
The Relationship Between Dental And Oral Health Maintenance Behavior And Oral Hygiene Of Fifth Grade Students At Sdn Alue Aceh Besar District

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ABSTRACT

Oral hygiene is one of the actions needed to keep the mouth from infection, clean and freshen the mouth. Awareness of maintaining dental and oral hygiene is very necessary as an effort to prevent dental and oral health problems. The purpose of this study was to determine the relationship between behavior and oral hygiene in fifth grade students at SDN Alue, Aceh Besar District. The research used is an analytical method with a cross sectional study design approach. The population in this study were all fifth graders at SDN Alue, totaling 40 respondents. The analysis carried out is univariate and bivariate analysis using chi-square statistical test. The results showed that from 40 respondents, it was found that knowledge of dental and oral health maintenance in the poor category was 21 respondents (52.5%), attitudes in the poor category were 23 respondents (57.5%), actions in the poor category were 25 respondents (62.5%). Dental and oral health maintenance behavior as knowledge ($P=0.001$), attitude ($P=0.001$) and action ($P=0.002$). Based on the results of the study, it can be concluded that there is a relationship between dental and oral health maintenance behavior with oral hygiene in fifth grade students at SDN Alue, Aceh Besar District. It is recommended for students to improve their behavior in maintaining their own oral and dental health.

Introduction

Dental and oral health is closely related to behavior. The behavior of maintaining good teeth and mouth will play a very important role in determining the health status of each individual. Therefore, the behavior of maintaining dental and oral health that is not good must be changed (1).

Behavior is all activities carried out by individuals (someone), both those that can be observed (seen) directly or indirectly. An important role in behavior is knowledge (knowledge), attitude (attitude), and action (practice). Knowledge and attitudes are a result of the senses and play an important role in an action considering that knowledge and attitudes will be able to increase the level of health awareness (2).

Dental health behavior is one that can affect dental health. Dental and oral health

behavior includes knowledge, attitudes, actions related to the concept of healthy and toothache as well as prevention efforts. In this concept, what is meant is that one of the causes of dental and oral health problems in the community is a behavioral or attitude factor that ignores dental and oral hygiene (3)

Maintaining good dental health will be able to prevent the occurrence of dental and oral diseases. The actions taken are, getting used to brushing your teeth every day after breakfast and at night before going to bed, then reducing the consumption of sweet foods and easily sticking to your teeth because it can accelerate the occurrence of cavities, then getting used to going to the dentist regularly to have your teeth checked once every six months. month(4).

Oral hygiene is one of the actions needed to keep the mouth from infection, clean and freshen the mouth. Awareness of maintaining oral hygiene is very necessary and is a medicine to prevent dental and oral health problems. Oral hygiene status can be assessed from the sum of plaque and calculus. This oral hygiene measurement is measured by the Simplified Oral Hygiene Index (OHI-S) from Greene and Vermillion, which means a number that shows the level of a person's dental and oral hygiene obtained by adding up the debris index (DI) and calculus index (CI) results.

There are 3 factors that cause someone to ignore oral health problems, namely knowledge, attitude and action factors. Knowledge of oral health is obtained through a thorough thought process. The relationship of a person's knowledge about the health of his oral cavity will affect the maintenance of his oral hygiene. Attitude is a closed response from a person to a stimulus that has not been followed by action on the maintenance of oral hygiene (5).

Children aged 10-11 years are a group that is vulnerable to dental and oral diseases. Generally, children of that age have less knowledge of dental and oral health, so that children still carry out habits that can interfere with dental and oral health such as eating sweet foods, elementary school children need special attention to get optimal dental and oral health degrees (Silaban et al., 2013). Children aged 10-11 years on average sit in fifth grade elementary school. Children at that age have the ability to think abstractly, understand the law of cause and effect, and use logic in understanding things (6).

Dental and oral health problems are a very important concern in health development, one of which is caused by the vulnerability of school-age children to dental health problems. At the age of elementary school children, efforts are needed to maintain regular dental and oral health, both in counseling on dental and oral health examinations and treatments, by parents, schools and relevant government agencies (7).

