

EDUCATIONAL DENTAL KEYCHAINS APPLICATION IN STUDENT TEAM ACHIEVEMENT DIVISION: IMPLEMENTATION OF DENTAL AND ORAL HEALTH PROMOTION

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ABSTRACT

The implications of effective, efficient, attractive dental and oral health promotion are closely related to a person's level of awareness and behavior in improving the maintenance of oral health and hygiene. The purpose of this community service is to implement the use of Educational Dental Keychains in Student Team Achievement Division as an effort to promote oral health. The method used 6 steps, they are consisting of conveying goals and motivating students, convey goals and information, motivating students, organizing and guiding students in study groups, evaluating learning outcomes, clarification and feedback by experts and giving awards.: The application of Educational Dental Keychains in the Student Team Achievement Division as an effort to promote dental and oral health has a good influence on students' dental and oral knowledge and a good understanding of students' dental and oral health knowledge. Student knowledge increased descriptively and statistically. The use of Educational Dental Keychains and the STAD health promotion method can be applied as an effort to increase oral and dental health knowledge in children.

Keyword: *Educational Dental Keychains*, health promotion, Student Team Achievement Division, Dental and Oral Health Knowledge, Children

1) INTRODUCTION

The dental and oral health of children in Indonesia is very concerning, so it needs serious awareness and attention (Himawan, 2020). Children who have problems with their teeth and mouth, if not treated immediately will have a bad impact on the child's holistic health. This is supported by Suratni (2016) who states that children who get problems with their teeth and mouth will have difficulty chewing food. This not only affects the amount of nutritional intake that enters the body, but also disrupts the metabolic process and food absorption, so the nutritional intake is reduced. Insufficient nutritional intake can interfere with a child's growth and development, such as weight that is not appropriate for age, decreased learning ability, susceptibility to infection, etc. RISKESDAS data states that the prevalence of dental and oral problems in South Kalimantan Province has increased from 36.10% in 2013 to 59.60% in 2018 and at the age of 10-14 years it was 59.56%. Dental and oral problems in children that are not handled properly can affect

the development of their dental and oral health into adulthood (Jannah, 2022).

The school age group is the basis for instilling and familiarizing children with maintaining healthy teeth and mouths. School-age children are those who are less concerned about the health and hygiene of their teeth and mouth, such as rarely brushing their teeth or brushing their teeth at the wrong time and like sweet and sticky foods. This is supported by Fatimatuzzahro (2016) which states that school-age children have a habit of consuming sweet and sticky foods, such as sugar (candy, chocolate, cookies) which easily stick to the surface of their teeth and are difficult to clean. Children aged 10-11 years have a habit of snacking on food and drinks at school and outside the home which predisposes to caries. School age is the ideal time to develop and train children's motor skills, such as brushing their teeth. Children of this age are still experiencing a period of mixed teeth, so awareness and action are needed to independently maintain the cleanliness of their teeth and mouth (Syaputri, 2023).

Problems that often arise in school-age children include caries, malposition of teeth, injuries to teeth, staining of teeth, gingivitis during puberty which is triggered by an increase in endocrine hormones and poor oral hygiene. The main cause of oral hygiene problems is due to lack of knowledge about dental and oral care so that the behavior applied is inappropriate and tends to ignore oral hygiene. One of the efforts to increase knowledge so as to create awareness and change in behavior in maintaining proper dental and oral health is by conducting health promotion (Deswita, 2013).

Dental and oral health promotion is carried out with the instruments such as tools or media. This tool is structured based on the principle that knowledge can be exists in every human being and can be received or captured through the five senses (Notoatmodjo, 2007). The STAD (Student Team Achievement Division) method is used to explain the concept of maintain healthy teeth and mouth. The STAD method was chosen with the aim of stimulating student activity to express opinions and ideas in learning (Maulana, 2017). This method is combined with educational dental keychains media. Educational dental keychains are key chains that contain dental and oral health messages (Wardani, 2022). According to (Jalanti, 2018) keychains are believed to be effective as promotional and information media in conducting health education. The advantages of key chains are that they are smaller in size, easy to carry, read and attractive as media compared to other media which are larger in size and designed to be read specifically.

