

Healthy Living Counseling Through Washing Hands Against Germs At State Elementary School Cisalak 3 In 2025

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ABSTRACT

Handwashing with soap is one of the most effective and accessible methods to prevent the transmission of infectious diseases in school-aged children. However, observations at Cisalak 3 Public Elementary School indicate that most students have not yet implemented proper handwashing behavior, necessitating the implementation of the (Handwashing Against Germs) community service program. This activity aims to improve students' knowledge, attitudes, and handwashing practices through an educational seminar method with a pretest–posttest approach implemented through the delivery of health materials, interactive discussions, demonstrations of handwashing techniques according to World Health Organization (WHO) standards, and hands-on practice with guidance. A total of 169 students from grades 1 to 6 of Cisalak 3 Public Elementary School participated as participants. The results of the activity showed a significant increase in all measured indicators. Students' knowledge increased from 28% in the pre-test to 55% in the post-test. Students' attitudes toward important handwashing times increased from 38% to 72%, and correct handwashing behavior increased from 41% to 86% after the intervention. The findings of this activity indicate that health seminars accompanied by demonstrations and hands-on practice are effective in improving elementary school students' knowledge, attitudes, and handwashing behavior. Recommendations from this activity include the integration of handwashing education into daily school routines, the provision of adequate handwashing facilities, and the ongoing implementation of health education to strengthen the implementation of Clean and Healthy Living Behaviors (PHBS) in the school environment.

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INTRODUCTION

Clean and Healthy Living Behavior (PHBS) is a crucial component in efforts to improve public health, particularly in the school environment. Schools are a strategic place to instill healthy habits because elementary school-aged children are in the process of forming behaviors that will influence them throughout adulthood. One of the simplest yet most impactful forms of PHBS is handwashing with soap (Ministry of Health of the Republic of Indonesia, 2023).

Handwashing with soap has been proven effective in reducing the risk of transmitting various infectious diseases, such as diarrhea, respiratory infections, influenza, and skin diseases. The World Health Organization states that hand hygiene is an easy-to-implement and highly effective preventative measure, especially in schools and communities (WHO, 2024). Furthermore, the Centers for Disease Control and Prevention (CDC) reports that consistent, correct handwashing can significantly reduce the incidence of environmentally related diseases in children (CDC, 2025).

Elementary school children are particularly vulnerable to infectious diseases due to their high levels of physical activity, intense interaction with peers, and habitual touching of various objects around them. Without proper hand hygiene, germs can easily enter the body through food or direct contact with the mouth and nose (Yusuf & Lestari, 2023). Therefore, suboptimal handwashing behavior has the potential to increase morbidity and student absenteeism.

Several recent studies have shown that handwashing practices among schoolchildren are still suboptimal, both in terms of soap use and accuracy of handwashing steps. This low compliance is generally caused by a lack of ongoing health education, minimal routine practice, and limited direct supervision in the school environment (Suryani & Putra, 2024). This situation suggests that health education needs to be delivered using methods that are more applicable and easily understood by children.

Initial observations at Cisalak 3 Public Elementary School indicate that some students have not yet practiced proper handwashing habits. They found habits of washing hands without soap, not following the complete handwashing steps, and a lack of awareness of important handwashing times, such as before eating, after playing, and after using the toilet. These findings indicate the need for more targeted and practical educational interventions.

A health education approach that combines counseling with demonstrations and hands-on practice is considered more effective in improving children's knowledge, attitudes, and skills. The WHO and CDC recommend experiential learning methods as the primary strategy for promoting hand hygiene in schools because they strengthen understanding and instill healthy behaviors (WHO, 2024; CDC, 2025).

Based on this, the CUCIMAN (Handwashing Against Germs) community service program was implemented at Cisalak 3 Public Elementary School as an effort to improve students' understanding and skills in proper handwashing. This program is expected to strengthen the implementation of PHBS in the school environment and support the sustainable prevention of infectious diseases.

METHOD

The method used in this community service activity was an educational seminar with a health education approach. The seminar was designed to provide information, increase understanding, and build awareness among elementary school students about the importance of hand hygiene through

proper handwashing practices. This approach allowed for direct interaction between the presenter and participants, allowing the material to be delivered effectively and in a manner relevant to real-world conditions in the school environment.

Data collection was conducted through observations during the seminar, interactive discussions between the presenter and participants, demonstrations of proper handwashing, and documentation of the activities. A total of 169 students from grades 1 to 6 at Cisalak 3 Public Elementary School participated in the seminar. The stages of implementing the CUCIMAN (Handwashing Against Germs) program included:

- Initial Observation

Identifying students' handwashing habits, soap use, completeness of steps, and adherence to key handwashing times.

- Initial Assessment (Pre-test)

The initial assessment, using simple questions and direct observation, was conducted to obtain baseline information regarding students' understanding of hand hygiene. This stage aligns with standard evaluation practices in school health education (Rahmawati & Yuliana, 2025).

