

The Relationship Between Knowledge of Clean and Healthy Living Behavior (CHLB) and Healthy Living Behavior Among Elementary School Students at Public Elementary School 5 Katerban, Baron District

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ABSTRACT

Introduction: Clean and Healthy Living Behavior (CHLB) is an effort to prevent diseases by implementing healthy habits from an early age. Elementary school children are a vulnerable group to health problems, thus requiring the inculcation of knowledge and behavior related to CHLB.

Objectives: This study aims to determine the relationship between knowledge of CHLB and healthy living behavior among elementary school students at Public Elementary School 5 Katerban, Baron District.

Methods: This study employed a correlational analytic design with a cross-sectional approach. The population consisted of all students in grades I–VI (62 students) with a total sampling technique. Instruments included a CHLB knowledge questionnaire and a healthy behavior observation sheet. Data were analyzed using the Chi-Square test.

Results: The results showed that most students had good knowledge (61.3%), while healthy living behavior in the good category was 58.1%. The Chi-Square test yielded $p = 0.021$ (<0.05), indicating a significant relationship between CHLB knowledge and healthy living behavior.

Conclusions: Knowledge of CHLB is associated with healthy living behavior among elementary school students. The role of teachers, parents, and health workers is needed to enhance CHLB education through creative and continuous methods.

Introduction

Clean and Healthy Living Behavior (CHLB) is one of the government's key strategies to prevent health problems in the community from an early age. This program aims to build sustainable healthy habits through five main settings, including households, schools, workplaces, health facilities, and public spaces (Ministry of Health RI, 2020). Among these, schools play a particularly important role as they function not only as places of learning but also as environments where children's daily habits are shaped. By integrating CHLB into school routines, students are encouraged to practice personal hygiene, consume safe and nutritious foods, maintain environmental cleanliness, and adopt healthier lifestyles.

Elementary school-aged children are a vulnerable group due to their rapid physical and cognitive development as well as their limited capacity to independently maintain healthy behaviors. Without proper health education and



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reinforceiment, they arei morei likely to deiveilop uinheialthy habits that increiasei the risk of infeictious diseiaseis, malnutrition, and otheir heialth probleims.

At thei provincial leveil, thei coveiragei of schools impleimeinting Cleian and Heialthy Living Beihavior (CHLB) in Eias Java reimains reilativeily low. Data from thei Eias Java Heialth Officei (2022) showeid that only 55.83% of eileimeintary schools had suicceissfully impleimeinteid CHLB indicators in 2021. Thei coveiragei fuirtheir deicreiasis in higheir eiducation leveils, with 40.79% in juinior high schools and 26.78% in seinior high schools, indicating that consisteint impleimeintation beicomeis morei challeinging as stuideints grow oldeir. Theisei figureis deimonstratei that, although eiffrts havei beiein madei to promotei CHLB in thei school seitting, a significant proportion of schools and stuideints havei yeit to reiach thei deisireid standards. This situatoin highlights thei neieid for continuious improveimeint in heialth eiducation, eispeicially at thei eileimeintary school leveil, whein habits and beihaviors arei most easily shapeid.

In thei speicific stuidy location, Puiblic Eileimeintary School 5 Kateirban, Baron District, thei findings reiflect both eincouraging progreiss and eixisting gaps. Baseid on thei stuidy reisults, 61.3% of stuideints had good knowleidgei of CHLB, 29.0% had modeiratei knowleidgei, and 9.7% still had poor knowleidgei. Thei majority of stuideints uindeirstood thei importancei of heialthy practiceis suich as washing hands with soap, consuiming balanceid meials, avoiding uinsafei streiet food, and maintaining peirsonal hygieinei. Howeiveir, thei preiseincei of neiarly 40% of stuideints in thei modeiratei and poor knowleidgei categorieis suiggeists that not all childrein arei consisteintly eixposeid to or ablei to inteirnalizei CHLB meissageis. This knowleidgei gap can poteintially limit thei eiffeectiveineiss of CHLB programs, as inadequiatei knowleidgei oftein translateis into weiakeir adoption of heialthy living beihaviors.