Based on the data obtained, MTsN 1 Barito Kuala is a school located in Barito Kuala Regency, South Kalimantan Province. This school was chosen as a place of community service due to the location of the school which is in one of the districts in South Kalimantan Province with the largest percentage of dental and oral problems, which is equal to 68.66% (Kemenkes RI, 2018). This is further supported by the data obtained that most families in Barito Kuala Regency still use river water as a resource to meet their needs so that the level of health is inadequate, especially dental and oral health (Adhani, 2022).

2) PROBLEMS AND QUESTIONS

The actual problem that occurs in the field is that correct tooth brushing behavior in Indonesia is very low, only 2.80%, especially in Barito Kuala Regency at 3.55% (Kemenkes RI, 2018). This will affect the hygiene status of a person's teeth and mouth, therefore our service team is encouraged to do the service at a partner's place, namely MTsN 1 Barito Kuala.

This activity was carried out at MTsN 1 Barito Kuala. MTsN 1 Barito Kuala is one of the schools in Barito Kuala Regency which has a high dental morbidity rate in South Kalimantan. Below are pictures and plans for community service locations.

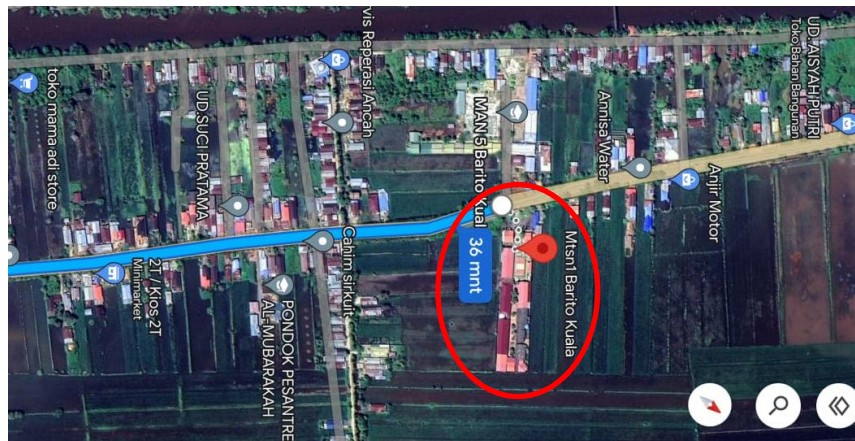


Figure 1. Map of Community Service Activity Locations

3) LITERATURE

1) Dental and Oral Health Promotion

Dental and oral health promotion is an effort to increase knowledge about dental and oral health, as well as the ability to behave in individuals, groups and communities that are given through a lesson. Health promotion prioritizes the principle of learning so that it is hoped that there will be a change in individual awareness and knowledge to achieve a better state through a health promotion medium. Health promotion media is a tool used by presenters to target information so that it is easily received and understood (Arsyad, 2018).

2) Dental and Oral Health Knowledge

a) Dental Visit

It is still very important to know the motivation of each individual to make regular visits to the dentist, especially in providing awareness to the public about the importance of independent dental examinations. Visits to the dentist are carried out regularly every six months. Visits to the dentist did not differentiate subjects that came in sick or healthy conditions. Dental health care has a close correlation with a person's daily behavior in maintaining healthy teeth and mouth. A person who frequently visits the dentist has a close correlation with the incidence of caries. The higher the number of visits to the dentist, the better the condition of the teeth. People who do not come to the dentist are getting worse condition of their oral cavity (Pratamawari, 2019).

b) Brushing teeth

1) Toothbrush selection

Tooth brushing is not just about how to brush the right way. Brush selection and maintenance need attention. Toothbrush selection includes brush neck, brush bristles, and toothbrush handle. The neck of the toothbrush that connects the toothbrush head with the toothbrush handle is chosen to be angled to make it easier for the bristles to clean the gums and teeth better without having to press the handle hard against the teeth. Good toothbrush bristles are soft, avoid bristles that are too stiff and rough because they can damage soft tissue. Note that the ends of the hair filaments should be rounded to protect the soft tissue from abrasion. Toothbrush bristles can be coated with antimicrobials such as Chlorhexidine and Triclosan, but the benefits do not last in the long term and reduce bacteria no better than toothpaste. The selection of toothbrush handles needs to be considered to facilitate direction in the process of brushing teeth. The toothbrush handle should ideally have a finger holder in the form of a groove and be made of rubber so that it doesn't slip easily so that it helps the user direct the angle of the bristles correctly and in balance (Wiley, 2012).

