

# WELCOME (WEALTH COMMUNITY EMPOWERMENT) JOURNAL

## "DEN-DY (Dental Diary)" AS AN EFFORT TO IMPROVE KNOWLEDGE AND BRUSHING SKILLS IN ELEMENTARY SCHOOL CHILDREN

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### ABSTRACT

This report discusses community service through the media "DEN-DY (Dental Diary)" which aims to improve knowledge and brushing skills in elementary school children in MI Miftahul Huda Suwawal Timur. Dental and oral health is an important aspect of general health, and children often lack adequate education about dental care. Through the development of interesting and interactive educational media, this research aims to overcome the problem of low knowledge and brushing skills among students. The methods used include counseling, distribution of DEN-DY media, and evaluation of results through pretest and posttest. The results showed a significant improvement in students' knowledge and skills after the intervention. It is hoped that this innovation can be a model for dental health programs in other schools.

**Keywords:** Educational Media, Dental Health, Elementary School Children, DEN-DY, Oral Hygiene.

## Introduction

Dental and oral health is an integral part of overall health, affecting many aspects of an individual's life, including their ability to speak, diet, and daily activities. Dental health problems, such as dental caries, are very common, especially among children. According to data from the 2023 Indonesian Health Survey (SKI), the proportion of dental and oral problems in Indonesia reaches 56.9%, with cavities being the biggest problem faced by society. Dental caries is a disease experienced by almost half of the world's population, and in Indonesia, the severity of caries is very high, especially in Central Java which recorded a rate of 42.8%. Primary school-age children are particularly vulnerable to this problem, largely due to a lack of adequate education regarding oral hygiene. Many children do not know how to brush their teeth properly or the importance of maintaining their oral hygiene. This bad habit is exacerbated by children's tendency to consume sugary foods that become a substrate for bacteria that cause tooth decay. Therefore, it is important to provide effective dental health education from an early age to prevent more serious dental and oral health problems in the future. Efforts to improve knowledge and skills in maintaining dental health need to be carried out through interesting and interactive educational programs so that children can understand the importance of dental care properly.

## Methods

The research method used in this report focuses on the development and implementation of the "DEN-DY (Dental Diary)" media as a tool to improve knowledge and brushing skills in elementary school children in MI Miftahul Huda East Suwawal. This study follows a quantitative approach with an experimental design, where researchers will carry out interventions using the media that has been designed and measure their impact on students' knowledge and skills.

The first step in this study was to conduct an initial survey to identify the level of knowledge and skills of the students brushing their teeth before the intervention. This initial data was collected through a specially designed questionnaire, which included questions about brushing habits, understanding of dental health,

and attitudes towards dental care. Researchers will develop "DEN-DY" media that contains educational materials about dental and oral health, equipped with educational videos that can be accessed via QR codes. This media also provides a monitoring table to help students record their brushing habits.

After the media is ready, the intervention is carried out by introducing the media to students during the classroom learning session. The researcher will provide instructions on how to use the media and explain the importance of maintaining dental health. During the intervention period, students will be asked to use the media regularly and report the results through the monitoring table that has been provided.

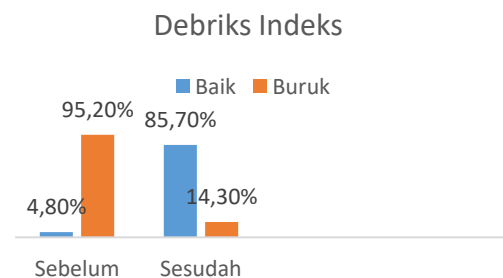
After the intervention period ends, the researcher will again survey to evaluate changes in students' knowledge and skills. Data collected from the post-intervention questionnaire will be analyzed using statistical methods to determine the effectiveness of the "DEN-DY" media in improving teeth brushing knowledge and skills. The results of this study are expected to make a significant contribution to the development of dental health programs in elementary schools and increase children's awareness of the importance of maintaining dental health from an early age.

## Results and Discussion

The results and discussion of the research on the use of "DEN-DY (Dental Diary)" media in elementary school children at MI Miftahul Huda Suwawal Timur showed significant results.

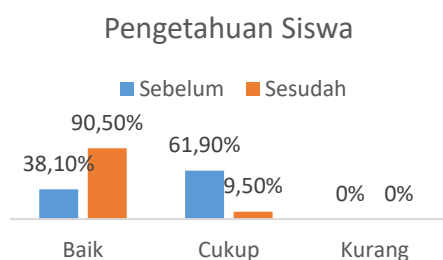
### 1. Student dental hygiene

Based on the data, before being given Den-Dy's media intervention, there was 1 student (4.8%) who had a good dental hygiene category, while 20 students (95.2%) were in the poor category.



After the intervention with Den-Dy media, there was a significant increase, where 18 students (85.7%) managed to achieve the good category and only 3 students (14.3%) were still in the bad category.

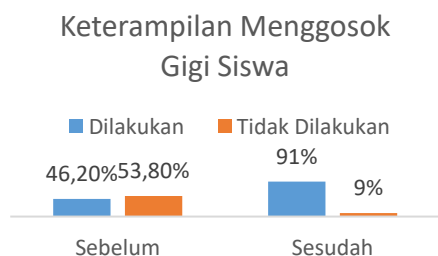
## 2. Student dental health knowledge



Based on the data collected before and after the intervention, there was a clear improvement in students' knowledge and skills related to dental and oral health. Before the intervention, only 38.10% of students had good knowledge of dental hygiene, while after the use of "DEN-DY" media, the percentage increased to 90.50%. This shows that the designed educational media is not only interesting but also effective in conveying important information about dental health. Students' teeth brushing skills have also improved significantly.

## 3. Students' teeth brushing skills

The results of the observation showed that after using the "DEN-DY" media, as many as 91% of the students were able to show the correct brushing technique, compared to only 46.20% before the intervention.



This improvement can be attributed to the presence of monitoring tables provided in the media, which encourages students to be actively involved in their dental care process. By recording their brushing habits, students become more aware of the importance of maintaining oral hygiene and developing good routines.

In addition, the evaluation of the effectiveness of the "DEN-DY" media also involves feedback from teachers and parents of students. Many teachers report that students become more enthusiastic about learning about dental health and more actively participate in brushing activities at school. Parents also noted positive changes in their children's behavior at home, such as remembering to brush their teeth regularly and choosing healthier foods.

In terms of innovation, the development of "DEN-DY" media as a diary book equipped with QR codes for access to educational videos has proven to be an effective strategy. This medium not only provides information but also an interactive learning experience, so that students can better understand the concept of dental health. This is in line with the educational theory that the right use of media can improve the teaching and learning process.

Overall, the results of this study show that the use of "DEN-DY" media can be a practical solution to improve the knowledge and skills of brushing teeth in children at MI Miftahul Huda. With this increase in knowledge and skills, it is hoped that it can reduce the prevalence of dental health problems among children and encourage better oral health behaviors in the future. This research makes an important contribution to the development of dental health programs in primary schools and opens up opportunities for further research on the effectiveness of educational media in other health contexts.

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