



The effect of the dental health training on the pattern of guidance to brush your teeth by parents of first-class students in elementary school SDN Luginasari I, II and Sukagalih VII Bandung City

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Abstract. **Background :** The most effective efforts to prevent caries are brushing teeth regularly in the morning after breakfast and at night before sleeping with a good technique. Every child should get guidance brushing continuously, especially in children who do not have the ability to brush teeth properly. The role of parents is very necessary to guide their children at home, so that changes in children's behavior in maintaining healthy teeth and mouth can be achieved. The purpose of this study is to know the influence of the parents dental training to their pattern of guidance behaviour for teeth brushing first grade student at SDN Luginasari I, II and VII Sukagalih Bandung by measuring the increased of student's hygiene index before and after training. This research is expected to be a guidance for the parents in conducting a good teeth brushing method for their children.

Methods : This research is a quasi-experimental design with pre and post test. The study population was parents of the SDN Luginasari class I, II and VII Sukagalih Bandung, with a purposive sampling taken about 58 people. Analysis of data is using one tail t-tests dependent method.

Results : The results showed there was an increasing of Hygiene Index in children after the parents training. The children with criteria good HI was increase from 38% to 98%. Test one dependent tail t-test showed the results of the t-count larger than t-table so H_0 rejected and H_a accepted.

Conclusion : It can be concluded that is a significant effect of the parents dental training to their pattern of guidance behaviour for teeth brushing first grade student at SDN Luginasari I, II and VII Sukagalih Bandung.

Introduction

Department of Health Polytechnic Department of Dental Nursing in Bandung (JKG Bandung) has six UKGS-built elementary schools which have become student practice areas for more than five years namely SD N Luginasari I & II, SD N Sukagalih I & II, and SD N Harapan I & II. Every day, taking turns, students practice guiding activities to brush teeth together. Each class gets a displacement bringing together a minimum tooth. One indicator that supports this activity is support for brushing students' teeth which are combined with the support of their teeth and mouth hygiene. If this can be obtained, then the next indicator of success is not increasing the number of new caries cases for students in the target elementary school. However, in the discussion, new caries cases were always found in the results of evaluations conducted by students every year. In addition, problems were also changed, the criteria changed for the Simplified Oral Hygiene Index (OHI-S) of students from "good" to "moderate", which meant

there was a change in their teeth and mouth hygiene. The activity of brushing teeth together which was carried out at UKGS all this time was by instructing and guiding elementary students guided by brushing teeth using a combination technique, namely a combination of horizontal, vertical and roll techniques. The combination of these three techniques discusses the most effective brushing technique because it can save plaque on the entire surface of the tooth. The joint brushing activity carried out at UKGS so far is by instructing and guiding elementary students guided by brushing teeth using a combination technique, such as a combination of horizontal techniques, vertical and roll. This combination of three techniques reverses the most effective brushing technique because it can free up plaque on most tooth surfaces.

Experimental Section

Method :

Research Type is Quasi-Experiment, and Research Design is Pre-test post-test. Location is at Luginasari Elementary School I, II, and Sukagalih VII Bandung City. The population are the Parents of the First-year students. The sample of study is Parents of the first-grade students purposive sampling with consideration of Inclusive criteria is the Parents are cooperative and want to research respondents, High school level education. The Exclusion criteria is the Parents of students who are/ not in high school. Sampling is done by categorical analytical techniques in pairs.

$$n_1 = n_2 = \frac{(Z\alpha + Z\beta)^2 \pi}{(P_1 - P_2)^2}$$

Error type 1 is 5%, one-way hypothesis with Z as 1.96, and the result of the minimum sample is 58 people.

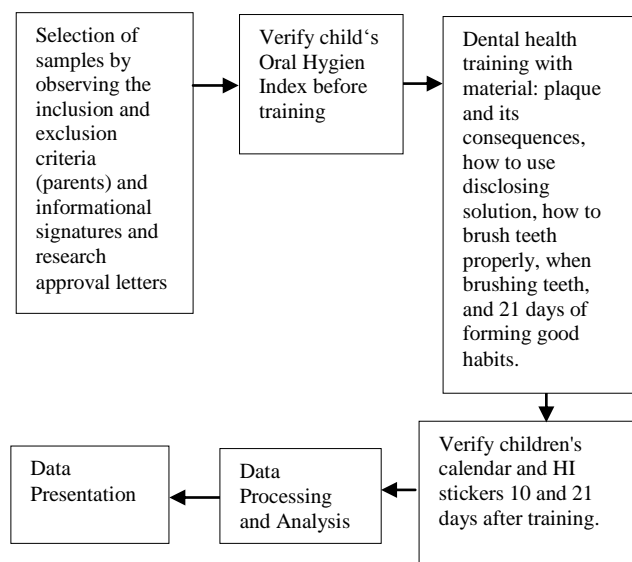
Research tools and materials:

Dental and oral health kit consisting of Phantom, flipchart training material book, toothbrush, toothpaste, mirror, disclosing solution, gargle glass ; Slabber/apron; Gloves/gloves ; Mask ; Observation measurement / checklist form

How it works:

STAGE I : 1. Selection of samples by taking into account the inclusion and exclusion criteria (parents) and informational signatures and research approval letters ; 2. Verify the child's Hygiene Index data before training ; 3. Dental health training with material: plaque and its consequences, how to use disclosing solution, how to brush teeth properly, when brushing teeth, and 21 days of forming good habits ; 4. Verify calendar stickers brushing teeth ; 5. Verify the child's Index Hygiene data ten days and 21 days after training.

