Knowledge and Participation in Training of School Dental Health Service Teachers at Surabaya Elementary Schools

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Abstract

The caries prevalence among 12-year-old children in Jakarta, Indonesia was 84%. Caries in children is a serious oral health problem, especially in a developing country. School Dental Health Services aimed to maintain and improve the oral health of all students in target schools. It targets individual health for students.

To identify knowledge and participation in training of School Dental Health Service teachers in Surabaya Elementary School.

This research is an observational descriptive conducted in elementary schools in the city of Surabaya with 34 School Dental Health Service supervisor teachers. Data collection was obtained from questionnaires and then displayed descriptively in the form of percentages and mean values. School Dental Health Service students who have not received training reached 41%, most of whom have not received training are teachers in South Surabaya and East Surabaya. East Surabaya and South Surabaya, have the lowest mean value of School Dental Health Service knowledge.

The implementation of School Dental Health Service has not been optimal, especially regarding the training that should be given to School Dental Health Service teachers, and it showed the low level of School Dental Health Service teachers' knowledge in the Surabaya area.

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Introduction

Oral health takes an important role in the human body due to the integration between oral health and general health. Poor oral health can affect general health.[1] Dental caries is an oral health problem that is most often found especially in children. It affects 60-90% of schoolchildren. The caries prevalence among 12-year-old children in Jakarta, Indonesia was 84%.[2]

While in Surabaya, the prevalence of caries in schoolchildren was 53%.[3,4] Caries in children is a serious oral health problem, especially in a developing country. Dental and oral health in children must be considered as early as possible because tooth decay in children can affect the growth of teeth at a later age. Because of this, the government is pursuing promotive and preventive programs in the field of dental and oral health through the implementation of School Dental Health Services to reduce the number of caries and oral health problems in children.[4]

School Dental Health Services are public health efforts aimed at maintaining and improving the dental and oral health of all students in target schools aimed at individual health efforts in the form of promotive and preventive efforts for students.[4] The main points of the School Dental Health Service program are health education, health services, and fostering a healthy school life environment so that optimal dental and oral health degrees can be achieved for school children. The programs carried out by School Dental Health Service include routine checks in accordance with the minimum service standard regulations for the Public Health Service

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(Puskesmas). In addition, School Dental Health Service also empowers teachers in charge of School Dental Health Service, young dentists, and parents of students who are assisted by dentists at the Puskesmas.[5]

In order for the School Dental Health Service program to run optimally, it is necessary to conduct regular training for School Dental Health Service teachers to increase teachers' knowledge in an effort to improve oral health in schools. The purpose of this study was to identify the participation of School Dental Health Service teachers in School Dental Health Service training and to identify School Dental Health Service knowledge in elementary schools in the Surabaya area.

Materials and methods

Study Design

This type of research was descriptive observational using a population of School Dental Health Service teachers in Surabaya Elementary Schools. This study would use data to describe the participation of School Dental Health Service teachers in School Dental Health Service training and the knowledge of School Dental Health Service teachers about oral health in Surabaya.

Samples

The total sample was 34 School Dental Health Service teachers who were taken using a simple random sampling technique. School Dental Health Service teachers who were selected as samples were asked for approval to participate in this study. Furthermore, interviews were conducted to complete a questionnaire about participation in the School Dental Health Service training and School Dental Health Service knowledge.

Statistical Analysis

School Dental Health Service knowledge was information held by School Dental Health Service teachers relating to oral health and the School Dental Health Service program. Measurements were carried out using 12 items of questions about School Dental Health Service, wrong answers/no answers got a score of 0, answers with imperfect answers got a score of 1, answers with correct answers got a score of 2, and the total score was obtained by adding up all the questionnaire items. The minimum score was 0, and the maximum score was 24. The training participation variable is the respondent's answer about having or not receiving School Dental Health Service training while assigned as a School Dental Health Service teacher, nominal data scale.

The data that was conducted in this study would be tested descriptively and displayed in the form of a percentage and average value.

Results

Region	Gender				Age
	Male		Female		
	N	%	N	%	
West Surabaya	2	33.3	4	66.7	35,9
Central Surabaya	2	50	2	50	46,75
South Surabaya	4	50	4	50	32,5
East Surabaya	0	0	8	100	45,9
North Surabaya	1	12.5	7	87.5	48,5
Total	9	26.5	25	75.3	41,2

Table 1. Characteristics of Gender and Age of School Dental Health Service Teachers in the Surabaya Region.

The results of the research are displayed in the demographic characteristics of School Dental Health Service teachers, School Dental Health Service training participation, and School Dental Health Service teachers' knowledge of oral health, the results are shown in the following table.

