

## ***MOTHER'S KNOWLEDGE ABOUT TEETH ERUPTION WITH CROWDING TEETH IN ELEMENTARY STUDENTS***

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### **ABSTRACT**

*Dental and oral problems in children need attention from parents. Entering school age, the child's permanent teeth begin to grow so that in the child's oral cavity there is mixed dentition. This study aims to determine the relationship between mother's knowledge about the changing period of teeth with crowding In Class V Students Kayee Leue SDN, Aceh Besar District. This research is analytic with a cross sectional approach. Sampling used total sampling, namely all In Class V Students Kayee Leue SDN, totaling 56 students and their mothers as respondents, by conducting dental examinations on children and interviews with mothers. The research instrument used a diagnostic set and a questionnaire. The results of the study were tested statistically using the SPSS program with a chi-square test ( $\alpha = 0.05$ ). The results showed There is a relationship between mother's knowledge about the change of teeth with crowding In Class V Students Kayee Leue SDN ( $p$  value = 0.0001). Conclusion The understanding of Mother's knowledge about the changing period of teeth has a significant relationship with crowding In Class V Students Kayee Leue SDN*

**Keywords:** *child's crowded teeth; mother's knowledge;*

### **1. INTRODUCTION**

Dental and oral problems in children need to get the attention of parents.<sup>1</sup> This is because parents are the closest example of children because if parents teach dental care early on, dental and oral problems will not occur too often. Therefore, parents need sufficient knowledge in order to be able to cope with their child's dental and oral problems.<sup>2</sup>

Most parents ignore the growth of the child's teeth, thus causing the permanent teeth that will grow instead of milk teeth to grow irregularly. The behavior of parents, especially mothers in the growth of children's teeth, greatly affects the health of the child's teeth later. Any parent will want their baby to grow up to be a good, smart and adorable-looking child plus have an attractive

smile with his rows of white and neat teeth.<sup>3</sup>

Milk teeth have a special function that is not possessed by fixed teeth, namely to lead the growth of fixed teeth, so that they are located regularly and provide a good place for fixed teeth that will replace them. At this time the parents assumed that all the teeth would be replaced by fixed teeth, but did not know the exact time of the change of teeth so the parents did not observe the phase of the child's tooth change. This situation results in parents not being responsive when the permanent teeth have grown, while the decidui teeth are still there or the permanent teeth are not yet time to grow but the milk teeth are damaged and the teeth have been shaken prematurely removed.<sup>4</sup>

Teeth need to be treated early so that the child does not experience impaired teeth growth and development, in addition to maintaining a normal state of the teeth, so that as an adult acquires harmonious, functional, and aesthetic tooth occlusion.<sup>5</sup> The habit of munching food, drinking milk in a teat bottle before bedtime, sucking fingers, and thalassemia are some of the factors that cause impaired tooth growth. In the stage of tooth growth and the development of occlusion, in particular the transition period of the change of the deciduous tooth to the permanent one, many factors affect the growth of the dental arch.<sup>6</sup>

Entering school age, the child's permanent teeth begin to grow so that in the child's oral cavity there is a growth of mixed teeth, namely fixed teeth and milk teeth. This condition is very prone due to the possibility of abnormal tooth growth. Abnormal tooth growth can indirectly cause abnormalities. General experts state that irregular arrangement of teeth will be difficult to clean, making it easier to stick to food which results in easy caries.<sup>7</sup> When the teeth are stacked, the one affected by the toothbrush during cleaning is the tooth in the outermost arch. Dental and oral hygiene has an important role in maintaining and maintaining the health of the teeth and surrounding tissues, poor dental and oral hygiene can cause tooth decay and tooth growth.<sup>5</sup>

Based on the results of the Basic Health Research (Riskesdas) survey in 2018, it is stated that the proportion of the population with dental health problems in the last 12 months in the Aceh region is 55%.<sup>8</sup> The prevalence of malocclusion in Indonesia is still very high around 80% of the population, and is one of the considerable dental and oral health problems, this is coupled with the low level of dental care awareness and bad habits such as sucking the thumb or other

objects, because the number and severity of malocclusion will continue to increase, malocclusion should be prevented. This is one of the proofs that public awareness is still lacking to maintain healthy teeth and mouth.<sup>7</sup>

