



IMPLEMENTATION OF COMMUNITY DENTAL AND ORAL HEALTH CARE SERVICES IN THE KELAPA ISLAND VILLAGE ENVIRONMENT

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Abstract, Background: The community targets dental and oral health care services, which aim to improve dental health status and optimally, but there are still dental and oral health problems. Dental health problems in the kelapa island village environment in 232 elementary school-age children consisted of a PTI rate of 0%, an average decay rate (DMF-T) of 1.26, and an average decay rate (def-t) of 3.78. Health care service efforts carried out in island villages are promotive and preventive efforts, while simple curative efforts are carried out in available dental health service facilities.

Methods: The methods used in this activity are screening examination of the dental and oral health status of elementary school-age children, cadres training, counseling on oral and dental health, brushing teeth together, pit and fissure sealant. The targets in this activity are 232 students, 10 cadres, and the community in the kelapa island village. Activities are carried out based on the order in which community oral health care is implemented.

Results: The results obtained are priority problems PTI with 100% results and becomes a priority I, which must receive follow-up from local health service facilities, priority II def-t with 89% results, and priority III DMF-T with 26% results.

Keywords : dental health care and the community.

Introduction

Oral health problems that are widespread in most of the world's population are dental caries, a hole characterized by progressive destruction of the enamel and dentin layers.^[1] Dental caries globally has a very high prevalence of chronic conditions and have a significant negative impact on a person's quality of life, starting from age early childhood, adulthood to an older age.^[2]

All age groups, in general, have experienced the prevalence of dental caries, but for the younger generation, it is more specifically seen.^[3] According to the World

Health Organization (WHO) in 2016, 60-90% of children experienced dental caries.^[4] Prevalence of caries in school-age children in Vietnam by 87.9%, Brazil 68%, America 59%, India 58.6%, and in Taiwan 37.30%.^[5-10]

According to Riskesdas (2018), as many as 57.6% of Indonesians have dental and oral problems, including children who have dental issues, reaching 93%. Correct tooth brushing behavior is only 2.8% of the Indonesian population who have brushed their teeth twice a day, that is correctly and correctly in the morning and evening.^[11] Efforts to improve optimal health status can

be carried out with dental health care programs. Dental health care is carried out to maintain dental health, including behavioral management to prevent dental and oral diseases.^[12]

Oral health care services are planned care services within a certain period on an ongoing basis to improve the optimal degree of dental and oral health for individuals, families, and communities. The implementation of dental and oral health is carried out through promotive, preventive, and curative approaches.^[13,14]

Methods

The methods used in this activity are screening examination of the dental and oral health status of elementary school-age children, cadres training, counseling on oral and dental health, brushing teeth together, pit and fissure sealant. The targets in this activity are 232 students, 10 cadres, and the community in the kelapa island village. Activities are carried out based on the order in which community oral health care is implemented.

The Order of Implementation of Stage I

Planning activities for community dental and oral health care services in the kelapa island village environment, conducting screening for dental health status checks (DMF-T and def-t), determining priorities for promotive, preventive, and curative problems from the results of the screening.

The Order of Implementation of Stage II

Plan activities according to priority problems, schedule activities, and implement priority problems I.

The Order of Implementation of Stage III

Implementation of priority problems to II, III, and so on.

The Order of Implementation of Stage IV

Conduct activity evaluation

Results and Discussion

The order of implementation of stage I

Planning for community dental and oral health care activities begins with cross-sectoral and cross-program coordination. Cross-sector covers sub-districts, villages, elementary schools, and local police, and cross-sectional programs include public health centers. Kelapa Island is geographically located in the north of Java Island and is included in the Kelapa Island Village, Kepulauan Seribu Islands District. This island has an area of 13.09 hectares. This island is one of the islands with a relatively dense population, which 5,023 people inhabit, and most of the people who inhabit this island are dominated by Makassarese or Bugis.

Data on the screening results for dental health status examinations (DMF-T and def-t) on 232 elementary school students.

