

Training of Little Doctors as an Effort to Improve Students' Health Status

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Keywords: *Clean and healthy living behavior, Elementary school, Little doctors, Students health.*

Abstract: The health of school-aged children is a critical determinant of their growth, development, and academic performance. Schools play a strategic role in promoting healthy lifestyle habits and shaping behaviors. Nevertheless, existing evidence indicates that many students still demonstrate limited awareness of personal and environmental health. An alternative strategy to address this issue is the Little Doctor training program, designed to equip students with fundamental health knowledge, basic first-aid skills, and the capacity to educate peers regarding Clean and Healthy Living Behaviors (CHLB). Previous programs have largely focused on knowledge improvement, with limited emphasis on structured intervention models, practical skill reinforcement, and measurable outcomes. This study addresses these gaps by integrating a stage-based training design, interactive methods, and pre-post evaluation. This community engagement activity was implemented through training sessions involving 20 elementary school students. The intervention encompassed three stages: preparation, implementation, and evaluation. This structured and participatory approach is a key contribution in strengthening both knowledge and practical competencies. The evaluation results demonstrated a statistically significant improvement in students' knowledge, with the mean score increasing from 49.5 (SD = 7.592) to 69 (SD = 7.363) in the post-test ($p < 0.05$). In addition, students were able to demonstrate essential skills, including proper handwashing techniques, basic first-aid management, and an understanding of balanced nutrition. Participants were also introduced to the role of peer educators to support health promotion activities within the school environment. In conclusion, the Little Doctor training program was effective in improving students' health-related knowledge and basic skills.

1 INTRODUCTION

Elementary school children health is a crucial aspect in supporting both their growth and academic achievement (Sella et al., 2023). Schools, as educational institutions, play a strategic role in instilling healthy lifestyle habits and shaping behavioral patterns that promote student well-being (Eva & Paulo, 2024; Mustar et al., 2018). However, numerous studies indicate that many students still lack adequate awareness of personal and environmental health, which contributes to an increased risk of infectious diseases and other health-related problems within the school environment (Azizah et al., 2019; Failasufa et al., 2023)

One strategic effort to enhance health awareness among students is through the little doctors program, a training initiative designed to equip students to serve as health agents within their schools (Ristanto, 2019; Sella et al., 2023). This program aims to provide students with basic health knowledge, first aid skills, and the ability to educate their peers on clean and healthy living behaviors.

Parental support for health education from an early age has also been shown to influence children's health-related behaviors in their daily activities (Rahayu et al., 2022; Rahelli et al., 2020).

The little doctors training has been proven effective in improving students' knowledge and skills in health-related matters, as well as in encouraging the adoption of healthy lifestyles within the school setting (Auld et al., n.d.; Rahmaddiansyah et al., 2023). Schools actively implementing the program have reported a reduction in environmentally related diseases such as diarrhea and upper respiratory tract infections (URTI) (Earlyawan & Kuntari, 2023). Furthermore, community engagement activities have also demonstrated the positive impact of the program in fostering a healthier school culture (Rahayu et al., 2022). Other studies highlight that the program enhances students' ability to detect early signs of common health problems and to provide health education to their peers (Dodd & Widnall, 2022; Hendrawan & Setiyawati, 2020)

Nevertheless, challenges remain in the implementation of this program, particularly

concerning its sustainability and the level of support from key stakeholders, including educators and parents. The little doctors program is expected to empower students as agents of change in maintaining hygiene and health within the school environment, thereby contributing to the overall improvement of students' health status. Based on this background, the present community service initiative aims to provide health training to elementary school students to enhance their knowledge and skills in basic health care..

2 METHOD

This community service activity was conducted at SD Negeri Telaga Langsat, located in Telaga Langsat Subdistrict, Hulu Sungai Selatan Regency, South Kalimantan Province. The implementation was carried out systematically through the stages of preparation, execution, and evaluation, between July and August 2017 (Figure 1). The main activity involved empowering 20 students from grades V and VI through the little doctors program. This initiative aimed to equip students with fundamental knowledge of clean and healthy living behaviors, as well as the ability to educate their peers on the importance of practicing such behaviors.

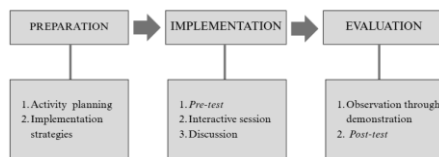


Figure 1. Activity implementation stages

In the preparation stage, coordination was carried out with the school to determine the number of participants and to adapt the training materials to the students' needs. A training module was then developed, which included content on personal and environmental hygiene as well as simple approaches to preventing communicable diseases. Subsequently, the training activities were conducted face-to-face within the school environment using interactive and participatory methods.

The program began with a pre-test consisting of 10 questions on basic health knowledge, followed by the delivery of educational material through lectures combined with discussions and question-and-answer sessions to

enhance students' understanding. In addition, demonstrations and hands-on practice were provided, such as the proper technique for handwashing. To ensure the effectiveness of the program, a simple evaluation was conducted through direct observation of students' skills after the training and a post-test. Furthermore, discussions with teachers and school staff were held to assess the extent to which the program benefitted the students.

