



Implementation Of Clean And Healthy Living Behavior Among Fifth- And Sixth-Grade Elementary School Students

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Abstract

Objectives. This study aimed to describe students' knowledge, attitudes, and practices regarding Clean and Healthy Living Behavior (Perilaku Hidup Bersih dan Sehat/PHBS) at SDN Inpres 2 Tolowata.

Materials and Methods. A descriptive observational study with a cross-sectional design was conducted among 66 fifth- and sixth-grade students selected using total sampling. Data were collected through a structured questionnaire (knowledge, attitude, and practice domains) and analyzed descriptively using frequency distributions and cross-tabulations. Stool samples were collected for parasitological examination; due to field constraints, five samples were obtained.

Results. Most students demonstrated good PHBS knowledge (93.84%), attitudes (97.70%), and practices (96.16%). However, stool examinations showed that 4 of 5 samples (80%) were positive for *Ascaris lumbricoides* eggs.

Conclusions. Although students reported strong PHBS knowledge and positive attitudes, consistent implementation in daily life remains a challenge. Sustained behavior habituation, routine supervision, and adequate sanitation facilities at school and home are needed to strengthen PHBS practice.

Keywords: PHBS; student health; hygiene behavior; elementary school; sanitation

Introduction

Health is a key determinant of students' learning success. A healthy school environment influences students' enthusiasm, motivation, and concentration during learning activities.

Notoatmodjo (2012) emphasized that health is not merely the absence of disease; it also encompasses optimal physical, mental, and social well-being. One school-based strategy to promote such conditions is the implementation of Clean and Healthy Living Behavior (Perilaku Hidup Bersih dan Sehat/PHBS). Preliminary observations at SDN Inpres 2 Tolowata, focusing on upper-grade students, indicated that PHBS implementation had not been fully optimized. Some students did not routinely wash their hands with soap before eating or after using the toilet. In addition, littering was still observed despite the availability of trash bins in classroom corners. In terms of food choices, several students preferred snacks sold outside the school, where hygiene is not always assured, compared with healthier options provided in the school canteen.

PHBS is an essential concept for developing a healthy and productive generation. Healthy habits introduced early have long-term health benefits, particularly for children in critical developmental stages. At the elementary level, students begin learning personal hygiene, balanced nutrition, and environmental cleanliness (Fitriani & Yusuf, 2020). Multiple factors influence PHBS, including household habits, the school environment, the broader community context, and role modeling by teachers. Within schools, PHBS is a strategic target that should be reinforced through consistent practice and clear expectations (Julianti & Nasirun, 2018). This emphasis is important because evidence indicates that many common diseases among elementary school children are linked to inadequate clean and healthy behaviors. PHBS programs aim to encourage students, teachers, and the school community to actively participate in maintaining healthy behavior and a supportive environment (Taryatman, 2016).

PHBS involves behaviors performed consciously as an outcome of learning and daily habituation. It can motivate students to create healthier school environments. Early exposure to PHBS supports lifelong healthy behavior; conversely, unhealthy practices increase the risk of disease (Handayani et al., 2016). In schools, PHBS includes regular handwashing with soap, maintaining environmental cleanliness, disposing of waste properly, consuming nutritious foods, and engaging in regular physical activity. The Indonesian Ministry of Health (2018) defines PHBS as a set of behaviors practiced based on awareness developed through learning, enabling individuals and communities to improve health and take action to protect themselves. Thus, PHBS is not only an individual habit, but also a culture that should be institutionalized within the school setting.

The World Health Organization has reported that handwashing with soap can reduce diarrheal incidence by approximately 45%. Appropriate sanitation practices—including safe disposal of feces—reduce fecal–oral transmission pathways. Food selection and safe food handling are also critical, because contaminated foods may cause diarrhea (Sukatin et al., 2022). Previous studies have shown that PHBS implementation in schools is associated with improved student health outcomes. Wati (2020) reported that students who regularly wash their hands with soap and maintain personal hygiene tend to have lower absenteeism due to infectious diseases. Similarly, Suryani (2021) found that PHBS programs in elementary schools contribute to improved concentration and learning motivation. These findings suggest that PHBS is not only linked to physical health but may also support academic engagement. Therefore, this study aimed to describe the implementation of PHBS among fifth- and sixth-grade students at SDN Inpres 2 Tolowata, including the distribution of knowledge, attitudes, and practices, as well as health-related findings that may inform improvements to PHBS reinforcement.

Materials and Methods

Study Participants.

The study population included students of SDN Inpres 2 Tolowata. Using total sampling, all fifth- and sixth-grade students were recruited ($n = 66$). These grades were selected because students were considered cognitively capable of understanding and completing the questionnaire with minimal response bias.

