

Dental and oral health education in parents of taam avicenna playgroup students

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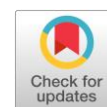
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Received 25 September 2022; accepted 8 December 2022; published 13 December 2022

ABSTRACT

Oral and dental health education aims to increase knowledge that leads to better dental and oral health behaviors. Parents play an important role in children's behavior to maintain dental and oral health. Lack of behavior to maintain healthy teeth can be caused by low knowledge of dental and oral health. This activity aim to provide dental and oral health education to parents of students in Taam Avicenna Surabaya playgroup. This activity was carried out by providing dental health education media such as flipcharts, posters, and dental phantoms. Then post-test was given to the participants. Questionnaires regarding the behavior of maintaining dental and oral health were also given. The results showed that the understanding of parents with good categories was more than those with moderate and low categories. This means that some parents can receive dental health education well. Providing dental health education has a positive impact on understanding and knowledge of dental and oral health in parents. It can be concluded that by giving dental health education for parents of students in Taam Avicenna Surabaya playgroup, could enhance understanding and knowledge of dental and oral health so that it could help parents to improve behavior in oral and dental health.



KEYWORDS

Dental and oral health
Parents
Knowledge
Behavior



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1. Introduction

Oral health problems are a public health problem in almost all countries. Oral disease prevention strategies are designed to increase awareness of oral health as an important component of people's health and quality of life [1]. Oral health education aims to increase knowledge that can lead to the application of beneficial oral health behaviors and to reduce the incidence of oral diseases [2]. However, the lack of health education and inadequate preventive measures have led to a high prevalence of dental and oral health problems [3]. This encourages dentists to implement dental and oral health knowledge in the community to form appropriate behaviors in maintaining their oral health [4]. Dental and oral health education can be provided to the community of school and their families, to a wide range of people through dental practice, in the workplace, daycare centers, and residences for older adults [1].

The promotion of oral health in children can be obtained by engaging health and education not only in education officials such as teacher but also in parents [5]. Parents are one of the figures who play a role in providing knowledge, encouraging, and supervising children to keep their teeth and mouth clean. Knowledge and behavior of parents affect the formation of children's behavior, including children's behavior in maintaining dental and oral health [6]. Maintenance of dental and oral health in children does not only involve interactions with dentists, but also interactions between children and their parents. In this case, the behavior of children in maintaining dental and oral health is significantly related to the behavior of parents [7].

The implementation of behavior to maintain hygiene and dental health in children can be based on the knowledge of parents about dental and oral health, one of which can be obtained through dental and oral health education. The lack of children's behavior to maintain their oral hygiene can be caused by the

lack of knowledge in maintaining dental and oral health. This will have an impact on increasing the risk of dental caries in children [8]. Lestari and Mujiyati [6] stated that the role of parents in maintaining dental health was proven to have a significant correlation with the number of dental caries in early childhood and kindergarten.

Taman asuh anak muslim (Taam) Avicenna playgroup is one of the playgroups located in Sukolilo Baru sub-district, Surabaya, with a geographical location on the Kenjeran coastal area. This school is located in a densely populated environment, with the background work of the students' parents as fishermen, day laborers, construction workers, and housewives. The provision of dental and oral health education has never been carried out to parents of students in Taam Avicenna playgroup, even though parents, especially mothers, are the closest sphere of children who play a major role in nurturing, educating, and supervising children in various matters including dental and oral health care [7]. There was still lack of knowledge in maintaining dental and oral health in parents of students in Taam Avicenna playgroup. This problem encourages us to provide dental and oral health education to the community to enhance and maintain their oral health. Therefore, this community service activity aim to provide dental and oral health education to parents of students in Taam Avicenna playgroup, which was expected to increase information and knowledge in maintaining oral and dental health.

2. Method

Hence the community service activity was carried out based on the following stages:

2.1. Survey and socialization

The survey was conducted to determine the condition of the environment around the playgroup, the number of students, types of activities in the learning process, and health problems that occurred. The purpose of the survey was also to find out problems in the dental and oral health sector, to know the role of the community health center as a local health service center, and to know the role of health cadres in the area. Then continued with the socialization of the activity program to the principal of the playgroup, teachers, and parents of students. The activity plan was explained to provide an overview of the service program that will be carried out.

2.2. Implementation

The implementation of the activity program was divided into three stages as follows:

- The first stage was the facilitator introducing themselves, conveying the purpose of the activity, and giving a questionnaire regarding the behavior of maintaining oral health that has been carried out by the participants so far.
- The second stage was the provision of dental health education materials using educational media in the form of flipcharts, posters, and dental phantoms.
- The third stage was discussion and giving a post-test to the participants after the dental health education materials has been given.

2.3. Evaluation

The evaluation was conducted by giving parents some questions in the form of a post-test after the dental and oral health education was given. The post-test gave consisted of 10 questions, with the score for the correct answer being 10, while the score for the wrong answer was 0. So if all the answers were correct, a maximum score of 100 will be obtained. Through this post-test score, participants' understanding of the dental and oral health material that has been given will be known. We also used a behavioral questionnaire of maintaining dental and oral health for the measuring instrument.

