

Increasing dental and oral health knowledge through health promotion of demonstration



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ABSTRACT

Introduction: Dental and oral diseases are experienced by many children, especially kindergarten or elementary school children. Health promotion with a demonstration method with props is one of the first steps in conveying dental health knowledge and a mouth that is easy to understand by children, using a humorous approach, the demonstration method is one of the most effective methods. The purpose of the study was to determine the effect of counseling demonstration method on increasing knowledge about dental health and mouth in Children at TPQ Al Jakfar Tiris Probolinggo.

Methods: Methods: this study used a pre-experimental design that used a one-group pretest-post-test approach with a design of 20 students. The type of research is used quasi-experimental with pretest-posttest design with control group design. The research subjects were divided into the treatment group (20 people) and the control group (17 people). The research sample is based on purposive sampling. Questionnaire to measure knowledge and check list to measure skills. Data analysis used paired t-test.

Results: The research shows that there is an effect of demonstration method counseling on increasing knowledge about dental and oral health in children at TPQ Al Jakfar Tiris Probolinggo. From the analysis results showed that the significant data equal to <0.001 , $p < \alpha = 0,05$ the result is H1 is accepted.

Conclusion: Health promotion methods with demonstration models have an effect on increasing knowledge about dental and oral health in children at TPQ Al Jakfar Tiris Probolinggo.

Keywords: Knowledge, demonstration method, oral health *r.*

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INTRODUCTION

Dental and oral health is very important and affects a person's overall health. Based on data in 2021, it shows that as many as 57.6% of the community get problems in the teeth and mouth and get treatment at the dental health service center. Community behavior, especially in maintaining dental health, is currently lacking in 2.8% of the population, and awareness to maintain dental and oral health decreases at the age of 3 years.¹ This is what underlies various dental and oral problems, one of which is dental caries whose prevalence has reached 60-90% in school-age children and almost 100% in adults. This problem will certainly cause pain and discomfort for the sufferer.²

The most important factor in supporting dental and oral health is knowledge. Knowledge of maintaining dental and oral health includes both

theoretical and practical prevention to produce more optimal oral and dental health. Maintaining oral health starting from an early age to adulthood is often associated with better oral health.³ Therefore, increasing public knowledge, especially at an early age, is very important to improve dental and oral health and avoid diseases related to an unhealthy lifestyle so that it has a direct impact on dental and oral health.⁴

One way that can be used to increase understanding of dental and oral health is to provide dental and oral health promotion. The purpose of this health promotion is to motivate patients to clean their teeth and mouth effectively. This method can also encourage and invite patients to be aware of the importance of maintaining oral hygiene which is the basis of dental and oral health.⁵ Considering that this problem is not only experienced by adults but an additional method is

also needed, namely demonstration so that children can see and practice directly how to maintain oral health and prevent diseases related to impaired oral hygiene.⁶ The purpose of this study was to determine the effect of the demonstration method on increasing knowledge about dental and oral health.

METHODS

General Background of Research

In this study used a pre-experimental design that uses a one-group pretest-post-test approach with a design of 20 students. In this method, the subject group is observed before the counseling is carried out. This research was carried out by children at TPQ Al Jakfar Tiris Probolinggo on february - March 2020.

The population in this study is Children in TPQ Al Jakfar Tiris Probolinggo as many as 20 TPQ children.

Determination of sample criteria is very helpful for researchers to reduce the usual research results, especially on variables (confounders) that turn out to have an influence on the variables studied.⁷

Sample of Research

Sampling in this study the subjects of this study were all children in TPQ Al Jakfar Tiris Probolinggo. In this study the sample will be taken using a total sampling technique. In this study, the independent variable used was the demonstration method extension. The dependent variable in this study is the knowledge of oral health.

Instrument and Procedures

Instruments Collecting data from this study used asking questions with a checklist sheet brushing teeth before and after the demonstration method counseling. The validity of the check list was tested with the Pearson correlation test with a significant level α is 5% (0,05) used *Statistical Product And Service Solution* (SPSS) 16, with the criteria if the probability is less than 0,05 then the question items in the instrument are declared valid. In this study, the validity test was carried out using an observation/check list. In this study, a reliability test was carried out using an observation sheet/check list.

