

An overview of the use of dental floss in Pediatric Patients at the Baiturrahmah Dental Hospital



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Abstract

Objective: The purpose of this study was to determine the description of the use of dental floss in pediatric patients in the Baiturrahmah Dental Hospital.

Material and Methods: This type of research is quantitative with a categorical descriptive method with a cross sectional research design. The population was pediatric patients who visited the pediatric patients in the Baiturrahmah Dental Hospital in July 2020. Sampling in this study used the total sampling method. characteristics of the frequency of use of dental floss in children in the pediatric patients in the Baiturrahmah Dental Hospital, Padang.

Results: Showed that the average children in the pediatric patients in the Baiturrahmah Dental Hospital, Padang, were 38.2% not independent in brushing their teeth, 3.9% were not disciplined in using dental floss and 48.7% of parents did not care about bringing their children to the doctor. teeth and 63.2% lack discipline in using dental floss.

Conclusion: Educational institutions are expected to provide education to all their students about the importance of maintaining oral hygiene and so that students understand the importance of oral health.

Keywords: Caries, Dental floss, Oral hygiene

DOI: [10.15562/jdmfs.v7i3.1412](https://doi.org/10.15562/jdmfs.v7i3.1412)

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Introduction

The condition of dental and oral health in Indonesia is still very concerning, 90% of the Indonesian population still suffers from dental and oral diseases.¹ Dental caries and periodontal disease are the most common diseases in the oral cavity, so this disease is a major problem of dental and oral health.²

Oral hygiene is very influential in preventing cavities or caries, gingivitis, periodontitis, as well as preventing bad breath. The disease often suffered by children is dental caries. Dental caries is important in the world of dentistry because this dental disorder can affect anyone regardless of age and if allowed to continue, it will be a source of infection in the mouth, causing complaints of pain. This condition of course will reduce the frequency of attendance of children to school or increase children's absenteeism days as well as interfere with learning concentration, affect appetite and nutritional intake so that it can lead to growth disorders which in turn will affect the nutritional status of children which has implications for the quality of resources.³ Oral and dental health is very important to pay attention to because there are many complaints in children who experience cavities, bleeding gums and porous teeth. Decreased dental health in children often occurs due to the large amount of plaque that has accumulated due to the large amount of leftover food sticking to the teeth, including sweet foods, and can be exacerbated by the lack of knowledge

and attention from parents to the hygiene and health of their children's teeth. Apart from that carbohydrates contained in food, bad brushing habits, and water consumed every day are other factors that cause dental caries.⁴

The factor that plays an important role in the occurrence of caries and periodontal disease is plaque.⁵ Plaque is a soft grayish or yellow deposit that is firmly attached to the tooth surface. If the amount of plaque is small then the plaque cannot be seen, unless stained with disclosing solutions.^{4,5} This will cause ineffective plaque removal on the tooth surface, which will affect the oral hygiene status which can lead to caries and other oral diseases. Dental plaque must be cleaned thoroughly and regularly to prevent caries and other oral diseases.³

Nearly 90% of school-aged children worldwide suffer from dental caries. Meanwhile, according to the Centers of Control Disease Prevention (CDC, 2013), dental caries is a chronic disease that often occurs in children aged 6-11 years (25%) and adolescents aged 12-19 years (59%) even though dental caries itself is preventable diseases. This phenomenon also occurs in Indonesia where 76.2% of Indonesian children in the 12 years age group (approximately 8 out of 10 children) experience cavities.^{4,5} Furthermore, according to the Indonesian Ministry of Health, children under the age of 12 in Indonesia suffer from dental caries as much as 89%.⁵

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Received 19 November 2020
Revised 16 April 2021
Accepted 29 July 2021
Available online 1 December 2022

Dental caries is a disease caused by many factors. The factors that cause caries are the host (teeth and saliva), microorganisms (plaque), substrate (carbohydrates) and added with the time factor). In addition, other predisposing factors that contribute to caries severity include caries experience, socioeconomic, age, gender, geography and behavior towards dental health.⁷

Based on Basic Health Research 2007, 91.1% of Indonesians brush their teeth every day, but only 7.3% of the data brush their teeth properly. The knowledge and attitudes of mothers towards the health or care of children's teeth and mouths are quite good, but their behavior is not in accordance with their knowledge and attitudes, this can be seen in only 50% of children with toothaches who are taken to dental and oral services.

