

## **ACEH INTERNATIONAL CONFERENCE ON HEALTH**

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### **ABSTRACT**

Oral health in Indonesia remains a serious challenge and is on the rise. One of the main causes is low public awareness of the importance of maintaining good dental health, particularly proper tooth brushing, and a lack of interest in seeking dental care from medical professionals. Oral health issues represent a major challenge to public health overall, global, especially on group child age school. The World Health Organization notes that dental caries is one of the most common chronic diseases in the world, affecting 60-90 % of school-age children. Dental health and mouth own connection close with health general, in where problem tooth Untreated can affect the quality of life of children, including the ability to eat, sleep, and learn. The purpose of the study To determine the relationship between dental and oral health maintenance behavior and quality of life related to dental health in elementary school students in Banda Aceh City. The research method is an observational analytical study with a *cross-sectional study approach*. The time of the study was conducted in August 2025. A sample of 9 elementary schools with 400 respondents, the research location of elementary schools in the Banda Aceh City area, cluster sampling technique. The results of the Chi-Square test analysis in this study showed a sample of 400 respondents, the *Pearson Chi-Square value* increased to 4.166 with a *p-value* = 0.041 (*p* <0.05), so it can be concluded that there is a significant relationship between parental behavior and children's quality of life. It is hoped that parents can improve their behavior regarding children's dental and oral health so that they can improve the quality of life of children.

**Keywords:** Parental behavior, dental and oral health maintenance, quality of life of elementary school children

### **INTRODUCTION**

Based on the *World Health Organization* (WHO) caries tooth is one of the most common oral diseases, epidemiological studies over the last 20 years have shown prevalence caries that tall on children And young adults. Caries toothache is an infectious disease caused by by many factor among others are pattern Eat And *oral hygiene*. Caries tooth can influence development children and disturbing activity child. Existence pain, infection, or dysfunction of the stomatognathic system can limit the absorption of nutritious food and thus affect growth child, process learning, communication skills, and disrupting children's activities (Suci Mentari, 2016).

Dental and oral health problems are a major challenge in public health in general, global, especially on group child age school (Stein et al., 2018). The World Health

Organization notes that dental caries is one of the most common chronic diseases in the world, affecting 60-90% of school-aged children. Dental health and mouth own connection close with health general, in where problem tooth Untreated conditions can affect a child's quality of life, including their ability to eat, sleep, and learn (Ghasemi et al., 2024).

Oral health in Indonesia remains a serious challenge and is on the rise. One of the main causes is low public awareness of the importance of maintaining good dental health, particularly proper tooth brushing, and a lack of interest in seeking dental care from medical professionals (Sofiani et al., 2024). Data from the 2013 and 2018 Basic Health Research (Risksesdas) show that that the majority of society Indonesia (76.6%) only brush their teeth when showering in the morning and evening, while the correct way to brush their teeth is after eating. Morning And before Sleep Evening, only done by 2.3% resident. Index The national DMF-T was recorded at 4.6, with 15 provinces having a prevalence higher than the national average (SKI, 2023).

Based on 2018 Risksesdas data, 57.6% of the Indonesian population experiences dental and oral problems, with the highest prevalence among school-age children. often don't have hygiene habits tooth Good nutrition, coupled with the consumption of high-sugar foods, increases the risk of tooth decay. Furthermore, limited access to dental health services in some areas exacerbates this situation. (Risksesdas, 2018)