- Educational Media Preparation

Educational media in the form of posters, slides, and handwashing demonstration tools were prepared. The latest references related to PHBS and WHO handwashing standards were reviewed to ensure the accuracy of the material (WHO, 2024; CDC, 2025).

- Educational Outreach

Outreach activities included material on the importance of handwashing, diseases associated with poor hand hygiene, important times for handwashing, and correct handwashing steps. This approach followed the national PHBS guidelines for elementary schools (Ministry of Health of the Republic of Indonesia, 2023).

- Handwashing Demonstration

The facilitator demonstrated the seven-step handwashing technique recommended by the World Health Organization. Demonstration-based learning has been proven effective in improving motor skills and hygiene in children (WHO, 2024).

The final stage of the activity was the completion of a post-test questionnaire.

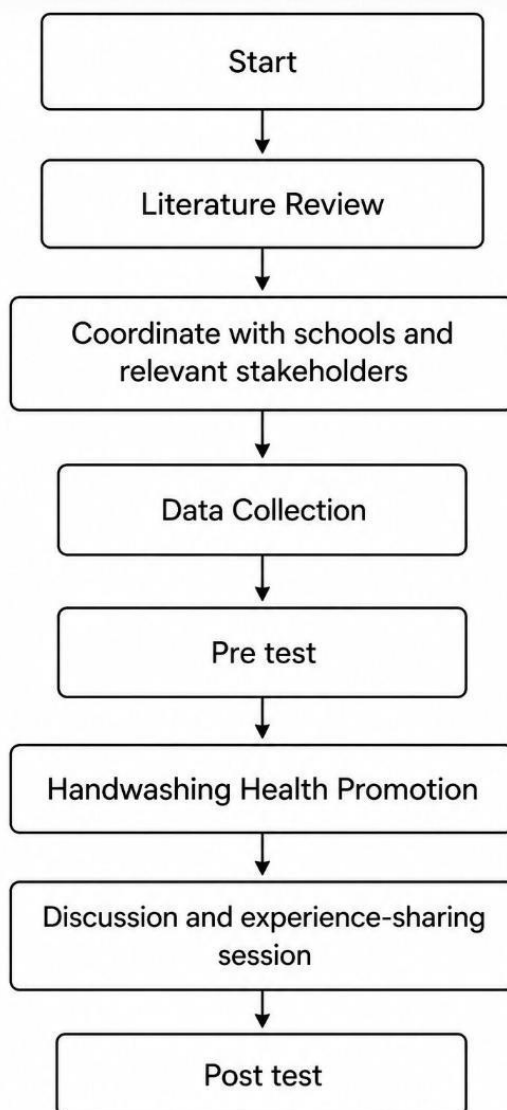


FIGURE 1. Flowchart

- **Direct Practice and Mentoring**

Students practice handwashing directly under the supervision of a facilitator and receive immediate feedback to correct errors. This hands-on, experiential, and supervised practice is recognized as an important component in improving hygiene behaviors in children (CDC, 2025).

- **Evaluation and Reflection**

Evaluation is conducted through observation, interactive question-and-answer sessions, and assessment of students' ability to demonstrate handwashing steps correctly. Reflections before and after the activity are also conducted. Evaluation focuses on participation, enthusiasm, and improved practice, in accordance with the principles of qualitative health promotion evaluation (WHO, 2024; Ministry of Health of the Republic of Indonesia, 2023).

RESULTS AND DISCUSSION

Through a series of structured educational activities implemented to improve students' knowledge, attitudes, and practices regarding proper handwashing, the CUCIMAN (Handwashing Against Germs) program at Cisalak 3 Elementary School demonstrated a significant increase in hygiene awareness among elementary school students. This program was implemented on November 10, 2025, and consisted of several integrated stages, including initial observation, health education, demonstrations, hands-on practice, and evaluation.

All stages supported each other in building students' understanding of hand hygiene as part of Clean and Healthy Living Behaviors (PHBS) and encouraging consistent implementation in daily activities. The main results and findings of this activity are presented as follows:

- Participant Participation



FIGURE 2. Number of Participating Students

All 169 students, from grades 1 to 6, actively participated in this activity. Students demonstrated high levels of enthusiasm during the explanation sessions, demonstrations, and hands-on practice. Student engagement was supported by the use of simple language, visual media, and interactive learning methods, which helped maintain student concentration and interest throughout the activity.

