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Health Education Can Improve The Knowledge of Parents About Children's Dental Care.

Alfiani Rohmatulloh^{1*}

¹ Patria Husada Institute of Health Science, Blitar, East Java, Indonesia
Corresponding author: alfianirohmah352@gmail.com

ABSTRACT

Many cases of tooth decay today are caused by a lack of parental knowledge about proper food selection and dental care for their children, especially children aged 4-6 years. This research method uses a descriptive exploratory approach by comparing mothers' knowledge about children's dental care. guardian of "Darma Wanita" Kindergarten 02, Genengan Village. Respondents in this study were 25 parents of students, selected by accidental sampling method. Researchers evaluated respondents' knowledge about children's dental care, with a questionnaire instrument. The results showed a significant increase in parental knowledge from 60% (poor category) to 92% (good category) after the intervention. Supervision in brushing teeth and regular dental check-ups are very important for children.

Keywords: Health education, knowledge, dental caries; parents

Background

The partners in this community service activity are children aged 4-6 years and their parents a total of 25 members at "Dharma Wanita" Kindergarten 02 Genengan Village, Doko District, Blitar Regency. This location was chosen because children aged 4-6 years are vulnerable to dental caries, which often occurs at this age. Children aged 4-6 years old often experience caries because their milk teeth have thin enamel, which is exacerbated by their daily food consumption. This condition is often triggered by parents' limited understanding, both in selecting safe nutritional intake for their children's teeth and in applying proper independent dental care techniques for their children.

Given that children at this age are still highly dependent on caregiving, the role of parents becomes paramount in these preventive efforts. Interviews with parents revealed that most of the mothers of participating students were homemakers, while others were actively employed, resulting in variations in the amount of time spent with their children at home.

Riskesdas data also shows that the prevalence of dental caries in children aged 3-4 years is 81.1%, in children aged 5-9 years is 92.6%, and in children aged 10-14 years is 73.4%. Half of the 75 million children in Indonesia have dental caries, and the number is increasing every year (1). Tooth decay in children is common but often overlooked by parents, who assume that their children's teeth will be replaced by permanent teeth. The current incidence of tooth decay is largely due to parents' lack of knowledge about choosing the right foods and proper dental care for their children, especially school-age children (2).

Untreated caries in baby teeth can cause various problems such as pain, infection, and chewing difficulties, which in turn affect the child's nutritional status. This condition can also affect the growth and development of the permanent teeth that will replace them (3). The risk of children developing cavities is quite high because children like to snack on food and drinks as they please according to their desires. (1). Parents' lack of knowledge about diets and their impact on tooth decay increases the amount of sugary foods they give their children, exposing them to more risk factors for tooth decay (4).

In Indonesia, dental caries ranks first among chronic diseases most commonly experienced by young children. However, some parents consider dental caries to be a minor condition (4). Many cases

of tooth decay today are caused by parents' lack of knowledge about choosing the right foods and dental care for their children, especially school-age children. Parents, especially mothers, play an important role in changing habits. Parents are always observed, evaluated, and imitated by their children, who then consciously or unconsciously absorb these habits and make them their own (5).

The family is an important element that must be involved in providing care, especially for children, because the family is closest to the child. However, most parents neglect their children's overall dental health. They consider dental care to be unimportant, even though its benefits are vital in supporting health (6). The role of parents is very important in providing guidance, direction, understanding, facilities, and reminding children to maintain dental hygiene. Factors that influence parental behavior are employment status and parental knowledge (7).

Most of the mothers of the students are housewives, while others are actively working, which affects the amount of time they can spend with their children at home. In terms of dental health, these parents show great concern for their children's growth and development, but based on initial observations, many still brush their teeth without using the proper technique. This is a significant social asset for the success of the research program, as parents, especially mothers, tend to be open to new learning innovations that are practical and demonstrative, particularly those that have a direct impact on the health and prevention of their families. Parenting styles shape various perceptions in children, so education is needed before imparting new skills to form new perspectives in parents.

Most parents experience obstacles in the form of children who refuse to brush their teeth, especially at night. Some parents say they cannot accompany their children at night due to several reasons, one of which is work hours. According to the author, other reasons also influence children's habits, such as ineffective parenting patterns, such as not getting children used to brushing their teeth at night. For this reason, the author strives to increase parents' knowledge, hoping that with increased knowledge, ineffective parenting patterns can be changed and parents will strive to implement the author's recommendations in their daily lives.

Methods

This research method uses a descriptive approach, which aims to describe and evaluate changes in parental knowledge of students at the "Darma Wanita" 02 kindergarten, Genengan Village, about pediatric dental care, which was evaluated before and after providing education about pediatric dental care using the lecture method. Mothers' knowledge was evaluated using a questionnaire instrument regarding pediatric dental care knowledge. The number of respondents was 25 mothers of children, who were selected using the accidental sampling method. The results of the study were seen by calculating the difference in maternal knowledge scores before and after being given health education.

