



## INTERACTIVE EDUCATION FOR BETTER DENTAL HEALTH: A COMMUNITY SERVICE EXPERIENCE IN SIDOARJO

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### ABSTRACT

**Background:** The Clean and Healthy Living Behavior (CHLB) movement is a fundamental principle that needs to be implemented in daily life. The background to this activity was based on the importance of preventing tooth decay from an early age, which has been proven to impact child growth and development. **Objective:** The goal was to provide education on CHLB, particularly regarding maintaining dental health in early childhood. **Method:** The current community service program was implemented at RA An-Nur RT 37, Sidokepong Village, Buduran, Sidoarjo. The methods used included initial observation, material development, interactive learning media development, lesson plan development, and outreach. The outreach was attended by 37 group B students, using an interactive approach consisting of illustrated stories, group practice, and fun mini-games. **Results:** The results showed an increase in students' understanding of the importance of maintaining dental health, the appropriate time to do so, and their understanding of choosing healthy foods for teeth. CHLB outreach using interactive educational methods has proven effective in increasing early childhood awareness of dental health while fostering healthy habits from an early age. **Conclusion:** This activity successfully demonstrated that utilizing an interactive educational approach, incorporating illustrated stories, group practice, and mini-games, is highly effective in increasing early childhood awareness regarding dental health.

**Keywords:** Clean and Healthy Living Behavior; early childhood; dental health; outreach; interactive education

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## **A. BACKGROUND**

The Clean and Healthy Living Behavior (CHLB) movement is a fundamental principle that needs to be implemented in daily life. Through this movement, it is hoped that every individual can maintain their health. Maintaining health is especially important in early childhood, as at this age, children are still susceptible to disease and their immune systems are not as strong as those of adults in general (Haryati, 2024). Therefore, implementing these behaviors is not easy; awareness and habituation are needed to ensure they become a healthy lifestyle.

Clean and healthy living habits should begin at an early age (>6 years old), as this is the golden age for a child's development. Implementing clean and healthy living habits from an early age has a significant impact on their lives. Children need to be introduced to simple habits first, such as eating healthy foods, washing their hands before eating, brushing their teeth regularly, and maintaining cleanliness in their surroundings. However, implementing and getting children used to living clean and healthy habits is not easy. It still requires guidance, patience, and support from parents, teachers, and the surrounding environment.

The first step in instilling good habits in children is through socialization activities that focus on early childhood dental health. During this age range, children are often uncontrolled in their food choices, and regular tooth brushing habits are often underestimated, and parents often neglect their children's dental health. According to Kusuma et al., (2023) early childhood caries (ECC) is a health problem for children aged 0-6 years in various countries, including Indonesia. The prevalence of ECC worldwide ranges from 12-27% and is more common in children aged 4-6 years, reaching 27-48%. In some countries, the incidence is even higher, such as in the Middle East, reaching 76%; and Australia, the United States, and Canada, reaching 60-90%. According to Rahina et al., (2019) dental caries in preschool age also impacts children's growth and development. Dental caries causes developmental disorders in children and has been shown to affect their quality of life. According to Bloom, in the first 4 years of a child's life, cognitive development reaches approximately 50%, reaching 80% within 8 years, and 100% after 18 years. If caries occurs in children, the child's cognitive development will be impaired. Based on the opinions above, it can be

concluded that the need for awareness in maintaining dental health must begin at an early age, the goal is to avoid damage to teeth from one of the problems that is often encountered, namely dental caries that occurs in early childhood.

In the field where we conducted outreach, data showed that 70% of the students in the class had visible tooth decay on their front teeth. Therefore, this outreach activity is crucial because children at this age do not yet fully understand the importance of maintaining personal hygiene and health, making education crucial in establishing a healthy lifestyle from an early age. Dental health, for example, is an important aspect that is often overlooked, but has a significant impact on a child's quality of life and development. The success of CHLB implementation in schools is inseparable from the active role of teachers and students (Deviardiani & Fitriyani, 2020). Therefore, the socialization approach should not only be informative but also interactive and fun so that children can easily accept and practice new behaviors. The urgency of CHLB socialization lies in its ability to prevent disease early on, which can improve children's future quality of life. For example, implementing the habit of washing hands, brushing teeth regularly, and maintaining a clean environment can minimize the risk of infection and tooth decay, which are very common in this age group. Dental caries in children not only causes pain but can also interfere with learning and cognitive development, so this socialization helps reduce this burden in a fun and educational way. Thus, this activity is highly relevant as a form of primary prevention with a broad impact (Khan et al., 2024).

