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# Overview of Knowledge Level and Status of Oral Hygiene in Aceh Besar State Elementary School Students

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#### ABSTRACT

Teaching children about the importance of dental and oral hygiene from an early age is a long-term investment in their health. Parents and caregivers have an important role in guiding children to maintain regular dental and oral hygiene. Good dental care habits should be taught from an early age, including brushing teeth twice a day, using age-appropriate fluoride-containing toothpaste, flossing teeth, and visiting the dentist regularly. This study aimed to provide an overview of aspects of knowledge and status of students' dental and oral hygiene in state elementary schools in Aceh Besar, Indonesia. The descriptive observational study, where as many as 44 research subjects participated in this study. Observation of knowledge and oral health status was carried out univariately using SPSS. In conclusion, the knowledge of Aceh Besar, state elementary school students, is still relatively poor regarding oral health. The dental and oral health status of Aceh Besar state elementary school students is classified as moderate.

## 1. Introduction

Dental and oral hygiene in children is very important in maintaining the health of their teeth and mouth from an early age. Good dental care from an early age can help children grow up with healthy teeth and prevent future oral health problems. Dental and oral hygiene habits in children also have a broader impact, including improving quality of life and promoting overall health. Children's teeth are susceptible to decay and infection. If not properly cared for, they can develop cavities, bleeding gums, and even premature tooth loss. Dental problems in children can also cause pain, discomfort, difficulty eating, and speech disorders. In addition, tooth infections can spread to other parts of the body and affect overall health.<sup>1-3</sup>

In addition to dental health problems, poor dental and oral hygiene in children is also associated with more serious health problems. Research shows that infection and inflammation in the mouth can contribute to systemic health problems such as heart disease, diabetes, respiratory disease, and problems with pregnancy in the mother. Therefore, maintaining oral hygiene in children is an important step to prevent serious health problems in the future.<sup>4</sup>

In addition to health benefits, good dental and oral hygiene also has a positive impact on the social and psychological aspects of children. Children with healthy teeth and mouths feel more confident in interacting with others, talking, and laughing without embarrassment. They can also avoid problems such as

bad breath, yellow teeth, or stains on their teeth, which can affect their self-confidence.<sup>5</sup>

Teaching children about the importance of dental and oral hygiene from an early age is a long-term investment in their health. Parents and caregivers have an important role in guiding children to maintain regular dental and oral hygiene. Good dental care habits should be taught from an early age, including brushing your teeth twice a day, using age-appropriate fluoride-containing toothpaste, flossing your teeth, and visiting the dentist regularly. This study aimed to provide an overview of aspects of knowledge and oral hygiene status of students in state elementary schools in Aceh Besar, Indonesia.

#### 2. Methods

This study is a descriptive observational study. This study uses primary data obtained from research subjects. A total of 44 research subjects participated in this study, where the research subjects met the inclusion criteria. The inclusion criteria in this study were students of Simpang Keuramat state elementary school, grades 2 and grade 3, who had obtained permission from their parents/guardians to participate in this study. This study was approved by

the research and medical ethics committee at the Politeknik Kesehatan Kementerian Kesehatan, Aceh, Indonesia.

This study made observations related to aspects of students' knowledge of dental and oral health as well as observations of dental and oral health status. Data analysis was carried out using SPSS software version 25. Univariate analysis was performed to present the proportional and open distribution of the frequency of each data variable.

# 3. Results and Discussion

Based on Table 1 of the frequency distribution above, it is known that the level of children's knowledge about brushing their teeth in grades 2 and grade 3 students of state elementary school in Aceh Besar is included in the poor category, namely 39 respondents (88.6%). Based on Table 2 of the frequency distribution above, it is known that the status of dental and oral hygiene in grade 2 and grade 3 students of state elementary school in Aceh Besar experienced more dental and oral hygiene status in the moderate criteria, namely 23 (52.3%).

Table 1. Frequency distribution of respondents based on knowledge of tooth brushing.

No.	Category	Frequency	Percentage (%)
1.	Good	5	11,4
2.	Poor	39	88,6
Total		44	100

Table 2. Frequency distribution of respondents based on dental and oral hygiene status.

No.	Criteria	Frequency	Percentage (%)
1.	Good	10	23
2.	Moderate	23	52
3.	Poor	11	25
Total		44	100

The study of children's knowledge related to the importance of dental and oral hygiene has an important role in understanding the extent to which children understand the importance of maintaining healthy teeth and mouths. Research shows that children's knowledge about the importance of dental and oral hygiene tends to vary. Some children have a

good understanding of the importance of brushing their teeth regularly, flossing, and visiting the dentist regularly. However, many children still have a limited or incomplete understanding of the importance of dental care. The main source of children's knowledge about dental and oral hygiene usually comes from parents, teachers at school, or dental health campaigns in the community. Children whose parents are active in providing information about the importance of dental hygiene tend to have better knowledge.<sup>7,8</sup>

Although most children are aware of the importance of dental hygiene to prevent cavities and bad breath, they may be less aware that dental and oral problems can also affect general health. Awareness of the relationship between dental health and systemic problems such as heart disease or diabetes still needs to be increased. Although some children have good knowledge of dental hygiene, consistent implementation of dental cleaning behavior is still a challenge. Some children may neglect to brush their teeth regularly or not use the correct technique. This shows that knowledge alone is not enough, but encouragement and supervision from parents or caregivers are needed to help children maintain good habits. Studies also show that cultural and environmental factors can influence children's knowledge of dental and oral hygiene. For example, children who live in areas with limited access to dental health services may have less knowledge or less emphasis on the importance of dental care.9

Studies show that dental health problems in children are still a significant issue in many countries. The prevalence of cavities (dental caries) in children is still high, with some children experiencing multiple caries teeth. In addition, problems such as bleeding gums, plaque formation, and periodontal disease are also found in a number of children. One important finding is the delay in seeking dental care. Many children visit the dentist when their dental problems are severe enough or when they have tooth pain. This shows that awareness of the importance of preventive dental care and regular visits to the dentist still needs to be increased. The study also identified eating and drinking habits that negatively impact children's dental health. Consumption of high-sugar foods, soft drinks, and unhealthy fast food contributed to the increased risk of cavities and other dental health problems. 10,11

Studies show that access to affordable and quality dental health services is still a problem in several areas. Some children may not have adequate access to dentists or lack an understanding of the importance of regular dental visits. Another important finding is the significant role played by parents in maintaining the dental health of their children. Children whose parents pay attention to and promote good dental hygiene tend to have better dental health status. The study also emphasizes the importance of educational and preventive approaches in maintaining children's dental health. Educational programs held at school or in the community as well as prevention campaigns targeting children, help increase their awareness and understanding of the importance of dental care. 12-15

# 4. Conclusion

The knowledge of Aceh Besar, state elementary school student, is still relatively poor regarding oral health. The dental and oral health status of Aceh Besar state elementary school students is classified as moderate.

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