

Knowledge of Oral Health Risks for Preschool Children by Clinical Students Class of 2019 at the IKGA Lab, RSGM Baiturrahmah

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Abstract

In the United States, dental caries is one of the most frequent and serious health issues. More than a quarter of children between the ages of two and five develop early childhood caries before starting kindergarten, according to the American Academy of Pediatric Dentistry. The goal of this study was to see how much pre-clinical students knew about risk factors for preschool children's dental and oral health. In Baiturrahmah, Padang City, a descriptive design was applied with a sample of 65 preclinical students. The students' knowledge of oral health was assessed using 19 knowledge questions. The results revealed that the majority of students had strong knowledge, with 56 persons (86.2%) answering yes (12.3%) and at least one person (1.5%) in the negative category when it comes to children's dental health. Preschoolers at the IKGA Lab of RSGM Baiturrahmah, Padang City, discuss oral health risk factors, and it is suggested that more research be done on student knowledge of oral health by researching different samples, such as elementary school students, so that information about preclinical students' oral health knowledge can be obtained. pupils in elementary school.

Keywords: knowledge; oral health pre-school children

Introduction

Dental and oral health care are essential components of comprehensive health care. The Global Goals for Oral Health 2020, developed by FDI and WHO, have been established as indicators of dental and oral health status. The goal is for governments around the world to adopt policies to prevent dental and oral illnesses and improve health promotion initiatives, particularly for children and adolescents in school [8].

The degree or level of dental and oral health, which encompasses both hard and soft tissues in the mouth cavity, is referred to as dental health status. Dental caries is the most common dental illness in the community, and it is an infectious disease produced by enamel and dentin demineralization, which is linked to the ingestion of cariogenic foods. The supporting tissues of the teeth, as well as the soft tissues around or in the patient's oral cavity, are included in the dental and oral health status [10].

More than a quarter of toddlers aged two to five years have dental caries before attending kindergarten, and by the age of 19, 68 percent of young adults have tooth decay in their permanent teeth. In the United

States, minorities are disproportionately affected by early childhood caries.

Non-Hispanic black children (19.3%) had considerably higher rates of untreated caries than non-Hispanic white children (11.3%) among children aged three to five years. In comparison to other ethnic/racial groups, Mexican-American children had the greatest percentage of untreated caries, according to national research [7].

Oral pain, increased absences from school, difficulty concentrating, bad look, and poor oral health as an adult are all symptoms of dental caries. Healthy People 2020 aims to lower the percentage of children with untreated dental caries and deterioration. To reduce or eradicate dental disease, the AAPD (2014) proposes that parents obtain greater knowledge regarding primary teeth and children's oral hygiene. According to research, parental oral health information has a major impact on children's dental caries, and there is a link between parental knowledge and children's dental caries [7].

According to the findings of the Basic Health Research (Riskesdas) in 2013, everyone should maintain dental and oral health by cleaning their

teeth properly to avoid dental caries. The majority of Indonesians clean their teeth in the morning and evening showers (76.6 %). Brushing teeth properly is recommended after breakfast and before going to bed at night, yet only 2.3 % of Indonesians do so. The habit of cleaning your teeth twice a day is the definition of proper dental hygiene [9].

According to Behrman, et al (1999), morerigorous treatment is required between theages of 6 and 12 years since there is a changein teeth and the formation of new teeth at thisage, and children entering school age have ahigher caries risk [12]. Dental health education should be offered to students and youngsters as early aspossible so that they can learn how to properlymaintain their dental health. The oral healthstatus of children in the future will be determined by their knowledge, attitudes, and behavior regarding dental health [13].

For the formation of one's actions (over behavior), knowledge or cognitive is a very significant domain. Because it has been proven through experience and research that behaviorbased on one's knowledge lasts longer than behavior that is not based on knowledge. Children begin to comprehend the value ofhealth and the prohibitions that must be avoided, as well as habits that might impact the status of their teeth, from an early age [3].

After environmental factors, behavior is the second most important factor that influences the health of people, organizations, and communities. According to Antisari (2005), conduct has a significant impact on the health of the teeth and mouth. As a result, behavior plays an essential role in affecting this health, as it can influence the good and negative aspects of dental and oral hygiene, as well as caries and periodontal disease scores [11].

According to the study's findings, 50 % of youngsters with toothaches were referred to dental and oral care. Several studies back up the definition of this illness, demonstrating a strong link between knowledge and dental health [5]. One of the variables that affects oral health is knowledge. Furthermore, knowledge aids other elements such as behavior in obtaining health achievement, as well as dentaland oral care. As a result, researchers aim to see how much "Knowledge of 2019 Class

Clinical Students about Oral Health Risks for Preschool Children at the IKGA Lab of RSGM Baiturrahmah Padang City" they have.