Using fun educational methods in socialization is crucial for engaging and engaging children. These methods can include educational games, interactive stories, or engaging visual media, ensuring health messages are conveyed without causing boredom or stress. According to Alifia & Hendriana (2021) which produces a product in the form of animated video media that functions as a learning medium for early childhood about clean and healthy living behavior, especially for children in group B2 of Paud Anggrek Tanjung Barat, which is able to improve clean and healthy living behavior. According to Ananda et al., (2025) with community service activities, socialization of CHLB through interactive communication with image media and role play for ABA 1 Kindergarten students has succeeded in instilling basic understanding and skills regarding the importance of maintaining personal hygiene. Based on several studies above, it

can be concluded that implementing fun methods also makes it easier for children to remember and apply healthy habits in everyday life. This fun approach is not only effective in increasing understanding but also helps strengthen children's emotional attachment to a clean and healthy lifestyle. The role of community service students in this socialization activity is vital as agents of change who bring knowledge and support directly to the community. Students can help by compiling educational materials that are easy to understand, facilitating socialization activities, and being active companions for children during activities. The involvement of students is also a real form of contribution in supporting public health programs which aim to improve the quality of life of the community as a whole, especially in the aspect of early childhood health which is the foundation for future human resource development.

## **B. METHOD**

This program was implemented on August 14, 2025, attended by approximately 37 students from group B RA An-Nur (Kindergarten) RT 37. This program was based on the importance of maintaining health, especially teeth for early childhood. It began with the observation stage at the school, aiming to reveal the school conditions and also ensure the number of students. Followed by a discussion of the material, lesson plans, and learning media which used during the socialization process. The third stage was the process of creating media and teaching plans. In this process, students worked together to create media for each student and prepare a fun and interactive teaching plan for students. Finally, the implementation stage involved 2 people as presenters while the others act as student companions. This stage was the implementation stage of the teaching plan prepared previously. From this stage, the students' responses were observed and identified.

## **C. RESULTS AND DISCUSSION**

The CHLB movement is the first step in providing appropriate education and habits to young children. Through this program, UNUSIDA community service program students held a CHLB socialization program, covering topics on how to properly maintain dental health at RA An-Nur. This activity is expected to encourage children to start living a clean and healthy life by becoming more aware of the importance of maintaining dental health. The following are the

stages of the Clean and Healthy Living Behavior (CHLB) socialization at RA An-Nur (Kindergarten):



**Figure 1.** Socialization Stage of CHLB

### ***Observation***

The initial stage is school observation. By starting with observation, we can determine the condition of the school and students. During the observation stage, what must be done is conveying the material that will be presented during the socialization, followed by asking the number of students at RA An-Nur and how much time will be given for the socialization. UNUSIDA KKN Community Service Program students chose to conduct socialization with group B because it was considered easier to condition and in terms of age, the number of students in group B is approximately 37 students. After confirming the number of students, the next stage will be discussed again, namely the stage of discussing media, teaching plans, and materials to be presented.

### ***Discussion***

Continued with the discussion stage, at this stage the UNUSIDA KKN Community Service Program students discussed the material that would be used for the socialization. With the 90 minutes given, the KKN students had to thoroughly prepare material that could be conveyed in full. Considering that the socialization was conducted in a Kindergarten setting, the material used did not have to be complex nor did it have to explain a lot of theory. Instead, the material had to be structured simply so that students could easily understand and apply it. Therefore, the UNUSIDA KKN Community Service Program students chose to use material on how to maintain dental health properly and correctly. The use of media was also adjusted to the large number of group B students at RA An-Nur. There were approximately 37 students, and the media created had to be for the same number. The media used was a picture of a girl showing her upper and lower teeth, plus media of dentures, and a custom toothbrush. After completing the discussion of the material and media, the discussion and creation of a teaching plan continued.

### ***Creating a Teaching Plan***

Creating a Teaching Plan is something that should not be missed. Making a teaching plan aims to be able to know the flow when conducting socialization. The creation begins with compiling the first step, namely compiling learning objectives, including: (1) stating the benefits of maintaining dental health; (2) knowing the right time to brush your teeth; (3) practicing the correct way to brush your teeth; (4) providing motivation to get used to brushing your teeth. Continued by writing down the tools and materials which include media pictures of teeth, toothbrushes made of sponge, markers, glue, scissors, and a loudspeaker. Next, compile the activity steps which include the opening, main activities, and closing. In the opening point, students will be introduced, ice breaking, giving starting questions, providing motivation, and inviting students to sing together. The core activity points include what material will be delivered during the socialization, including: (1) picture stories; (2) demonstrations using dentures; (3) joint practice using media pictures and toothbrushes made of sponge; and (3) working on sheets in the form of pictures of teeth, healthy and unhealthy foods for dental health. At the closing point there is an icebreaker, then asking again the points that have been presented, inviting students to play mini games also accompanied by giving rewards, and closed with a prayer. After completing the lesson plan, the next step is to create learning media. The learning media uses a picture of a girl with her upper and lower teeth visible, the picture is printed then attached to cardboard that has been adjusted to the size, then given a plastic cover. The use of a plastic cover aims to later when the picture is scribbled on the teeth, it can be easily erased. Added media dentures that have been prepared, and a toothbrush made from ice cream sticks with a sponge attached to it so that it resembles a toothbrush, but in a simpler version.



