



THE EFFECT OF COUNSELING USING TOOTH BRUSHING POSTERS ON TOOTH BRUSHING BEHAVIOR CHANGES IN PRESCHOOL CHILDREN AT KINDERGARTEN SANTA MARIA PARE

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Article info	ABSTRACT
<p>Corresponding Author:</p> <p>Astri Yunita astrinipongyunita07@gmail.com STIKes Bhakti Mulia, Kabupaten Kediri</p>	<p>The prevalence of dental caries aged 0-16 years in Indonesia is very high, namely 90%. Vargas, Crall, and Schneider from the United States reported that 61% of a sample of children aged 6-12 years had at least one primary tooth that had caries or filling. The aim of the research was to determine the effect of counseling using posters on learning to brush the teeth on changes in tooth brushing behavior in pre-school children. The research design was experimental using pre-post group intervention. The research sample was 48 respondents at Kindergarten Santa Maria Pare. The independent variable is education using tooth brushing posters, while the dependent variable of the research is tooth brushing behavior. The research instrument used tooth brushing posters for education and behavioral questionnaires. The analysis test uses the Wilcoxon test. The results showed that there was an influence of counseling using posters on learning to brush your teeth on changes in tooth brushing behavior in pre-school children ($p=0.000$). Health institutions in UKGS activities can provide education using tooth brushing posters in schools on a regular basis.</p>
	<p>Keywords: <i>Counselling, Poster, Tooth brushing, Behavior</i></p>
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INTRODUCTION

Dental and oral health is an integral part of complete human health, thus dental health efforts will play a role in improving the quality and productivity of human resources. Dental health is important because food digestion begins with the help of teeth. Including maintaining dental health in school children is also very important (Noviani et al., 2023). The problem is that not all children necessarily have good behavior in dental care, including brushing their teeth. In the end, the number of children suffering from dental caries is still high (Sukarsih & Silfia, 2020).

The prevalence of dental caries aged 0-16 years in Indonesia is very high, namely 90%. Vargas, Crall, and Schneider from the United States reported that 61% of a sample of children aged 6-12 years had at least one primary tooth that had caries or filling. In another study of the permanent teeth of 4,116 children aged 6-14 years, 40% had at least one permanent tooth

that was carious or filled (Wahyuningtyas et al., 2022). In East Java, the number of children requiring dental treatment is 402,098 children and those who have received treatment are 261,133 children (64.94%) (East Java Health Office, 2011). In Kediri Regency, based on the results of School Dental Health Business (UKGS) activities, through dental health examinations on 1318,723 children (40.31%) it was found that 395,633 children needed treatment and 236,586 children (59.80%) had received treatment (District Health Office Profile. Kediri, 2014). The results of a preliminary study on 24 November 2015 at Kindergarten Santa Maria Pare-Kediri of 10 children showed that 4 children experienced dental caries while 6 children did not experience dental caries.

There are still many inappropriate or incorrect teeth grinding behaviors in children which can be caused by various factors. In theory, children will be able to brush their teeth properly if they receive guidance from their family, whether father, mother or other family members. This basic knowledge is very important because brushing teeth is a technical skill. For children who are already at school, their ability to brush their teeth also depends on the guidance of teachers at their school (Nurmalasari et al., 2021). This also includes technical guidance for health workers when carrying out UKGS (Dental and Oral Health Business) activities. According to Green, as quoted by Notoatmodjo, behavior is influenced by knowledge. So in this case knowledge is the basis for creating correct tooth brushing behavior. The impact if there is a lack of knowledge means brushing your teeth incorrectly. A further impact is the emergence of dental and mouth pain (Notoatmodjo, 2015).

Considering these problems, various efforts are needed to change the tooth brushing behavior of pre-school children. One strategy is through health education or health education. There are many methods and methods that can be done using various media (Senjaya & Indrayani, 2017). Posters are a static medium and prioritize visual messages. Generally it consists of a description of a number of words, pictures or photos in color. Other print media besides posters are leaflets, brochures, magazines, newspapers, stickers, pamphlets (Mozartha et al., 2023).

Based on the above, the researcher is interested in conducting research by formulating the title of the research article: "The Effect of Counseling Using Posters on Learning to Brush Teeth on Changes in Teeth Brushing Behavior in Pre-School Children at Kindergarten Santa Maria Pare".