According to data from Riskesdas (Basic Health Research) in 2018, 94.7% of those who brush their teeth every day are in the age range of 3 years, but 2.8% of those who do proper dental care are morning and night, and The highest prevalence of having dental and oral problems and receiving health services was 57.6%, but only 10.2% received care and treatment. The results of Riskesdas 2018 in Aceh

Province show that the proportion of dental and oral hygiene in the community is 6.4% and based on the age group 10-14 years the proportion of brushing teeth every day is 96.5% and the proportion of time to brush teeth properly is 2.1 %.

The results of the initial examination carried out on 15 students of SDN Alue, Aceh Besar District, the results showed that dental and oral hygiene with good criteria were 2 students, moderate criteria were 3 students, and bad criteria were 10 students, OHIS category 3.68 (Category Bad). Based on the description above, the authors are interested in researching the relationship between dental and oral health maintenance behavior with oral hygiene in fifth grade students at SDN Alue, Aceh Besar District.

Method

This research is analytic with a cross sectional study design to determine the relationship between oral hygiene behavior and oral hygiene in fifth graders at SDN Alue, Aceh Besar District. The population in this study were all fifth grade students at SDN Alue, Aceh Besar District. The sampling in this study used a total population sampling technique, namely all fifth grade students at SDN Alue, totaling 40 students. The instruments used in the study were diagnostic sets, KSP, and questionnaires. Data collection was obtained directly by conducting an examination (OHIS) and seeing the presence or absence of debris and calculus on the teeth as well as the results of interviews using a questionnaire. The data obtained from the research results were analyzed using univariate analysis and bivariate analysis (8). This analysis is to determine the relationship between the independent variable, namely the behavior of maintaining dental health on the dependent variable, namely the oral hygiene of students. Statistical testing using the Chi-Square test with 0.05.

Research result

The results of research and data processing can be presented in the form of tables and narratives as follows:

- 1) Univariate Analysis
 - a. Respondent's age

The frequency distribution of respondents based on age grouping can be seen in the following table:

Table 1 Frequency Distribution of Respondents Based on Student Age Grouping

No	Age	Frequency	Persentase
1	10	6	15,0%
2	11	34	85,0%
Total		40	100%

The table above shows that the majority of respondents are in the 11 year age category as many as 34 people (85.5%) and the 10 year age category as many as 6 people (15.5%).

b. Gender distribution of respondents

The frequency distribution of respondents based on gender can be seen in the following table:

Table 2

Frequency Distribution of Respondents Based on gender

No.	Gender	Frequency	Persentase
1.	Female	27	67,5 %
2.	Male	13	32,5 %
Total		40	100 %

The distribution of frequency and percentage of respondents based on knowledge can be seen in the following table:

Table 3

Frequency Distribution of Respondents Based on Knowledge about maintaining oral health on oral hygiene in fifth grade students at SDN Alue Aceh Besar

No.	Knowledge	Frequency	Persentase
1.	Not good	27	67,5 %
2.	Good	13	32,5 %
Total		40	100 %

Table 3 shows that the highest student knowledge about dental and oral health maintenance is in the poor category, namely 27 respondents (67.5%).

Table 4 Frequency Distribution of Respondents Based on Attitudes about maintaining oral health on oral hygiene in fifth grade students at SDN Alue Aceh Besar

No.	Attitudes	Frekuensi	Persentase
1.	Not Good	23	57,5 %
2.	Good	17	42,5%
Total		40	100 %

Table 4 shows that the students' attitudes about maintaining oral and dental health are the highest in the unfavorable category, namely 23 respondents (57.5%).

Table 5

Frequency Distribution of Respondents Based on actions regarding the maintenance of oral health on oral hygiene in fifth grade students at SDN Alue Aceh Besar

No.	Actions	Frequency	Persentase
1.	Not good	25	62,5 %
2.	Good	15	37,5%
Total		40	100 %

Table 5 shows that the highest student actions regarding dental and oral health maintenance are in the poor category, namely 25 respondents (62.5%).