2) Selection of toothpaste

Toothpaste contains three main features namely abrasiveness, taste and fluoride. The abrasiveness in toothpaste functions to clean stains on the tooth surface, but if it is excessive it can erode tooth structure, especially dentin. The taste of toothpaste is caused the more diligent people brush their teeth. The fluoride content is good for the process of remineralizing teeth and preventing cavities. The recommended size for using toothpaste for people over six years is the size of peas/pearls and for children under six years is the size of rice (Wiley, 2012).

3) Toothbrush Maintenance

Toothbrush maintenance is carried out to maintain the cleanliness of the toothbrush used because toothbrushes have the risk of becoming a place for pathogen growth. The bristles between toothbrushes that touch each other allow bacteria to move and develop, especially in the open air in the toilet increasing the potential for toothbrushes to be indirectly contaminated with dirt. Oral biofilm, *E. coli* and other fecal bacteria found on the bristles came from a nearby toilet because they were left open during rinsing. Fungi and bacteria such as *Streptococci*, *Staphylococci*, *Candida*, *Corynebacterium*, *Haemophilus*, and *Coliforms* stick to the toothbrush you use for several weeks. Therefore, complete the bristles with a lid and place the toothbrush away from the toilet (Wiley, 2012). A healthy person's body can maintain homeostasis from pathogens, but a contaminated toothbrush is dangerous for people with a weak immune system such as people on chemotherapy medical treatment or have uncontrolled systemic diseases. It is recommended to replace the toothbrush every three months and wash the toothbrush regularly to decontaminate the bristles using an antimicrobial mouthwash. One of the easiest ways to do this is

to soak the toothbrush for 20 minutes in a mouthwash solution and then dry it (Wiley, 2012).

4) Time to Brush Your Teeth

Brushing your teeth is a common way that is recommended to clean various dirt that sticks to the surface of the teeth and gums. Tooth brushing time is recommended for 2 minutes or 120 seconds to achieve plaque-free status and of course it must be balanced with the correct tooth brushing method. The right time to brush your teeth twice a day in the morning after breakfast and at night before going to bed. Brushing your teeth at night before going to bed is very important because the condition of the oral cavity is dry due to the slow flow of saliva during sleep. Saliva that contains a buffer functions to counteract the acid produced by bacteria, if you sleep without brushing your teeth, food residue and plaque left behind have a greater potential to cause tooth demineralization (Wiley, 2012).

5) Tooth Brushing Technique

Brushing your teeth is an action to prevent plaque that is easy for every individual to do. There are several methods of brushing your teeth, including:

a) Vertical Technique

The vertical technique is performed by closing both jaws, then brushing the buccal surface of the teeth in an upward and downward motion, the same is done on the lingual and palatine surfaces with the mouth open.

b) Roll technique

The roll technique is performed by placing the bristles on the gums as far as possible from the occlusal surface with the ends of the bristles pointing towards the apex and the sides of the bristles being moved slowly over the tooth surface so that the back of the toothbrush head area moves in an arc. This movement is repeated 8-12 times in each area systematically so that nothing is missed.

c) Bass technique

Bass technique by placing a toothbrush at an angle of 45° to the long axis of the tooth pointing apically with the tip of the toothbrush bristles at the edge of the gums, moving the toothbrush with small vibrations forward and backward for approximately ten to fifteen seconds in each area. On the buccal and labial surfaces, how to brush by holding the toothbrush handle horizontally (forwards and backwards) parallel to the dental arch and on the lingual and palatine surfaces of the back teeth slightly angled (almost horizontally) and the front teeth of the brush are held vertically.

d) Horizontal Technique

The horizontal technique is a method that is commonly used to perform this technique, namely by moving forward and backward on the occlusal surface.

6) Stages of Brushing Teeth

Brushing your teeth should follow the correct steps so that you can clean food residue that sticks to the surface of your teeth.

The correct steps for brushing your teeth according to the Indonesian Ministry of Health are as follows:

- a) Prepare a toothbrush and fluoride paste with a paste size of about the size of a pea.
- b) Gargle with clean water before brushing your teeth.
- c) The entire tooth surface is brushed with a back and forth motion for 2 minutes.
- d) Pay attention to the area where the teeth and gums meet.
- e) Do the same for all the inner upper teeth. Repeat the same movement for the outer and inner surfaces of all the upper and lower teeth.
- f) The inner surface of the front jaw teeth, tilt the toothbrush after that, clean the teeth with the right brush movement.
- g) Brush the tongue and palate with a back and forth motion 2 times.
- h) Do not brush too hard, especially on the surface of the teeth with the gums, because it causes tooth enamel to be damaged and teeth to feel sore.
- i) After brushing your teeth, rinse your mouth only once so that the remaining fluoride is still on the teeth.
- j) Clean the toothbrush with water and store it upright with the toothbrush head above (Santi, 2019).

