who were present showed a positive response and active participation related to the health promotion.



Figure 1. Book cover as counseling media

3. RESULT AND DISCUSSION

The screening procedure went according to plan, starting with the calling of the sequence number according to the attendance. There were three operators and three assistant operators with the DMFT and def-t examination methods. During the screening, there were no obstacles or obstacles that disrupted the screening process. This happened because the students actively participated in the screening program that was carried out after the health promotion program. The implementation of the activity generally went smoothly, starting and ending according to the rundown. The obstacles we encountered were the lack of human resources from ourselves who were a little overwhelmed during the examination. However, all of that could be overcome well. That is why the data collected is complete, accurate, and

reliable because it uses the def-t index assessment and there were no errors in collecting and recording data. The health workers involved were cooperative and followed the screening procedure correctly. Starting from proper sterilization of tools, then minimizing the use of repeated tools with disposable diagnostic sets, training operators and assistant operators before the examination, then the waste that we have separated between medical and non-medical waste. Before carrying out the activity, we have asked permission from the school which is then conveyed from the school to the parents. Before starting the action, we also asked the child's willingness to be examined. Most students showed an increased understanding of the importance of maintaining dental health. The counseling activity succeeded in attracting students' attention, with a high level of active participation during the question and answer session with prizes and the results of the pretest and posttest. And all students managed to practice brushing their teeth with the correct technique after receiving instructions. Observations showed that many students were able to follow the steps of brushing their teeth properly. The joint toothbrushing activity went smoothly, and the students seemed enthusiastic. With the examination carried out using the Def-t examination, it was found that students had dental problems such as caries. This indicates the need for follow-up in dental care for students who are detected to have problems. After the activity, there were positive changes in students' behavior related to dental hygiene, namely students more routinely reminded each other to brush their teeth after eating, and there was an increase in interest in learning more about dental health, as seen from the questions asked by students during the counseling session.



Figure 2. Counseling activity

From the results of the examination of the def index of students in class 4 Abu Bakar, it is known that the def-t index score is 4.5. Based on the def-t index category, it shows that the prevalence of caries is quite high. There are several factors that influence the screening results, including: 1. Oral care habits in children. Including how often they brush their teeth, using fluoride toothpaste, and how to brush their teeth. 2. The level of understanding of parents and children about the importance of dental and oral health has a direct impact on children's oral hygiene habits. 3. Children's fear or anxiety about dental examinations can affect cooperation during screening. 4. The accuracy of the tools and the expertise of medical personnel in conducting screening affect the accuracy of the results. 5. In the implementation of the study, there were weaknesses, for example, several students in class 1 who were not yet fluent in reading, so using the pretest and posttest as a reference for the success of health

promotion needs to be reviewed again to adjust the age of the counseling participants. Then there needs to be media that can be used or seen by participants after the health promotion is carried out so that knowledge about dental and oral health can last for a long time.



Figure 3. (a) Screening dental health (b) tutoring how to brush teeth

Dental and Oral Health Counseling for Children, Dental and oral health counseling is one of the efforts to increase public awareness, especially children, regarding the importance of maintaining dental and oral hygiene and health. Through counseling activities, children are given information about the importance of brushing their teeth, avoiding foods that can damage teeth, and how to maintain oral health in general. Research shows that counseling that is carried out routinely can increase knowledge and positive behavioral changes in children regarding oral and dental hygiene ([Prabhu et al., 2022](#)). Effective Counseling Techniques, Counseling carried out in schools, such as that carried out at SD Al Azhar Syifa Budi Solo, should use an interactive and fun approach. This method aims to make children more interested and easier to understand the information provided. A study by [Zitzmann et al., \(2020\)](#) showed that counseling using visual media, such as videos or images, as well as direct demonstrations such as proper tooth-brushing practices, can improve children's understanding and compliance with dental and oral hygiene. In addition, the role of teachers and parents in supporting healthy habits is also very important in the success of this counseling program.

