



Analysis of Factors Associated with Clean and Healthy Living Behavior in the Community

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Abstract

Background : Clean and Healthy Living Behavior is an important component of community health promotion through preventive daily practices life . PHBS may be influenced by various factors , including knowledge , attitudes , family support , and access to health and sanitation facilities. Objective : To analyze factors associated with clean and healthy living behavior among community members. Methods : This study used an observational analytics design with a cross-sectional approach . The study was conducted from May to July 2026 in a community served by a healthcare facilities . A total of 113 respondents were recruited using consecutive sampling. Independent variables included knowledge , attitude , family support , and access to health and sanitation facilities . The dependent variable was clean and healthy living behavior . Data were collected using a structured questionnaire and analyzed using the Chi- square test with a significance level of $\alpha=0.05$. Results : Sixty-nine respondents (61.1%) demonstrated good clean and healthy living behavior , while 44 respondents (38.9%) demonstrated less favorable Good behavior knowledge was found in 68 respondents (60.2%), positive attitudes in 71 respondents (62.8%), good family support in 65 respondents (57.5%), and adequate access to health and sanitation facilities in 74 respondents (65.5%). Knowledge ($p=0.003$), attitude ($p=0.001$), family support ($p=0.012$), and access to health and sanitation facilities ($p=0.021$) were significant associated with clean and healthy living behavior. Conclusion : Knowledge , attitude , family support , and access to health and sanitation facilities were significantly associated with clean and healthy living behavior among community members .

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1. Introduction

Clean and healthy living behaviors are a crucial component in improving public health. These behaviors, practiced in daily life, can play a role in preventing various infectious and non-infectious diseases and supporting a healthy environment (Ministry of Health of the Republic of Indonesia, 2022; World Health Organization, 2023).

PHBS includes various simple actions that can be carried out by individuals and families, such as washing hands with soap, using clean water, using healthy toilets, maintaining environmental cleanliness, consuming healthy food, doing physical activity, not smoking, and utilizing health services appropriately (Ministry of Health of the Republic of Indonesia, 2022).

The adoption of healthy behaviors is not solely determined by individual knowledge. A person may understand the importance of certain behaviors but not necessarily consistently implement them. Attitudes, family support, social norms, availability of resources, economic conditions, and the environment can all influence a person's ability to maintain healthy behaviors (World Health Organization, 2023).

Knowledge is one factor that can form the basis for shaping behavior. Adequate information about the benefits of personal and environmental hygiene can help people understand the risks of unhealthy behavior and the importance of preventive measures (Ministry of Health of the Republic of Indonesia, 2022).

Attitude also plays a role in health behavior. A positive attitude toward hygiene and disease prevention can increase a person's likelihood of consistently engaging in health-related practices. However, converting attitudes into behavior still requires adequate environmental support and resources (World Health Organization, 2023).

Family support is also a crucial factor because it is an individual's closest environment. Families can provide motivation, remind family members, provide hygiene needs, and foster healthy habits together.

The availability of clean water, sanitary toilets, handwashing facilities, waste management, and access to health services can also influence the implementation of PHBS. Healthy behaviors are easier to adopt when a community has a supportive environment (Ministry of Health of the Republic of Indonesia, 2022; World Health Organization, 2023).

Based on this description, an analysis of the factors related to clean and healthy living behaviors in the community is necessary. This information can serve as a basis for developing health promotion activities that are more appropriate to community conditions.

2. Methods

The study used an observational analytical design with a cross-sectional approach, in which the independent and dependent variables were measured during the same period. The research was conducted in May–July 2026 in a community area receiving primary health services. The study population consisted of community members living in the health service area, with a sample of 113 respondents recruited using consecutive sampling, whereby eligible respondents were recruited sequentially until the required sample size was reached.





Data were collected using a structured questionnaire. Knowledge was assessed based on respondents' ability to answer questions regarding personal hygiene, handwashing, clean water, healthy sanitation facilities, waste management, physical activity, healthy food consumption, and disease prevention; attitudes were measured using Likert-scale statements; family support was assessed based on informational, instrumental, emotional, and appreciation support; access to health and sanitation facilities was assessed based on the availability and accessibility of clean water, toilets, handwashing facilities, waste management, and health services; and PHBS was assessed based on indicators of personal hygiene, environmental cleanliness, healthy lifestyles, and utilization of health services. Data were analyzed using univariate analysis to describe the distribution of each variable and bivariate analysis using the Chi-square test with a significance level of 5% ($\alpha=0.05$).