7) *Dental Floss*

Dental Floss is used manually to clean between the teeth or on the interdental/proximal parts of the teeth. Dental floss aims to remove plaque and debris attached to the teeth. The use of dental floss with a special handle (Dental floss holder) is done to avoid using fingers in the mouth (Fione, 2015).

8) *Mouthwash*

Mouthwash is an antiseptic liquid that is used to clean between the teeth, the surface of the tongue and gums and in the throat. Mouthwash works to reduce bad breath, neutralize acid and prevent the formation of dental plaque. Mouthwash is a medium that is easy to find and practical to use (Asridiana, 2019).

c. *Good and Bad Foods for Dental Health*

Foods that are good for dental health are foods that are high in protein, low in carbohydrates, and not sticky. Some foods that are good for dental health are fruits, vegetables, and nuts. Foods that are not good for dental health are foods that are high in sugar, such as sweet and sticky foods (Armilda, 2017).

This community service program is carried out by promoting health with educational dental keychains using active learning in the Students Team Achievement Division.

1) *Students Team Achievement Division*

a) *Definition*

STAD learning is a cooperative type learning model. The facilitator divides students into several groups consisting of both boys and girls, who have different abilities (Esminarto, 2016). The purpose of STAD is to master the material in completing group assignments where each member works collaboratively and helps to understand the material, as well as helping friends to master the learning

material. STAD type cooperative learning allows children to work in groups so that students can develop a willingness to work together, think critically, be motivated, and be responsible for the group. Students have the ability to help friends and themselves in taking quizzes later in order to achieve a goal, namely to get a super team award. Evaluation is needed so that students are able to summarize the lessons received from the facilitator's explanation and the results of the group work carried out. The facilitator evaluates learning outcomes about the material that has been studied where students are not allowed to cooperate in this evaluation (Wardana, 2017). This learning model encourages student cooperation through learning in groups whose members are diverse so that they encourage and help each other in a diverse social atmosphere to master the skills being studied. The STAD model is more concerned with the attitude of student participation in developing cognitive and effective potential, including:

- 1) Relatively easy to organize
- 2) Able to motivate students in developing individual potential, especially creativity and responsibility in raising the image of the group
- 3) Teach students to work together and help each other in groups
- 4) Students are able to convince themselves and others that the goals to be achieved depend on how they work, not because of luck.
- 5) Students are able to communicate verbally and nonverbally in collaboration
- 6) Increase familiarity between students.

This learning model at the implementation level uses the mixing of the abilities of different groups, namely normative interaction learning, which is carried out consciously and purposefully, and serves as a guide in which direction educational goals will be directed. In addition, the Cooperative Learning Student Teams Achievement Division (STAD) learning model can be applied to motivate students who dare to express their opinions, respect the opinions of others/friends, and give each other opinions (ideal sharing), besides that in learning students are usually faced with practice questions or problem solving. Therefore cooperative learning is very good to implement because students can work together and help each other in dealing with the tasks at hand.

b) Steps

The steps of the STAD (Student Teams Achievement Division) learning model according to (Wulandari, 2022):

- 1) Arrange groups whose members are heterogeneous (mix according to IQ, gender, ethnic, etc.).
- 2) The facilitator presents the material
- 3) The facilitator gives assignments to groups to be carried out by group members. Members who already understand can explain to other members until all members in the group understand.
- 4) The facilitator gives quizzes or questions to all students.
- 5) Give evaluation
- 6) Conclusion

c) Advantage

The advantages of the STAD (Student Teams Achievement Division) learning model:

- 1) Students work together in achieving goals by upholding group norms
- 2) Active students help and motivate enthusiasm to succeed together
- 3) Active role as a peer tutor to further enhance the success of the group
- 4) Interaction between students is in line with the increase in their ability to argue.

d) Weakness

Weaknesses in the application of the STAD type cooperative learning model according to (Kurniasih, 2015):

