

# Knowledge and Attitude of the Mother in Maintenance of Dental Cleaning in Qurratul Ayyun Early Childhood Education at Banda Aceh City.

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**ABSTRACT**

Caries are the most common dental problem found in children. Dental caries is an infectious disease that is a progressive demineralization process in the hard tissues of the crown and root surfaces of the teeth that can be prevented. Based on the results of dental examinations on 35 children aged 3-5 years at Qurratul Ayyun early childhood education, it was found that 60% of children suffered from dental caries, and the average dental and oral hygiene of children in the kindergarten was the poor category with a score of 37, the data is still far from expectations. Because it is not following the government's stipulation that the dental and oral hygiene status score (PHP-M) is < 15, the role of the mother is very much needed in maintaining the child's dental and oral hygiene. This study aimed to determine the mother's knowledge and attitudes in maintaining oral and dental hygiene in terms of caries status in Qurratul Ayyun early childhood education, Banda Aceh City. The design of this research is descriptive quantitative research. The sample in this study is the total population of 35 student respondents. The study results showed that the mother's knowledge of the maintenance of dental and oral hygiene of Qurratul Ayyun early childhood education students in Banda Aceh City was poor, with 18 respondents (51.4%). Mother's attitude toward maintaining dental and oral hygiene of Qurratul Ayyun early childhood education students in Banda Aceh City was in the poor category with 18 respondents (51.4 %).

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**1. Introduction**

Maintenance of oral health is one of the efforts to improve health because it can prevent various oral diseases [1]. Dental and oral health is one of the supporting aspects of the health paradigm and a national development strategy to realize a healthy Indonesia [2]. Dental caries is a disease caused by many factors. Factors causing caries are the host (teeth and saliva), microorganisms (plaque), substrate (carbohydrates), and added time factor) [3]. In addition, other predisposing factors that contribute to caries severity include caries experience, socioeconomic, age, gender, geography, and behavior towards dental health [4]. Dental and oral health disease ranks first out of the top 10 list of diseases that the people of Indonesia often suffer. According to the Centers for Control Disease Prevention (CDC, 2013), dental caries is a chronic disease that often occurs in children aged 6-11 years (25%) and adolescents aged 12-19 years (59%) even though dental caries itself is a disease that can cause tooth decay. Prevented [5]. In Indonesia, 76.2% of Indonesian children in the 12-year age group (approximately 8 out of 10 children) experience cavities [6]. Furthermore, according to the Indonesian Ministry of Health, 89% of children under 12 in Indonesia suffer from dental caries. The Dental and Oral Health Action Plan targets Indonesia caries-free by 2030 [7]. Based on the data above, dental health problems in early childhood are still very high. Early childhood has not been

able to carry out dental health care independently and requires assistance from parents to familiarize children with good habits in maintaining dental health. A unique strategy is needed to assist in early childhood following their development so that good habits for maintaining dental health are needed. Based on the results of dental examinations on 35 children aged 3-5 years at Qurratul Ayyun early childhood education, it was found that 60% of children suffered from dental caries. The average dental and oral hygiene of children in the kindergarten was in the poor category with a score of 37; the data is still far from expectations because it is not following the government's stipulation that the dental and oral hygiene status score (PHP-M) < 15. so the role of the mother is needed to guide, give understanding, remind, provide facilities to children so that children can maintain dental and oral health.

## 2. Methods

The design of this research is descriptive quantitative research. This research was conducted for two weeks, from 16 to 28 August, with 35 mothers. The sampling technique used is total sampling so that the subject of The research is all Qurratul Ayyun early childhood education students in Banda Aceh City. The data collection technique of this research interviews using a questionnaire. The measurement of the knowledge variable uses the Guttman scale, where the answer choices are right and wrong. The other variable is dental maintenance behavior, where the measurement of this variable is by asking several questions about dental maintenance. The questions given are in the form of questions with a Likert scale. The data processing carried out includes the editing, coding, scoring, data entry, and cleaning processes. The statistical analysis technique used in this research is a univariate analysis where the data collected is calculated to see the percentage of the amount of available data. In addition, to determine whether there is a relationship, univariate analysis is used.

## 3. Results and Analysis

The results of the correct answers from the respondents were based on the mother's knowledge about the maintenance of children's dental and oral hygiene at Qurratul Ayyun early childhood education, Banda Aceh City.

