ORAL HEALTH STATUS IMPROVEMENT OF MEKARJAYA AND CIKAWARI STATE ELEMENTARY SCHOOL, MEKAR MANIK VILLAGE, CIMENYAN DISTRICT, BANDUNG REGENCY

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Abstract. Introduction: The current paradigm in dentistryis not emphasising on curative treatment, but more on the health promotion and preventive care. However, dental health program in schools has not been maximaly implemented now a days. Thus the oral health status and hygiene are still far from the minimum ideal indicators set by the government. **The aim** of the community service for oral health status improvement of Mekarjaya And Cikawari State Elementry School, Mekarmanik Village, Cimenyan District, Bandung Regency.

Methode: the methodeis description withsurvey technique.

Results: based on the data obtained from the survey results in the form of oral examinations, the DMF/def value of MekarJaya State Elementary School students was 9.9, which means that each student has 9-10 cavities generally; while the DMF/def value of Cikawari State Elementary School students was 7.6, which means that each student has 7-8 cavities generally. Therefore, a community service program isneeded in these schools which were located in MekarManik Village, Cimenyan District, Bandung Regency. To increase the knowledge regarding oral health in the elementary school students, we conducted a counselling on the oral health and the oral health maintenance along the first to sixth-grade periods — the training of the teacher as cadres were given twice with oral health education and oral health maintenance as the theme, by applying the toothbrush program for 21 days without interruption. Little dentist training was conducted by trained as much as 20 students from selected from these two state elementary schools.
Decayed teeth were filled with the ART technique using a glass ionomer material containing fluorine. The fillings only performed towards approximately 20% of decayed teeth, because we were prioritising on the permanent teeth filling on particular classes selected (first, third, and fifth grade).

Conclussion: based on the data obtained from the survey results in the form of oral examinations, the DMF/def value of Mekar Jaya State Elementary School students was 9.9 categorized as high risk caries.Lack of knowledge about dental and oral health causes high caries levels. In adequate infrastructure facilities. The involvement of stakeholders in the dental and oral health program is very lacking.

Keywords: oral health status, dental health cadres, cadre training.

Introduction

Oral diseases are the most common disease of the community and affect all ages (MoHIndonesia, 2012). The prevalence of oral diseases, especially dental caries, isstill high amongst the elementaryschool-agedchildren and has become an urgent problem. Based on the results of the study conducted by Puspitasari, the prevalence of dental caries in childrenaged 11 – 12-years-old in underdeveloped areas of Bandung regency, West Java, showed a DMF-T index of 2.55, with the prevalence of 79.51%, and a DMF-S index of 3.5. These results meant that generally, each child has three to four decayed teeth, with the occlusal surface as the most affected area (Puspitasari, 2014).

The high prevalence of dental caries in school-aged children is caused by a lack of knowledge and awareness regarding the importance of oral health maintenance. Maintaining oral healthis one form of health behaviour. Description of oral health behaviour can be seen from the results of Indonesia Basic Health Research 2013 (Riskesdas), where the majority of Indonesians brush their teeth during morning and

evening baths (76.6%) with only 2.3% of them brush their teeth properly.

Mekarjaya and Cikawari State Elementary School are located in Mekarmanik Village, Cimenyan Subdistrict, Bandung Regency, which situated in a mountainous area and very far from down town, with the nearest Community Health Centre (Puskesmas) is about 5 km thus makes it difficultf or people to reach. Access to this village is difficult to achieve by cars, and public transportation is still very rare.

Based on the data obtained from the research conducted by the Faculty of Dentistry lecturers and students, the DMF/def value of Mekar Jaya State Elementary School was 9.9, which means that generally, each child has 9-10 decayed teeth, while the DMF/def value of Cikawari State Elementary School was 7.6. The high incidence of dental caries and the low status of oral hygiene of students in both schools indicated that various risk factors of oral health diseases were still high.

There fore, iti s necessary to performed a community service program in Mekar Jaya and Cikawari State ElementarySchool, Mekarmanik Village, Cimenyan Subdistrict, Bandung Regency, which included the re-screening of oral health data, oral health education for elementary school students, teacher cadres training regarding oral health, application of a 21-days-tooth brushing program, little dentists training, and dental treatment in the form of fillings with ART technique.