- 1) When viewed from class facilities, arranging seats for group work is very time-consuming. This is usually due to the unavailability of special rooms that allow it to be directly used for group study.
- 2) A large number of students (fat class) can cause the facilitator to be less than optimal in observing learning activities, both in groups and individually.
- 3) The facilitator is required to work quickly in completing tasks related to the learning carried out, including correcting student work, calculating progress scores and calculating the group's average score which must be done at the end of each meeting.
- 4) Take up a lot of time in preparing lessons (Wulandari, 2022).
- 5) A number of students may be confused because they are not used to this kind of treatment.
- 6) Requires a longer time for students so it is difficult to reach the target.
- 7) Requires special abilities of teachers so that not all teachers can carry out STAD cooperative learning.
- 8) Demand certain characteristics from students, for example the nature of like to work together (Ariani, 2018).

2) Educational Dental Keychains

Educational Dental Keychains is a keychain that contains health messages to protect your teeth and mouth. These keychains are used for dental and oral health promotion activities because of their attractive shape, so it is hoped that children will be interested and read the messages conveyed in them. The message contains procedures for maintaining teeth and mouth which are intended for the general public because the rate of damage to teeth and mouth is still very high (Wardani, 2022).

a) Purpose

The purpose of this community service is to implement the use of Educational Dental Keychains in Student Team Achievement Division as an effort to promote oral health.

3) Research question

The community service team wanted to know how the use of educational dental keychains in the Student Team Achievement Division influenced students' knowledge of oral and dental health?

4. METHOD

The method we use in this community service is a cooperative learning-based educational counseling method, namely STAD using Educational dental Keychains. The steps we have taken are as follows:

- 1) Convey goals and motivate students
Before starting health promotion activities, students are given a pre-test to find out the extent of students' initial knowledge related to health promotion being carried out.
- 2) Presenting / conveying information
The facilitator presents information to students by explaining what students have to do. As for what students have to do is discuss with their friends about their knowledge regarding maintaining good and correct dental and oral health. Their initial knowledge is written down on a piece of paper, which the facilitator will later discuss about the correctness of their answers.
- 3) Organizing students in study groups
The facilitator divides student groups into heterogeneous groups. After the groups are divided, the facilitator conveys all the goals to be achieved in the promotion program, namely to increase students' knowledge about procedures for maintaining dental and oral health and motivate students to learn together to solve problems with friends.
- 4) Guiding work and study groups
Guiding study groups when they do their assignments. After everyone wrote down the initial answers that the students knew about oral health, they were given key chains as answers to the questions. They discussed again, and analyzed whether the answers they wrote were right or wrong.
- 5) Evaluation
Evaluating learning outcomes about the material that has been taught or each group presenting their work, asking questions about material that has not been understood, and giving a pretest.
- 6) Give awards
Give awards in the form of prizes to groups that have the most understanding of dental and oral health.

5. RESULT AND DISCUSSION

a. Result

- 1) Result community service team
 - 1) Convey goals and motivate students



Figure 2. Explanation to students about goals and purpose health promotion

2) Presenting / conveying information



Figure 3. The facilitator presents information to students by explaining what students have to do.

3) Organizing students in study groups



Figure 4. The facilitator divides student groups into heterogeneous groups.

4) Guiding work and study groups



Figure 5. Guiding study groups when they do their assignments.

5) Evaluation



Figure 6. Evaluating learning outcomes about the material that has been taught or each group presenting their work.

6) Give awards



Figure 7. Give awards in the form of prizes to groups that have the most understanding of dental and oral health.

2) Result Knowledge based Educational Dental Keychains Application in Student Team Achievement.

Table 1. Description of Respondents' Characteristics based on Gender

No	Gender	Amount	Percentage
1	Male	27	45%
2	Female	33	55%
Total		60	100%

Based on table 1, most of the research respondents were women. Women dominate the respondents with a total of 33 people, which is as much as 55%.

Table 2. Description of Respondents' Characteristics by Age

No	Age (year)	Amount	Percentage
1	11	1	1,7%
2	12	17	28,3%
3	13	32	53,3%
4	14	7	11,7%
5	15	2	3,3%
6	16	1	1,7%
Total		60	100%

Based on table 2, most of the research respondents were 13 years old. Age 13 years dominated the respondents with a total of 32 people, that is as much as 53.3%.