3 RESULT AND DISCUSSION

This community service program was completed at SD Negeri Telaga Langsat, Hulu Sungai Selatan Regency, South Kalimantan Province, during July–August 2017. The activity involved 20 students from grades V and VI. The stages implemented included preparation, execution, and evaluation (Figure 1). In the pre-test stage, students were given 10 questions assessing basic health knowledge, particularly regarding clean and healthy living behaviors, , tooth brushing, handwashing, the importance of breakfast, and waste disposal. The pre-test was administered to identify students' learning needs, serve as a baseline for comparison, and increase motivation toward the health topics to be addressed.

The results (Table 1) indicated that the mean pre-test score was 49.5 (SD = 7.592), which increased to 69 (SD = 7.363) in the post-test. This improvement reflects a positive change in participants' knowledge following the intervention. Statistical analysis revealed a p-value of 0.000 (p < 0.05), indicating a significant difference between pre-test and post-test scores. These findings suggest that the training program was effective in enhancing participants' knowledge.

Table 1. Univariate Analysis

Table1. *Pre-test & post-test score*

Variable	Mean	Std. Error	SD	N	p-value
Pre-test	49.5	1.698	7.592	20	
Post-test	69.0	1.646	7.363	20	<0.000

The implementation stage was carried out through educational lectures, discussions, and question-and-answer sessions (Figure 2). The educational lectures were delivered in a communicative manner with the aid of simple visual media, namely illustrated PowerPoint slides. The purpose was to provide a fundamental understanding of clean and healthy living behaviors concepts, the importance of maintaining personal hygiene, and the practice of healthy habits such as proper tooth brushing, correct handwashing, having a nutritious breakfast, and maintaining environmental cleanliness.

Following the lectures, the activities continued with discussions and a question-and-answer session. The students demonstrated enthusiasm, as indicated by their active participation in answering questions and sharing personal experiences related to healthy living practices.



Figure 2. Health education session on clean and healthy living behaviors

The activities were then continued with demonstrations and hands-on practice, including the correct six-step handwashing technique, simple first aid simulations, and a brief discussion on examples of healthy breakfast menus. During the evaluation stage, observational results indicated that most students were able to correctly perform the skills taught, particularly in hand hygiene and basic first aid.

The post-test results demonstrated a statistically significant improvement in students knowledge, with the mean score increasing from 49.5 (SD = 7.592) in the pre-test to 69 (SD = 7.363) in the post-test. The t-test analysis showed a p-value of 0.000 ($p < 0.05$), indicating a significant difference between pre-test and post-test scores. These findings suggest that the training methods implemented were effective in enhancing students'

understanding of clean and healthy living behaviors and basic health (Thania & Asiyah, 2023). Furthermore, discussions with teachers indicated that students became more enthusiastic about adopting healthy habits at school, such as washing their hands before meals and reminding their peers to maintain environmental cleanliness. Teachers also reported that the program provided tangible benefits, not only in improving knowledge but also in fostering positive habits that contribute to a healthier school environment.

Overall, the findings demonstrate that the little doctors training was effective in improving the health knowledge and skills of elementary school students. The interactive lecture method proved effective in delivering fundamental information in a structured manner, while discussions and question-and-answer sessions played a key role in fostering two-way interactions that facilitated students' comprehension (Dinatha et al., 2023). This aligns with the findings of

(Daniel, 2022) who reported that interactive lectures are effective in enhancing student engagement. Meanwhile, demonstrations and hands-on practice were particularly beneficial for developing applied skills, especially simple motor skills such as proper handwashing and basic first aid. This approach is consistent with active learning theory, which emphasizes the importance of direct student involvement in the learning process to improve both skills and motivation (Tamsuri & Nugroho, 2024)

In addition to improvements in cognitive aspects and skills, the training also had a positive impact on students' attitudes and motivation. Their enthusiasm during the sessions reflected their readiness to act as health change agents within the school environment. This supports previous research asserting that the little doctors program is an effective strategy for fostering healthy behaviors among school-aged children and for preventing health problems in schools, particularly communicable diseases (Wulandari & Yufi Latmini, 2024)

4 CONCLUSION

In conclusion, the little doctors training not only enhanced students' knowledge but also instilled practical skills and positive attitudes toward health. To ensure the sustainability of its benefits, the program should be implemented regularly with support from schools, teachers, and health professionals, enabling students to actively serve as health promoters for their peers and surrounding environment. To enhance the potential impact of this program, its regular implementation with support from schools, teachers, and health professionals is recommended. Such efforts may help strengthen students' role as peer educators and support the promotion of healthy behaviors within the school environment

4 ACKNOWLEDGEMENT

The authors would like to express their gratitude to all parties involved in this community service activity, particularly to the Head of Telaga Langsung Village and the Community Service–Community Empowerment Learning Program (KKN-PPM) Team KSL-02 of Universitas Gadjah Mada.