The distribution of frequency and percentage of respondents based on dental and oral hygiene status in fifth grade students at SDN Alue, Aceh Besar District can be seen in the following table:

Table 6

Distribution of Frequency and Percentage of Respondents Based on Dental and Oral Hygiene Status in fifth grade students at SDN Alue Aceh Besar

No.	OHIS	Frequency	Persentase
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1.	Good	8	20,0 %
2.	Curently	13	32,5 %
3.	Poor	19	47,5%
Total		40	100 %

2). Bivariate Data Analysis

Cross tabulation of the relationship between behavior and Oral Hygiene Students can be seen in the table below:

Table 7

Results of Chi-Square Calculations to Determine the Relationship between Knowledge and Oral Hygiene for fifth grade students at SDN Alue Aceh Besar

From table 6, it shows that some respondents have dental and oral hygiene status in the bad category, namely 19 respondents (47.5%)

Knowledge of oral hygiene	Oral Hygiene						Total	%	Statistical Test Result		
	Good		Curently		Poor				P	df	α
	F	%	F	%	F	%					
Good	8	20,0	8	20,0	3	7,5	19	47,5	0.01	2	0.05
Not Good	1	2,5	5	12,5	15	37.5	21	52.5			
Total	9	22,5	13	32,5	18	45,0	40	100			

Based on table 7 above, it shows that the knowledge of dental and oral health maintenance in the good category is mostly on the moderate criteria as many as 8 people (20%), and the knowledge of the poor category is mostly on the bad criteria as many as 15 people (37.5%). The results of the chi-squere test showed that the value of P = 0.001 <0.05, it

can be concluded that there is a relationship between knowledge and oral hygiene in fifth grade students at SDN Alue, Aceh Besar District.

Table 8
Frequency Distribution of Respondents Based on the Relationship between Attitudes and Oral Hygiene in Class V Students at SDN Alue, Aceh Besar District

Attitudes of oral hygiene	Oral Hygiene						Total	T	Statistical Test Result	
	G		Cu		Po				I	f
	ood	rently	or							
Good							1	.01	.05	
Not good	2,5		7,5		,5	7	2,5			
Total	,0		5,0	7	2,5	3	7,5			
	2,5	3	2,5	8	5,0	0	00			

Based on Table 8 above, it shows that the attitude of maintaining oral and dental health in the good category is mostly on the good criteria as many as 9 people (22.5%), and the attitude in the bad category is mostly on the bad criteria as many as 17 people (42.5%). The results of the chi-squere test showed that the value of P = 0.001 <0.05, it can be concluded that there is a relationship

between knowledge and oral hygiene in fifth grade students at SDN Alue, Aceh Besar District.

Table 9
Frequency Distribution of Respondents Based on Relationships Action with Oral Hygiene in Class V Students SDN Alue, Aceh Besar District

Acti on of Oral	Oral Hygiene						T	Statistical Test Result	
								I	f

Hygiene	Good		Curently		Poor		Total	
Good	7,5	5,0	6	0,0	5	7,5	.02	.05
Not Good	2,5	3	2,5	8	5,0	0	00	
Total								

Based on Table 9 above, it can be seen that the most good category of dental and oral health maintenance actions were on the good criteria as many as 7 people (17.5%), and the most bad category actions were on the bad criteria as many as 16 people (40.0%). The results of the chi-square test showed that the value of $P = 0.002 < 0.05$, it can be concluded that there is a relationship between action and oral hygiene in fifth grade students at SDN Alue, Aceh Besar District.

D. Discussion

Based on the results of research on "The Relationship of Dental and Oral Health Maintenance Behavior with Oral Hygiene in SDN Alue students, Aceh Besar District" are as follows:

1. The Relationship of Student Knowledge With Oral Hygiene

Based on the results of research from 40 students who have poor knowledge with poor oral hygiene as many as 21 students (52.5%). From the statistical results show that the value of $P = 0.001 < 0.05$, it can be concluded that there is a relationship between knowledge and oral hygiene in fifth grade students at SDN Alue, Aceh Besar District.

Knowledge of dental and oral hygiene is very important for the formation of actions in maintaining dental and oral health. Maintaining dental and oral hygiene is done to prevent dental and oral diseases and to increase body resistance. Maintaining dental and oral hygiene at school age is one way to improve dental and oral health at an early age, dental health is an integral part of general health, so it is necessary to constantly improve dental and oral hygiene according to the ability to develop health in general (9).

