

## Role and Behavior of Parents Against the Dental and Oral Health in Children 6-10 Years Old

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### ABSTRACT

Dental and oral health is closely related to knowledge, attitudes, and behavior. The environment plays a very important role in the formation of attitudes and behavior for school-age children. The immediate environment where school-age children are located is the family (parents and siblings) and the school environment. The role of parents and teachers is very decisive in changing attitudes and behavior in the maintenance of children's dental and oral health. The purpose of this study was to analyze the role and behavior of parents in order to maintain dental and oral hygiene in children aged 6-10 years. This study was a literature review. Information obtained from text books, journals, books and other literature. The information is collected and processed by the steps of editing, organizing and interpreting. Based on the results of the study it can be concluded: 1) Parents are examples and role models that can be imitated by children, one of which is in maintaining dental and oral health. Therefore, the role of parents is very important and very large in maintaining dental and oral health in children. The effect on the incidence of caries in children is influenced by knowledge, awareness, and habits of parents in caring for children's dental and oral health. 2) The role of parents in maintaining the health of their children's teeth and mouth is to teach children how to brush their teeth properly, namely brushing their teeth 2 times a day every morning after breakfast and at night before going to bed, taking children to the dentist every 6 months, and also giving education about good food and drink to maintain the health of children's teeth and mouth. 3) Parental behavior towards children's dental and oral health is divided into two, namely open behavior and closed behavior. Where closed behavior refers to parental attention, perception, knowledge/awareness, and attitudes. While open behavior is a form of action/practice of closed behavior.

**Keywords:** dental and oral health; parents; role; behavior

### INTRODUCTION

Dental and oral health is still a problem in Indonesia, both for adults, adolescents and children, for example dental caries. Dental caries can occur as a result of the oral Streptococcus group of bacteria collectively called Streptococcus mutans. In addition, the health status of the teeth and mouth also includes the supporting tissues of the teeth and the surrounding soft tissues. The prevalence of dental caries in children is estimated to be quite high ( $\pm 50.0\%$ ), and at a certain level of severity it can interfere with the masticatory system. According to Brauer, caries is a disease of dental tissue characterized by tissue damage, starting from the tooth surface (pits and fissures and interproximal areas) extending to the pulp area <sup>(1)</sup>.

A mother who is the closest person to the child in health care has a significant influence on the attitude and behavior of the child. Children aged 6-10 years generally do not know and have not been able to maintain the health of their oral cavity, so it is the parents' responsibility to educate them properly.

Children's dental health is a special concern in this modern era. The problem of dental caries in elementary school-aged children is important because dental caries is an indicator of the success of efforts to maintain children's dental health. In Indonesia in 2015, the prevalence of dental and oral health problems reached 25.9% and there are 14 provinces with a higher prevalence, one of which is North Sulawesi Province with a prevalence of 31.6%. Another thing that is of concern is that the proportion of the population with dental and oral health problems in the group of children aged 1-5 years is 10.4% and children aged 5-9 years is 28.9% <sup>(2)</sup>.

Research conducted by Susi (2013) in several schools in Padang shows that children who have mothers with non-graduate education are more likely to suffer from dental caries <sup>(3)</sup>.

Indonesian Basic Health Research data shows that the prevalence of the population with dental and oral health problems is 25.9% and the prevalence of the number of permanent teeth that have caries and have not been treated or filled is 1.6%. The DMF-T index is 4.6, and 15 provinces have a higher index. The DMF-T index is higher in women (5.0) than men (4.1) <sup>(2)</sup>.

Dental caries is more common in children from families with low socioeconomic levels, single parents or parents with low levels of education. The World Health Organization (WHO) targets that in 2009 at least 50% of children aged 5-8 years are free from dental caries. Children affected by dental caries at school age sometimes do not have access to dental examinations. In addition, examining the teeth of children their age is much more difficult than examining the teeth of adults.

According to WHO, until 2006, dental caries was still a major problem in 60-90% of school students. Observations in 13 private schools in Jakarta found that 55% of grade 1 primary school children had cavities with an average of 2 primary teeth per child. In 2009, Thaverud17 reported that the prevalence of dental caries in children varies greatly by age group. Children aged 1 year by 5%, 2 years old: 10%, 3 years old: 10%, 4 years old: 55%, and 6 years old: 75% <sup>(4)</sup>.

Thus, the age group of toddlers is most prone to dental caries. Therefore, it is felt that there is a need to make efforts to prevent dental disease through schools at an earlier level, namely pre-school. WHO recommends certain age groups to be examined, namely the age group of 6 years for primary teeth <sup>(4)</sup>.

Dental and oral health is closely related to knowledge, attitudes, and behavior. The environment plays a very important role in the formation of attitudes and behavior for school-age children. The immediate environment where school-age children are located is the family (parents and siblings) and the school environment. The role of parents and teachers is very decisive in changing attitudes and behavior in the maintenance of children's dental and oral health.

The purpose of this study was to analyze the role and behavior of parents in order to maintain dental and oral hygiene in children aged 6-10 years.

### METHODS

This study was a literature review. Information obtained from text books, journals, books and other literature <sup>(5,6)</sup>. The information is collected and processed by the steps of editing, organizing and interpreting.