The 2023 Indonesian Health Survey shows that nationally, around 56.9% resident Indonesia aged  $\geq 3$  year experience problem health tooth And However, only about 11.2% of them received treatment from health workers. teeth. Although happen improvement tooth brushing behavior twice a day With the right timing, from 2.8% (2018 Basic Health Research) to 6.2%, this figure is still relatively low. (SKI, 2023) According to data from the Aceh Provincial Health Service, the prevalence dental caries 55.4% is still high, where there is an increase in health service efforts tooth And mouth in province Aceh. However, challenge Still There is, like high numbers caries tooth And low awareness public to importance maintenance teeth regularly (Aceh Provincial Health Office, 2022). In City Banda Aceh, various initiative has done For increase community dental and oral health. Banda Raya Community Health Center, for example, regularly holds education health tooth And mouth for students school base, like Which done in SDN 67 Pilot. However prevalence caries 33.3% of students have dental caries status was very high, high (20.5%), moderate (21.8%), low (16.7%), and very low (7.7%). Most students with high caries also experienced a decline in the quality of their teeth. live, like complaint oral cavity and limitations functional (Ratna Keumala et al., 2024). The prevalence of dental caries is still high among elementary school students in Banda Aceh. show that problem health teeth and mouth is issue health community that has not been optimally addressed. This condition can negatively impact children's quality of life, including impaired oral function, decreased concentration in learning, and psychosocial aspects such as self-confidence. Low levels of knowledge and behavior regarding dental hygiene, limited access to health services tooth, as well as lack of program promotional And preventive in environment school This also exacerbates this problem. Therefore, structured intervention efforts are needed. And based proof For lower number incident caries tooth on child elementary school age in Banda Aceh City (Ratna Keumala et al., 2024). Although dental and oral diseases do not directly cause death, these conditions can affect children through sleep disturbances, difficulty concentrating in Study, And decline presence in school consequence problem tooth (Hall & Christian, 2017) As a result, children's productivity, academic achievement, and quality of life are disrupted. Tooth decay in children is estimated to result in the loss of more than 50 million O'clock presence school every the year. By Because That, prevention since very early important

And can be done with increase knowledge, understanding, and the behavior of parents and teachers in maintaining children's dental health (Farooqi et al., 2022). Children who have good oral health usually enjoy a higher quality of life compared to children who experience oral health problems. (Sharna et al., 2019). The concept of quality of life related to dental health is now considered an important indicator in assessing oral health conditions in both children and adults. This concept reflects an individual's subjective assessment of their oral condition, encompassing aspects of well-being, functional limitations, expectations, and satisfaction with the care received. Through measuring quality of life, information can be obtained regarding oral symptoms, functional limitations, emotional aspects, and social well-being related to a child's health and care needs. (Shin, et al., 2015).

## METHODS

Method used in this study is an observational analytical study with a *cross-sectional study approach*. The study was conducted in August 2025. The sample consisted of 9 elementary schools in Banda Aceh City with 400 respondents, using a cluster sampling technique. This study was conducted at 9 elementary schools in Banda Aceh City. namely SDN 1 Kuta Raja District, SDN 3 Baiturrahman District, SDN 13 Meuraxa District, SDN 14 Ulee Kareng District, SDN 24 Kuta Alam District, SDN 39, SDN 54 Syiah Kuala District, SDN 62 Lueng Bata District, SDN 67 Bandar Raya District. Data collection was carried out using a questionnaire with interviews. Data analysis using the chi-square test  $\leq 0.05$ , and obtained approval from the Ethical Commission of the Faculty of Dentistry, Syiah Kuala University, Banda Aceh with the Ethical Expedited number: 46 / KE / FKG / 2025 dated July 8, 2025.

## RESULTS AND DISCUSSION

The characteristics of the respondents observed in this study included age and gender of the child, while the parents' education and occupation were assessed for a total of 400 respondents. The complete distribution of respondent characteristics can be seen in the following table:

### Frequency Distribution of Respondents Based on Age and Gender of Elementary School Children in Banda Aceh City

Characteristics	Category	Amount	%
Age	6 - 9 Years	219	54.75
	10 - 12 Years	181	45.25
Total		400	100
Gender	Man	165	41.25

	Woman	235	58.75
Total		400	100

Table 5.1 shows that of the 400 respondents, the largest age distribution was in the 6-9 year age category (54.75%). Gender characteristics showed girls (58.75%).