Table 1. Priority Problems with Oral Health Status

Indicator	Target	Achievement	Gap	Percentage	Priority
DMF-T	1	1.26	0.26	26%	III
def-t	2	3.78	1.78	89%	II
PTI	80%	0	-80%	100%	I

Based on the description of the priority problems of dental health status:

1. The low number of PTI in 232 students is 0 from the national target set, 80%.
2. The high decay rate (DMF-T) in 232 students was 1.26 compared to the ideal target that has been set, which was 1
3. The high decay rate (def-t) in 232

students was 3.78 compared to the national target that has been set, which was 2

Other dental and oral health problems:

1. There are 6 students who have periodontal disease
2. There are 33 students who have deep pits and fissures.

Table 2. Alternative Troubleshooting

No	Formulation of the problem	Cause of Problem	Alternative Troubleshooting	Troubleshooting Sequence
1.	The low number of PTI is 0 from the national target set, which is 80%	1. input Lack of knowledge about maintaining oral health 2. process No dental filling 3. environment There is no education on dental and oral health knowledge because time is not possible	Provide counseling to students about cavities and their treatment Make referrals to the public health centers for dental fillings	Conduct counseling about 1. causes of cavities 2. food that can damage teeth 3. how to prevent cavities 4. how to brush your teeth the right way 5. do a toothbrush together 6. doing toothbrush activities together 7. make referrals to the public health center for health control of decidua teeth and permanent dental fillings
2.	The high def-t figure is 3.78 from the target set 2	1. input Lack of knowledge about maintaining oral health 2. process No dental filling 3. environment There is no education on dental and oral health knowledge because time is not possible	Provide counseling to students about cavities and their treatment	Conduct counseling about 1. causes of cavities 2. food that can damage teeth 3. how to prevent cavities 4. how to brush your teeth the right way 5. do a toothbrush together 6. doing toothbrush activities together 7. make referrals to a public health center for control of decidui teeth health
3.	The high number of DMF-T is 1.26 from the set target of 1	1. input Lack of knowledge about maintaining oral health 2. process No dental filling 3. environment There is no education on dental and oral health knowledge because time is not possible	Provide counseling to students about cavities and their treatment Make referrals to the public health centers for dental fillings	Conduct counseling about 1. causes of cavities 2. food that can damage teeth 3. how to prevent cavities 4. how to brush your teeth the right way 5. do a toothbrush together 6. doing toothbrush activities together 7. make referrals to the public health centers for permanent dental fillings
4.	Periodontal disease	1. input Lack of knowledge about maintaining oral health 2. process No implementation of dental health control 3. environment There is no education on dental and oral health knowledge because time is not possible	Provide counseling to students about periodontal tissue health and carry out control to the nearest public health center	Conduct counseling about 1. how to prevent periodontal disease 2. make referrals to the public health centers for control
5.	Deep pits and fissures	1. input Lack of knowledge about maintaining oral health 2. process Failure to close deep pits and fissures 3. environment There is no education on dental and oral health knowledge because time is not possible	Providing counseling to students about deep pits and fissures and closing deep pits and fissures	Provide counseling to students about deep pits and fissures and the treatment of pit and fissure sealants

The order of implementation of stage II

Table 3. Oral Health Care Activities Schedule

No	Type of activity	Week			
		1	2	3	4
1	Conducting discussions about the design of activities and implementing dental and oral health care	√			
2	Implementation of promotive efforts: 1. Cadre training 2. Counseling for students 3. Counseling to residents		√ √ √		
3	Implementation of preventive measures: 1. Toothbrush with students 2. Pit and fissure sealant in students			√ √	
4	Implementation of simple curative efforts through referrals to public health centers for health control of decidui teeth and permanent dental fillings				√

The implementation of dental and oral health care is a professional care service that is an integral part of health services aimed at improving the degree of dental and oral health, which is carried out

in a planned and sustainable manner through simple promotive, preventive and curative efforts in the community in the kelapa island village environment.