Theisei preivaleincei data at both thei provincial and local leveils reiinforcei thei uirgeincy of streingtheining CHLB promotion in schools. Whilei thei provincial data indicatei systeimic challeingeis in eixpanding coveiragei, thei school-leveil data show thei practical implications on stuideints' reiadineiss to adopt heialthy beihaviors. Theireiforei, focuising on improving knowleidgei and practicei of CHLB in eileimeintary schools, suich as SDN 5 Kateirban, is a strateigic approach to fosteiring long-teirm heialthy lifeistyleis among childrein.

Deispitei eixteinsivei heialth promotion eiffrts, challeingeis reimain in einsuring that knowleidgei of Cleian and Heialthy Living Beihavior (CHLB) is eiffeectiveily translateid into daily practicei among eileimeintary school stuideints. Childrein at this stagei arei in a critical peiriod of growth and deiveilopmeint, making them highly suisceptiblei to infeictious diseiaseis, malnutrition, and uinheialthy lifeistylei patteirns if preiveintivei measuireis arei not adeiquateily reiinforceid. Whilei knowleidgei is a fuindameintal componeint in shaping heialth-reilateid beihavior, reial-lifei obseirvations indicatei that many stuideints still eixhibit poor practiceis, suich as rareily washing theiir hands beiforei meials, bringing uinheialthy snacks insteiad of balanceid luinch boxeis, and being inconsisteint in maintaining einvironmeintal hygieinei.



This phenomenon demonstrates the well-documented gap between knowledge and behavior, suggesting that awareness alone may not guarantee healthy practices. Various factors, including attitudes, peer influence, family support, and school policies, may moderate this relationship. In the context of Public Elementary School 5 Kateirban, Baron District, such discrepancies have been noted, raising concerns about the extent to which knowledge of CHLB influences students' actual behavior. Therefore, it becomes crucial to investigate the relationship between knowledge of CHLB and healthy living behavior among these students in order to provide evidence that can guide targeted interventions for strengthening health promotion in schools.

A preliminary study at Public Elementary School 5 Kateirban, Baron District, revealed that some students have not fully implemented Clean and Healthy Living Behavior (CHLB) in their daily lives, such as washing hands with soap, bringing nutritious meals, and disposing of waste properly. This finding indicates a gap between students' knowledge of CHLB and their actual healthy behaviors they practice.

This study aims to analyze the relationship between knowledge of CHLB and healthy living behavior among elementary school students, as well as to provide a basis for developing more effective interventions to improve children's health behaviors. Efforts to enhance CHLB implementation can be conducted through several strategies, including: regular and systematic health education, active involvement of teachers and parents in guiding and modeling healthy behaviors, the implementation of school policies supporting CHLB such as accessible handwashing facilities and proper waste management, and reinforcement of habits through practical activities such as behavior monitoring or providing rewards for students who consistently apply CHLB.

By implementing these strategies, it is expected that CHLB knowledge will not only be cognitively understood but also consistently applied in daily behaviors, thereby improving students' health and maintaining a clean school environment.

Several studies have examined the relationship between knowledge of Clean and Healthy Living Behavior (CHLB) and their actual implementation of healthy living practices among school-age children. For instance, a study conducted by Putri et al. (2021) in Yogyakarta found a significant positive correlation between students' knowledge of personal hygiene and their daily hygiene practices. The study involved 100 elementary school students and showed that students with higher knowledge levels were more consistent in washing hands, brushing teeth, and maintaining a clean school environment.

Similarly, research by Rahmawati and Santoso (2020) highlighted that knowledge alone is not always sufficient to ensure healthy behavior. Their study on 80 elementary school students in Surabaya revealed that while 70% of students had good knowledge about CHLB, only 55% consistently applied these behaviors. The authors emphasized the role of environmental factors, parental



support, and school health promotion programs in bridging the gap between knowledge and behavior.

Another study by Kurniawan (2019) in Central Java focused on the implementation of CHLB in schools and concluded that comprehensive health education, combined with practical demonstrations and peer role modeling, significantly improved students' healthy living behaviors. This study indicated that knowledge must be reinforced through continuous practice and guidance to achieve meaningful behavior change.