The dental and oral health education was carried out by three dentists and lecturers from the Faculty of Dentistry and the Faculty of Psychology, Hang Tuah University Surabaya, which was integrated from the fields of biomedical dental health, public dental health, and clinical psychology. The target of this service activity was the parents of students in Taam Avicenna playgroup totaling 24 people.

3. Results and Discussion

Dental and oral health education provided to parents (mothers) of students at Taam Avicenna playgroup using a dental health education flipcharts. The flipcharts contain dental and oral health materials, including the causes of dental caries, swollen gums, bleeding gums, how to brush teeth properly, the right time to brush teeth, good and bad food for dental health, the right time to check with the dentist, and how to prevent children from being afraid to go to the dentist. After being given dental and oral health materials, the parents' level of understanding was measured using a post-test and showed a maximum score of 100 and a minimum score of 40 (Table 1). Fig. 1 showed the distribution of the results of post-test scores on the parents of students at Taam Avicenna playgroup. Based on the graph, it was found that the highest score was 100, followed by 90 and 70. Parents' understanding of the dental and oral health materials was categorized into good, moderate, and low based on the post-test scores obtained (Table 2).

Table 1. Post-test scores of dental and oral health on parents

| Values | Scores |
|---------|--------|
| Maximal | 100 |
| Minimal | 40 |
| Average | 76.7 |

Table 2. Categories of the level of dental and oral health understanding in parents

| Category | Number | % |
|----------|--------|------|
| Good | 12 | 50 |
| Moderate | 8 | 33.3 |
| Low | 4 | 16.7 |

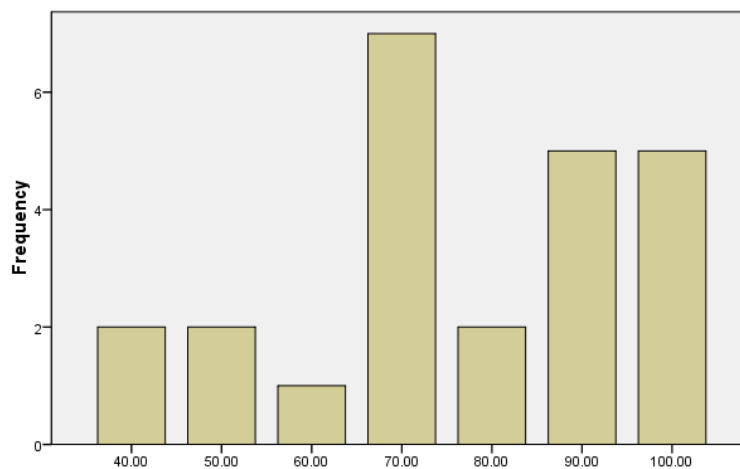


Fig. 1. Graph of the frequency of dental and oral health post-test scores in parents.

In addition to measuring the understanding of the parents of students in Taam Avicenna playgroup, the behavior of maintaining oral health that has been carried out so far was also measured. Table 3 showed that some parents of students did not brush their teeth at night before going to bed (58.3%), while the behavior of brushing their teeth in the morning when they wake up or after breakfast has been carried out by most parents (87.5%). Likewise, the behavior of using a personal toothbrush (not belonging to other family members) and fluoridated toothpaste has been carried out by most of the parents (70.8%). Based on Table 3, it can also be seen that most of the parents did not have the habit of eating sweet and sticky foods (87.5%). Meanwhile, the behavior to check dental health or dental control regularly every 6 months, was only carried out by a small proportion of parents (37.5%).

Table 3. The results of the behavior of maintaining dental and oral hygiene in parents

| Variable | Total | |
|--|-------|------|
| | n | % |
| Number of subject | 24 | 100 |
| Age | | |
| 20-30 years old | 12 | 50 |
| 31-40 years old | 6 | 25 |
| 41-50 years old | 4 | 16.7 |
| 51-60 years old | 1 | 4.2 |
| 61-70 years old | 1 | 4.2 |
| Brushing teeth at night before going to bed | | |
| Yes | 10 | 41.7 |
| No | 14 | 58.3 |
| Brushing teeth in the morning after wake up or after breakfast | | |
| Yes | 21 | 87.5 |
| No | 3 | 12.5 |
| Brushing teeth with brush and fluoride tooth paste | | |
| Yes | 17 | 70.8 |
| No | 7 | 29.2 |
| Using toothbrush belonging to other family members | | |
| Yes | 1 | 4.2 |
| No | 23 | 95.8 |
| Like to eat sweet and sticky food | | |
| Yes | 3 | 12.5 |
| No | 21 | 87.5 |
| Check the dental health into dentist or health center | | |
| Yes | 9 | 37.5 |
| No | 15 | 62.5 |

Table 2 showed the understanding of parents in the good category more than the moderate and low category. This showed that some parents have been able to receive dental health materials well. Providing dental and oral health education can help parents understand how to maintain dental and oral health. This will later have an impact on the formation of a better dental and oral health status in the family and community environment. Parents are expected to be able to provide dental and oral health knowledge to themselves and their families so that they can find out about dental and oral health problems that may occur. In addition to providing knowledge to children, parents also play a role as a motivator or support for children to be enthusiastic in taking care of their dental hygiene and health [7]. It is also the responsibility of parents to supervise children's attitudes to carry out these good habits, so as to prevent dental complaints and diseases.