Based on the dental and oral health report of the Ingin Jaya Health Center in 2021 from January to November, the results of the examination of persistent dental cases were obtained, namely 630 cases, and the extraction of milk teeth totaled 530 cases.<sup>9</sup> Based on the results of an interview with the Principal of SDN Kayee Leue, it was stated that counseling had been carried out to students regarding dental and oral health at SDN Kayee Leue by the Department of Dental Nursing, Poltekkes, Ministry of Health, Aceh. However, so far, no counseling has been carried out to parents, especially to mothers regarding the health of children's teeth and mouth. Based on a preliminary survey of 10 students at Kayee Leues Elementary School, 60% of children's teeth were crammed, and the results of interviews with the parents of these students, 70% of them did not know at what age the child's milk teeth were first removed, and did not pay much attention to the growth of milk teeth because they thought all milk teeth would be replaced and let the teeth of the child who had shaken because the child refused to pull out his teeth on the grounds of fear. This study aims to find out the relationship of mother's knowledge about the change of teeth with crammed teeth in grade V students of SDN Kayee Leue, Aceh Besar Regency.

## 2. RESEARCH METHODS

This research is analytical with a cross sectional study approach. Sampling using total sampling i.e. all 56 students of grade V SDN Kayee Leue and her mother as respondents, by conducting a dental examination on child and

interview with the mother. The instruments used in data collection are questionnaires and diagnose sets. Data analysis using the chisquare statistical test with the degree k epercayaa n (alpa) = 0.05.

### 3. RESULT

This research was conducted on grade V students of SDN Kayee Leue, Aceh Besar Regency. from March to April 2022.

#### a. Univariate Analysis

Based on the results of data processing, the following results were obtained:

##### 1) Mother's Knowledge

**Table 1 :** Frequency distribution of respondents based on maternal knowledge about the change of teeth of grade V children of SDN Kayee Leue, Aceh Besar Regency

No	Knowledge	Frequency	%
1	Good	25	44,6
2	Not Good	31	55,4
<b>Sum</b>		<b>56</b>	<b>100</b>

Based on table 1, it can be seen that the most maternal knowledge in the category is not good, namely 31 people (55.4 %).

##### 2) Arrangement of Children's Teeth

**Table 2:** Distribution of respondents' frequency is based on the dental arrangement of grade V students of SDN Kayee Leue, Aceh Besar Regency.

No	Arrangement of Children's Teeth	Frequency	%
1	Not crowded	23	41,1
2	Crowded	33	58,9
<b>Sum</b>		<b>56</b>	<b>100</b>

Based on table 2, it can be seen that of the 56 students who experienced the most crammed dental arrangements, namely 33 students (58.9%).

#### b. Analisis Bivariat

##### Relationship Mother's knowledge of the period of tooth change with crammed teeth

**Table 3:** The Relationship between Mothers' Knowledge about the Period of Tooth Change with Crammed Teeth in Grade V Students of SDN Kayee Leue, Aceh Besar Regency.

No	Mother's Knowledge	Arrangement of Children's Teeth		Total	%	Statistical Test Results		
		Crowded	Not Crowded					
1.	Good	7	28,0	18	72,0	25	100	P = 0,0001 df = 1 α = 0,05
2.	Not Good	26	83,9	5	16,1	31	100	

Based on table 3, it can be seen that the knowledge of good mothers experiencing the arrangement of children's teeth is not crowded, which is 72.0% and the knowledge of mothers is not good at experiencing the arrangement of children's teeth crammed, which is

83.9%. Based on the results of the *chi-square* test, a p value = 0.001 ( $p < 0.05$ ) was obtained, meaning that there was a relationship between the mother's knowledge about the tooth change period and crammed teeth in grade V students of SDN Kayee Leue, Aceh Besar Regency.