Methods

Even though it was reported for the first time in 2020 at the IKGA Lab of RSGMBaiturrahmah, Padang City, this study included 65 respondents from the 2019 batch. The initial step in this study was to gather demographic data, such as student ethnicity, student attitudes of children's oral health, and the importance of frequent dental check-ups. The study's participants wereKoas students at RSGM Baiturrahmah in Padang City. The sample for this study was 65 students from the Baiturrahmah RSGM in Padang City, who were in even class 2019 Coass.

Even-class 2019 clinical students undergoing co-assignment studies at RSGM Baiturrahmah met the study's inclusion requirements.

The following were used as exclusion criteria in this study:

- a) Preclinical students were unable to complete the survey.
- b) Lecturers or teachingstaff who are unable to complete the questionnaire.
- c) Employees who are unable to complete the questionnaire (security guards, cs, academics, and nurses).

The SPSS test was used to statistically assess the results. Descriptive statistics were used to examine demographic data andstudent knowledge. To test the relationship between variables, the correlation coefficient was determined. To investigate if there were any changes in knowledge based on ethnicity, an independent T test wasemployed.

Results

According to the findings of a survey of 65 clinical students, the class of 2019 had 33 non-Minang ethnic groups (50.8%) and 32 Minang ethnic groups (49.2%), with all students with educational status being professional students at the University. PadangCity, Baiturrahmah. The demographic data is

Data on the Population		Frequency	Percentage
Etnisitas	Non Minang	32	49.2
	Minang	33	50.8
Education	Pre clinic	0	0
	Profession	65	100
Knowledge		56	86.2
Good		8	12.3
Enough Bad		1	1.5

Table 1: Demographic Information Frequency and Percentage.

Total student knowledge scores varied from 31 to 57, with an average of 49 (SD = 5,471). The highest category of student knowledge was good, with 56 individuals (86.2%), enough for 8 people (12.3%), and at least 1 person (1.5%) in the group.

Table 2 shows the bad category for oral health of preschool children at the IKGA Lab of RSGM Baiturrahmah Padang City in terms of oral health risk factors, as well as the answers to the questionnaire for each statement item

No	Knowledge	Unknown		Not Agree		Agree	
		f	%	f	%	f	%
1	Students' views on children's oral health.	1	1.5	8	12.3	56	86.2
2	Regular dental check-ups are critical, according to students.	3	4.6	5	7.7	57	87.7

3	Baby teeth are crucial.	3	4.6	5	7.7	57	87.7
4	Brush your baby's teeth twice a day.	7	10.8	10	15.4	48	73.8
5	Brushing permanent teeth twice a day is required.	3	4.6	8	12.3	54	83.1
6	Teeth are permanent in a baby's mouth.	8	12.3	39	60	18	27.7
7	Teeth might be punctured if you consume liquids other than water from a bottle or cup.	6	9.2	28	43.1	31	47.7
8	Cavities are caused by frequent eating.	3	4.6	17	26.2	45	69.2
9	Teeth might be punctured if you consume a lot of sugary foods and beverages.	2	3.1	2	3.1	61	93.8
10	Even if they don't have cavities, children should get their teeth checked by a dentist.	3	4.6	1	1.5	61	93.8
11	It is critical for a child to consume fluoride containing water.	7	10.8	5	7.7	53	81.5
12	It is critical for a child to take fluoride supplements in order to avoid cavities.	8	12.3	12	18.5	45	69.2
13	Fluoride varnish helps to keep teeth from becoming perforated.	9	13.8	6	9.2	50	76.9
14	Flossing is required for baby teeth.	10	15.4	38	58.5	17	26.2
15	Flossing is required for permanent teeth.	6	9.2	5	7.7	54	83.1
16	Cavities in permanent teeth can be caused by baby teeth.	14	21.5	33	50.8	18	27.7
17	The cavity in the child's mouth should be checked by his health care physician.	5	7.7	12	18.5	48	73.8
18	It makes no difference to students if parents place their child's pacifier/bottle in their mouth before giving it to him.	8	12.3	36	55.4	21	32.3
19	Cavity-causing bacteria can be passed from parent to child via shared equipment.	8	12.3	19	29.2	38	58.5

Table 2: Student Responses to Oral Health Knowledge Questions: Frequency and Percentage.

To compare the students' total knowledge by ethnicity, an independent sample t-test was performed. Although students of Minang ethnicity scored somewhat higher on oral health knowledge (50.03, SD = 3,780) than students of non-Minang ethnicity (48, SD = 6,628), there was no statistically significant difference between the two groups. In terms of understanding Except for a negative link between total knowledge and ethnicity ($R = -0.187$, $P = 0.05$), there is no correlation between total knowledge and demographic characteristics, indicating that the more ethnically varied the population, the lower the total knowledge of oral health.