Study Organization.

This study employed a descriptive observational design with a cross-sectional approach to capture students' knowledge, attitudes, and practices related to PHBS at a single point in time without researcher intervention. Data were collected using a structured questionnaire measuring three domains: (1) knowledge, (2) attitudes, and (3) practices related to PHBS. Data collection was conducted onsite at the school with assistance from the researchers and accompanying teachers to ensure clarity of instructions and accuracy of responses. In addition, stool sampling was conducted to support descriptive information regarding students' health status. Due to limited resources and technical constraints in the field, only five stool samples were successfully

collected and examined. Data analysis was descriptive and quantitative, presented as frequency distributions and cross-tabulations to describe the levels of knowledge, attitudes, and practices and their patterns of co-occurrence.

Statistical Analysis.

Data were analyzed descriptively using frequency distributions and cross-tabulations, consistent with the study's descriptive objectives.

Results

A total of 66 respondents participated in the study, consisting of 36 fifth-grade students and 30 sixth-grade students. By sex, 35 respondents were boys (57.70%) and 31 were girls (42.30%). related to PHBS. Of those, 50.77% received counseling within the last 1–6 months, 19.23% within the past month, and 21.53% more than six months ago. In contrast, 8.47% reported never having received PHBS counseling. Students' PHBS knowledge, attitudes, and practices were categorized as good, adequate, or poor. No respondents fell into the poor category. Good knowledge was observed in 93.84% of respondents, with 6.16% categorized as adequate. Good attitudes were reported by 97.70% of respondents (2.30% adequate). For practices, 96.16% were categorized as good and 3.84% as adequate. Cross-tabulation indicated a consistent pattern between knowledge and attitudes: 92.30% of respondents with high knowledge also reported good PHBS attitudes. Likewise, 90% of respondents with high knowledge reported good PHBS practices. Laboratory examination of stool samples showed that 4 of 5 samples (80%) were positive for *Ascaris lumbricoides* eggs, while one sample was negative. This suggests that intestinal helminth infection remains a concern despite the generally high self-reported PHBS knowledge, attitudes, and practices. Overall, the findings indicate that students have learned and largely endorse PHBS; however, sustained implementation requires continued reinforcement through practical health education, environmental supervision, and adequate sanitation facilities both at school and at home.

Table 1. Cross-tabulation between knowledge and attitudes.

Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan
Sikap	Baik	Baik	cukup	cukup	Total	Total
Sikap	n	%	n	%	n	%
Baik	64	92,30%	7	4,75	72	97,34
Cukup	2	1,25%	1	0,88	3	2,25

Total	66	93,55%	8	5,90	75	99,59
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Table 2. Cross-tabulation between knowledge and practices.

Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan	Pengetahuan
Tindakan	Baik	Baik	cukup	cukup	Total	Total
Tindakan	n	%	n	%	n	%
Baik	50	93,30%	6	3,75	65	96,34
Cukup	2	1,65%	1	0,88	3	2,25
Total	52	94,95%	7	5,90	68	99,59

Discussion

The results show that most students at SDN Inpres 2 Tolowata demonstrated good PHBS knowledge. Adequate knowledge can facilitate the adoption of clean and healthy habits in everyday life and may support improved student health status. Introducing PHBS concepts at the elementary level is a strategic approach to establishing sustainable healthy behavior patterns. Most students also reported positive attitudes toward PHBS (97.70% in the good category), suggesting awareness of the importance of personal and environmental hygiene. Nevertheless, a small proportion of students were not consistently practicing basic behaviors such as handwashing after playing, which is critical for preventing helminth infection. Therefore, strengthening attitudes through hands-on practice, routine reminders, and school-wide habituation activities is recommended. Importantly, stool examinations indicated that 4 of 5 samples (80%) were positive for *Ascaris lumbricoides*. This finding suggests that good knowledge and positive attitudes do not always translate into consistent daily practices. The result aligns with Jamal (2021), who reported that helminthiasis is often driven by insufficient real-world implementation of clean and healthy behaviors even when children's knowledge is adequate. Other studies have linked high helminth prevalence among school children to limited sanitation facilities such as inadequate handwashing stations and toilets (Yufiarti et al., 2019; Tolera & Dufera, 2020). Djuma et al. (2020) also highlighted the role of environmental hygiene in increasing infection risk. However, the present findings do not fully align with Zuchaliya et al.

(2021), who found that poor PHBS was more strongly associated with higher helminth risk.