Table 3. Description of Respondents' Characteristics by Class

No	Class	Amount	Percentage
1	7	22	36,7%
2	8	34	56,6%
3	9	4	6,7%
Total		60	100%

Based on table 3, most of the research respondents were grade 8 children. Grade 8 children dominated with a total of 34 people, which was as much as 56.6%.

Table 4. Description of Father's Occupational Characteristics

No	Job	Amount	Percentage
1	Civil servant	3	5%
2	Privat sector	11	18,3%
3	Self Employed	4	6,7%
4	Merchant	8	13,3%
5	Farmer	30	50%
6	Other	4	6,7%
Total		60	100%

Based on table 4, most of the research respondents' fathers were farmers. Father's work as a farmer dominates with a total of 30 people, which is as much as 50%.

Table 5. Description of Mother's Occupational Characteristics

No	Job	Amount	Percentage
1	Civil servant	1	1,7%
2	Privat sector	12	20%
3	Self Employed	2	3,3%
4	Merchant	7	11,7%
5	Farmer	7	11,7%
6	Housewife	28	46,6%
7	Other	3	5%
Total		60	100%

Based on table 5, most of the research respondents' mothers are housewives. The work of mothers as housewives dominates with a total of 28 people, which is as much as 46.6%.

Table 6. Description of Father's Income Characteristics

No	Income	Amount	Percentage
1	Low <Rp 1.500.000,-	38	63,3%
2	Medium Rp. 1.500.000,- s.d Rp. 2.500.000,-	6	10%
3	Height > Rp.2.500.000,- s.d Rp. 3.500.000,-	9	15%
4	Very high> Rp. 3.500.000,-	7	11,7%
Total		60	100%

Based on table 6, the income of the fathers of the research respondents is mostly in the low category according to BPS. The low income category (Rp <1,500,000.-) dominates with a total of 38 people, which is 63.3%.

Table 7. Description of Mother's Income Characteristics

No	Income	Amount	Percentage
1	Low <Rp 1.500.000,-	43	71,6%
2	Medium Rp. 1.500.000,- s.d Rp. 2.500.000,-	6	10%
3	Height > Rp.2.500.000,- s.d Rp. 3.500.000,-	7	11,7%
4	Very high > Rp. 3.500.000,-	4	6,7%
Total		60	100%

Based on table 7, the income of the mothers of the research respondents is mostly in the low category according to BPS. The low income category (Rp <1,500,000.-) dominates with a total of 43 people, which is 71.6%.

Table 8. Results of Knowledge about Dental and Oral Health

Group	Criteria					
	Good	%	Medium	%	Bad	%
Pre test	6	10%	26	43,3%	28	46,7%
Post test	38	63,3%	17	28,3%	5	8,4%

Based on table 8, most of the children in the pretest had scores in the bad category, namely 28 people (46.7%) and most of them improved in the post test. The highest score criterion at the time of the post test was good, which was obtained by 38 children (63.3%).

Table 9. Descriptive analysis and data normality test

Variable	Skewness	Kurtosis	Median	ρ value*
Pre test	0.705	-0.783	60.00	0.003
Post test	0.749	0.040	80.00	0.001

*Shapiro-Wilk, ρ value < 0.05 shows abnormal data

Based on table 9, it can be seen from the Shapiro-Wilk normality test, both pre-test and post-test have a significance value of <0.05, which means that the data is not normally distributed, so it is continued for the bivariate test with the Wilcoxon Signed Rank Test. In table 9. We can also see that there is an increase in the median value of the pretest and posttest.

Tabel 10. Bivariate analysis

Category	Sampel	Mean rank	ρ value**
Post test - Negative rank	7	12.64	0.000
pre test Positive rank	50	31.29	
Ties	3		

**Wilcoxon Signed Ranks Test, ρ value < 0.05 show signifikan

Based on the bivariate analysis in table 10, it shows that ρ value = 0.000, which means that there is an influence on the application Educational Dental Keychains in the Student Team Achievement Division.

b. Discussion

Health promotion using STAD is a health promotion model adopted from a cooperative learning system of learning carried out in a learning team. Each team member is expected to be able to make each student learn. Each team must work together to achieve learning goals. Criteria for the success of learning is determined by the success of the team. Each group is heterogeneous so that each member contributes to the success of the group. In group learning with cooperative management, students are expected to be able to carry out the functions of the learning objectives, namely the planning function, the organizational function, the implementation function and the control function. In this learning skills required to work together in a team. The willingness to work together is then practiced through the activities and activities described in the skills to work together. Thus, students need to be encouraged to be willing and able to interact and communicate with other members. Students need to be helped to overcome various obstacles in interacting and communicating, so that each student can convey ideas, express opinions, and contribute to the success of the group. It is hoped that with this cooperative learning, students can implement health promotion in everyday life, not only in the classroom (Wulandari, 2022).