**Figure 2.** Image of the learning media creation process

### **Implementation**

This phase was carried out on August 14, 2025, at 08.00 WIB. Before starting the socialization activity, teachers at RA An-Nur (Kindergartren) had prepared students by arranging their sitting positions and praying. The socialization activity began by greeting students, then continued with greetings and introductions to the KKN Community Service Program students' brothers. In accordance with the teaching plan, after greeting students, the student brothers did an icebreaker so that the atmosphere did not feel awkward and students could focus on paying attention ahead. Afterward, the students were asked leading questions, including "Who brushed their teeth this morning?" and "Why should we brush our teeth?" The students enthusiastically responded to these leading questions, with many raising their hands. Following the leading questions, the student provided motivation to ensure they continued participating in the activity until the end.

The main activity began with a picture story, showing pictures of healthy and unhealthy teeth. The story continued with a reading of the story about the characters "White Teeth and Black Teeth," which encouraged students to always pay attention to their dental health by brushing their teeth twice a day, avoiding foods that can damage teeth, such as sweets, and brushing their teeth properly. The next point, a demonstration using dentures, the student invited students to sing the song "How to Brush Your Teeth" and demonstrated how to brush their teeth using dentures and a toothbrush specifically for children. The purpose of the song demonstration was to make it easier for students to remember and practice.

The final point was: During group practice, students practiced brushing their teeth using the provided materials: a picture of a girl showing her upper and lower teeth, which were then scribbled on with markers to give the impression of dirty teeth, and a homemade toothbrush made from ice cream sticks and a sponge attached to the top. After the group practice, the student teacher selected five brave students to come forward to work on a sheet of teeth and attach stickers indicating which foods are healthy and unhealthy for teeth. It was clear that all five students fully understood which foods can and do not damage teeth. After completing the core activity, the closing session began. During the closing session, the student teacher again asked questions about key points from the

material presented, such as "how many times should we brush our teeth a day?" and "when is the best time to brush?" The students were then invited to play mini-concentration games to liven things up and help them concentrate. The final activity included giving rewards in the form of a carton of UHT milk and praying together.



**Figure 3.** CHLB socialization at RA An-Nur RT 37 Sidokepong Village, Buduran, Sidoarjo

Based on research by Najilla et al., (2025) shows that introducing CHLB to children is one way to form a positive attitude towards children, through digital popup book media on CHLB material shows the results of product trials on children aged 5-6 years showing results of 98.88% with a feasible category, this shows that using this media can be used and is suitable to be a teaching material on CHLB material for early childhood. Based on research conducted by (Mulyawan et al., 2025) It was found that through the CHLB socialization carried out on elementary school students using interactive counseling with examples, questions and answers, and educational games, it was able to increase students' enthusiasm in receiving the material and show initial changes in attitudes towards cleanliness. Based on research conducted by (Sabriani et al., 2025) in elementary school children to improve the understanding of CHLB practices through an interactive educational approach based on games, simulations, and visual media showed an increase in student knowledge of 61.5% and positive changes in daily behavior of up to 44%. Thus, the interactive educational approach is proven to be effective and applicable in instilling CHLB values. Based

on several studies above, it can be concluded that the implementation of Clean and Healthy Living Behavior in early childhood and elementary school students is very effective if carried out with a fun, interactive approach and adapted to child development.

#### **D. CONCLUSION AND SUGGESTION**

The implementation of Clean and Healthy Living Behavior (CHLB) socialization at RA An-Nur RT 37, Sidokepong Village, demonstrated that an interactive educational approach can improve early childhood understanding of the importance of maintaining dental health. By using simple yet engaging learning media, students can more easily grasp health messages and directly instill them. The success of this program is not only seen in the students' enthusiasm for participating in the activities, but also in their increased awareness of the appropriate time to brush their teeth, the correct brushing technique, and their ability to distinguish between healthy and unhealthy foods for teeth. This demonstrates that health education delivered in a fun way can have a positive impact on children's behavior from an early age.

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