Experimental Section

Materials

Diagnostic tools, ART sets, tooth brushes and tooth paste, glass ionomerfilling materials (Fuji IX), plastic glass, alcohol 70%, cotton roll and cotton pellets, flipcharts about oral health maintenance, and dental models.

Sample

92 students of Mekarjaya State ElementarySchool and 225 students of Cikawari State Elementary School.

Methods

Oral health examinations, oral health counselling, 21-days tooth brush activities, teacher cadres training, little dentists training, and tooth filling with ART technique.

Results and Discussion

The mostcommon oral disease is dental caries. Caries is an infectious disease affects the hard tissues of the teeth, which are the tooth enamel, dentine, and cementum, caused by the activity of microorganisms developed in a fermentable carbohydrate.

Based on the results of the surveywe've been carried out, the following results are obtained: the average DMF-T index of MekarJaya State Elementary School students was 9.9 means that each child had 9-10 cavitiesa veragely; while in Cikawari State Elementary School, the average DMF-T index was 7.6 means that each child had 6-7 cavities generally. These results indicated that various risk factors for oral health status in both schools were still high, which also illustrated that the control of risk factors had not been optimised yet. The high value of DMF-T in both schools was also caused by the school's location in Mekarmanik Village, which was an underdeveloped area as determined by the Indonesian Ministry of National Development Planning (Bappenas). The economic status of the surrounding community was still in the middle to lower category; the qualified human resources were stilllimited, and the infrastructure was also very limited. The socio-economic level of the community was classified as veryl ow, which affected the knowledge of oral health maintenance (Kosasih, 2008). Factors that influence the knowledge include education and socio-economic levels. The education level of the Mekarmanik Village society was mostly in the elementary school graduates.

The facilities and infrastructure of Mekarjaya State Elementary School were still limited. Mekarjaya State Elementary School did not have electricity and clean water access in their school. The nearest Community Health Centre (Puskesmas) was also difficult to reach due to its remote location and limited transportation facilities in this village. This condition wasalso a contributing factor to the low oral health maintenance of dental health of the community.

To overcome conditions above, a team of lecturersfrom the Dental Nursing Department of Bandung Health Polytechnic held a community service to improved the oral health of students at Mekarjaya and Cikawari State Elementary School.
The first step was collecting data regarding oral health status by observing the DMF index. The team was conducting oral health care and maintenance counselling for all students from the first to sixth grade to increase the knowledge regarding oral health of both elementary school students. Also, the team was trained and formed 10 oral health cadres from elementary school teachers with the intention of regular counselling for students can be performed by their teacher.

Maintaining oral health was performed by brushing teeth once a week under the guidance of the teacher. Also, all students from both State Elementary schools were applying a 21-days tooth brush program with the intention of forming good

oral health habits. However, the role of teachers and parents wasvery important in these practices.

Formation of little dentists was conducted by training as much as 20 students from Mekarjaya and Cikawari State Elementary School. This formation wasaimed to provide examples and support on overcoming oral health problems of their peers.

The tooth-filling was performed due to high DMF index of students in Mekarjaya and Cikawari State Elementary School, with the ART technique using glass ionomer fillings containing fluorine. The tooth-fillings was performed onlyt owards 20% of all of the students' decayed teeth due to limited fundings of the community service program. We were prioritising the filling of permanent teeth in selective grades (the 1st, 3rd, and 5th grades).

Conclusion

Mekarjaya and Cikawari State ElementarySchool (SDN) are one of the schools whose students' having low oral health maintenance awareness. Both State Elementary School students had high caries incidence, with DMF-T index of Mekar Jaya State Elementary School student was 9.9, means that each child had 9-10 cavities generally;while DMF-T index of Cikawari State Elementary School student was 7.6, means that each child had 7-8 cavities generally. Low level of oral health care preventive program services in Mekarjaya and Cikawari State Elementary School may also caused the high caries incidence in both schools.

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