Table 4. Promotive Effort Implementation Schedule

No	Type of activity	Information	The place
1	Cross Program Approach	Executed according to plan	District, village, Local health center, Elementary school
2	Cadre training on oral health and how to brush teeth properly and correctly	Executed according to plan	Classroom
3	Counseling on dental and oral health and dental problems at school	Executed according to plan	Classroom
4	Counseling on dental and oral health by door to door	Executed according to plan	Classrooms, Village offices, and Residents' homes
5	Sports together and mutual cooperation with the community	Executed according to plan	Kelapa Island village, Volleyball court

Cadre training for teachers in grades 1-6 on how to brush their teeth with 16 movements according to WHO and it is recommended to be carried out for 40 days so that students can get used to doing these activities. Dental health activities for school-

age children are carried out through school dental health business activities (UKGS), one of which is counseling activities about cavities by the problem data from the screening. After completing the activities at the school, it was continued with outreach

to the residents in the kelapa island village environment by the door to door, and the

promotive efforts were closed with joint sports activities and mutual cooperation

The order of implementation of stage III

Table 5. Preventive Effort Implementation Schedule

No	Type of activity	Target	Information	The place
1	Brush teeth together	Students	Executed according to plan	School court
2	Pit and fissure sealant treatment	Students	Executed according to plan	Classroom

Their respective class teachers guided the implementation of joint toothbrushing. After brushing their teeth together, 6 students were found whose mouth water was cloudy and bloody, indicating inflammation of the

gums or periodontal disease. Pit and fissure sealant preventive activities for grade 1 and grade 2 students who 33 students had previously examined in the UKS room.

Table 6. Simple Curative Effort Implementation Schedule

Type of activity	Information	The place
Referral to the public health center for health control of decidui teeth and permanent dental fillings	Long term evaluation	Nearest public health center

The order of implementation of stage :
Activity evaluation

1. CPITN and OHIS which were not implemented due to insufficient time
2. Limited facilities and infrastructure
3. Students are a little scared when the examination is carried out

Solution

1. CPITN is replaced with a shared toothbrush to determine the health level of periodontal disease
2. An appeal for the community in the kelapa island village environment to take advantage of the available health service facilities
3. Approaches such as therapeutic communication so that children want to be examined



Figure 1. Cross-program coordination



Figure 2. Cross-sectoral coordination



Figure 3. Screening Examination



Figure 4. Cadres Training



Figure 5. Counseling for Students



Figure 6. Brush Teeth Together



Figure 7. Pit dan Fissure Sealant



Figure 8. Counseling for Residents



Figure 9. Sport Together and Mutual Cooperation

Conclusions

Health efforts are every activity carried out in an integrated, and sustainable manner to maintain and improve a person's health status and disease prevention. Based on the data collected, the problem of cavities is obtained. Based on the data collected, the results obtained are priority problems: PTI with 100% results and becomes a priority I, which must receive follow-up from local health service facilities, priority II def-t with 89% results, and priority III DMF-T with 26% results.

The intervention of dental health care services provides dental health education using several methods followed by brush teeth together, fissure sealants.^[15] Teachers can provide dental and oral health counseling interventions to students. In the process, teachers need to be given training first because, with the knowledge, attitudes, and skills of maintaining dental and oral hygiene, teachers can transfer knowledge and transfer skills to children.^[16]

According to Santoso (2018), dental health maintenance training is an activity that is planned through a teaching and learning process so that a person can independently perform dental and oral hygiene maintenance actions. Cadre training is said to be successful because teachers are given an understanding of dental and oral health maintenance materials, conduct simulations and demonstrations on how to brush their teeth properly and correctly to take action according to the information provided.^[16]

Suyatmi's research (2018) shows a significant difference in elementary school students before and after receiving dental and oral health care services. That is, there are substantial differences in knowledge, attitudes, dental and oral health status.^[13] According to Niakurniawati (2021), dental and oral health care services can improve teeth brushing skills.^[14]

The management and technical implementation of dental and oral health care are arranged in short-term and long-term planning and then evaluated to obtain optimal results and build independence and awareness in efforts to maintain dental health.^[12]

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