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Oral Health Control Card As A Dental Caries Prevention In Children In The New Normal Era At SD Negeri 2 Baumata Timur, Kupang Regency

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ABSTRACT

The tooth brushing habit of the Indonesian people is still a cause for concern, as can be seen from the 2018 Basic Health Research data where only 2.3% of the population aged \geq 10 years brush their teeth after breakfast and before going to bed at night. This condition can cause tooth decay, as seen from the Riskesdas data, where the tooth decay index (DMF-T) of the Indonesian population is 4.6, which means that every Indonesian resident having about 4-5 carious teeth. The high rate of dental caries is supported by the fact that the level of knowledge of Indonesian people about the importance of brushing their teeth properly is very low. The dental health control card is a tool for monitoring children's activities or their behavior every day in the routine tooth brushing in the morning after breakfast and at night before going to bed. This effort is expected to increase children's obedience in carrying out prevention efforts independently so that caries can be prevented. This study aimsto determine the effect of oral health control cards as an effort to prevent dental caries in children in the new normal era at SD Negeri 2 Baumata Timur, Kupang Regency. This is an experiment with a one shot case study design, without a control group which was conducted on all 126 students of SDN 2 Baumata Timur. The results showed that the students's behavior in tooth brushing consistently at home in the morning after breakfast and at night before going to bed by using an oral health control card for 90 days as a monitoring tool, can prevent the risk of dental caries in children with the results of the Wilcoxon Signed Ranks test. The test shows a significant value of p 1.000 > 0.05. There is no difference before and after treatment, this shows that statistically there is no difference between before and after the intervention, but in substance, the use of dental and oral health control cards has an effect on preventing dental caries if the action of brushing teeth is carried out regularly, namely in the morning after eating and the night before bed. The conclusions are the tooth brushing habit in the morning after breakfast and at night before going to bed if consistently done can prevent the risk of dental caries in children. It is recommended to have an education about the importance of consistency in brushing teeth for school-age children.

Keywords: oral health control card; caries prevention; tooth brushing

1. INTRODUCTION

Dental health is still a problem in Indonesia as seen from the prevalence of dental caries which reaches 73% of the population. Dental health data through Basic Health Research (Riskesdas) in 2013 is quite concerning. Some of this data is related to the habit of brushing their teeth, namely out of 835,256 respondents aged ≥ 10 years, only 2.3% of Indonesians brush their teeth after breakfast and before going to bed at night. brushing quality. Riskesdas 2013 the tooth decay index (DMFT) for Indonesian people is 4.6 which means that for every 100 people there are 460 damaged teeth or every Indonesian citizen has 4-5 carious teeth. The high rate of dental caries is supported by the fact that the

level of knowledge of Indonesian people about the importance of brushing their teeth properly is still very low.

Tooth decay is caused by the formation of plaque on the teeth. Plaque is formed because sugar in the mouth invites bacteria to come. Plaque is highly acidic and wears away tooth enamel. This is the initial stage of the cavities process. As the tooth cavity widens, bacteria in the mouth can attack the tooth pulp (living tissue in the tooth) and cause inflammation which can progress to an infection called an abscess. This process is quite painful and very uncomfortable, not including the very expensive medical costs. However, dental caries can be prevented by cleaning your teeth with a toothbrush and dental floss, eating the right foods, and regular visits to the dentist for cleaning and dental check-ups. School age is a time to lay a solid foundation for the realization of quality human beings and health is an important factor that determines the quality of human resources. The role of schools is very necessary in efforts to maintain children's oral and dental health, because environmental factors, one of which is school, have great power in determining behavior.