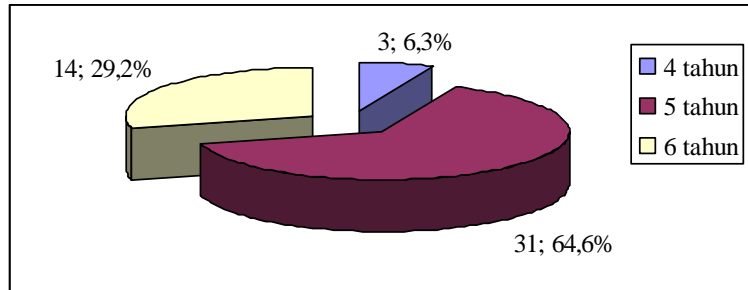
METHOD

The research design is experimental using pre-post group intervention. The research was conducted in October 2023 at Kindergarten Santa Maria Pare, Kediri Regency, East Java. The research population was all 48 students from Santa Maria Pare Kindergarten. The total research sample was 48 respondents, with a total sampling technique. Inclusion criteria: respondents actively communicate and are easy to talk to and are not sick. The independent variable is education using tooth brushing posters, while the dependent variable of the research is tooth brushing behavior. The research instrument used toothbrushing posters for counseling and behavioral questionnaires. Primary data was collected by recording the respondents' toothbrushing behavior and demographic data. The analysis technique used is univariate data analysis and the bivariate analysis used is the Wilcoxon test using SPSS.

RESULT AND DISCUSSION

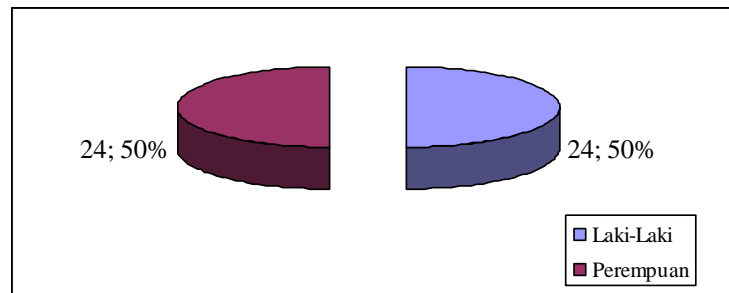
Finding

Diagrams 1, 2, 3, 4 and 5 explain the general data of respondents at Kindergarten Santa Maria Pare, explained as follows:



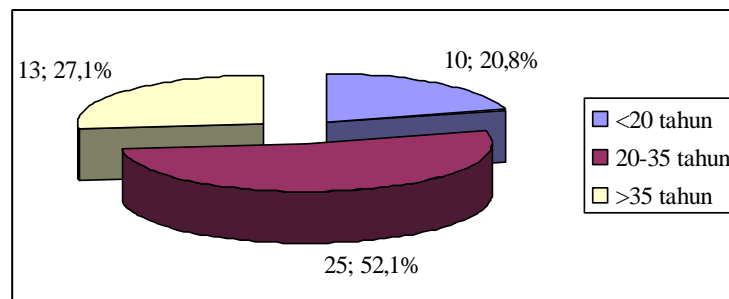
Based on diagram 1, it is known that the majority of respondents were 5 years old, namely 31 respondents (64.6%).

Diagram 2 Gender of Respondents at Kindergarten Santa Maria Pare



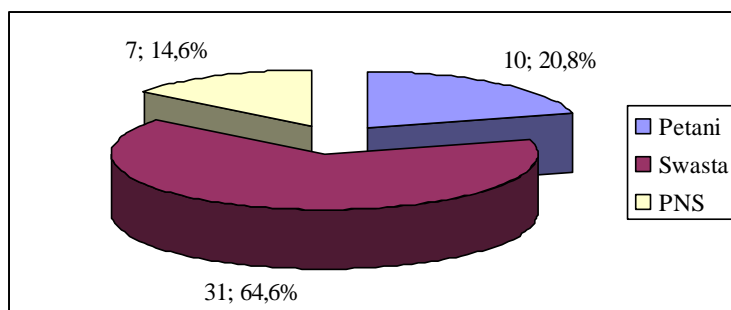
Based on diagram 2, it is known that half of the respondents were male, namely 24 respondents (50%).

