

Research Report

Development of Illustration Book on Dental and Oral Healthy in Children (Community Empowerment)

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ABSTRACT

Background: Dental caries is a disease that affects all ages, including early childhood. According to the World Health Organization (WHO), the incidence of dental caries in Indonesian children aged 5 and 6 years in 2017-2018 reached 70% or more. Parental education in dental health from an early age plays a vital role. One of the easy-to-understand educational media is a picture book. **Purpose:** This engagement activity was conducted to increase parental participation in the development of a picture book to meet the needs of dental health education for early childhood at Omah Cilik Fundaycare Surabaya **Methods:** This activity was an online educational activity involving parents. It was a sharing session between participants and informants about early childhood dental and oral health problems. The increased participation of participants was assessed using a Google form when the activity was going on. **Results:** This activity revealed that 100% of participants were enthusiastic about getting the latest information about children's oral health, and more than 70% had the correct answers. **Conclusion:** Participants are quite enthusiastic and active during online discussions.

Keywords: picture book; education; dental health; early childhood; development

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INTRODUCTION

The growth of primary teeth in early childhood appears at the age of six months, and at the age of 30 months, the 20 primary teeth were complete.¹ The majority of thriving children's teeth will contribute to their health and well-being. However, teeth that are damaged and sometimes destroyed in some children will result in dental caries.² Dental caries can also cause discomfort in children, and thus they can interfere with daily activities.

Dental caries is a disease that attacks teeth at all ages, including early childhood. It attacks the primary teeth (milk teeth) and permanent teeth. Children and adults have different dental caries because of their rapid development, depending on risk factors and their control. It is a non-communicable disease that can be prevented and most commonly affects children worldwide.²⁻⁴

Based on data from the WHO Collaborating Center for Community Oral Health Program and Research, University of Copenhagen, the percentage of dental caries in Indonesian children aged 5 and 6 years in 2017-2018 reached 70% or more.⁵ Meanwhile, according to the Basic Health Research data in 2018, dental caries in early childhood in the age range of 5-6 years reached 93%. This means that only 7% of early childhood in Indonesia are free from dental caries.⁶

Dental caries in early childhood can be prevented, one of which is through the active role of parents. They must be good at choosing child dental health education because their children's dental health may be obstructed if it is not given early. Dental health education can be delivered through a picture book. This kind of media is in great demand and easy to understand because of having two elements, namely verbal and visual.⁷ The most apparent advantage of a picture book as a health promotion media compared to other media is its power to increase readers' curiosity as learning motivation. The images presented play a role in stimulating the reader's interest. Messages are easier to convey, and thus they can be used as learning alternatives.⁸ Therefore, this engagement activity aims to increase parents' knowledge and role in developing a picture book to meet the needs of dental health education for early childhood at Omah Cilik Fundaycare Surabaya.

MATERIALS AND METHODS

This community service activity was online discussion about child dental health emergencies and myths and facts about child dental health involving 31 respondents. The subjects of this activity were parents with children aged

≤ 6 years, especially those at Omah Cilik Fundaycare Surabaya City.

The moderator opened this activity and then followed by a two-way discussion between participants and experts in their fields as the source person. This activity was attended by parents and partners of Omah Cilik Fundaycare Surabaya through a zoom meeting. The e-picture book entitled “50 Myths and Facts about Children’s Dental Health” was provided. This activity aimed to increase the active role of parents in early childhood dental health education. Evaluation of this activity was carried out through an online form provided during online sharing.

RESULTS

The results of the Parent’s Sharing Session attended by the parents and partners of Omah Cilik Fundaycare were presented in this part. The results showed that the participants were very enthusiastic about getting the latest information about child dental health. It can be seen from all participants were willing to get new information. From the questions given, more than 70% had correct answers. This revealed that online sharing participants were active (Table 1).

Table 1. Respondents’ answers about child dental emergency and myth and facts about child dental health

Statement	Willing	Not willing
Willing to get the latest information about children’s dental health	100%	0%
Statement	True	False
Factors that affect cavities	81%	19%
What to do when your children have a toothache	78%	22%
Prevention of children’s toothache at night	81%	19%
What to do when your children’s tooth hurt	84%	16%
Golden hour time	78%	31%

DISCUSSION

The community service was aimed at increasing the role of parents in child dental health. It showed that they were enthusiastic about the care and supervision of child dental health. It was indicated by all parents were willing to get the latest information about their children’s health. Previous research has stated that parental knowledge, especially mothers, relates to parenting or care in preventing dental caries in early childhood.⁹ If someone has good knowledge, they will take good actions. A mother with good knowledge about child dental and oral health will teach her children as early as possible about preventing dental caries.^{10,11} Several previous studies state that knowledge is a critical domain in shaping one’s actions; therefore, an action made based on

knowledge is better than an action made without knowledge.¹² Therefore, the better mother’s knowledge about dental and oral health, the better the dental and oral health of the child.¹³⁻¹⁵ Additionally, knowledge and attitudes can also increase the intentions and behavior of parents, especially mothers, in teaching more effective tooth brushing practices to their children.¹⁶

Speaking about participants’ answers regarding dental and oral health for early childhood, among 31 participants, more than 70% answered correctly. It revealed that participants had a good understanding of child dental and oral health. It may be due to the selection of educational media and information obtained by parents. For example, they choose a reading source that is easy to understand; the information can be received and taken into action correctly. The educational media used in this activity is an picture book.

Picture book plays a vital role in presenting the story in pictures, representing the story, and expanding the story without duplicating the text to make readers easily understand. Moreover, picture book encourages readers to enjoy reading until the last page.¹⁷ Several studies have stated that picture book is worthy of use in increasing reader knowledge.¹⁸⁻²⁰ The extended picture books help parents provide education in early childhood. Parents will implicitly invite their children to practice dental and oral hygiene in everyday life.

CONCLUSION

The program of extended picture book as an education for dental and oral health in early childhood for parents of Omah Cilik Fundaycare Surabaya was conducted online. The participants were pretty enthusiastic and active in the discussion as indicated by more than 70% correct answers. Similar programs can be carried out with more exciting presentations and illustrations to increase parents’ interest in understanding child dental health.

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