Everyone's behavior will be different from others, but keep in mind that behavior can be formed from childhood. The closest home environment, namely parents, siblings, and caregivers is the main shaper of behavior in children. Parents also have an important role in caring for the dental and oral health of their children. Many parents never imagine that their child's teeth and mouth problems can affect their child's development. So, parents should pay attention to the health of their children's teeth and mouth. Parents must teach their children how to care for their teeth properly, namely by setting an example of how to brush their teeth properly. The process of brushing teeth in children with a frequency that is not optimal can be caused because children are not accustomed to brushing their teeth early by their parents, so that children do not have the awareness and motivation to maintain the cleanliness and health of their teeth and mouth (Veld, 993).

2. METHODS

This study used an experimental method with a one shot case study design without a control group. The research object was all students of SD Negeri 2 Baumata Timur grades 1 to 6 with a total of 126 students. The data collection technique was that all students examined their oral cavity and the results of the examination were recorded in the DMF-T/def-t index format to determine the incidence of caries. After that, it is continued with an explanation of the use of dental health control cards that will be used by students as a medium to record brushing behavior in the morning after eating and at night before going to bed. Each student is given a control card to fill in every morning and evening for 90 calendar days. Monitoring for every child who has received a card is carried out every 30 days. After 90 days, the condition of the teeth was evaluated by re-examining dental caries. The results of the research were carried out by the Wilcoxon Signed Ranks Test

3. FINDINGS AND DISCUSSION

SD Negeri 2 Baumata Timur is one of the elementary schools in the Taebenu District, Kupang Regency. Administratively, it is included in the working area of the Baumata Health Center.

		Caries category before _PRE intervention					Total
		Very	Low	Medium	High	Very High	
		low					
Condon	Male	56	5	0	4	1	66
Gender	Female	44	9	2	6	1	62

 Table 1. Results of gender crosstabs with caries categories before intervention with dental health control cards

Total	100	14	2	10	2	128
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Table 1 illustrates that before the intervention, the majority of students were in the very low caries category.

 Table 2. Results of gender crosstabs with caries category after intervention with dental health control cards.

		Caries category after _PRE intervention					
		Very low	Low	Mediu	High	Very High	
				m			
Gender	Male	56	5	0	4	1	66
	Female	44	9	2	6	1	62
Total		100	14	2	10	2	128

Table 2 shows that after the intervention, the majority of students are in the very low category.

		Category of dental caries before intervention					Total
		Very low	Low	Mediu	High	Very High	
				m			
	Grade 1	26	0	0	0	0	26
	Grade 2	15	2	1	1	0	19
Grade	Grade 3	18	5	0	4	0	27
Grade	Grade 4	10	1	0	1	1	13
	Grade 5	12	4	0	2	0	18
	Grade 6	19	2	1	2	1	25
Total		100	14	2	10	2	128

 Table 3. Results of class crosstabs with caries category before intervention with dental health control card.

Results and discussion contain the results of research findings and their scientific discussion. Write down scientific findings (scientific finding) obtained from the results of research that has been carried out but must be supported by adequate data. The scientific findings referred to here are not the research data obtained. These scientific findings must be explained scientifically including: What scientific findings were obtained? Why did it happen? Why is the trend variable like that? All of these questions must be explained scientifically, not only descriptively, if necessary supported by adequate scientific basis phenomena. In addition, comparisons must also be made with the results of other

researchers who have almost the same topic. Research results and findings must be able to answer the research hypothesis in the introduction section.

		KAT_POST					Total
		Very low	Low	Mediu m	High	Very High	
	Grade 1	26	0	0	0	0	26
	Grade 2	15	2	1	1	0	19
Crale	Grade 3	18	5	0	4	0	27
Grade	Grade 4	10	1	0	1	1	13
	Grade 5	12	4	0	2	0	18
	Grade 6	19	2	1	2	1	25
Total		100	14	2	10	2	128

 Table 4. Results of Class Crosstabs with Caries Category After Intervention with Dental Health

 Control Cards

From tables 3 and 4 above, it can be seen that the majority of students in grades 1 - 6 have a very low incidence of dental caries.

The results of the univariate analysis are shown in Tables 5, 6 and 7 below.

