## THE RELATIONSHIP OF MOTHER'S BEHAVIOR ABOUT BOTTLE MILK FEEDING WITH CARIES LEADING IN SCHOOL

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#### **ABSTRAK**

Rampant caries is a multifactorial disease that interacts with each other. Factors in the incidence of dental caries include factors from food, oral hygiene, and habits that are not in accordance with health such as eating food and feeding through bottles. In addition, parents' misunderstanding of the causes of caries, such as using milk, further exacerbates the occurrence of rampant caries in children. This study aims to determine the relationship between mother's behavior regarding bottle feeding with rampant caries in TK Negeri 7 Sabang City. This research is analytic with cross-sectional approach. Sampling used total sampling, namely all 45 children of TK Negeri 7 Sabang City 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 (a = 0.05). It can be concluded that there is a relationship between mother's behavior about bottle feeding and rampant caries in TK Negeri 7 Sabang City. It is recommended to further improve good behavior towards children when giving bottle milk to avoid rampant caries.

**Keywords**: Mother's Behavior; Rampant Caries

## 1. INTRODUCTION

Rampant caries is a multifactorial disease that interacts with each other. There are several factors that contribute to the occurrence of dental caries in children. These factors include food factors, oral hygiene, and habits such as eating food and feeding through bottles.<sup>1</sup>

In addition, the factor that aggravates the occurrence of caries is due to parental misunderstanding of the causes of caries triggered by giving milk solution, soft drinks using bottles, and breast milk which is given in an inappropriate way, frequency and intensity. The length of time the solution is in the oral cavity, such as when a child falls asleep while drinking milk in a bottle, further exacerbates the occurrence of rampant caries in children. Children are still very dependent on adults in terms of maintaining dental hygiene and health because of the lack of knowledge of children about dental health compared to adults

Ordinary people assume that damaged primary teeth are not a problem, because these teeth will be replaced with permanent teeth. But keep in mind that the function of primary teeth is to assist mastication, for aesthetics, and as guidance for the growth of permanent teeth. The participation of parents is very necessary to guide, give understanding, remind, provide facilities for children so that children can maintain healthy teeth and mouth. In addition, parents also have a significant role in preventing plaque accumulation and caries in children.<sup>2</sup>

Parental knowledge important in underpinning the formation of behaviors that support or do not support children's dental and oral hygiene. This knowledge can be obtained both naturally and in a planned manner, namely through the educational process. Parents with low knowledge about dental and oral health are predisposing factors for behavior that does not support children's dental and oral health. Dental care for children also depends on how the mother helps take care of them. Mothers play an important role in the family, as a wife and mother of their children. The first figure a child recognizes as soon as he is born is his mother.

Therefore, the behavior and habits of the mother can be imitated by the child. Mother's knowledge about dental health plays an important role in determining the dental health status of their children in the future. However, just knowing is not enough, it needs to be followed with care and action.<sup>3</sup>

Children are still in the stage of needing strict guidance, so the role of parents, especially mothers, is verv necessary in guiding, providing understanding, improving and providing facilities for children to be able to maintain dental and oral hygiene. In addition, mothers also have a significant role in preventing rampant caries in children. Mother's knowledge, attitudes, and behavior towards dental and oral health will determine the dental health status of children in the future. Starting to grow teeth is an important process of child growth. Mothers must know how to take care of their children's teeth, and mothers must teach their children how to take good care of their teeth. Even though they still have baby teeth, a child must have serious attention from the mother. The condition of a child's milk teeth greatly determines the growth of a child's permanent teeth.<sup>4</sup>

Dental and oral health problems in children, especially dental caries, can cause pain and discomfort, which can have a negative impact on children's quality of life. The World Health Organization (WHO) in 2016 stated that the incidence of caries in children was still 60-90%<sup>5</sup>. Based on the results of the 2018 Basic Health Research (Riskesdas) survey, it was stated that the proportion of the population with dental health problems in the last 12 months in the Aceh region was 55% and those who received services from dental medical personnel were 15%. > 3 years by 95% and the proportion of brushing teeth properly in the population aged > 3 years is 2.8%. This is one proof that public awareness is still lacking to maintain dental and oral health.