- Improved Knowledge and Understanding

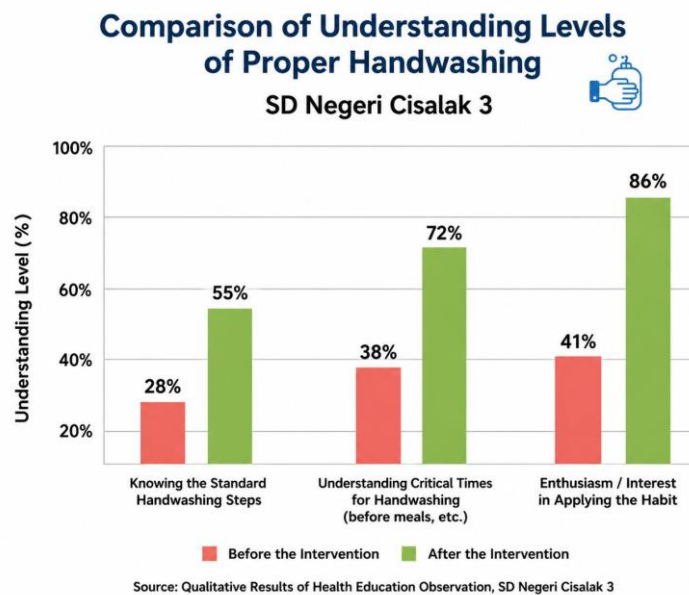


FIGURE 3. Comparison of Student Understanding Levels

The results of observations and interactive Q&A sessions before and after the activity showed a clear improvement in students' understanding of proper handwashing. Initially, most students still lacked understanding of the importance of handwashing with soap, the important times to wash their hands, and the correct handwashing steps.

After the intervention, most students were able to identify the benefits of handwashing and list the handwashing steps recommended by the WHO.

- Changes in Handwashing Practices



FIGURE 4. Handwashing practices

During the hands-on practice activities, students initially experienced difficulty with certain steps, such as cleaning their thumbs, fingertips, and wrists. However, after receiving direct guidance and feedback from the facilitator, students demonstrated increased accuracy and sequence in performing the handwashing steps. This demonstrates the successful transfer of skills from the demonstration to the hands-on practice phase.

- Student Motivation and Attitude

Students demonstrated increased motivation and positive attitudes toward hand hygiene. Many students expressed a willingness to practice proper handwashing routinely and actively participated during the practice activities and discussions. Reinforcement from teachers and facilitators played a crucial role in encouraging this behavioral change.

- Supporting and Inhibiting Factors

Several supporting factors that contributed to the program's success included interactive learning methods, the use of visual and hands-on media, and teacher involvement. However, several obstacles were encountered, such as the limited number of handwashing facilities, the need for more intensive

supervision for lower-grade students, and the persistence of students rushing through the handwashing steps. This situation highlights the importance of continuous reinforcement and habituation.

- General Discussion

The results of this program's implementation confirm that school-based handwashing education combined with demonstrations and hands-on practice is effective in improving students' knowledge, skills, and motivation regarding hand hygiene. This finding aligns with public health recommendations emphasizing that behavior change interventions for children should integrate education with hands-on practical experiences.

The long-term sustainability of this program requires the integration of handwashing education into daily school routines, the provision of adequate facilities, and strengthened collaboration between teachers and health workers to support ongoing adherence to PHBS.

Based on the results obtained, it can be seen that there was a significant increase in student understanding after the implementation of the CUCIMAN activity. Pre-test results showed that students' knowledge level regarding standard handwashing steps was 28%, which then increased to 55% in the post-test. Students' attitudes toward important handwashing times also improved, from 38% before the intervention to 72% after the educational activity.

Furthermore, students' handwashing behavior showed a significant increase, from 41% to 86% after the hands-on practice and mentoring during the activity. These findings indicate that the handwashing education and training conducted at Cisalak 3 Public Elementary School were effective in improving students' knowledge, attitudes, and practices regarding hand hygiene. Overall, students became more aware of the importance of handwashing with soap and were better able to apply the correct steps in their daily activities, thus contributing to a healthier school environment.

CONCLUSION AND RECOMMENDATION

The implementation of the CUCIMAN (Handwashing Against Germs) program at Cisalak 3 Public Elementary School demonstrated that structured health education, supported by demonstrations and hands-on practice, was effective in improving students' knowledge, awareness, and skills in implementing proper handwashing as part of Clean and Healthy Living Behaviors (PHBS). Through interactive learning, students demonstrated a better understanding of the importance of hand hygiene and were able to implement handwashing steps according to WHO recommendations more accurately.

The students' enthusiasm and active participation during the activity demonstrate that school-based interventions play a crucial role in fostering healthy lifestyles and preventing the spread of infectious diseases in the school environment.

To maintain and strengthen the impact of this activity, it is recommended that schools integrate handwashing education into daily routines, ensuring the availability of supporting facilities such as clean water, soap, and adequate handwashing facilities. Teachers are expected to provide regular guidance and reminders, especially for students who still require more intensive supervision. Furthermore, the placement of visual media such as posters and stickers in the handwashing area is recommended to reinforce and reinforce healthy behaviors. Regular health education activities and strengthening collaboration between schools, health workers, and community partners are also needed to maintain the sustainability of PHBS implementation and support long-term health improvements in the school environment.

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APPENDIX



FIGURE 5. Community Service activity documentation 1



FIGURE 6. Community Service activity documentation 6