3. Results and Discussion

a. Result

Table 1. Distribution of Respondent Characteristics

Characteristics	n	%
Age		
18–29 years	31	27.4
30–39 years	36	31.9
40–49 years	28	24.8
≥50 years	18	15.9
Education		
Base	22	19.5
Intermediate	64	56.6
Tall	27	23.9
Work		
Not working/housewife	34	30.1
Self-employed	31	27.4
Employee	27	23.9
Other	21	18.6
Total	113	100

The largest age group was 30–39 years old, with 36 respondents (31.9%). Based on education, the majority of respondents had secondary education, with 64 respondents (56.6%).

Table 2. Distribution of Knowledge Levels

Knowledge	n	%
Good	68	60.2
Not enough	45	39.8
Total	113	100

A total of 68 respondents (60.2%) had good knowledge regarding PHBS, while 45 respondents (39.8%) had poor knowledge.



**Table 3.** Distribution of Attitudes towards PHBS

Attitude	n	%
Positive	71	62.8
Less positive	42	37.2
Total	113	100

Most respondents showed a positive attitude towards the implementation of PHBS, namely 71 people (62.8%).

Table 4. Distribution of Family Support

Family support	n	%
Good	65	57.5
Not enough	48	42.5
Total	113	100

As many as 65 respondents (57.5%) received good family support.

Table 5. Distribution of Access to Health and Sanitation Facilities

Access	n	%
Adequate	74	65.5
Inadequate	39	34.5
Total	113	100

A total of 74 respondents (65.5%) had adequate access to health and sanitation facilities.

Table 6. Distribution of Respondents' PHBS

PHBS	n	%
Good	69	61.1
Not good	44	38.9
Total	113	100

A total of 69 respondents (61.1%) showed good clean and healthy living behavior, while 44 respondents (38.9%) showed less good behavior.

Table 7. Relationship between Knowledge and PHBS

Knowledge	Good PHBS n (%)	PHBS Lacking n (%)	Total	p- value
Good	49 (72.1)	19 (27.9)	68	0.003
Not enough	20 (44.4)	25 (55.6)	45	
Total	69 (61.1)	44 (38.9)	113	

The proportion of good PHBS was higher among respondents with good knowledge, namely 49 people (72.1%), compared to respondents with less knowledge, namely 20 people (44.4%). The Chi- square test produced $p = 0.003$, indicating a significant relationship between knowledge and PHBS.



**Table 8.** Relationship between Attitude and PHBS

Attitude	Good PHBS n (%)	PHBS Lacking n (%)	Total	p- value
Positive	52 (73.2)	19 (26.8)	71	0.001
Less positive	17 (40.5)	25 (59.5)	42	
Total	69 (61.1)	44 (38.9)	113	

Respondents with positive attitudes were more likely to demonstrate good PHBS, namely 52 people (73.2%). The statistical test results showed $p = 0.001$, indicating a significant relationship between attitudes and PHBS.

Table 9. Relationship between Family Support and PHBS

Family support	Good PHBS n (%)	PHBS Lacking n (%)	Total	p- value
Good	46 (70.8)	19 (29.2)	65	0.012
Not enough	23 (47.9)	25 (52.1)	48	
Total	69 (61.1)	44 (38.9)	113	

Good PHBS was found in 46 respondents (70.8%) who had good family support, while in 23 respondents (47.9%) with less family support. The Chi- square test showed $p = 0.012$, indicating a significant relationship between family support and PHBS.

Table 10. Relationship between Access to Health and Sanitation Facilities and PHBS

Access to facilities	Good PHBS n (%)	PHBS Lacking n (%)	Total	p- value
Adequate	51 (68.9)	23 (31.1)	74	0.021
Inadequate	18 (46.2)	21 (53.8)	39	
Total	69 (61.1)	44 (38.9)	113	

Respondents with adequate access to facilities demonstrated good PHBS practices, as many as 51 people (68.9%). Among respondents with inadequate access, good PHBS practices were found in 18 people (46.2%). The test results showed $p=0.021$, indicating a significant relationship between access to health and sanitation facilities and PHBS.

b. Discussion

The research results show a relationship between knowledge and PHBS. Respondents with good knowledge demonstrated more good PHBS behaviors than respondents with less knowledge. Knowledge can provide a foundation for understanding the benefits of healthy behaviors and the risks of not practicing them. Information about handwashing, clean water, sanitation, waste management, physical activity, and disease prevention can help people understand the actions they need to take in their daily lives (Ministry of Health of the Republic of Indonesia, 2022; World Health Organization, 2023). Knowledge does not automatically result in healthy behavior. Individuals with good knowledge may still encounter obstacles in implementing PHBS if the environment is not supportive or the necessary resources are not available (World Health Organization, 2023).