**Table 1**

Frequency Distribution of Correct Answers to the Knowledge Questions of Students at PAUD Qurratul Ayyun

NO	Knowledge	F	%
1.	Dental and oral hygiene are teeth that are free from food residue and tartar	27	77.1
2.	Tooth decay is the breakdown of hard tooth tissue that hits the tooth surface	23	65.1
3.	Minimum brushing teeth in a day are 2 times	19	54.2
4.	The right time to brush your teeth is after breakfast and at night before going to bed	10	28.6
5.	The purpose of brushing your teeth is to prevent plaque formation	19	5.3
6.	The way to maintain dental and oral hygiene is to brush your teeth in the right way and at the right time	23	65.1
7.	How to choose a good brush bristle, namely soft bristles	17	48.6
8.	The right time to control your teeth to the dentist is every six months	20	57.1
9.	Foods that can cause cavities are sweet and sticky	19	54.2
10.	The way to prevent cavities is to reduce sweet and sticky foods and control your teeth every six months	19	54.2

Based on table 1. above, it can be seen that the respondents who answered the least correctly, namely when the time was right to brush their teeth, were ten people (28.6%). While respondents who brush their teeth at least two times a day and know the purpose of brushing teeth is to prevent plaque formation and respondents who know foods that can cause cavities, namely sweet and sticky foods, only 19 respondents (54.2%)

**Table 2**

Distribution of Mothers' Knowledge Frequency at Qurratul Ayyun early childhood education Banda Aceh in 2018

NO	Level Knowledge	Frequency	Percentage( %)
1.	Well	17	48.6%
2.	Not good	18	51.4%
Amount		35	100%

Table 2 above shows that the mother's knowledge is the most in the unfavorable category, as many as 18 people (51.4%).

Mother's attitude about maintaining children's oral and dental hygiene at Qurratul Ayyun early childhood education, Banda Aceh City.

**Table 3**

Frequency Distribution of Correct Answers to Questions about Mothers' Attitudes at Qurratul Ayyun early childhood education Banda Aceh in 2018

NO	Attitude	f	%
1.	If the tooth is in pain, it is better to take it to the public health center	23	65.7
2.	Aching teeth can be left alone	21	60.0
3.	If you have tartar, you do not need to clean it; just rinse your mouth	13	37.1
4.	Sweet and sticky food is the cause of cavities	25	71.4
5.	Checking your teeth with the doctor should be every six months	22	62.8
6.	Brushing your teeth should only be done in the shower	21	60.0
7.	Brushing your teeth should be done two times a day	18	51.4
8.	Do you have cavities, do not need to fill them, brush your teeth?	11	31.4
9.	Replace the toothbrush when the bristles have bloomed and after more than three months of use	21	60.0
10.	Eating many foods that contain carbohydrates can cause tooth decay	22	62.8

Based on table 3. above, it can be seen that the respondents who answered the least correctly, namely at the right time to brush their teeth, were 11 people (31.4%). Meanwhile, respondents who changed their toothbrushes when the bristles had bloomed and after more than three months of use and only 21 respondents (60.0%)

**Table 4**

Frequency distribution of the attitudes of Qurratul Ayyun early childhood education Banda Aceh mothers.

NO	Attitude level	frequency	Percentage (%)
1.	Well	17	48.6%
2.	not good	18	51.4%
Amount		35	100%

Based on table 4 above, the mother's attitude in the most unfavorable category is 18 people (51.4%).

### 3.1 Discussion

The study results showed that the knowledge of the mother (respondents) of students was in the poor category, with the number of respondents being 18 people (51.4 % ). This is caused by a lack of knowledge about maintaining dental and oral hygiene, the lack of information about dental health, the lack of counseling by health workers, especially dental health workers, and the lack of knowledge of mothers in effective and efficient dental care efforts. General dental care is done by brushing teeth. Habit brushing teeth is crucial in the process of dental caries. Good quality brushing teeth will increase the efficacy of brushing teeth [8]. The dental and oral hygiene status of children plays a vital role in preventing dental caries in children. Dental caries in early childhood can occur if a child's dental and oral hygiene is not maintained, and conversely, if the child's dental and oral hygiene status is included in good criteria, the child will avoid the risk of dental caries [9],[10]. There are dental and oral health businesses maintain the health of children's teeth and mouth so they do not get sick and heal when sick. Children's eating habits are often generally found in sweet foods such as chocolate, candy, ice cream, biscuits, etc. This will not be a problem if the teeth should be cleaned at least by gargling after consuming foods that contain sugar. Knowledge of a person, especially a mother, is an essential factor in efforts to prevent and control the occurrence of dental and oral hygiene[11],[12]. With good knowledge, mothers can receive all kinds of information from outside,

especially about how to prevent and overcome dental problems. Because knowledge is the result of knowledge obtained by informants or formally, knowledge is also an act of a person after the person has sensed an object. The mother's attitude is in the unfavorable category with 18 respondents (51.4%). This unfavorable attitude towards mothers is based on their knowledge of health which significantly supports their attitude toward their health, especially dental and oral health [11],[12]. Lack of concern for dental and oral health so that they assume that dental health is not essential. The respondents' answers showed that the least number of people who answered correctly, namely when it was the right time to brush their teeth, was only 11 people (31.4%). Meanwhile, respondents who changed their toothbrush when the bristles had bloomed and after using it for more than three months and only 21 respondents (60.0 % )

#### **4. Conclusion**

Mother's knowledge of the dental and oral hygiene maintenance of Qurratul Ayyun early childhood education students in Banda Aceh City is in the poor category, with 18 respondents (51.4%). Mother's attitude toward maintaining dental and oral hygiene of Qurratul Ayyun early childhood education students in Banda Aceh City was in the poor category with 18 respondents (51.4%).

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