Dental and oral health education can produce changes or increase knowledge, while increasing knowledge will not necessarily have a

direct effect on the dental and oral hygiene index (10). Elementary school age children have less knowledge of oral and dental health, so that children still carry out habits that can interfere with dental and oral health such as eating sweet foods, elementary school children need special attention to get optimal dental and oral health (11.)

The author assumes that most students at SDN Alue still do not understand about proper dental health maintenance so that children still carry out habits that can interfere with dental and oral health such as eating sweet foods and brushing their teeth incorrectly. For this reason, elementary school-age children need regular efforts to maintain dental and oral health, both counseling activities, dental and oral health checks and treatments, by parents, schools and related government agencies. The role of the school is very necessary to provide information and counseling to fifth graders at SDN Alue Aceh Besar so that children are more aware of the importance of maintaining and maintaining oral hygiene.

2. Student Attitude Relationship with Oral Hygiene

Based on the results of the study, from 40 students who had poor attitudes with poor oral hygiene, there were 23 students (57.5%). From the statistical results show that the P value = $0.01 < 0.05$, it can be concluded that there is a relationship between attitude and oral hygiene in fifth grade students at SDN Alue, Aceh Besar District.

Unfavorable attitudes are caused by many factors, including poor knowledge. The attitude of respondents who are categorized as unfavorable in maintaining oral health can be influenced by the respondent's lack of knowledge about maintaining oral health (12).

Attitude is a stimulus to a known object by showing a certain attitude, either positive or negative. Attitude has a close relationship with knowledge, therefore knowledge affects the way a person thinks and analyzes in solving problems, so that it can help him make a decision (13). If a person has good knowledge, the attitude of a person is mostly to accept and understand so that an attitude arises to respond, appreciate and be responsible for everything that is closely related to his health in order to achieve a degree of health. A person's good attitude is not necessarily accompanied by good oral hygiene because of several predisposing factors.

The author assumes that attitudes are formed because of the stimulation of a knowledge. Knowledge, thoughts, beliefs and emotions play a very important role in determining attitudes. Poor attitudes are caused by poor knowledge, so that the attitude of respondents who are included in the category of being unfavorable in maintaining oral health is due to a lack of knowledge of respondents about health care. teeth and mouth. In Green's theory, a good attitude is determined by good knowledge, so that respondents can make decisions about the behavior to be shown.

3. Student Action Relationship With Oral Hygiene

Based on the results of the study of 40 students who had poor actions with poor oral hygiene as many as 25 students (62.5%). Statistical results show that the value of $P = 0.002 < 0.05$, it can be concluded that there is a relationship between action and oral hygiene in fifth grade students at SDN Alue, Aceh Besar District. In general, students have a good level of knowledge and attitude, but they do not apply it in daily life, so it is very influential on oral hygiene.

A person's actions are based on his attitude. Lack of attitude will form bad actions. Actions regarding the maintenance of dental health will determine a person's dental and oral health status in the future, but knowledge alone is not enough to be followed by appropriate attitudes and actions. A person's actions will determine his behavior in terms of health. Someone who has good health, will know the right action in maintaining dental and oral health, namely to prevent a disease,

everything must exist continuously between knowledge and attitudes that reflect in the form of action (14).

Maintaining good dental health will be able to prevent the occurrence of dental and oral diseases. The actions taken are, getting used to brushing your teeth every day after breakfast and at night before going to bed, then reducing the consumption of sweet foods and easily sticking to your teeth because they can accelerate the occurrence of cavities, then getting used to going to the dentist regularly for a six-month dental check-up. once(15).

The author assumes that a person's actions are based on his attitude. Lack of attitude and knowledge will form bad actions. Dental health maintenance actions are the main prevention of preventing dental and oral disorders in order to avoid dental and oral diseases, therefore the teeth and their supporting tissues must be considered and properly cared for independently and professionally . Self-care can be done at home with a regular toothbrush, twice a day with the right method (16).

E. Conclusion

From the results of the study, it can be concluded that there is a relationship between dental health maintenance behavior and oral hygiene in fifth graders at SDN Alue, Aceh Besar District (P value = $0.001 < 0.05$). It is hoped that elementary school students will be able to maintain their dental and oral health and the school and other related parties are expected to provide counseling and information about proper dental health maintenance for school children.

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