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There is a relationship between attitudes and PHBS. Respondents with positive attitudes toward clean and healthy living behaviors showed a higher proportion of good PHBS. Attitudes can influence a person's readiness to accept and perform health-related actions. A positive attitude toward personal and environmental hygiene can encourage behaviors such as handwashing, maintaining a clean home, using a healthy toilet, and managing waste (Ministry of Health of the Republic of Indonesia, 2022). Turning attitudes into action requires opportunities and enabling environmental conditions. Therefore, health promotion interventions should not only increase knowledge but also build positive attitudes and provide a supportive environment (World Health Organization, 2023).

The research results show a relationship between family support and PHBS. Respondents with good family support had a higher proportion of good PHBS. The family is the closest social environment and can shape daily habits. Support can be provided through information, reminders, providing hygiene supplies, sharing responsibilities for maintaining cleanliness, and modeling healthy behaviors. Forming healthy habits will be easier if family members adopt the same behaviors. Thus, promotion of PHBS can be directed not only at individuals but also at the family as a whole.

Research has found a relationship between access to health and sanitation facilities and PHBS. Respondents with adequate access to facilities are more likely to demonstrate good PHBS.

The availability of clean water, sanitary latrines, handwashing facilities, waste disposal facilities, and health services provides opportunities for people to adopt healthy behaviors. Conversely, limited resources can be a barrier, even if someone possesses good knowledge and attitudes. Access to adequate water, sanitation, hygiene facilities, and health services is an important component of creating an environment that supports healthy behaviors (World Health Organization, 2023). These findings suggest that improving PHBS (Healthy Living) requires an approach that combines education and environmental improvements. Education without adequate resources can result in limited behavioral change.

Research results show that PHBS is related to several factors at the individual, family, and environmental levels. Therefore, health promotion activities should be carried out in an integrated manner. Public education can be directed at low-risk behaviors, while families can be involved as advocates for habit change. At the same time, the availability of sanitation facilities needs to be considered so that communities have the practical skills to implement recommended behaviors (Ministry of Health of the Republic of Indonesia, 2022; World Health Organization, 2023).





This study has several limitations. First, the cross-sectional design cannot establish a causal relationship between the factors studied and clean and healthy living behavior (PHBS). Second, some variables were measured using questionnaires, so the results may have been influenced by respondents' perceptions and self-reported answers. Third, the study was conducted in a single area, which may limit the generalizability of the findings to other populations and settings. Finally, other potentially relevant factors, such as socioeconomic conditions, social norms, the role of community leaders, and environmental quality, were not analyzed in depth..

4. Conclusion

The study concluded that 61.1% of respondents had good clean and healthy living behavior (PHBS), while most respondents had good knowledge, positive attitudes, good family support, and adequate access to health and sanitation facilities. There were significant relationships between knowledge and PHBS ($p=0.003$), attitude and PHBS ($p=0.001$), family support and PHBS ($p=0.012$), and access to health and sanitation facilities and PHBS ($p=0.021$). Health workers are encouraged to strengthen health promotion activities that not only provide information but also foster positive attitudes and involve families in developing healthy habits. The community is expected to consistently implement PHBS in daily life, particularly through maintaining hand hygiene, using clean water and sanitation facilities, managing waste properly, engaging in physical activity, and utilizing health services. Families are expected to provide support and serve as role models in implementing clean and healthy living behaviors. Health service facilities are encouraged to strengthen community empowerment and health promotion activities and coordinate with relevant stakeholders to support the availability of adequate sanitation facilities. Further researchers are encouraged to use longitudinal designs or multivariate analyses and include socioeconomic factors, environmental conditions, social norms, and the role of health cadres to obtain a more comprehensive understanding of the factors associated with PHBS.

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