The dental and oral health education given to the parents of students in Taam Avicenna playgroup had a positive impact on understanding and knowledge of maintaining oral hygiene and dental health. Parents who initially did not know how to maintain healthy teeth and mouth, such as how to brush their teeth correctly, became aware of how to apply it properly. Several studies have reported good results on dental and oral health education interventions in the form of oral hygiene levels, significant behavioral changes in maintaining dental and oral hygiene, tooth brushing behavior, caries control, and also the incidence of dental caries. Dental and oral health education has been known to create better oral and dental health and positive oral health practices [9]. Therefore, parents who already know about maintaining dental and oral health should provide the understanding and teach the importance of maintaining oral health to children and their families. The results of research by Rakhmatto [9] showed that there was a relationship between the level of knowledge of parents and the behavior of maintaining dental health in children. Knowledge of mothers who are the closest person to children in health care had a significant influence on children's attitudes and behavior to maintain dental health [10]. This behaviour should be planned at early age of children, so that the exact guidance and knowledge should be given to the parents to discourage oral diseases [11]. However, children at an early age and in kindergarten, in general, do not know how to maintain the health of their teeth and oral cavity, so it is parents who play

an important role in teaching them properly and correctly. The understanding and knowledge of parents, especially mothers about maintaining dental and oral health is very important because it can influence the sustainability of health and the incidence of dental disease in children [12], and it is known that Oral health become a crucial aspect in integral health of children [11].

Dental and oral health education given to parents of students in Taam Avicenna playgroup showed that 33.3% of people had a moderate level of understanding of the dental health education material, while 16.7% was low. This can be caused by several factors that affect the level of understanding of participants such as age, and education level. This was in line with research conducted by Rakhmatto [13] and Rompis [12] which stated that educational factors, type of work, age, place of residence, the experience of parenting, and economic status could affect the level of parental knowledge about dental and oral health. The provision of dental and oral health education should also be carried out regularly and continuously to help increase the understanding and knowledge of parents in maintaining dental and oral health.

The half of participants showed a good level of knowledge in maintaining dental and oral health. Many of these parents have brushed their teeth twice a day in the morning and at night before going to bed. The use of fluoride toothpaste and personal toothbrush has also been done well. Most parents also showed an attitude not to eat sweet and sticky foods, where these foods are a source of dental caries. The behavior of maintaining good oral and dental health can be taught and exemplified to their children. Most of these parents were housewives who had more time and opportunities to help and teach their children how to maintain oral health. Parents, especially mothers, play a role in the primary socialization phase, where children's habits and activities are formed in this phase [13]. If the mother can teach the behavior of maintaining good oral health to the child, then the child will also be able to apply this behavior well. Previous study showed that if a young child able to brush their teeth with fluoridated toothpaste twice a day, the child will continue brush their teeth into adulthood. The same is true for avoiding sweet and sticky food [14].

Based on the results of the behavior in carrying out routine dental checks, had not been carried out properly. Table 3 showed that most parents never had their teeth checked by a dentist. This can be caused by a lack of knowledge about the need to maintain oral and dental health. Dental and oral health checks should be carried out every six months, but many parents think that dental examinations are not necessary if the teeth do not hurt. Whereas regular dental examinations can help detect dental and oral abnormalities or diseases at the early stage, and also act as a preventive measure against tooth decay [6]. To take the children for routine dental checkups also become another crucial way to help maintain good oral health [14].

4. Conclusion

Based on the results of this activity community program, it can be concluded that dental and oral health education for parents of students in Taam Avicenna playgroup could provide understanding and knowledge of maintaining dental and oral health so that it can help parents to improve behavior in maintaining dental and oral health in the family as well as in the society.

Acknowledgment

We would like to thank the Directorate of Research and Community Service Deputy for Strengthening Research and Development Ministry of Research and Technology/National Innovation Research Agency, Institute for Research and Community Service of Hang Tuah University Surabaya, and the people in charge of Taam Avicenna playgroup.

Declarations

Author contribution. All authors contributed equally to the main contributor to this paper. All authors read and approved the final paper.

Funding statement. The authors have received funding from Directorate of Research and Community Service, Deputy for Strengthening Research and Development, Ministry of Research and Technology/National Innovation Research Agency, Indonesia.

Conflict of interest. The authors declare no conflict of interest.

Additional information. No additional information is available for this paper.

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