Taken together, these results indicate that PHBS reinforcement should move beyond knowledge-based education to include continuous behavior practice, supportive environments, and sanitation improvements. Integrated collaboration among schools, teachers, and parents is critical to ensure that PHBS becomes a stable daily routine for children.

Conclusions

Most students at SDN Inpres 2 Tolowata demonstrated good levels of knowledge, attitudes, and practices regarding Clean and Healthy Living Behavior (PHBS). This indicates high awareness of the importance of maintaining personal and environmental hygiene. However, the presence of helminth infection detected through stool examination suggests that healthy behaviors have not been fully implemented consistently in daily life. Therefore, sustained efforts from schools, teachers, and parents are needed to strengthen PHBS habituation through routine monitoring, practical reinforcement activities, and provision of adequate sanitation facilities to support a clean, healthy, and productive school environment.

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Conflict of Interest

The authors declare no conflict of interest.

References

- Djuma, A. W., Olin, W., & Pan, I. M. (2020). Risk factors of STH infections in children aged 6–12 years in Sub-Villages II and IV Manusak Village of East Kupang District–Kupang Regency Year 2019. *Pakistan Journal of Medical and Health Sciences*, 14(2), 1429–1433.
- Fitriani, R., & Yusuf, N. (2020). Evaluasi program PHBS di sekolah dasar di Kota Bandung. *Jurnal Kesehatan Pendidikan*, 17(2), 101–109.

- Handayani, R., Novaryatiin, S., & Ardhany, S. D. (2016). Sosialisasi perilaku hidup bersih dan sehat pada anak-anak tingkat sekolah dasar di Desa Tabore Kecamatan Mentangai Kalimantan Tengah. *Jurnal Surya Medika*, 2(1), 8–13. <https://doi.org/10.33084/jsm.v2i1.363>
- Jamal, E. N., & Rivai, A. (2021). Faktor-faktor yang berhubungan dengan kecacingan pada anak prasekolah di Kelurahan Mangasa Kota Makassar. *Jurnal Sulolipu: Media Komunikasi Sivitas Akademika dan Masyarakat*, 21(1), 1–5.
- Julianti, R., & Nasirun, H. M. (2018). Pelaksanaan perilaku hidup bersih dan sehat (PHBS) di lingkungan sekolah. *Jurnal Ilmiah Potensia*, 3(2), 11–17.
- Kementerian Kesehatan RI. (2018). Perilaku hidup bersih dan sehat di sekolah. Jakarta: Kemenkes RI.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Moleong, L. J. (2017). *Metodologi penelitian kualitatif*. Remaja Rosdakarya.
- Notoatmodjo, S. (2012). *Ilmu perilaku kesehatan*. Rineka Cipta.
- Putra, A. (2020). Analisis kendala penerapan PHBS di sekolah dasar negeri Kota Bandung. *Jurnal Promosi Kesehatan*, 12(3), 201–210.
- Rahmawati, I. (2019). Tingkat kesadaran siswa SD dalam penerapan PHBS di lingkungan sekolah. *Jurnal Ilmiah Kesehatan*, 7(2), 89–96.
- Sugiyono. (2018). *Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sukatin, Nurkhalipah, Kurnia, A., Ramadani, D., & Fatimah. (2022). *Jurnal Ilmiah Multi Disiplin Indonesia*, 1(9), 1278–1285.
- Suryani, L. (2021). Implementasi program PHBS dalam meningkatkan motivasi belajar siswa sekolah dasar. *Jurnal Pendidikan Dasar*, 9(1), 45–53.

Taryatman. (2016). Budaya hidup bersih dan sehat di sekolah dasar untuk membangun generasi muda yang berkarakter. *Trihayu: Jurnal Pendidikan Ke-SD-an*, 3(1).

Tolera, A., & Dufera, M. (2020). The prevalence of soil-transmitted helminths and associated risk factors among school children at Sekela Primary School, Western Ethiopia. *Journal of Parasitology Research*, 2020, 1–7.

Wati, D. A. (2020). Hubungan perilaku hidup bersih dan sehat (PHBS) dengan tingkat absensi siswa sekolah dasar. *Jurnal Kesehatan Masyarakat*, 8(2), 112–120.

World Health Organization. (2019). *Hand hygiene: Why, how & when*. WHO Press.

Yufiarti, Y., Edwita, & Suharti. (2019). Health promotion program (JUMSIH) to enhance children's clean and healthy living knowledge. *Jurnal Pendidikan Usia Dini*, 13(2), 341–355.

Zuchaliya, A. C., Sari, Y., Setyawan, S., & Mashuri, Y. A. (2021). The relationship between soil-transmitted helminth infections and clean and healthy living behavior. *Disease Prevention and Public Health Journal*, 15(2), 57–63.