



IMPROVING CLEAN AND HEALTHY LIVING BEHAVIOR (PHBS) AMONG SCHOOL CHILDREN THROUGH HEALTH EDUCATION

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ABSTRACT

Clean and Healthy Living Behavior (PHBS) is an essential component of health promotion aimed at preventing disease and improving the quality of life, particularly among school-aged children. However, the implementation of PHBS among school children remains suboptimal due to limited knowledge and awareness of healthy practices. This community service activity aimed to improve PHBS among school children through structured health education. The activity was conducted at an elementary school using interactive educational methods, including lectures, visual media, demonstrations, and question-and-answer sessions. The target participants were school-aged children who actively took part in the health education program. The results showed an improvement in students' knowledge, attitudes, and practices related to PHBS after the intervention. Students demonstrated a better understanding of clean and healthy behaviors, particularly proper handwashing techniques, personal hygiene, and environmental cleanliness. Increased participation and positive responses during the activity indicated that health education effectively enhanced students' awareness and willingness to apply PHBS in their daily school activities. In conclusion, health education plays a significant role in promoting Clean and Healthy Living Behavior among school children. School-based health education programs are recommended as a sustainable strategy to foster healthy habits from an early age and to support the creation of a healthy school environment.

Keywords: Clean and Healthy Living Behavior, PHBS, Health Education, School Children, Community Service.

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INTRODUCTION

Clean and Healthy Living Behavior (PHBS) is a fundamental component of public health that focuses on the adoption of hygiene and healthy lifestyle practices to prevent disease and promote well-being among individuals and communities. In school settings, PHBS encompasses various behaviors such as proper handwashing, maintaining personal hygiene, consuming nutritious food, and keeping the environment clean, all of which are essential for safeguarding children's health and optimizing their learning experiences (Laura B. S. Huwae et al., 2024; Nggorong, 2025). Despite its importance, multiple studies indicate that the level of PHBS among school children remains suboptimal, often resulting in increased vulnerability to communicable diseases and other health problems (Widia & Yustati, 2024).

Health education has been identified as a strategic intervention for improving PHBS among school children by increasing their knowledge, attitudes, and skills related to clean and healthy living practices. Educational programs delivered through structured counseling, interactive media, demonstrations, and participatory activities have been shown to positively influence children's understanding and practice of PHBS, leading to measurable improvements in hygiene behaviors and health outcomes (Laura B. S. Huwae et al., 2024; Nggorong, 2025; Putri et al., 2023). For example, health education in elementary schools has been associated with significant increases in students' hygiene awareness and the consistent application of healthy behaviors such as washing hands with soap and practicing proper sanitation (Nggorong, 2025; Putri et al., 2023).

Furthermore, the implementation of PHBS in schools contributes not only to physical health but also to broader educational achievements by reducing absenteeism, preventing disease transmission, and fostering an environment that supports overall child development. The role of teachers, parents, and school leadership is also critical, as collaborative efforts enhance the sustainability of health education outcomes and promote long-term adoption of healthy habits among students (Widia & Yustati, 2024).

Given the persistent challenges in achieving optimal PHBS among school children, health education interventions remain a priority in school-based health promotion programs. This study aims to investigate the impact of health education interventions on PHBS practices among school children, providing evidence to support the integration of effective health education strategies within the school curriculum and community service activities.

OBJECTIVES

General Purpose

The general purpose of this community service activity is to improve Clean and Healthy Living Behavior (PHBS) among school children through structured health education interventions.

Special Purpose

The specific purposes of this community service activity are to:

1. Increase school children's knowledge regarding the principles and importance of Clean and Healthy Living Behavior (PHBS).
2. Improve students' attitudes toward adopting clean and healthy lifestyle practices in daily school activities.

3. Enhance students' skills in implementing proper hygiene practices, such as handwashing with soap and maintaining personal cleanliness.
4. Encourage consistent application of PHBS practices within the school environment.
5. Support the role of schools in promoting sustainable health-oriented behaviors among students.

PLAN OF ACTION

Strategy Plan

The strategy plan of this community service activity was designed to ensure the effective delivery of health education on Clean and Healthy Living Behavior (PHBS) among school children. The planning phase involved coordination with school authorities to obtain permission and determine the schedule of activities. Educational materials were developed based on key PHBS indicators for school-aged children, including personal hygiene, handwashing with soap, environmental cleanliness, and healthy eating habits.

Appropriate educational methods were selected to match the cognitive level of school children, such as interactive lectures, visual media, demonstrations, and question-and-answer sessions. In addition, simple evaluation tools were prepared to assess students' understanding before and after the health education session. This strategic planning aimed to create an engaging learning environment and to maximize students' participation and comprehension of PHBS concepts.

Implementation

The implementation phase was carried out according to the planned strategy. The activity began with an introduction to assess students' initial knowledge related to PHBS through informal questioning.

Health education was then delivered using interactive presentations and visual aids, followed by practical demonstrations, particularly on proper handwashing techniques. Students were actively involved in the learning process through discussions and direct practice to reinforce their understanding of clean and healthy behaviors.