The most common method used to remove plaque is brushing your teeth. Toothbrushes can clean plaque on the buccal, lingual, and occlusal surfaces, but cannot completely clean the interproximal areas.⁶ Interproximal removal of plaque is considered important for maintaining gingival health, prevention of caries and periodontal disease.⁷

One way to clean the interproximal part of the tooth is to use a tool that can penetrate between adjacent teeth. Many products are designed to assist in cleaning the interproximal part of the teeth, one of which is dental floss.⁶ Dental floss is a thread made of nylon filamine or thin monofilament plastic, waxy or non-waxed which is used to remove food residue and plaque on the part interproximal.⁸ Dental floss began to be recommended for cleaning interproximal sections in the late 1960s

Based on the background of the problems that have been described, the problem formulation is obtained, how is the description of the use of dental floss or dental floss effectively in pediatric patients in the Baiturrahmah Dental Hospital.

The purpose of this study was to determine the description of the use of dental floss in pediatric patients in the Baiturrahmah Dental Hospital.

Material and Methods

This type of research is quantitative with a categorical descriptive method with a cross sectional research design. The population was pediatric patients who visited at the Department of Pediatric Dentistry, Baiturrahmah Dental Hospital in July 2020.

Sampling in this study using the total sampling method, which means that all members of the

population are used as samples. The total sample in this study was the total denture treatment patients at the Department of Pediatric Dentistry in July 2020. Dependent variable: The effectiveness of using dental floss.

Research procedure; Ethic consent, licensing for Baiturrahmah Dental Hospital, subjects who meet the inclusion criteria are given an explanation of the research to be carried out, subjects signed informed consent, subjects are given a questionnaire that asks questions related to this research, as for the types of questions asked can be seen in the questionnaire (attached), the questionnaires that have been filled in by the subjects are collected, then data are grouped, data processing and analyzed.

Data obtained from the results of filling out a questionnaire obtained from the google form link and then processed and analyzed using the SPSS PC application program to obtain the characteristics of the frequency of use of dental floss in children in the Department of Pediatric Dentistry, Baiturrahmah Dental Hospital.

Results

Based on the research that has been carried out at Department of Pediatric Dentistry in the Baiturrahmah Dental Hospital, Padang, about how to describe the use of dental floss in children and an overview of independence of children brushing their own teeth.

Based on Table 1, it can be explained that of the 76 respondents studied, there were categories of the level of children's independence in brushing their teeth. There were 22 respondents (28.9%) in the independent category, 25 respondents (32.9%) in the less independent category and 29 respondents (38.2%) in the non-independent category. It can be concluded that the non-independent category is the largest category (38.2%), which means that it shows that many children of patients in Pediatric Dentistry of the Baiturrahmah Dental Hospital, Padang are not independent in brushing their teeth. Description of child discipline using dental floss.

Table 1. Frequency distribution of independent children brushing their teeth in patients in the Pediatric Dentistry Section of the Baiturrahmah Dental Hospital.

Child Independence Level	f	%
Independent	22	28.9%
Less Independent	25	32.9%
Not Independent	29	38.2%
Total	76	100,0%

Based on Table 2, it can be explained that of the 76 respondents studied there were 3 respondents (3.9%) with the discipline category, 25 respondents (32.9%) with the less disciplined category and 48 respondents in the undisciplined category. The conclusion in this study found that the category of undisciplined in using dental floss was the largest category in children in the pediatric patients in the Baiturrahmah Dental Hospital Padang. Description of parent concern for bringing children to the dentist.

Table 2. Frequency distribution of children discipline using dental floss in patients in Pediatric Dentistry section of the Baiturrahmah Dental Hospital, Padang

Child Independence Level	F	%
Discipline	3	3.9%
Lack of Discipline	25	32.9%
Undisciplined	48	63.2%
Total	76	100.0%

Based on Table 3, it can be explained that of the 76 respondents who were studied about caring to bring their children to the doctor, 31 respondents (40.8%) were in the caring category, 37 respondents (48.7%) were in the less caring category and 8 respondents (10.5%) with the category do not care. These results indicate that many parents of patient children in the Pediatric Dentistry section of the Baiturrahmah Dental Hospital, Padang, are less concerned with their children's dental health, namely 37 respondents (48.7%). Discipline description of the patient's parents on the use of dental floss.