#### 4. DISCUSSION

The results showed that the *chi-square* test obtained a value of p value = 0.001 ( $p < 0.05$ ) meaning ada relationship of maternal knowledge about the period of tooth change with crammed teeth in grade V students of SDN Kayee Leue, Aceh Besar Regency. This is because masih kurangnya knowledge mother mengenai pertumbuhan gigi, jumlah and type of teeth and persistensi teeth sehingga berpengaruh terhadap kesehatan gigi child. Plus with rendahnya kepedulian orang tua terhadap tumbuh kembang the child's teeth will berdampak pada perkembangan kemampuan child secara keseluruhan, either fisik maupun kecerdasannya.<sup>10</sup>

Parental knowledge is very important in underlying the formation of behaviors that support or do not support the hygiene of the child's teeth and mouth. This knowledge can be obtained naturally or in a planned manner, namely through the educational process.<sup>11</sup> Dental and oral problems of the child need to get the attention of parents. Therefore, parents need sufficient knowledge in order to be able to overcome dental problems and their child. The mother's knowledge of dental health will greatly determine the health status of her child's teeth in the future.<sup>12</sup> This proves that the higher the mother's knowledge, the lower the probability of tooth cramming in the child, ibu who has a high knowledge of having a great awareness of the child's

tooth change period, namely by taking the child to the dentist or health center if the child's teeth start to shake or have other dental health problems. Meanwhile, a low-knowledge mother allows the child's teeth that have been shaken and does not remove the teeth, causing the teeth to grow crammed.<sup>13</sup> Knowledge is a very important realm for the formation of action.<sup>14</sup>

In the growth and development of teeth in particular the transition period of the change of deciduous teeth to permanent teeth many direct factors affect the growth of teeth that cause teeth to cram among others, milk teeth that fall out prematurely, teeth that do not grow, the loss of fixed teeth, milk teeth do not fall out and bad habits that the child does.<sup>15</sup>

Generally, the child's teeth grow normally in a regular order. however, untreated milk teeth can cause the arrangement of permanent teeth to be uneven and stacked. One of the most important steps to having neat teeth is to start caring for milk teeth. Gigi milk becomes a guide to permanent teething. The regularity of care and growth and falling out, determines whether or not the structure of the tooth is good when it matures. In the growth of children's teeth, attention and knowledge of parents, especially mothers, are needed, which are more about the period and transition or the time of mixing milk teeth and fixed teeth. The falling out of milk teeth during this time is often

overlooked. Because it assumes that it will be replaced by a fixed tooth. Premature tooth loss can affect the growth and development of fixed teeth, on the contrary, milk teeth that last longer than they should, also cause disturbances in the growth / eruption of fixed teeth. This results in the teeth remaining erupting where they shouldn't, causing the teeth to pile up.<sup>16</sup>

Knowledge is needed in child dental care, because usually ana k-children do not care in his dental care. It is the duty of parents especially mothers to teach, guiding and memberfish information p there is a child about the importance of maintaining cleanliness and tooth health. According to Oktarina, et al. a mother should have good knowledge, attitude, and action towards tooth and mouthfulness in order to provide oral to her child's keshealth education. 16 This result is also supported by Pratiwi's opinion which states that the persistence state of the child studied can actually prevented if the mother has good knowledge, with the increase in maternal knowledge and is expected to shape behavior in preventing the persistence of teethwhich will improve the state toschild dental health. These 15 things are prevented by the participation of energy toshhealth, especially dental nurses in increasing parental knowledge through dental health counseling as a basis for the formation of good keshealth teeth behavior.

## 5. CONCLUSION

Based on the results of research and discussion, it can be concluded that there is a relationship between the mother's knowledge about the tooth change period with crammed teeth in grade V students of SDN Kayee Leue KAbupaten Aceh Besar Leue ( $p$  value = 0.0001). It is recommended to dental

health workers to be able to provide counseling to mothers, especially about the maintenance of children's dental and oral health to increase knowledge.

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