At the end of the session, a brief evaluation was conducted to measure changes in students' knowledge and understanding of PHBS concepts. Feedback was also provided to students to strengthen key messages and encourage the application of PHBS in their daily school activities. The implementation concluded with collaboration with teachers to support the continuity of PHBS practices within the school environment.

Setting

This community service activity was conducted at SDN Kedungjati 1, Kabuh Subdistrict, an elementary school located in Jombang Regency, East Java Province, Indonesia. The school was selected as the setting for this activity due to its strategic role in promoting early health education and the need to improve Clean and Healthy Living Behavior (PHBS) among students. The activity was carried out during school hours in the classroom environment to ensure optimal participation and effective learning conditions.

Target

The target of this community service activity was school children enrolled in the selected elementary school. The participants consisted of students who were within the school-age group and were considered appropriate recipients of PHBS education due to their developmental stage.

This target group was expected to benefit from the activity by gaining increased knowledge, positive attitudes, and improved practices related to Clean and Healthy Living Behavior.

RESULTS AND DISCUSSION

The implementation of the health education intervention at SDN Kedungjati 1, Kabuh Subdistrict demonstrated significant positive outcomes in improving Clean and Healthy Living Behavior (PHBS) among elementary school children. During the activity, students actively participated in interactive learning and practical demonstrations, particularly handwashing practices, which are foundational behaviors in PHBS promotion (Astuti et al., 2024). Immediately following the intervention, a marked improvement was observed in students' knowledge of PHBS principles, including personal hygiene, sanitation, and healthy habits such as appropriate waste disposal and hand hygiene (Priliana & Herlina, 2025; Putri et al., 2023). These findings are consistent with other recent studies reporting that structured health education increases understanding and retention of hygiene knowledge among school-aged children (Dona Martilova et al., 2025; Fatma Riyanti et al., 2025).

Moreover, students demonstrated enhanced attitudes toward implementing clean and healthy behaviors post-intervention. Teachers reported that more children expressed willingness to wash their hands before eating and to keep their surroundings clean, reflecting shifts in attitudes that are known precursors to behavior change (Handri Maika Saputra et al., 2025; Setiawan et al., 2024). Previous research supports this finding, showing that PHBS education improves attitudes and

commitment to hygienic practices among students (Rahmadina et al., 2023; Ronald Darlly Hukubun et al., 2023). In addition, increased engagement during hands-on demonstrations suggests that interactive methods are particularly effective for consolidating PHBS concepts in young learners (Wijayanti et al., 2024).

Behavioral changes were also evident, as students began practicing proper handwashing techniques and demonstrated greater responsibility in maintaining environmental cleanliness. This outcome aligns with studies that show PHBS education significantly improves hygiene behavior in school settings when delivered through participatory and context-specific approaches (Handri Maika Saputra et al., 2025; Xaybouaphanh et al., 2025). Consistent with this, research conducted in diverse school contexts has found that interventions targeting both knowledge and practice can lead to measurable gains in hygiene compliance and behavior adoption (Akbar et al., 2023; Toru et al., 2025).

Specifically, the observed improvements mirror results from quasi-experimental studies in which health education interventions increased students' handwashing behavior and overall hygiene practices (Akhter et al., 2025). These behavior changes are critical, as PHBS is associated not only with reduced incidence of communicable diseases but also with enhanced school attendance and learning outcomes (Bolatova et al., 2025). Additionally, the integration of PHBS education with school health programs fosters a holistic approach where students, teachers, and families collectively contribute to a healthier school environment (Handri Maika Saputra et al., 2025; Sasmita et al., 2020).

However, the intervention's duration limited the ability to assess long-term sustainability of behavior change, a challenge noted in the literature where longer and reinforced educational efforts are recommended to maintain positive practices over time (Erkoca et al., 2025). Furthermore, individual differences among students and variations in home support for health behaviors may affect the extent to which PHBS practices are sustained beyond the school context. Future programs should incorporate follow-up sessions, continuous monitoring, and engagement with families and community stakeholders to strengthen the durability of PHBS adoption (Phalis et al., 2025; Rohani, 2025).

In summary, the health education intervention effectively enhanced knowledge, attitudes, and behaviors related to Clean and Healthy Living Behavior among the participating school children. The results underscore the importance of interactive, school-based health education as a central strategy in promoting PHBS and establishing lifelong healthy behaviors in children.



Figure 1. Delivery of Health Education Material on Clean and Healthy Living Behavior.

CONCLUSION

This community service activity demonstrated that health education is an effective approach to improving Clean and Healthy Living Behavior (PHBS) among school children. The implementation of structured and interactive health education activities successfully increased students' knowledge, fostered positive attitudes, and encouraged the adoption of clean and healthy practices in the school environment. Active participation and practical demonstrations played a key role in enhancing students' understanding and application of PHBS principles.

The findings highlight the importance of school-based health education as a strategic effort in promoting healthy behaviors from an early age. Collaboration between health educators and school stakeholders supports the sustainability of PHBS practices and contributes to the creation of a healthier learning environment. Continuous and well-planned health education programs are recommended to maintain and strengthen clean and healthy living behaviors among school children.

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