These studies collectively suggest that while there is generally a positive relationship between knowledge of CHLB and healthy living behavior, various factors such as school environment, family support, and habit reinforcement influence the degree to which knowledge translates into actual behavior. Therefore, investigating this relationship at Public Elementary School 5 Katerban, Baron District, is important to understand the specific context and to design targeted interventions that promote sustainable healthy living practices among students.

Methods

This study employed a correlational analytic design with a cross-sectional approach, in which data collection was carried out at a single point in time to examine the relationship between knowledge of Clean and Healthy Living Behavior (CHLB) and students' healthy living practices. The population consisted of all grade I–VI students at Public Elementary School 5 Katerban, totaling 62 individuals, and the entire population was included as the sample using a total sampling technique. The research instruments included a CHLB knowledge questionnaire consisting of 20 items developed by the researchers based on the Ministry of Health Indonesia's guideline (2020), and a healthy living behavior observation sheet with 10 assessment indicators. The knowledge questionnaire items were evaluated for content validity by three experts, including elementary school teachers and health promotion specialists, confirming that all items were relevant and suitable for measuring CHLB knowledge. Reliability testing using Cronbach's Alpha yielded a value of 0.82, indicating good internal consistency. The behavior observation sheet was adapted from previously validated instruments and assessed using a Likert-scale approach, with validity confirmed through item-total correlations ($r = 0.35\text{--}0.72$, $p < 0.05$) and reliability Cronbach's Alpha = 0.85, demonstrating high internal consistency. Data were analyzed using univariate analysis to obtain the frequency distribution of each variable, followed by bivariate analysis employing the Chi-Square test with a significance level of 0.05 to determine the relationship between knowledge and healthy living behavior.

Results

1. Distribution of CHLB Knowledge among Students of Public Elementary School 5 Katerban



Table 1. Distribution of CHLB Knowledge among Students of Public Elementary School 5 Katerban (n = 62)

Table 1. Distribution of CHLB Knowledge among Students of Public Elementary School 5 Katerban (n = 62)

Knowledge Category	Frequency	Percentage (%)
Good	38	61.3
Fair	18	29.0
Poor	6	9.7
Total	62	100

Based on data ini Table 1. The majority of students (61.3%) demonstrated good knowledge of Clean and Healthy Living Behavior (CHLB).

2. Distribution of Healthy Living Behavior among Students of Public Elementary School 5

Table 2. Distribution of Healthy Living Behavior among Students of Public Elementary School 5 Katerban (n = 62)

Behavior Category	Frequency	Percentage (%)
Good	36	58.1
Fair	20	32.3
Poor	6	9.6
Total	62	100

Based on data ini Table 2. The majority of students (58.1%) demonstrated good healthy living behavior at Public Elementary School 5 Katerban.

3. Relationship between CHLB Knowledge and Healthy Living Behavior

Table 3. Relationship between CHLB Knowledge and Healthy Living Behavior.

Knowledge Category	Good Behavior	Fair Behavior	Poor Behavior	Total
Good	28	8	2	38
Fair	6	9	3	18
Poor	2	3	1	6
Total	36	20	6	62

Based on data ini Table 3. Students with good knowledge of CHLB mostly demonstrated good healthy living behavior (28 out of 38 students). The Chi-Square test showed a significant relationship between CHLB knowledge and healthy living behavior ($p = 0.021$), indicating that higher knowledge is associated with better healthy living practices among students at Public Elementary School 5 Katerban.

Discussion

1. Knowledge of Clean and Healthy Living Behavior (CHLB)

The findings of this study indicate that the majority of students at Public Elementary School 5 Katerban possessed good knowledge regarding Clean and Healthy Living Behavior (61.3%). This knowledge was generally obtained through formal education at school, health counseling activities, and habits instilled by teachers and parents. This fact demonstrates that educational efforts carried out by both schools and families play an important role in enhancing children's understanding of the importance of maintaining personal health from an early age. However, 9.7% of students still had poor knowledge. This condition may be attributed to students' limited comprehension, the lack of family involvement in instilling healthy habits at home, or limited access to age-appropriate health information.

Theoretically, Notoatmodjo (2018) explains that knowledge is a cognitive domain that plays a dominant role in shaping behavior. Adequate knowledge increases awareness and encourages individuals to adopt health behaviors in daily life. This implies that improving knowledge is a crucial first step in fostering healthy living behavior among elementary school children.