Diagram of 3 Age Types of Respondent Parents at Kindergarten Santa Maria Pare



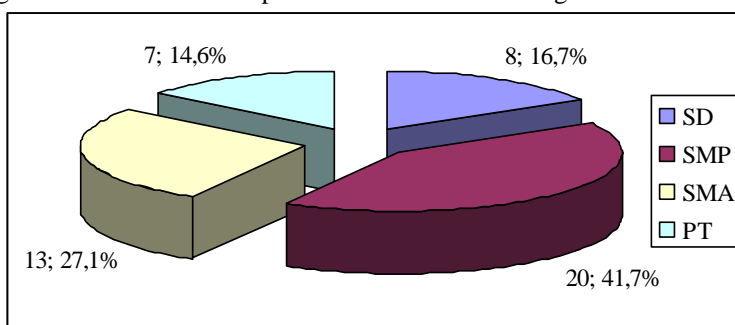
Based on diagram 3, it is known that most of the respondents' parents were aged 20-35 years, namely 25 respondents (52.1%).

Diagram 4 Occupation of Respondent Parents at Kindergarten Santa Maria Pare



Based on diagram 4, it is known that the majority of respondents' parents work in the private sector, namely 31 respondents (64.6%).

. Diagram 5 Education of Respondents' Parents at Kindergarten Santa Maria Pare



Based on diagram 5, it is known that the majority of respondents' parents had junior high school education, namely 20 respondents (41.7%).

Tables 1 and 2 explain specific data on respondents' tooth brushing behavior before and after counseling using tooth brushing posters at the Santa Maria Pare Kindergarten, explained as follows:

Table 1 Teeth brushing behavior in pre-school children before counseling using tooth brushing posters at Kindergarten Santa Maria Pare

No	Pre-Behavior	Frequency	Percentage
1	Less	21	43,8
2	Sufficient	25	52,1
3	Good	2	4,2
Total		48	100,0

Based on table 1, it is known that before the education using posters, the majority of respondents had sufficient behavior in brushing their teeth, namely 25 respondents (52.1%) and only a small portion were considered good, namely only 2 respondents (4.2%).

Table 2. Teeth brushing behavior in pre-school children after counseling using tooth brushing posters

at Kindergarten Santa Maria Pare

No	Post Behavior	Frequency	Percentage
1	Less	9	18,8
2	Sufficient	26	54,2
3	Good	13	27,1
Total		48	100,0

Based on table 2, it is known that after counseling using posters, the majority of respondents had sufficient behavior in brushing their teeth, namely 26 respondents (54.2%) and almost half of the respondents were good, namely 13 respondents (27.1%).

The results of cross tabulation and data analysis of the influence of counseling using posters on learning to brush your teeth on changes in tooth brushing behavior in pre-school children at Kindergarten Santa Maria Pare are explained in tables 3 and 4.

Table 3 Cross Tabulation of the Effect of Counseling Using Learning Toothbrushing Posters on Changes in Tooth Brushing Behavior in Pre-School Children at Kindergarten Santa Maria Pare

No	Tooth Brushing before Counseling Poster	Tooth Brushing after Counseling Poster						Total	
		Less		Sufficient		Good		n	%
		n	%	n	%	n	%		
1	Less	8	16,7	13	27,1	0	0,0	21	43,8
2	Sufficient	1	2,1	13	27,1	11	22,9	25	52,1
3	Good	0	0,0	0	0,0	2	4,2	2	4,2
Total		9	18,8	26	54,2	13	27,1	48	100

Based on table 3, it is known that before counseling using posters, there were 13 respondents (27.1%) whose tooth brushing behavior was sufficient. Respondents who previously behaved quite well were 11 respondents (22.9%). This shows a tendency for influence. Furthermore, the results of the influence analysis can be seen in the following table:

Table 4 Wilcoxon Test Results Effect of Counseling Using Posters on Learning to Brush Teeth on Changes in Teeth Brushing Behavior in Pre-School Children at Kindergarten Santa Maria Pare

No.	Variabel	Z	Asymp. Sig. (2-tailed)
1.	Perilaku Pre-Post	-5.292	0,000
2.	N observasi =48		
3.	$\alpha = 0,05$		

Based on table 4, it is known that the results of the Wilcoxon test analysis obtained the Asymp value. Sig. (2-tailed) of $0.000 < 0.05$. This shows the influence of counseling using posters on learning to brush your teeth on changes in tooth brushing behavior in pre-school children at Kindergarten Santa Maria Pare ($p = 0.000 < 0.05$ so H_0 is rejected).