STAGE I : 1. Data processing and analysis ; 2. Presentation of data



Hypothesis testing is one tail t dependent test.

Results and Discussion

From the 58 samples obtained data on dental and oral hygiene (HI) results from brushing their children's teeth before training (HI 1), ten days after training (HI 2) and 21 days after training with the following data:

Table 4.1 Child HI Data Before 10 Days and 21 Days After Training

HI CRITERIA	CHILD NUMBER		
	HI 1	HI 2	HI 3
GOOD	24	52	57
BAD	34	6	1
TOTAL	58	58	58

Description: HI 1 = before training, HI 2 = 10 days after training, HI 3 = 21 days after training

The table above shows that before the training, the results of the HI examination after brushing teeth from 59% of the respondent's children were still poor. This also means that the technique of brushing their teeth is also not good. Ten days after the training, it was found that only 10% of children were still in poor hygiene index. 21 days after the training it was found that only 2% of children still had poor HI criteria.

Table 4.2 Data on Parenting Teaching Guidance

ELEMENTS OBSERVED	SUM
Guiding after breakfast and the night before going to bed 21 consecutive days	32
Did not guiding after breakfast and the night before going to bed 21 consecutive days	26
AMOUNT OF RESPONDENTS	58

Table 4.2 shows that 55% of respondents guided after breakfast and the night before going to bed 21 consecutive days. While the remaining 45% did not do it in a row.

Table 4.4 One Tail T-Test Dependent Test Results

	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower				Upper
Pair 1 Score HI Sebelum Pelatihan - Score HI 21 hr Setelah Pelatihan	32.20%	22.71%	2.98%	38.17%	26.23%	10.80	57	.000

Table 4.4 shows that the t-count value is 10.80 while the t-table for the degree of freedom (df) 57 with a probability of 5% is 2.00. Thus t count is greater than t table. This means that there is the influence of dental health training on the pattern of guidance in brushing the teeth of parents of first grade students.

Discussion

The results showed that the guidance pattern of brushing teeth by parents of first-grade students before the training provided the HI results of children with good criteria of 59%. This is very possible because parents do not know the techniques for brushing teeth that are good for their children to teach.

While the guidance pattern for brushing teeth by parents of first-class students after training provides children's HI results with good criteria of 98%. This happens because parents already know the technique of brushing teeth is good to teach their children. In addition, parents are also provided with knowledge about how to see plaque that adheres to the surface of the tooth by using disclosing solutions so that parents can tell their children whether they brush their teeth clean or not.

The statistical test results (table 4.5) using one tail t-test dependent obtained a calculated t value greater than t table which means that H_0 is rejected or H_a is accepted, meaning that there is an influence on dental health training on the guidance pattern of brushing parent teeth to children. This can also be seen from the criteria of HI resulting from brushing a child's teeth which initially 59% of children had a bad criterion changed to only 2%.

However, the percentage of parents who guide their children to brush their teeth after breakfast and the night before going to bed for 21 consecutive days is only 55%. Many factors can cause 45% of parents do not guide their child for 21 consecutive days. Factors of the busyness of parents may be one of the causes. The guiding pattern of brushing parents' teeth to children is intended to form a habit about maintaining the health of their teeth and mouth. This good habit can be formed if done for 21 consecutive days without interruption. If these good habits can be established early, dental and oral health problems, especially caries, can be prevented.

This study also shows evidence that the role of parents in guiding children to brush their teeth is very important because parents have a more intense time in educating their children when compared to teachers or cadres. This is in line with the opinion of Yusuf and Juntika (2005) which states that children identify themselves with their

parents before making an identification with others. For this reason, it is also necessary to conduct a study to compare the differences in the results of dental health training given to teachers or cadres with training given directly to parents.

Conclusion

The results and discussion of the research on the Effect of Dental Health Training on the Pattern of Guidance on Brushing Teeth of First Class Students at Luginasari I, II, and Sukagalih VII Elementary Schools in Bandung City, can be concluded: Child HI results with good criteria as much as 59%. The pattern of guidance in brushing teeth by parents of first-year students after training provides 98% of the children's HI outcomes with good criteria. The difference between child HI before and after training is 38%, from only 59% of children who have the criteria "Good" to 98%, the meaning is quite significant. One-tailed t-test dependent test shows the results of t-count are greater than t-table which means that H_0 is rejected and H_a is accepted. Thus it can be concluded that the influence of dental health training on the pattern of guidance in brushing the teeth of parents of first-grade students.

Competing Interest

The authors of this paper have no competing interest to report.

Acknowledgement

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