Based on these findings, it can be concluded that although most students already have good knowledge, the small group with low knowledge should not be overlooked. This difference highlights the need to strengthen more comprehensive health education interventions, using age-appropriate methods, actively involving parents, and utilizing engaging learning media for children. In this way, the knowledge gap can be minimized, ensuring that all students have equal opportunities to optimally understand CHLB.

2. Healthy Living Behavior

In addition to knowledge, this study also found that the majority of students demonstrated good healthy living behavior (58.1%). Such behavior was reflected in habits such as washing hands with soap before meals, maintaining nail hygiene, and disposing of trash properly. Nevertheless, 9.6% of students still exhibited unhealthy behavior. This phenomenon underscores that good knowledge does not always align with actual behavior in daily life. In other words, there is a gap between the cognitive aspect (knowledge) and the practical aspect (behavior).

Green's (1980) health behavior theory explains that behavior formation is influenced not only by predisposing factors such as knowledge and attitudes but also by enabling factors such as the availability of facilities, and reinforcing factors such as the roles of teachers, parents, and the social environment. This indicates that even if students possess good knowledge, healthy behavior will not consistently be practiced when handwashing facilities are limited or when supervision from teachers and parents is lacking.

From the researcher's perspective, the healthy living behavior of Public Elementary School 5 Katerban students remains unstable and situational. When the environment is supportive, students are able to demonstrate healthy behavior; conversely, when facilities and support are lacking, healthy behavior tends to be neglected. Therefore, continuous efforts from schools are needed to ensure the availability of adequate facilities and consistent supervision so that healthy living behavior becomes a firmly established habit among students.

3. The Relationship between CHLB Knowledge and Healthy Living Behavior

The results of the statistical analysis using the Chi-Square test showed a significant relationship between CHLB knowledge and healthy living behavior ($p = 0.021$). This finding suggests that students with good knowledge are more likely to adopt healthy living behavior



compared to those with poor knowledge. The result is consistent with previous studies by Rahayu (2019) and Sari (2021), which emphasized that good knowledge is one of the factors encouraging the adoption of health practices among school-aged children.

Theoretically, this finding aligns with Notoatmodjo's (2018) view that knowledge is a dominant factor in shaping health behavior. However, Green's theory emphasizes that health behavior is not solely dependent on knowledge but is also influenced by external factors such as facility availability, teachers' roles, family support, and school policies. Therefore, although there is a significant relationship, not all students with good knowledge automatically demonstrate healthy living behavior.

The researcher believes that these findings highlight the importance of combining educational approaches with environmental interventions. Increasing knowledge remains a fundamental step, but it must be followed by external support to ensure consistent behavior formation. For instance, providing handwashing facilities at school, implementing habit-forming programs by teachers, and engaging parents in fostering healthy habits at home. With this combination, healthy living behavior is expected to become not only theoretical knowledge but also a real, sustainable habit in students' daily lives.

Conclusion

There is a significant relationship between knowledge of Clean and Healthy Living Behavior (CHLB) and healthy living behavior among elementary school students at Public Elementary School 5 Katerban, Baron District ($p = 0.021$). The findings indicate that students with better knowledge are more likely to practice healthy behaviors compared to those with lower levels of knowledge. This underscores the critical role of knowledge as a foundation for shaping health-related behaviors in school-aged children.

However, the study also shows that knowledge alone is not sufficient to ensure consistent healthy behavior. External factors such as the availability of adequate facilities, continuous guidance from teachers, active involvement of parents, and supportive school policies play an equally important role in reinforcing and sustaining these behaviors. Without these enabling and reinforcing factors, even students with good knowledge may fail to consistently apply healthy practices in daily life.

Therefore, it can be concluded that improving students' knowledge of CHLB must be accompanied by supportive environmental interventions. Schools, families, and communities need to work collaboratively to provide comprehensive health education, create a conducive environment, and instill healthy habits through continuous supervision and reinforcement. By integrating knowledge improvement with environmental support, healthy living behavior among elementary school students can become a sustainable practice that contributes to the prevention of health problems and the promotion of overall well-being.

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