Discussion

Based on tables 3 and 4, it is known that there is an influence of counseling using posters on learning to brush your teeth on changes in tooth brushing behavior in pre-school children at Kindergarten Santa Maria Pare ($p = 0.000 < 0.05$, so H_0 is rejected). The magnitude of the influence of the 48 respondents was that 28 respondents experienced an increase in tooth brushing behavior, 20 respondents did not experience a change in tooth brushing behavior or the way they brush their teeth remains the same and none of the respondents whose tooth brushing behavior has decreased.

Posters are a form of printed media containing messages or health information, which are usually stuck on walls, in public places, or on public transportation (Ilmi et al., 2023). The aim of the poster is to remind and direct readers towards certain actions according to what the communicator wants. Posters are one of the media for outreach. Health education is increasing a person's knowledge and abilities through practical learning techniques or instructions with the aim of changing or influencing human behavior individually, in groups or in society to be more independent in achieving healthy living goals (R. E. et al., 2023). Behavior is a person's response to stimuli from outside the subject and has two types of response, namely passive form (internal response) and active form (external response). Behavior is a response to a stimulus that is largely determined by the circumstances of the stimulus (Notoatmodjo, 2015).

According to Green in Notoatmodjo, behavior is influenced by 3 factors, namely predisposing factors which are manifested in knowledge, attitudes, beliefs, values and so on. Supporting factors (enabling factors) are manifested in the physical environment, the availability or unavailability of health facilities or facilities, for example health centers, medicines, contraceptives, latrines and so on. Reinforcing factors are manifested in the attitudes and behavior of health workers, or other workers, who are the reference group for community behavior. Brushing teeth is a routine that everyone must follow every day. Before going to bed, it is recommended to brush your teeth to remove food residue stuck to your teeth. Likewise, when you wake up, you must immediately shower and don't forget to brush your teeth so that bacteria that are active during sleep can die (Pasaribu, 2019).

According to Green, as quoted by Notoatmodjo, behavior is influenced by knowledge. So, in this case knowledge is the basis for creating behavior such as correct tooth brushing behavior. Considering this, various efforts are needed to change the tooth brushing behavior of pre-school children. One strategy is through health education or health education. There are many methods and methods that can be done using various media (Widyastuti, 2015). Posters are a static medium and prioritize visual messages. Generally, it consists of a description of a few words, pictures or photos in color. Other print media besides posters are leaflets, brochures, magazines, newspapers, stickers, pamphlets.

If there is an influence of counseling using posters on learning to brush your teeth on changes in tooth brushing behavior in pre-school children, this is because the posters can attract children's attention. Posters are also able to convey messages for a very long time and can be read repeatedly. Posters can be presented in an attractive display that is easy for children to understand. This media is also very informative if it is designed in simple, clear and interesting language. When children forget the steps for brushing their teeth, they can be reviewed and followed. This will make posters an appropriate learning medium. Therefore, it has a fairly high effectiveness value for increasing knowledge and skills in correct tooth brushing techniques (Ilmi et al., 2023). The research results show that after counseling using

posters, the majority of respondents had adequate behavior in brushing their teeth and almost half were good, this is because there is already media that can act as technical instructions that can easily be followed step by step. Posters that are installed can at least arouse children's interest in reading. After reading every day, over time the children will start to memorize step by step and the children will even try new behaviors according to the instructions. In essence, posters act as a one-way learning medium that children can still use. If one child is interested in reading, then usually other children will join in reading. If one child can understand and imitate the instructions, the other children will also follow suit. Generally, poster media can also be read whenever children want to read. because with the poster model there are no limits so it can be re-read according to the reader's wishes. This will be different from other information media, for example television or radio, which are very time limited. This advantage will provide quite effective learning for children. This is because children often forget, often ignore, often don't care, so the stimulus must be carried out continuously, repeatedly and must be done with a fun approach.

CONCLUSION

The conclusion of the research is that before counseling using posters, the majority of respondents had adequate behavior in brushing their teeth, namely 25 respondents (52.1%) and only a small portion were considered good, namely only 2 respondents (4.2%). After counseling using posters, the majority Respondents had adequate behavior in brushing their teeth, namely 26 respondents (54.2%) and almost half of the respondents were good, namely 13 respondents (27.1%). preschool at Kindergarten Santa Maria Pare ($p = 0.000 < 0.05$ then H_0 is rejected).

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