### RESULTS

Table 1. The results of review

No	Author	Title	Methods	Data collection	Results
1.	Fetiara Nur Annisa Erfa Eddy, Hanna Mutiarra, 2015 <sup>(7)</sup>	The Role of Mothers in Maintenance of Dental Health for Children with Caries Status for Elementary School Age Children.	Descriptive	Observation	From the results of the study, it can be seen that the role of parents who care for, educate, encourage, and supervise children in maintaining dental hygiene is important in preventing caries. In this case, the mother is the main example for the child in everyday life.
2.	Adhya Rizaldi, Sri Susilawati, Anne Agustina, Suwargiani, 2015 <sup>(8)</sup>	Parents' Behavior on Dental Health Maintenance in Children at SD Negeri Mekarjaya.	Descriptive	Questionnaire	From the results of this study, it was found that the behavior of parents was not good, while the attitudes and actions of parents were categorized as good.
3.	Ida Rahmawati, Julita Hendartini, Agus Priyanto, 2011 <sup>(9)</sup>	Dental and Oral Health Behavior in Elementary School Children.	Cross-sectional	Questionnaire	The results of this study prove that there is a positive relationship between knowledge, attitudes, behavior of mothers about dental and oral health, and the environment, with children's behavior about dental and oral health.

4.	Margaret P. Halim, 2012 (10)	The Role of Parents in Maintaining Children's Dental and Oral Health & Dental and Oral Health Status of Children in Grade 2 Elementary School	<i>Cross-sectional.</i>	Questionnaire	From this study, it was found that there are still many parents whose role in maintaining the health of their children's teeth and mouth is still low, namely in teaching children how to brush their teeth since the child is 2 years old, informing the child when to brush their teeth, accompanying the child to the dentist for the first time as a child. 2 years old, taking the child to the dentist every 6 months for a dental health check, checking the child's teeth once a month, looking for cavities, tartar, and layered teeth / teeth that are about to grow or milk teeth that are already loose.
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### DISCUSSION

Based on research conducted by Annisa, et al. <sup>(7)</sup> in 2015, parents will be an example and role model to emulate, one of which is in dental and oral health issues. To care for children's dental health, parents need to know various things about dental and oral health. In dental health care, parents need to teach children how to brush their teeth as early as possible, the best age to teach children to brush their teeth is 2 years old. After children are taught to brush their teeth, it is better when children brush their teeth, parents supervise whether they have been cleaned properly and properly. Parents should provide a toothbrush with a size that is appropriate for the child's age and toothpaste that contains fluoride.

Providing education about the importance of dental health care should also be given to children. Educate children to brush their teeth at least twice a day, in the morning before breakfast and before going to bed at night. In addition, parents should tell what foods and drinks can damage teeth and try not to consume these foods or drinks too often. Children should also be accustomed to liking vegetables and fruits that can support the growth of children's bones and teeth.

Parents need to check their child's teeth to the dentist from an early age, starting at the age of 2 years, not just taking their child to the dentist because there are complaints. Children should be taken to the dentist regularly, i.e. every 6 months to determine the development and growth of teeth and treat them if needed. Parents should also be able to actively examine their child's teeth and mouth such as seeing cavities, tartar, loose teeth, and abnormal tooth growth (teeth growing in layers, crowding teeth, and others).

Based on research conducted by Rizaldi, et al. <sup>(8)</sup> in 2015, parents' behavior was still in the bad category, while attitudes and actions were in the good category. This is based on giving questionnaires to parents of students, where the results of the behavior of parents regarding dental health maintenance in children which include knowledge is 55% included in the poor category, attitude of 77.37% is included in the good category, and action is 75.38% included in the good category.

Based on research conducted by Rahmawati, et al. <sup>(9)</sup> in 2011, there is a positive relationship between mother's knowledge, mother's attitude, mother's behavior about dental and oral health, environment, and children's behavior towards dental and oral health of elementary school children in Banjar Regency. This result is reinforced by the analysis that all variables contribute positively to children's behavior regarding dental and oral health of elementary school children in Banjar Regency. This can be explained based on the level of significance that the mother's attitude gave the most positive contribution to the behavior of elementary school children about dental and oral health in Banjar Regency, followed by mother's behavior, environment and knowledge, respectively. However, the size of the effect on the incidence of caries in children is influenced by the knowledge, awareness, and habits of parents in caring for dental health. Knowledge and awareness that parents need to have is how to clean teeth, types of food and drinks that are beneficial or detrimental to dental

health. Thus the behavior of children to maintain good dental health status requires a good contribution to the formation of behavior for children.

Based on the results of research conducted by Halim <sup>(10)</sup> in 2012, there are still parents whose role in maintaining oral and dental health is still low. This is due to the lack of background knowledge of parents about children's dental and oral health which can be the cause of the low role of parents in maintaining dental and oral health.

Based on research conducted by Muhammad Irsal <sup>(11)</sup> in 2020, parents are examples and role models to imitate, especially mothers and children are a unified bond, where mothers have a significant influence on children's behavior in maintaining children's dental and oral health or in other words, Mother is a woman who in most families has a role as a health leader and caregiver. Not only the role of the mother, but if the child is in the school environment, the teacher plays a key role in approaching children in the school environment and is expected to change behavior patterns and habits in maintaining dental and oral hygiene for elementary school age children.

### CONCLUSION

Based on the results of the study it can be concluded:

1. Parents are examples and role models that can be imitated by children, one of which is in maintaining dental and oral health. Therefore, the role of parents is very important and very large in maintaining dental and oral health in children. The effect on the incidence of caries in children is influenced by knowledge, awareness, and habits of parents in caring for children's dental and oral health.
2. The role of parents in maintaining the health of their children's teeth and mouth is to teach children how to brush their teeth properly, namely brushing their teeth 2 times a day every morning after breakfast and at night before going to bed, taking children to the dentist every 6 months, and also giving education about good food and drink to maintain the health of children's teeth and mouth.
3. Parental behavior towards children's dental and oral health is divided into two, namely open behavior and closed behavior. Where closed behavior refers to parental attention, perception, knowledge/awareness, and attitudes. While open behavior is a form of action/practice of closed behavior.

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