

Research Report

## Encouraging Mothers for Routine Pediatric Dental Check-Up Through Cadres Empowerment Program

Darmawan Setijanto, Rita Yuana Rachmawati, Hayyin Sabila Kandar, Dwicha Rahma Nuriska Hartono, Agtadila Novitananda, Revian Gigih Laksono, Audina Thalia, Dennaya Listya Dias, Rachma Adityasari, Naura Athiyah Sativa, Ahmad Fauzi

Departement Dental Public Health,  
Faculty of Dental Medicine, Universitas Airlangga  
Surabaya – Indonesia

### ABSTRACT

**Background:** Oral and dental hygiene is essential for physical health and well-being, and it can affect speech, mastication, and self-confidence. Children under five are not able to brush their teeth independently, do not have manual dexterity and psychological maturity to understand the importance of maintaining oral health. Therefore, parental role, especially maternal role, is critical in maintaining children's dental and oral health. An epidemiological study under Kalijudan Public Health Center coverage revealed that maternal parenting style significantly affected dental and oral health care in children per caries severity index using def-t. A promotional program was needed to strengthen the maternal perceived control domain to promote dental and oral health in children. The "SEKOLAH KADER" program was intended to train health cadres in disseminating dental health information and assisting mothers in child dental and oral health care.

**Purpose:** To increase cadres' knowledge levels about pediatric dental and oral care through "SEKOLAH KADER." Upon program completion, the cadres were expected to help to disseminate dental health information and assisting mothers in terms of child dental and oral health. **Methods:** The program involved 6 cadres from 3 local Integrated Health Centre. The program material was distributed in hard and soft copies. **Results:** The paired t-test showed a significance value of 0.018 ( $p < 0.05$ ). This indicates that there was a significant increase from pre-test to post-test evaluation results. **Conclusion:** This program has succeeded in increasing cadres' knowledge levels about basic dental health care.

**Keywords:** perceived control; mother of five-year-old children; dental caries in children

Correspondence: R Darmawan Setijanto, Department of Dental Public Health, Faculty of Dental Medicine, Universitas Airlangga, Jl. Prof. Dr. Moestopo 47 Surabaya 60132 - Indonesia. Email: r-darmawan-s@fkg.unair.ac.id

### INTRODUCTION

Oral and dental hygiene is essential for physical health and well-being, and it can affect speech, mastication, and self-confidence.<sup>1</sup> Most people are not aware that dental and oral health problems start with poor oral hygiene. This is influenced by behavioral factors such as reluctance to maintain dental and oral hygiene.<sup>2</sup> Human behavior is influenced by personal and environmental characteristics. However, human behavior is formed since childhood. The nearest home environment that is parents, siblings, and influence are the main behaviors that form in children.<sup>3</sup>

Dental health education for children is an effort to eliminate fear, foster curious, observational behavior and finally promote consequential behavior for personal health.<sup>4</sup> Dental and oral health education aims to help the community to become more independent, especially in terms of dental

and oral health, promoting behavioral changes related to health in general as well as dental and oral health.<sup>5,6</sup>

Parents especially mothers are responsible for the oral health care of their children. Children under five are unable to brush their teeth by themselves, do not have manual dexterity and psychological maturity to understand the importance of maintaining oral health.<sup>7</sup> An epidemiological study under Kalijudan Public Health Center coverage revealed that maternal parenting style significantly affected dental and oral health care in children per caries severity index using def-t. The maternal parenting style is dominantly affected by subjective norms and perceived control.

Therefore, a promotional program was needed to strengthen the domain to change the maternal parenting style. The program name was "SEKOLAH KADER." The program is expected to strengthen the maternal perceived control domain through the cadre empowerment program.

The cadres were expected to help disseminate dental health information and assist mothers in child dental and oral care.

**MATERIALS AND METHODS**

Tools and materials of this empowerment program were a laptop, USB, LCD Display, program materials, stationery, and evaluation sheets. The program material was distributed in soft and hard copies covering: a) deciduous and permanent teeth; b) dental cavities; c) preventing dental cavities; d) treatment of dental cavities.

The soft copy material was displayed on the LCD projector, and the hard copy was distributed to the program participants. The program was evaluated using pre-test and post-test group design. Before the program started, the participants received pre-test sheets upon program completion, they received post-test sheets.

**RESULTS**

The pre-test and post-test evaluation sheets were distributed before and after the program, respectively. The mean of pre-test scores was 51.8, and the mean of post-test scores was 80.5. The 28.7 increased indicated that the cadres' knowledge levels about child dental care have improved. The results are presented in Figure 1.

A paired t-test was then performed to see the relation between the two variables. The results of data analysis are presented in Table 1. The mean was -28.7, indicating that cadres' knowledge levels have increased. The significance value was 0.018 (p-value <0.05). This means that there was a significant increase from the pre-test to the post-test.

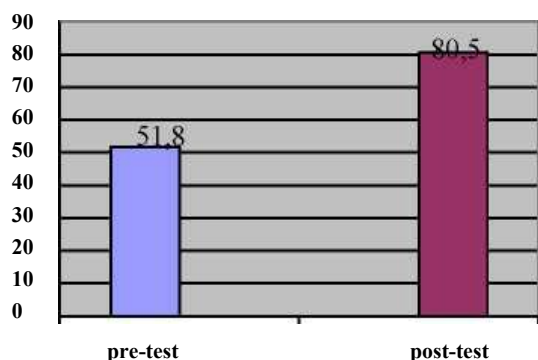


Figure 1. The mean of material understanding.

Table 1. The results of paired t-test

	N	Mean	Sig. 2-tailed (p value <0.05)
pre-test & post-test	8	-28.7	0.018

**DISCUSSION**

Empowerment means educating individuals, families, or groups continuously. It consists of 3 aspects namely knowledge (from unaware become aware), attitude (from aware become willing), and practice (from willing to practicing the introduced behavior).<sup>8</sup>

This empowerment program targeted a group of cadres of Kalijudan Public Health Center. The empowerment program in the meeting room of Kalijudan Public Health Center took place on Monday, 20 May 2019. The program consisted of a lecture named "SEKOLAH KADER." The program also consisted of presentation and QA sessions, including a model media called "CILUGBA" book.<sup>9,10</sup> The empowerment program was expected to gradually increase the group's knowledge levels, promoting independence for an ideal community.<sup>1</sup> The program results showed that participants were able to understand the program material. The evaluation result showed an increased knowledge level after attending the lecture about dental and oral health.

The presentation of child dental and oral health for mothers make use of flip chart per material checklists on the CILUGBA book. The program participants were able to fill the CILUGBA table well. The SWOT analysis of the program: (1) Strength: The program participants received books and flip charts about child dental and oral health care. Also, the lecture was informative, innovative, and easy to understand. Also, the program participants were challenged to memorize the information by completing a table from the "CILUGBA" book. (2) Weakness: The empowerment program was high cost, especially in books and flipcharts production. The time constraint also limited the program. (3) Opportunity: Supports from the school the public health center (Puskesmas) and integrated health service post (Posyandu) have allowed the program to run smoothly. (4) Threat All program participants were not able to complete the "CILUGBA" table, and this was a short empowerment program that not all program participants successfully implemented the program in their respective integrated health center.

**CONCLUSION**

The empowerment program involved Kalijudan Health Center cadres in encouraging mothers for child dental and oral health care, and the program successfully increased the cadres' knowledge levels of basic dental and oral health care. All cadres were able to perform dental and oral check-ups by completing the "CILUGBA" table.

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