Table 3. Frequency distribution of parents' concern for bringing children to dentists in pediatric patients in the Baiturrahmah Dental Hospital, Padang

Child Independence Level	F	%
Care	31	40.8
Careless	37	48.7
Does not matter	8	10.5
Total	76	100.0

Based on Table 4, it can be explained that of the 76 respondents studied, 7 respondents (9.2%) had the discipline category, 48 respondents (63.2%) were in the less disciplined category, and 21 respondents (27.6%) were in the undisciplined category. These results indicate that many parents of patient children in the Pediatric Dentistry section of the Baiturrahmah Dental Hospital, Padang, who are less disciplined (63.2%) do not use dental floss to maintain the health of their teeth and mouth.

Table 4. Frequency distribution of patients' parents discipline using dental floss in the Pediatric Patients in the Baiturrahmah Dental Hospital, Padang.

Level of Discipline	F	%
Discipline	7	9.2%
Lack of Discipline	48	63.2%
Undisciplined	21	27.6%
Total	76	100.0

Discussion

Based on the research that has been done, it is found that the level of discipline of children in maintaining healthy teeth and mouth shows the results are not independent (38.2%). This is in line with research conducted by I Dewa Gede.⁹ who stated in his research that 31% of respondents did not brush their teeth every day, 33% respondents did not use their own toothbrush, 10% of respondents did not use toothpaste, and 33% brushed their teeth only once a day. Only 3.7% were found brushing your teeth right in the morning, namely after breakfast and brushing at night, namely before going to bed. No respondents were found to brush their teeth using the correct method of brushing their teeth.⁹

Furthermore, in this study also obtained the level of discipline of a child in using dental floss to maintain the health of his teeth and mouth. The results showed that there was an average habit of children in the Pediatric Dentistry Section of the Baiturrahmah Dental Hospital, Padang, who were less disciplined (63.2%) in using dental floss to maintain the cleanliness of their teeth and mouth.

In terms of parents' concern for their children's oral and dental health, this study shows the level of concern of parents in the Pediatric Dentistry section of Baiturrahmah Dental Hospital that does not care (48.7%) for their children to take them to the dentist. This is in accordance with research conducted by Abadi NY et al.¹⁰ which states that parents' concern for the importance of visiting a dentist is still low. That parents prefer to be diligent in brushing their teeth and reducing sugary foods and drinks rather than visiting the dentist. As many as 13.73% of parents who routinely checked their children's teeth to the dentist. A relevant study also shows that kindergarten children who have caries with the level of parental behavior in examining children's teeth and mouth are less than children with caries with the level of behavior of parents in examining the child's teeth and mouth both.¹⁰

A child will imitate the behavior of his parents. Parents' behavior is used as a motivating factor for their children in using dental floss to maintain oral

health. In this study, it was found that the average parent of children in the Pediatric Dentistry section of the Baiturrahmah Dental Hospital in Padang had less discipline in the use of dental floss (63.2%) to maintain the health of their teeth and mouth. This is in line with the research of Adilah BH,¹¹ which states that children's oral hygiene can also be influenced by the habits of parents in maintaining oral hygiene and the level of awareness of parents to control the state of their children's teeth and mouth.¹¹

Conclusion

Based on the results of the research and discussion that has been described, the following conclusions are obtained; On average, child respondents in the Pediatric Dentistry section of Baiturrahmah Dental Hospital Padang were not independent in brushing their teeth; On average, child respondents in the Pediatric Dentistry section of Baiturrahmah Dental Hospital Padang were not disciplined in using dental floss; On average, parents of child respondents in the Pediatric Dentistry section of the Baiturrahmah Dental Hospital, Padang, do not care to take their children to the dentist regularly; On average, parents of child respondents in the Pediatric Dentistry section of Baiturrahmah Dental Hospital Padang were less disciplined in using dental floss to maintain the health of their teeth and mouth. Educational institutions are expected to provide education to all their students about the importance of maintaining oral hygiene and so that students understand the importance of oral health.

Acknowledgment

Thank you very much for the Department of Pediatric Dentistry, Faculty of Dentistry, University of Baiturrahmah Padang for allowing this research.

Conflict of Interest

The authors report no conflict of interest.

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