In implementing this method, it was found that the use of dental keychains in the student team achievement division method was able to increase students' knowledge about dental and oral health maintenance. It was shown that from the pre-test and post-test there was an increase in student scores as evidenced by statistical analysis ρ value $0.000 < 0.05$, which means that there was a significant difference in knowledge between the pre-test and post-test. Increased knowledge occurred in 83% (50 students). This is in accordance with Edgar Dale who stated that in general people will understand well the learning conveyed if the media used is interesting (Priambodo, 2022). As much as 11.7% (7 students) their knowledge decreased, and 5.3% (3 students) their knowledge remained. Students whose knowledge decreases and remains constant is because the child is not active in discussion activities and does not ask questions during the explanation from the facilitator so that the perception of dental and oral health decreases or remains the same. However, the value of these children is still above average. This is appropriate Ariani (2018) which states that the STAD method has drawbacks for students who are not yet proficient, it will be difficult to do. Besides that, the weakness of this

method is that it requires students to be active in working together, which is not done by students with declining and fixed scores.

6. CONCLUSION

The use of Educational Dental Keychains and the STAD health promotion method can be applied as an effort to increase oral and dental health knowledge in adolescents. In the future, it is hoped that this community service can be carried out routinely in the UKGS program. For further researchers, it is hoped that it can be used as a reference for further research.

7. REFERENCES

- Adhani, R. (2022) *Karies Gigi Di Masyarakat Lahan Basah*. Media Nusa Publishing.
- Ariani, T., & Agustini, D. (2018) 'Model Pembelajaran Student Team Achievement Division (Stad) Dan Model Pembelajaran Teams Games Tournament (Tgt): Dampak Terhadap Hasil Belajar Fisika', *Spej (Science And Physic Education Journal)*, 1(2), Pp. 65-77.
- Armilda D, Aripin D, S. S. (2017) 'Pola Makanan Kariogenik Dan Nonkariogenik Serta Pengalaman Karies Anak Usia 11-12 Tahun Di Sdn Cikawari Kabupaten Bandung', *Padjadjaran J Dent Rest Student*, 1(2), Pp. 127-134.
- Arsyad. (2018) 'Pengaruh Penyuluhan Terhadap Pengetahuan Pada Murid Kelas Iv Dan V Sd.', *Media Kesehatan Gigi*; 17(1): 61-71., 17(1), Pp. 61-71.
- Asridiana, T. E. (2019) 'Efektivitas Penggunaan Obat Kumur Beralkohol Dan Non-Alkohol Terhadap Penurunan Indeks Plak Mahasiswa D-iv Jurusan Keperawatan Gigi Poltekes Makassar', 18(2), Pp. 1-2.
- Deswita (2013) 'Hubungan Kesehatan Gigi Dan Mulut Dengan Konsep Diri Pada Remaja Di Smpn 7 Pariaman.', *Ners Jurnal Keperawatan*, 9(2), Pp. 152-153.
- Esmianto, E., Sukowati, S., Suryowati, N., & And Anam, K. (2016) 'Implementasi Model Stad Dalam Meningkatkan Hasil Belajar Siwa', *Briliant: Jurnal Riset Dan Konseptual*, 1(1), Pp. 16-23.
- Fatimatuzzahro N, Prasetya T, A. W. (2016) 'Gambaran Perilaku Kesehatan Gigi Anak Sekolah Dasar Di Desa Bangsalsari Kabupaten Jember.', *Jurnal Ikesma*. 2016; 12(2): 85-86,88., 12(28), Pp. 85-88.
- Fione Rossa V, Bidjuni M, K. A. (2015) 'Efektivitas Penggunaan Benang Gigi (Dental Floss) Terhadap Plak Indeks. 2015; 10(1): 36-37.', *Infokes*, 10(1), Pp. 36-37.
- Himawan, Fennita, Isnur Hatta, I. K. W. (2020) 'Effectiveness In The Use Of Soft And Medium Toothbrush Bristles With Fone's Technique For Plaque Reduction', *Dentino*, 5(2), Pp. 210-216.
- Jalanti, Sanuddin Putra (2018) 'Pengaruh Media Promosi Gantungan Kunci Terhadap Perubahan Pengetahuan Bahaya Merokok Pada Siswa Smp Negeri 27 Samarinda'.
- Jannah, Eva Nor, Ika Kusuma Wardani, D. W. (2022) 'Perbedaan Efektivitas Penyuluhan Pemeliharaan Kesehatan Gigi Dengan Media Video Animasi Dan Podcast', *Dentin*, 6(2).