	Statistics						
		After Breakfast	Night Before Sleeping				
NI	Valid	128	128				
IN	Missing	0	0				
Mean	l	89.92	79.68				
Minimum		80	70				
Maximum		90	88				

Table 5. Frequency of Teeth Brushing Days Using a Control Card

Table 6. Frequency Distribution of Tooth Brushing After Breakfast

After Breakfast						
Frequency Percent						
Valid	80	1	.8			
	90	127	99.2			
	Total	128	100.0			

Night Before Sleeping							
		Frequency	Percent				
	70	5	3.9				
	75	26	20.3				
	76	4	3.1				
	77	4	3.1				
	78	17	13.3				
Valid	80	27	21.1				
vanu	81	4	3.1				
	83	8	6.3				
	84	4	3.1				
	85	25	19.5				
	88	4	3.1				
	Total	128	100.0				

Table 7. Frequency Distribution of Tooth Brushing Before Sleeping

The results of the bivariate analysis are shown in Tables 8.9 and 10 below

Table 8. Descriptive Statistics

Descriptive Statistics							
	Ν	Mean	Std. Deviation	Minimum	Maximum		
DMF_T_PRE	128	.91	1.455	0	8		
DEF_T_PRE	128	2.84	3.052	0	13		
KAT_PRE	128	1.44	.970	1	5		
DMF_T_POST	128	.91	1.455	0	8		
DEF_T_POST	128	2.84	3.052	0	13		
KAT_POST	128	1.44	.970	1	5		

Tabel 9.Wilcoxon Signed Ranks Test

Ranks						
		Ν	Mean Rank	Sum of Ranks		
	Negative Ranks	0 ^a	.00	.00		
DMF_T_POST -	Positive Ranks	0 ^b	.00	.00		
DMF_T_PRE	Ties	128c				
	Total	128				
	Negative Ranks	0 ^d	.00	.00		
DEF_T_POST -	Positive Ranks	0e	.00	.00		
DEF_T_PRE	Ties	128 ^f				
	Total	128				
	Negative Ranks	0g	.00	.00		
VAT DOCT VAT DDE	Positive Ranks	0 ^h	.00	.00		
KAI_FOSI - KAI_FKE	Ties	128 ⁱ				
	Total	128				

Test Statistics ^a			
	DMF_T_POST -	DEF_T_POST -	KAT_POST - KAT_PRE
	DMF_T_PRE	DEF_T_PRE	
Z	.000 ^b	.000 ^b	.000 ^b
Asymp. Sig. (2-tailed)	1.000	1.000	1.000

Table 10. Statistical Test

From Tables 8, 9, and 10 it can be seen that the results of the Wilcoxon Signed Ranks Test showed a significant value of p 1.000 > 0.05, which means there was no difference before and after treatment.

This study was to determine the effect of dental and oral health control cards as an effort to prevent dental caries in children in the new normal era at SD Negeri 2 Baumata Timur, Taebenu District, Kupang Regency. The results of the study showed that the behavior of brushing teeth consistently for 90 days by students at home, namely in the morning after eating and at night before going to bed using a dental and oral health control card can prevent the risk of dental caries in children. This is because every student after brushing their teeth can put a sticker on the brushing column both in the morning and at night. Prevention of dental caries can be effective if students have the habit of brushing their teeth and consistently brush their teeth properly and correctly. The results of dental caries evaluation after the intervention using the dental and oral health control card showed that there was no caries risk or caries incident during 90 days of brushing teeth regularly and consistently.

On average, the majority of children who had dental caries before the intervention (56 students) had very low caries, 5 students had low caries, 4 students had high caries and 1 student had very high caries. For girls, 44 students had very low caries, 9 students had low caries, 2 students had moderate caries, 6 students had high caries and 1 student had very high caries.

4. CONCLUSION

The habit of brushing teeth in the morning after eating and at night before going to bed if consistently done can prevent the risk of dental caries in children. It is recommended that there be education about the importance of consistent tooth brushing for school-age children.

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