Results

Characteristics respondents

Table 1 Characteristics based on parents

Characteristics	Frequency	Percentage
Age		
17-25 Tahun	2	8%
26-35 Tahun	18	72%
36-45 Tahun	5	20%
Parenting activities		
Worker/Farmer	3	12%
Private Sector Employees	8	32%
Entrepreneur	1	4%
Housewife	13	52%
Education Background		
Junior High School	9	36.0
High School	16	64.0
Total	20	100%

Based on Table 1, it can be seen that of the 25 members of the parent’s student “Dharma Wanita” kindergarten 02 Genengan, 72% are aged 26-35 years, 20% are aged 36-45 years, and 8% are aged 17-25 years. Parenting activities include of the 52% are housewives, 32% are private employees, 12% are laborers/farmers, and 4% are entrepreneurs. The educational background, include 36% have a junior high school education and 64% have a high school education.

Frequency of parental knowledge about children's dental care

Table 2 *Pre-test* frequency of parental knowledge about children's dental care

Knowledge	Before		After	
	N	%	N	%
Good	0	0	23	92%
Enough	10	40	2	8%
Less	15	60	0	0%
Total	25	100	25	100

Researchers evaluated respondents' knowledge about children's dental care, with a questionnaire instrument. The results showed a significant increase in parental knowledge from 60% (poor category) to 92% (good category) after the intervention

Discussion

Based on the results of measuring the knowledge of parents of partner members before being given education about dental caries in children, data shows that 60% of parents have a low level of knowledge, 40% have adequate knowledge, and 0% have good knowledge. This condition shows that parents still have a low level of knowledge about the definition, causes, risk factors, prevention, and treatment of dental caries, thereby potentially increasing the risk of dental caries.

Health education activities aim to increase the knowledge of parents who are members of the Dharma Wanita Genengan 02 kindergarten. This increase in knowledge can encourage changes in parents' attitudes and behaviors in preventing dental caries in children. Research conducted (8) stated that health education has been proven effective in increasing public knowledge about hypertension, with results showing an increase in knowledge to 95.24%.

The dental caries education material presented included the definition, causes, signs and symptoms, complications, and management of dental caries in children. In addition to providing health education using leaflets, there was a significant increase in knowledge, with 92% of respondents in the good knowledge category and 8% in the adequate knowledge category.

This is in line with research (9) which states that there is an influence of dental caries health education through leaflets on parents' knowledge, with a conclusion that there was an 86% increase. This education has a positive impact on participants' understanding.

The study found that 64% of respondents had a high school education. Parents with a secondary education (equivalent to high school) believed that dental health promotion was important to familiarize their children with oral health programs and adopt healthy habits as early as possible, while also encouraging children to follow their parents' advice. The higher the parents' education level, the more likely they were to have knowledge, but most parents still had poor knowledge about their children's tooth development (10). The level of parental knowledge regarding the status of their children's dental and oral hygiene is mostly poor due to a lack of insight or information from parents regarding how to maintain dental and oral hygiene in children (11). Knowledge about a person's health will influence attitudes towards healthy living and will shape behavior in leading a healthy life (12). Based on the research results, it can be concluded that there is a significant relationship between the variable of tooth brushing behavior and the level of knowledge of dental and oral hygiene in children aged 10-14 years in the East Bekasi area with the results of the level of knowledge being 86% included in the good category

with the number of respondents being 43 children and children's behavior being included in the fairly good category, namely 70% with the number of respondents being 35 children (13). Parental participation in children's dental health care is influenced by parental knowledge about oral health, motivation, and attitudes toward dental care. It is recommended to increase health promotion related to dental health and the benefits of treatment to encourage parental participation in children's dental health care (14).

This research needs to be continued with health education that uses demonstration methods to increase its effectiveness. Based on the results of previous research regarding the influence of demonstration and simulation methods on tooth brushing skills, it was found that oral health education using demonstration and simulation methods was effective in improving the tooth brushing skills of students at SD 1 Sawang, North Aceh Regency (15). As the results of previous research showed an increase in parental knowledge of 83.33%, with indicators showing parenting patterns in implementing the habit of brushing teeth in the morning after breakfast and at night before bed (16).

Conclusions and Recommendations

The implementation of health education using leaflets combined with toothbrushing drill training has proven to be very effective in improving parents' knowledge and behavior in preventing dental caries in children aged 4–6 years. The results showed a significant increase in parental knowledge from 60% (poor category) to 92% (good category) after the intervention. Supervision in brushing teeth and regular dental check-ups are very important for children

Based on these findings, it is recommended that health institutions and research sites provide health education to children on proper dental care through demonstrations and regular dental checkups. Furthermore, future interventions should emphasize the importance of brushing at night, given that compliance rates are still lower than in the morning. Parents are encouraged to consistently support nighttime routines to ensure optimal protection against caries risk while children sleep.

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