- Kemendes Ri. (2018) *Laporan Riset Kesehatan Dasar, Riset Kesehatan Dasar*. Jakarta: Balitbang Kemendes Ri.
- Kurniasih, Imas Dan Sani, B. (2015) “*Ragam Pengembangan Model Pembelajaran Untuk Peningkatan Profesionalitas Guru*”. Jakarta: Kata Pena. Available At: <https://Serupa.id/Model%02pembelajaran-Stad>.
- Maulana, P., & Akbar, A. (2017) ‘Penerapan Pembelajaran Kooperatif Tipe Stad (Student Team Achievement Division) Untuk Meningkatkan Kemampuan Membaca Pemahaman Di Sekolah Dasar’, *Jurnal Pesona Dasar*, 5(2).
- Notoatmodjo, S. (2007) *Promosi Kesehatan Dan Ilmu Perilaku*. Jakarta: Pustaka Rineka Cipta.
- Pratamawari, H. M. (2019) ‘Hubungan Self-Rated Oral Health Terhadap Indeks Kunjungan Rutin Pemeriksaan Kesehatan Gigi Dan Mulut Ke Dokter Gigi’, *Odonto (Dental Journal)*, 6(1), Pp. 6-11.
- Priambodo, Yanuar Agung, Isnur Hatta, I. K. W. (2022) ‘Efektivitas Penerapan Metode Demonstrasi Dan Video Pada Dental Health Education Terhadap Tingkat Pengetahuan Kesehatan Mulut Pasien Skizofrenia Di Rsj Dr. Radjiman Wediodiningrat’, *Dentin*, 6(2).
- Ri, K. (2018) *Riset Kesehatan Dasar Nasional*. Jakarta.: Riset Kesehatan Dasar Nasional. Badan Penelitian Dan Pengembangan Tenaga Kesehatan.
- Santi, K. S. (2019) ‘Pengaruh Cara Menggosok Gigi Terhadap Karies Gigi Anak Kelas Iv Di Sdn Satria Jaya 03 Bekasi’, *Semnasfip*.
- Suratri M, Sintawati, A. (2016) ‘Pengetahuan, Sikap Dan Perilaku Orang Tua Tentang Kesehatan Gigi Dan Mulut Pada Anak Usia Taman Kanak-Kanak Di Provinsi Daerah Istimewa Yogyakarta Dan Provinsi Bante Tahun 2014.’, *Media Litbangkes*, 26(2), P. 120.
- Syaputri, Dwi Indah, Isnur Hatta, I. K. W. (2023) ‘The Correlation Between Parenting Style And Student Def-T Index’, *Dentin*, 7(1).
- Wardana, I., Banggali, T., & Husain, H. (2017) ‘Penerapan Model Pembelajaran Kooperatif Tipe Student Team Achivement Division (Stad) Untuk Meningkatkan Hasil Belajar Siswa Kelas Xi Ipa Avogadro Sma Negeri 2 Pangkajene (Studi Pada Materi Asam Basa)’, *Chemica: Jurnal Ilmiah Kimia Dan Pendidikan Kimia*, 18(1), Pp. 76-84.
- Wardani, Ika Kusuma, Deby Kania Tri Putri, E. N. (2022) ‘Diversification Of Ironwood Waste As Educational Dental Keychains’, *Jurnal Kreativitas Pengabdian Kepada Masyarakat*, 5(11), Pp. 4046-4056.
- Wiley J, S. (2012) *Comprehensive Preventive Dentistry*. Usa: Blackwell Publishing.
- Wulandari, I. (2022) ‘Model Pembelajaran Kooperatif Tipe Stad (Student Teams Achievement Division) Dalam Pembelajaran Mi’, *Jurnal Papeda*, 4(1).