Discussion

Reduce the proportion of children with untreated dental caries and deterioration is one of Healthy People 2020's goals (Department of Health Prevention and Promotion, 2015). To reduce dental problems, the American Academy of Pediatric Dentistry (AAPD) recommends that the public be educated about children's dental and oral health. Before establishing an effective educational program for the target demographic, it is critical to assess students' understanding of children's oral health. As a result, this study looked at student accounts of childhood oral health risk factors. The findings back up the necessity for health care clinicians, pediatric nurses, and pediatric nurse practitioners to screen

and educate students about oral health hazards.

Overall, students who took part in this study exhibited strong knowledge, with 86.2% agreeing that the perception of oral health for children was important, and 87.7% agreeing that frequent dental check-ups are vital. Although it is critical to look after baby teeth, there are still some students who are unaware of this. For example, 10.8% of students are unaware of this. Brushing baby teeth twice a day is recommended, and 12.3% of kids are unaware that teeth in cavities exist. The baby's mouth is permanent, and nearly half of the pupils (43,15) disagree that drinking fluids other than water from bottles or cups might create cavities. Because of these misconceptions, students may overlook opportunities to learn about children's dental and oral health.

Students in this study were aware of the role of food in the development of dental caries; 69.2% agree that frequent snacking causes cavities, 93% agree that eating a lot of sugary foods/drinks causes cavities, and 93.8% agree that children should be checked by a dentist even if they do not have cavities. A prior study discovered that people's knowledge of early *S. mutans* infection was quite low (Gussy et al., 2008). Because the first step in avoiding caries in children is to reduce bacterial transmission from parent to kid (Marrs, Trumbley, & Malik, 2011).

According to the responses to the questionnaire, an average of 81.5% of students believed that it is vital for a child to consume fluoride containing water, and 76.9% agreed that fluoride varnish prevents cavities. Fluoride is essential in the prevention of dental caries (Rozier et al.), (2010). Brushing teeth with fluoride toothpaste reduces the occurrence of dental caries in preschool children, according to a comprehensive review (Wright et al., 2014) and a meta-analysis of eight clinical trials (Santos, Nadanovsky & Oliveira, 2013). Dentition is a term that refers to the foundation of a person's.

Students should also be aware that fluoride in any form should not be given to children under the age of six months, and that fluoridation supplements should be based on fluoride levels in local public water sources (Rozier et al., 2010). When it comes to fluoride and the development of moderate fluorosis, there are conflicting messages. The usage of fluoride should be based on the needs of each child as well as the dangers and benefits (mild fluorosis versus preventing destructive dental caries).

Children and parents should be taught that "smear" or "rice-sized" fluoridated toothpaste should be used for children under three years of age, and "fluoridated toothpaste in "rice size" amounts should be used for children under three years of age, to reduce the risk of fluorosis while preventing caries. peas for kids three to six years old (Wright et al., 2014). 73.8% of students agree that primary care providers should examine their oral cavity, 55.4% disagree that parents should put their child's pacifier/bottle in their mouth before giving it to their child, and 58.5% agree that germs that cause cavities can be passed from parent to child via shared equipment.

Because of these expectations, as well as guidelines from the American Academy of Pediatrics and the United States Prevention Task Force, primary care physicians, including pediatric nurse practitioners, must include oral health evaluations and education as part of routine health visits. Pediatricians observed the following difficulties to completing oral health assessments on children and educating families about oral health care in one study:

- 1) a lack of oral health training (41%),
- 2) insufficient time during health surveillance visits (35%), and
- 3) the inability to bill oral health assessment or counseling separately (34%). (Lewis et al., 2009).

Conclusions and Suggestions

Conclusion

The majority of students have good knowledge of the oral health of preschool children in the IKGA Lab RSGM Baiturrahmah Padang City regarding risk factors for oral health, with 56 people (86.2%), enough as many as 8 people (12.3%), and at least 1 person (1.5%) in the bad category. Preclinical students should have a better understanding of oral health in preschoolers. Students in this study were aware of some parts of risk factors for children's oral health but were unaware of others. Effective oral health care, according to the AAPD (2014), necessitates a collaborative effort involving families, early childhood care providers, and health care professionals.

To refresh their knowledge and implement this information into their practice, health care practitioners should use the AAPD (www.aapd.org) and the AAP (www.aap.org) resources on oral health care, policy,

evidence-based clinical guidelines, and parental education.

Suggestion

Further research on students' knowledge of oral health might be conducted by evaluating diverse samples, such as elementary school children, in order to acquire information regarding preclinical students' understanding of oral health in primary school students.

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