Childhood is the beginning of the formation of behavior. At that time the child is

most vulnerable to various influences, both from within and from outside the child. It is not surprising that children are quite vulnerable to changes in health status, including caries.<sup>7</sup> Preschoolers are children aged between 4-6 years. At that age, children experience a process of growth and development, both physically, mentally and socially. The process of growth and development is related to health factors, in other words, healthy children are expected to have optimal growth and development processes. Children aged between 4-6 years are the age group in which children do not have a sense of responsibility/behavior pattern for the act of cleaning their teeth and mouth so the role of parents, especially mothers, is very necessary in guiding and improving dental and oral health. This is in accordance with Davies' opinion that the behavior of children aged 4-6 years is strongly influenced by the behavior of the mother

Based on the results of the initial survey of dental examinations on 10 children aged 4-6 years in TK Negeri 7 Sabang City, it was found that 60% of children suffered from dental caries. This study aims to determine the relationship between mother's behavior about bottle feeding with rampant caries in TK Negeri 7 Sabang City.

## 2. RESEARCH METHODS

This research is analytic with cross sectional study approach. The purpose of this study was to determine the relationship between maternal behavior in bottle feeding and rampant dental caries in Kindergarten children with a population of all children and mothers attending TK Negeri 7 Kota Sabang. Sampling used total sampling, namely all children of TK Negeri 7 Sabang City and their mothers as respondents, totaling 45 people, by conducting dental examinations on children and interviews with mothers. The instruments used in data collection were questionnaires and diagnostic sets. Data analysis used Chi-Square statistical test with a degree of confidence (alpa) = 0.05.

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#### 3. HASIL

This research was conducted on children of Kindergarten 7, Sabang City. from May to July 2022

## a. The Relationship Between Mother's Knowledge About Bottle Feeding And Rampant Caries

Table 1: The relationship between mother's knowledge about bottle feeding and rampant caries

No	Knowledge	High		Low		Total		'
		f	%	f	%	Jlh	%	
1	Good	6	30	14	70	20	100	0,002
2	Fair	20	80	5	20	25	100	
	Total	26		19		45	100	

Based on table 1, it can be seen that the knowledgeable mothers experienced low caries rampant, namely 20 people (80%), and the knowledgeable mothers experienced low caries rampant, namely 14 people (70%). Based on the results of the chi-square test, the p value = 0.002 (p <0.05) means that there is a relationship between mother's knowledge about bottle feeding and rampant caries.

# b. Relationship between mother's attitude about bottle feeding with rampant caries

Table 2: Relationship between mother's attitude about bottle feeding with rampant

No								
	Attitude	High		Low		Total		
		f	%	f	%	Jlh	%	
1	Good	7	33,3	14	66,7	21	100	0,005

 2
 Fair
 19
 79,2
 5
 20,8
 24
 100

 Total
 26
 19
 45
 100

Based on table 2, it can be seen that the attitude of the mother is less prone to high caries rampant, namely 19 people (79.2%), and the attitude of the good mother experiencing low caries rampant is 14 people (70%). Based on the results of the chi-square test, the p value = 0.002 (p <0.05) means that there is a relationship between mother's attitude about bottle feeding and rampant caries.

# c. Relationship Between Mother's Actions About Bottle Feeding With Rampant Caries

Table 3: Relationship between mother's actions about bottle feeding with rampant caries

		,						
No	Tindakan	High		Low		Total		
		f	%	f	%	Jlh	%	
1	Good	7	36,8	12	63,2	19	100	0,034
2	Fair	19	73,1	7	26,9	26	100	
	Total	26		19		45	100	

Based on table 3, it can be seen that the actions of mothers who did not experience high caries rampant were 19 people (79.2%), and the actions of good mothers experienced low caries rampant that were 12 people (63.2%). Based on the results of the chi-square test, the p value = 0.002 (p <0.05) means that there is a relationship between the mother's actions regarding bottle feeding and rampant caries.