Data Analysis

To test the hypothesis which states that there is an effect of demonstration method counseling on increasing knowledge about dental and oral health in first grade children. This extension is used statistical test "T-Test Paired" used computer media programs "Windows SPSS 16". Then the researcher concludes the results of the study "If the value of p value $< 0,05$ so H1 is accepted, H0 rejected, and when the value p value $> 0,05$ then H1 is rejected, H0 is accepted, meaning that there is an effect of counseling demonstration methods on increasing knowledge about dental and oral health".

RESULTS

The results of the study on the effect of demonstration method counseling on increasing knowledge about dental and oral health in children at TPQ Al Jakfar

Tiris Probolinggo is found data.

Based on Table 3, it was found that children in TPQ Al Jakfar Tiris the level of knowledge about oral dental health before the demonstration method counseling was carried out in the good category was 2 respondents (10%) and those who entered the sufficient category were 6 respondents (30%) and those included in less categories were 12 respondents (60%).

Based on Table 4, data obtained in the good category amounted to 20 respondents (100%) and included in the sufficient category were 0 respondents (0%), and in the less category were 0 respondents (0%).

Based on table 5 above, the results show that of the 20 respondents prior to the counseling on the level of knowledge about dental and oral health there were 2 respondents (10%) who were in the good category, and those included in the sufficient category were 6 respondents (30%), and those who were in the less category.

Analysis of the effect of demonstration method counseling on increasing knowledge about dental and oral health in grade 1 children, the results of the Paired

Samples T-Test statistical test obtained significant data of 0.000, $p < \alpha = 0.05$, which resulted in H1 being accepted so that there was an effect of demonstration method counseling. on increasing knowledge about dental and oral health in children at TPQ Al Jakfar Tiris Probolinggo.

DISCUSSION

Level of Knowledge About Dental and Oral Health Before Counseling About Dental and Oral Health

Based on the results of the study, it was found that before the counseling on dental and oral health was included in the good category, there were 2 respondents (10%), and the sufficient category were 6 respondents (30%), while the less category were 12 respondents (0%).

Students who do not know about dental and oral health because the first factor is age that does not know the importance of dental and oral health and gender also affects the level of knowledge because there are mostly women who understand the level of knowledge about dental and oral health and more ranges are male than

Table 1. Distribution by Age.

Age	Frequency (f)	Percentage (%)
4 years	8	40
5 years	12	60
amount :	20	100

Table 2. Distribution of Respondents by Gender.

Gender	Frequency (f)	Percentage (%)
Male	9	45
Female	11	55
amount :	20	100

Table 3. Distribution based on previous Student Knowledge.

Knowledge level	Frequency (f)	Percentage (%)
Good	2	10
Sufficient	6	30
Less	12	60
amount :	20	100

Table 4. Distribution based on Student Knowledge after Demonstration.

Knowledge level	Frequency (f)	Percentage (%)
Good	20	100
Sufficient	0	0
Less	0	0
amount :	20	100

Source: Research Observation Data 2020

Table 5. Distribution of Respondents Frequency Based on the Effect of Demonstration Method Counseling on Increasing Knowledge about Dental and Oral Health.

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences			95% Confidence Interval of the Difference				
Mean	Std. Deviation	Std. Error Mean	Lower	Upper					
Pair 1	before - after	-1.474	0.697	0.160	-1.809	-1.138	-9.220	18	<0.001*

Analysis was carried out using paired sample t test; *Significant if $p < 0,05$.

female. From the description of the facts above, it can be concluded that the level of knowledge about dental and oral health is still in the sufficient category

Counseling is a process of changing behavior among the community so that they know, are willing and able to make changes in order to achieve increased production, income, or profits and improve their welfare.⁸ Counseling is a non-formal learning process to a certain group of people, where dental and oral health counseling is expected to create a good understanding of dental and oral health.⁹ Factors that affect knowledge consist of age, education, occupation, sources of information, gender factors can also affect the level of knowledge because before counseling the level of knowledge is very low. Age factor is a variable that is always considered in research that affects knowledge because with age students are less able to know about dental and oral health. Education is one of the factors that influence a person's perception. Source of information is everything that becomes an intermediary in the delivery of information, information media for mass communication.¹⁰

In accordance with the description above, it showed that all children in TPQ Al Jakfar Tiris Probolinggo as many as 12 respondents (60%) who fall into the category of lack of increased knowledge about dental and oral health, due to lack of knowledge about dental and oral health and the benefits of dental and oral health and habits are one of the factors for the low level of knowledge about dental and oral health.