The Role of Parents in Improving Children's Dental and Oral Health, Parents play an important role in supporting children's healthy habits, especially in terms of maintaining dental and oral health. Research conducted by [Poutanen et al., \(2006\)](#) shows that children who get parental support to brush their teeth properly have a lower risk of experiencing dental and oral problems. Therefore, collaboration between schools, parents, and students is very important in creating an environment that supports healthy living behaviors, including maintaining dental and oral hygiene. The Importance of Routine Dentist Check-ups, Routine dental check-ups are an important preventive step to detect dental and oral health problems early on. According to the American Dental Association (ADA), regular dental checkups at least twice a year can help detect cavities, gum disease, and other health problems before they develop into more serious problems. In children, these dental checkups are also important to monitor the development of their permanent teeth and provide preventive care, such as fluoride or fillings if needed ([Camargo et al., 2012](#)). Challenges in Promoting Oral Health in Schools Although oral health education programs have significant benefits, there are still challenges in their implementation ([Elsadek et al., 2023](#)). Some of these challenges include low public awareness of the importance of oral care, lack of resources to support education

activities in schools, and lack of motivation for children to maintain their own dental hygiene. Therefore, an approach that involves various parties, such as schools, parents, and medical personnel, is needed to achieve optimal results in promoting oral health among children ([Peerbhay et al., 2025](#)). Positive Impact of Dental and Oral Health Counseling, Overall, dental and oral health counseling in schools can have a long-term positive impact on children's dental and oral health. By increasing knowledge and healthy habits from an early age, children will be better able to avoid dental and oral health problems in the future, which in turn can reduce the prevalence of dental health problems in the community. In addition, this counseling also supports government efforts to improve the quality of public health, especially in the field of dental and oral health, which contributes to improving the overall quality of life ([Khan et al., 2017](#)).

4. CONCLUSION

From the results of the screening of grade 4 students, Abu Bakar, the def-t index was categorized as high. Apart from that, the results of health promotion and screening showed that many children were aware of the importance of maintaining dental and oral health, indicated by increased post-test scores and enthusiasm when brushing their teeth together. In addition, the activity went smoothly and participants followed it enthusiastically.

Schools should provide facilities such as handwashing facilities and toothbrushes at school, and ensure that children have easy access to brush their teeth after eating. There also needs to be routine activities that educate students about the importance of maintaining dental and oral health. Activities such as counseling, poster making, or story competitions about dental health can be interesting and effective means.

REFERENCES

- Camargo, M. B. J., Barros, A. J. D., Frazão, P., Matijasevich, A., Santos, I. S., Peres, M. A., & Peres, K. G. (2012). Predictors of dental visits for routine check-ups and for the resolution of problems among preschool children. *Revista de Saude Publica*, 46, 87–97.
- Elsadek, Y. E., Edwebi, S., Turner, A., Vinall-Collier, K., Csikar, J., & Pavitt, S. (2023). A systematic review of school-based student peer-led oral health interventions to promote the oral health of school children. *BMC Oral Health*, 23(1), 742.
- Khan, A., Thapa, J. R., & Zhang, D. (2017). Preventive dental checkups and their association with access to usual source of care among rural and urban adult residents. *The Journal of Rural Health*, 33(4), 419–426.
- Peerbhay, F., Mash, R., & Khan, S. (2025). Effectiveness of oral health promotion in children and adolescents through behaviour change interventions: A scoping review. *PloS One*, 20(1), e0316702.
- Poutanen, R., Lahti, S., Tolvanen, M., & Hausen, H. (2006). Parental influence on children's oral health-related behavior. *Acta Odontologica Scandinavica*, 64(5), 286–292.
- Prabhu, V., Alayed, M. A., Bhattacharjee, S., Alnasyan, A. S., Alzaben, M. M., Altowaijri, O. F., & Pullishery, F. (2022). Oral health and oral hygiene related literacy and behaviors among Saudi school children in Al-Qassim region. *Med Sci*, 26, 2–8.
- Sari, E. P. (2020). the Relationship Between Family Support and the Readiness of the Menarche in Young Women. *Nurse and Health: Jurnal Keperawatan*, 9(2), 145–151.
- Zitzmann, N. U., Matthisson, L., Ohla, H., & Joda, T. (2020). Digital undergraduate education in dentistry: a systematic review. *International Journal of Environmental Research and Public Health*, 17(9), 3269.