### 4. DISCUSSION

## a. The Relationship Between Mother's Knowledge About Bottle Feeding And Rampant Caries.

Based on table 1, it can be seen that knowledgeable mothers have less experience of high caries rampant, namely 20 people (80%), and good knowledge mothers have low caries rampan, namely 14 people (70%). Based on the results of the chi-square test, the p value = 0.002 (p < 0.05) means that there is a relationship between mother's knowledge about bottle feeding and rampant caries. This is due to a lack of understanding and information on how to bottle feed their children. Mothers do not guide children in maintaining oral health, resulting in poor dental and oral health. These results are in accordance with research conducted on elementary school students in Al Hassa Saudi Arabia, revealing that parents have never received knowledge instructions regarding dental and oral health, so parents never guide their children in maintaining dental and oral hygiene. major predictor of dental caries in children.8

## **b.** Relationship Between Mother's Attitude About Bottle Feeding With Rampant Caries

Based on table 2, it can be seen that the attitude of the mother is less prone to high caries rampant, namely 19 people (79.2%), and the attitude of the good mother experiencing low caries rampant is 14 people (70%). Based on the results of the chi-square test, the p value = 0.002 (p <0.05) means that there is a relationship between mother's attitude about bottle feeding and rampant caries. This is due to a negative attitude based on a lack of reaction or response to the stimulus to the mother on how to properly bottle feed to avoid the incidence of rampant caries and they do not care about the incidence of rampant caries in children caused by improper bottle feeding.

Attitude has a close relationship with knowledge, therefore knowledge affects a person's way of thinking and analyzing in solving problems so that it can help him make a decision. and is responsible for everything that is closely related to his own health in order to achieve optimal health degrees. This is

supported by the opinion of Notoatmodjo, attitude is a conclusion or willingness to act and not a specific motive, attitude is not yet an action or activity. , but predisposes to action or behavior. Attitude is an open reaction or open behavior. For the realization of the attitude to be an act of death, a supporting factor or a possible condition is needed, including facilities. Attitudes are also formed in a person can be influenced by several factors, among others, the most factors. important are genetic direct experience factors with attitude objects, social communication. some knowledge experience.<sup>10</sup>

## c. Relationship Between Mother's Actions About Bottle Feeding With Rampant Caries

Based on table 3, it can be seen that the actions of mothers who did not experience high caries rampant were 19 people (79.2%), and the actions of good mothers experienced low caries rampant, namely 12 people (63.2%). Based on the results of the chi-square test, the p value = 0.002 (p <0.05) means that there is a relationship between the mother's actions regarding bottle feeding and rampant caries. This is because many mothers do not take preventive measures against rampant caries. The mother's lack of action is due to the lack of knowledge and attitudes of mothers about giving the right bottle milk to children which can cause rampant caries.

The behavior of mothers in helping or guiding children in brushing their teeth that is lacking causes children to neglect their dental hygiene and not brush their teeth twice a day after breakfast and before going to bed at night, and these students eat sweet and sticky foods. The dental and oral hygiene status of children plays an important role in the occurrence of 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. Children's eating habits that are often found in general like sweet foods such as chocolate,

candy, ice cream, biscuits and others. Actually, this will not be a problem if after eating foods that contain sugar, the teeth should be cleaned at least by gargling.<sup>11</sup>

The results of this study were supported by Kusnoto who showed that 88.3% respondents had dental and oral hygiene status in the poor category, supported by sufficient knowledge of parents. This is a problem that needs to be addressed considering that dental and oral hygiene is a very decisive factor in the process of maintaining dental and oral health. A person's awareness of the importance of dental health can be seen from the knowledge they have. Fankari 2004 explains that one of the causes of dental and oral health problems is the behavioral factor or attitude of ignoring dental and oral hygiene. This is based on a lack of knowledge about the importance of maintaining teeth and mouth. 12

## **CONCLUSION**

Based on the research that has been conducted in TK Negeri 7 Kota Sabang, it can be concluded that there is a significant relationship between knowledge, attitudes and actions (behaviors) of mothers regarding bottle feeding with the occurrence of rampant caries in children in TK Negeri 7 Kota Sabang. It is expected that mothers can improve their behavior in maintaining teeth and mouth.

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