Knowledge Level of Dental and Oral Health After Counseling on Dental and Oral Health (Brushing Teeth)

Based on the results of the study, it was found that after counseling about dental

and oral health was obtained, children at TPQ Al Jakfar Tiris Probolinggo totaling 20 respondents, all of them were into the good category, and those who are into the sufficient category are 0 respondents (0%), and those are in the less category are 0 respondents (0%).

From the results of observations that have been carried out for 14 days, from March 13 to March 28, 2020, it was found that all students with a level of knowledge about dental and oral health who were in the good category were 20 respondents (100%). All students reasoned because they were afraid of the dangers of disease about teeth and mouth. They are afraid of having cavities or when they grow up their teeth will become more porous. In the majority of the main reasons all students know about dental and oral health, namely students are afraid of the impact if they know about dental and oral health, so that all students know about dental and oral health after counseling. Factors that affect knowledge after counseling the level of knowledge increases, namely based on the age of students who are 5 years old there are 12 students (60%) and 4 years old 8 students (40%) because they have already known about dental and oral health.

Health education is an application of the concept of education in the health sector. In terms of education, health education is a practical pedagogy or educational practice. Health education is essentially an activity or effort to convey health messages to the community or individuals. The purpose of health education is an effort to convey health messages to the community or individual. With the hope that with this message, the community, group or individual can gain knowledge about better health.¹¹

In line with the theory above, the research results show that after counseling about increasing knowledge about

dental and oral health 20 respondents (100%) were in the good category, and 0 respondents (0%) in the sufficient category and 0 respondents in the less category. totaling 0 respondents (0%). So the researchers argued that increasing knowledge about dental and oral health can increase students' knowledge to behave healthier, namely doing dental and oral health.

The Effect of Demonstration Method Counseling on Increasing Knowledge about Dental and Oral Health in Children at TPQ Al Jakfar Tiris Probolinggo

After statistical tests were carried out using the Paired Sample T-Test, significant data was obtained at p value = 0.001 so that p value = 0.001 $<$ = 0.05 which resulted in H_1 being accepted so that there was an effect of counseling demonstration methods on increasing knowledge about dental and oral health in children at TPQ Al Jakfar Tiris Probolinggo.

From the statistical test results above, it was found that all children in TPQ Al Jakfar Tiris Probolinggo The level of knowledge that is categorized as sufficient is due to habits and lack of knowledge about the importance of dental and oral health. Some students before the counseling the level of knowledge about dental and oral health was categorized as quite reasonable, the level of knowledge about dental and oral health was still less good. However, after counseling about dental and oral health for all children in TPQ, Al Jakfar Tiris Probolinggo as many as 20 respondents, all of whom have knowledge about dental and oral health which are in the good category (100%). For fear of the danger that will be caused by dirt on the teeth. Because of that fear all the children in TPQ Al Jakfar Tiris Probolinggo knowing about dental and

oral health.¹¹

Knowledge is personal and interest is individual. That is, everyone has knowledge that can be different from the knowledge of others knowledge arised from within a person when something that is known is useful, can be felt, experienced in real terms, and when external parties are also pushing in that direction. Knowledge is closely related to one's motivation, something that is learned, and can change depending on needs, experience and trending fashion, not in labor. Factors that influence the emergence of one's knowledge depend on physical, social, emotional, and experiential needs.¹¹

In line with the theory above, when the level of knowledge about dental and oral health is good through counseling demonstration methods on dental and oral health, if it is not supported by facilities from parents, knowledge about dental and oral health will remain low.

CONCLUSION

The conclusions from the results of the demonstration method counseling research on increasing knowledge about dental and oral health in children at TPQ Al Jakfar Tiris Probolinggo The results of the analysis show that statistical tests using the paired samples T-Test statistical test obtained significant data of p value = 0.001 so that p value = 0.001 < α = 0.05 which results in H1 accepted so that there is an effect of demonstration method counseling on increasing knowledge about

dental health and mouth in Children at TPQ Al Jakfar Tiris Probolinggo.

AUTHOR CONTRIBUTION

All authors equally contribute to the study from the research concepts, data acquisitions, data analysis, statistical analyses, revising the paper, until reporting the study results through publication.

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CONFLICT OF INTEREST

There is no conflict of interest for this manuscript.

ETHICAL CONSIDERATION

This research was approved by the Health Research Ethics Committee of University Nahdlatul Ulama. Letter of exemption Ref. No. 1883/EC.KEPK/UMS/2020.

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