### **The Relationship Between Parental Behavior in Maintaining Dental and Oral Health and the Quality of Life of Elementary School Children**

	Children's Quality of Life		Total
	Yes	No	
Parental Behavior	Good	42	49
	Not good	180	129
Total		222	178
			400

Based on the table above, it shows that the number of parents with poor behavior is 309 (77.25%) and the quality of life of elementary school children in the Yes category is 222 (55.5%).

### **DISCUSSION**

The results of the Chi-Square test analysis in this study showed that a sample of 400 respondents, the *Pearson Chi-Square value* increased to 4.166 with a *p-value* = 0.041 ( $p < 0.05$ ), so it can be concluded that there is a significant relationship between parental behavior and children's quality of life.

Parental behavior is an important determinant in children's dental and oral health. Parents who exhibit good behavior, such as guiding their children in maintaining dental hygiene, limiting their consumption of sweet foods, and taking their children regularly to dental services, can improve their quality of life, both in terms of functionality, comfort, and psychosocial aspects (Adulyanon & Sheiham, 1997; Petersen, 2016). Conversely, poor parental behavior can increase the risk of caries, impaired chewing function, pain, and even reduce a child's self-confidence.

This finding aligns with research by Finlayson et al. (2007), which states that parental behavioral and psychosocial factors play a crucial role in preventing and exacerbating children's dental health problems. Furthermore, previous studies have emphasized that parents are primary *role models* for children in health behaviors, including dental and oral hygiene (Petersen, 2016).

Thus, the results of this study reinforce the importance of family-based dental health interventions. Dental health promotion programs in elementary schools should actively involve parents, as changes in children's dental hygiene behavior are inextricably

linked to parental support and role models at home. Behavior health tooth in school very influential to health tooth and the child's mouth. School is place in where children spend their time most of the time they, so that important For create environment Which support healthy behavior. According to research by Al-Maweri *et al.* (2018), children who receive education health tooth in school tend to have better behavior in maintaining their dental health, such as brushing their teeth regularly and avoiding sweet foods (Janssen *et al.*, 2024).

Wrong One factor which influence behavior health tooth is knowledge. Knowledge Which adequate about importance dental health can push children For more active in guard cleanliness their mouths. A studies in Indonesia shows that children Which follow education programs health tooth at school show improvement knowledge And behavior health tooth significant (Sari *et al.*., 2020). This show that education health tooth effective can change behavior child become more positive (Fernández-Bonet *et al.*, 2023). However, challenges in improving dental health behaviors in schools remain. Many children lack access to adequate dental care, and some don't even have a toothbrush at home. According to data from the Indonesian Ministry of Health, approximately 30% of children in Indonesia lack access to adequate dental care (Kemenkes, 2020).

In addition, the school environment also plays a significant role in shaping children's dental health behaviors. Schools that implement good dental health policies, such as provide time to brush your teeth after eat, tend to have children with behavior health tooth Which more Good (People *et al.*., 2021). By therefore, collaboration Collaboration between educators, healthcare professionals, and parents is essential to creating an environment that supports healthy behaviors. In this context, collaborative oral health care applications can provide an effective solution to improve dental health behaviors in schools. By involving various parties, including healthcare professionals, educators, and parents, dental health programs can be developed in a comprehensive and sustainable manner. This is expected to foster a positive dental health culture among children, thereby maintaining healthy dental behaviors throughout their lives.

## CONCLUSION

Based on the research results and discussion above, it can be concluded that there is a significant relationship between parental behavior in maintaining dental and oral health and the quality of life of elementary school children in Banda Aceh City p value = 0.041 (p <0.05).

It is hoped that parents will improve their behavior regarding their children's dental and oral health so that they can improve their children's quality of life.

## ACKNOWLEDGEMENT

The author expresses his deepest gratitude to all parties who provided support, both directly and indirectly, so that this research could be successfully completed. Sincere appreciation is also extended to the departments that contributed through support and facilities provided during the implementation of this activity.

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