Table 1 The total number of School Dental Health Service teachers who were the sample of the study was 34 people, with more female teachers than male teachers. The average age of School Dental Health Service teachers is 41.2 years,

Region	Untrained in The School Dental Health Service program		Trained in the School Dental Health Service program	
	N	%	N	%
West Surabaya	1	16.7	5	83.3
Central Surabaya	1	25	3	75
South Surabaya	5	62.5	3	37.5
East Surabaya	4	50	4	50
North Surabaya	3	37.5	5	62.5
Total	14	41	20	59

Table 2. School Dental Health Service Teacher Training Participation in Surabaya.

Based on Table 2 above, it can be seen that there are still many School Dental Health z Service teachers in the Surabaya area who have never attended School Dental Health Service training. The region with the largest number of teachers who have not received School Dental Health Service training is South Surabaya, and in second place is East Surabaya.

Region	Knowledge
	Mean ± Std. Deviation
West Surabaya	18.00 ± 2.82
Central Surabaya	17.50 ± 1.00
South Surabaya	14.87 ± 3.68
East Surabaya	14.25 ± 2.71
North Surabaya	16.00 ± 2.82
Total	15.85 ± 3.07

Table 3. Average knowledge of School Dental Health Service teachers.

The average knowledge of School Dental Health Service teachers about oral health in table 3 shows that the highest average is West Surabaya, while the lowest average is East Surabaya and South Surabaya respectively. The overall record for School Dental Health Service teachers in Surabaya has an average knowledge of 15.58, while the maximum score if the teacher can answer all the questions correctly is a score of 24.

Discussion

Oral health is an important part of general body health. At the age of children, dental health greatly affects the growth and development of children. Therefore, the government launched the School Dental Health Service program to improve the oral health of school children. School Dental Health Service implementation is divided into three categories: community health efforts, individual health efforts, and School Dental Health Service management. Individual health efforts consist of five School Dental Health Service activities, namely teacher training, training for young doctors, education and counseling by teachers, tooth brushing together, and dental and oral health screening. Teacher training is an important point to equip teachers with sufficient knowledge about dental health and the School Dental Health Service program.[4-6]

In this study, it appears that the implementation of School Dental Health Service teacher training is still not optimal, as evidenced by the percentage of teachers who have not received School Dental Health Service training reaching 41%. This result is also related to the description of School Dental Health Service teachers' knowledge, that School Dental Health Service teachers' knowledge is still low, as evidenced by the average knowledge score obtained is 15, still far from the maximum score of 24.[1,7]

The South Surabaya and East Surabaya regions, where many of the School Dental Health Service teachers had not attended School Dental Health Service training, apparently also got the lowest knowledge score among the other Surabaya regions. This shows that there is a link between School Dental Health Service training and School Dental Health Service teachers' knowledge. School Dental Health Service training can increase teachers' knowledge about the School Dental Health Service program. This is in line with the opinion which states that training and refreshment are needed to increase and maintain health knowledge. Without training and refreshment, knowledge and the ability to perform certain tasks can quickly disappear. A study shows that training conducted 3 times a year can improve the quality of services provided.[8]

Lack of knowledge as a result of not receiving training can have implications for their roles such as providing information, providing advice on food intake, and facilitating support groups.[8] It has also been found the effect of education and training on teacher competence.[9,10] Other factors that influence oral health maintenance are tooth brushing frequency and the education level of the mother or teacher.[11,12] These factors can lead to the increased likelihood of dental care visits or school dental health services.[13] Previous study had proven that children's age was an important age for maintaining oral health. Dental and oral health needs to be maintained from an early age. Efforts to prevent oral health problems have to be done at an early age. Childhood through adulthood is also an important period of time to prevent premature dental health problems.[14,15]

Based on these findings, it is suggested to carry out a training program and carry it out periodically to increase School Dental Health Service teachers' knowledge about oral health

and the School Dental Health Service program, so that this program can work optimally.

Conclusions

Elementary schools in Surabaya have implemented the School Dental Health Service program, but its implementation has not been optimal, especially regarding the training that should be given to School Dental Health Service teachers, and it showed the low level of School Dental Health Service teachers' knowledge. It is necessary to conduct School Dental Health Service training periodically to increase School Dental Health Service teachers' knowledge, and to optimize the role of School Dental Health Service teachers in implementing the program. For the Surabaya City government, it is necessary to carry out periodic evaluations and increase knowledge and training for the Surabaya area, especially East and South Surabaya.

Declaration of Interest

The authors report no conflict of interest.

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