REFERENCES

- Auld, M. E., Allen, M. P., Hampton, C., Montes, J. H., Sherry, C., Mickalide, A. D., Logan, R. A., Alvarado-Little, W., & Parson, K. (n.d.). Health Literacy and Health Education in Schools: Collaboration for Action. *NAM Perspectives*, 2020, 10.31478/202007b. <https://doi.org/10.31478/202007b>
- Azizah, N. R., Puspikawati, S. I., & Oktanova, M. A. (2019). Inspeksi Kesehatan Lingkungan Sekolah Dasar di Kabupaten Banyuwangi. *Journal of Public Health Research and Community Health Development*, 2(1), 11. <https://doi.org/10.20473/jphrecode.v2i1.16249>
- Daniel, R. (2022). Penerapan Metode Ceramah Interaktif dalam Meningkatkan Keaktifan Belajar Siswa Kelas V Sekolah Dasar [Bachelor, Universitas Pelita Harapan]. <http://repository.uph.edu/id/eprint/51865/>
- Dinatha, N. M., Sariyani, M. D., Dhena, G. V. A., & Wae, M. S. (2023). Pelaksanaan Trias Usaha Kesehatan Sekolah di Sekolah Dasar. *Jurnal Ilmiah Pendidikan Citra Bakti*, 10(4), 758–772. <https://doi.org/10.38048/jipcb.v10i4.2031>
- Dodd, S., & Widnall, E. (2022). School-based Peer Education Interventions to Improve Health: A Global Systematic Review of Effectiveness. *BMC Public Health*. <https://link.springer.com/article/10.1186/s12889-022-14688-3>
- Earlyawan, P. A., & Kuntari, T. (2023). Pelatihan Dokter Kecil dan Pengenalan PHBS sebagai Upaya Peningkatan Kesehatan Berbasis Sekolah. *Jurnal Budi Darma*, 3(2):39-44.
- Eva, O., & Paulo, S. (2024). Educational Strategies for Healthy Habits in Secondary School: Promoting Integral Health. *Revista de Gestao Social e Ambiental*, 18(11):e09715.
- Failasufa, H., Fatkhurrohman, F., Kusniati, R., & Wardhana, E. (2023). Pelatihan Dokter Kecil untuk Peningkatan Status Kesehatan Umum dan Kesehatan Gigi Mulut di Wilayah Kerja Puskesmas Pegandon Kota Semarang. *Jurnal Inovasi Dan Pengabdian Masyarakat Indonesia*, 2(2), 23–26. <https://doi.org/10.26714/jipmi.v2i2.105>
- Hendrawan, A., & Setiyawati, D. (2020). Deteksi Dini Gangguan Postur Melalui Peningkatan Life Skill Education Dokter Kecil. *Aksiologi: Jurnal Pengabdian Kepada Masyarakat*, 4(2), 149–152. <https://doi.org/10.30651/aks.v4i2.3300>
- Mustar, Y. S., Susanto, I. H., & Bakti, A. P. (2018). Pendidikan Kesehatan: Perilaku Hidup Bersih dan Sehat (PHBS) di Sekolah Dasar. *JISIP (Jurnal Ilmu Sosial dan Pendidikan)*, 2(2). <https://doi.org/10.58258/jisip.v2i2.359>
- Rahmaddiansyah, R., Nurmiati, N., & Rusti, S. (2023). Peningkatan Program Kesehatan Sekolah Melalui Pembinaan Dokter Kecil pada Siswa di SDN 21 Limau Sundai Kabupaten Pesisir Selatan. *Buletin Ilmiah Nagari Membangun*, 6(1), 26–34. <https://doi.org/10.25077/bina.v6i1.422>
- Ristanto, R. (2019). Pengaruh Pendidikan Kesehatan dengan Metode Simulasi terhadap Pengetahuan dan Keterampilan Dokter Kecil pada Penanganan Luka Terbuka. *Jurnal Kesehatan Mesencephalon*, 5(2), 83–87.

- Sella, S., Heni, F., & Afriyanto. (2023). Peran Usaha Kesehatan Sekolah (UKS) dalam Pembinaan Sekolah Sehat. *IHSAN: Jurnal Pengabdian Masyarakat*, 5(2). <https://doi.org/10.30596/ihsan.v5i2.15101>
- Tamsuri, A., & Nugroho, C. (2024). Pelatihan Dokter Kecil Bagi Siswa Sekolah Dasar. *Journal of Community Engagement in Health and Nursing*, 2(1).
- Thania, K., & Asiyah, S. (2023). Pemberdayaan “Dokter Kecil” pada Kegiatan UKGS terhadap Pengetahuan Kebersihan Gigi dan Mulut Anak Usia Sekolah. 6(11). *Media Publikasi Promosi Kesehatan Indonesia*, 6(11):2256-2262.
- Wulandari, M., & Yufi Latmini, L. (2024). Pelaksanaan Program Dokter Kecil Sebagai Upaya Meningkatkan Perilaku Hidup Bersih dan Sehat pada Siswa MIN 1 Tanah Datar. *Jurnal Pengabdian Kepada Masyarakat: Kesehatan*, 4(2).

