



Overview of Adolescents' Knowledge and Attitudes Related to Clean and Healthy Living Behavior at SMA Negeri 2 Tondano

Lidia Injili Bintang^{1*}, Bertom Pajung², Richard Palilingan³, Merdekawati Weken⁴, Maxi Moleong⁵

¹Public Health Program, Manado State University lidiainjili@gmail.com

²Public Health Program, Manado State University cbertompajung@unima.ac.id

³Public Health Program, Manado State University richardpalilingan@unima.ac.id

⁴Public Health Program, Manado State University merdekawatiweken@unima.ac.id

⁵Public Health Program, Manado State University maximoleong2.@gmail.com

*Corresponding Author Email: lidiainjili@gmail.com

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ABSTRACT

Clean and Healthy Living Behavior (PHBS) plays an important role in improving the degree of public health through habituation of healthy behavior from adolescence. Schools are strategic environments in the formation of these behaviors. This study aims to find out the overview of adolescents' knowledge and attitudes towards PHBS at SMA Negeri 2 Tondano. The study used a quantitative descriptive design with a cross-sectional approach. The study population was all students of SMA Negeri 2 Tondano totaling 89 respondents who were taken with a total of sampling. Data was collected through questionnaires and analyzed descriptively with frequency and percentage distributions. Most of the respondents had good knowledge about PHBS as many as 66 respondents (66.7%) and good attitudes as many as 59 respondents (66.3%). A small number have enough knowledge and attitudes to less. The majority of SMA Negeri 2 Tondano students have good knowledge and attitude towards PHBS. Coaching, education, and support for school facilities are needed so that clean and healthy living behaviors can be applied consistently.

INTRODUCTION

The Ministry of Health of the Republic of Indonesia (Kemenkes RI) states that the degree of public health is achieved through the implementation of health development that aims to increase awareness, willingness, and the ability to live a healthy life for everyone in order to realize the highest degree of public health (Ministry of Health of the Republic of Indonesia, 2023). Health development is an integral part of national development, and clean and healthy living behaviors (PHBS) are one of the main indicators in assessing the success of this development. According to the Indonesian Ministry of Health (2021), PHBS is a set of behaviors that are practiced on the basis of awareness as a result of learning, which makes individuals, families, groups, and communities able to help themselves in the health sector and play an active role in realizing public health.

Clean and healthy living behaviors are a concern for the government because PHBS is a benchmark to increase health coverage in the SDGs program in 2015-2030. PHBS and SDGs are one of the prevention efforts that can have a short-term impact on improving health, including the family, the general public, and schools. Clean and healthy living behavior (PHBS) is a form of operationalization of Indonesia's health promotion (Lina, 2017 in Katiandagho, 2024). Clean and healthy living behavior (PHBS) aims to increase the knowledge, awareness, willingness, and ability of individuals to live a clean and healthy life, as well as increase the active role of the community, including the private sector and the business world, in realizing an optimal degree of health. These goals are applied to five orders that are targeted for clean and healthy living

behavior (PHBS), namely household orders, educational institutions, health institutions, workplaces, and public places (Ministry of Health of the Republic of Indonesia, 2011 in Katiandagho, 2024). In order to achieve the best degree of health, PHBS is an important part of health development that requires every resident to have awareness, ability and willingness to live a healthy life (Suprpto and Arda, 2021)

Clean and healthy living behaviors are one of the most important factors in improving an individual's health, especially among adolescents. Clean and healthy living behavior is one of the important aspects in maintaining individual health, especially among adolescents. Adolescence is a very crucial transition period, where they begin to develop habitual habits that will affect their health in adulthood. Based on data from the Ministry of Health of the Republic of Indonesia, the prevalence of diseases caused by a lack of knowledge about clean and healthy living behaviors among adolescents is quite high. For example, stomach diseases caused by unhealthy diets and lack of personal hygiene are one of the common health problems among adolescents (Sulistiawati and Septiani, 2024). PHBS covers various aspects, ranging from personal hygiene, environmental sanitation, to a healthy diet. According to Nurhidayah et al. (2023), the implementation of PHBS among adolescents can reduce the incidence of infectious diseases. A study in Aceh Besar showed that adolescents who had good knowledge of PHBS tended to have healthier living behaviors (Nurhidayah et al., 2023). This is in line with research by Sari, et al., (2025) which shows that PHBS education is able to significantly increase student knowledge. This shows the importance of education about PHBS from an early age. Global statistics show that around 1.5 million children under the age of five die each year from diseases that can be prevented by clean and healthy living behaviors (WHO, 2021). In Indonesia, this figure is still quite high, with diarrhea and respiratory infections being the main causes of death (Ministry of Health of the Republic of Indonesia, 2022). Therefore, efforts to increase adolescents' knowledge about PHBS are essential.

In Indonesia, the prevalence of diseases that can be prevented through clean and healthy living behaviors is still quite high. According to data from the Ministry of Health of the Republic of Indonesia, around 50% of adolescents in Indonesia do not have adequate knowledge about PHBS (Ministry of Health of the Republic of Indonesia, 2022). In North Sulawesi, data from the Health Office shows that the prevalence of infectious diseases among adolescents is still high. For example, in 2022, it was recorded that 30% of adolescents experienced health problems due to a lack of knowledge about PHBS (North Sulawesi Health Office, 2023). This indicates the need for more effective interventions in health education in schools. In North Sulawesi Province, especially in Minahasa Regency, this condition is not much different. Data from the North Sulawesi Provincial Health Office shows that only 40% of adolescents apply PHBS in their daily lives (North Sulawesi Health Office, 2023). Based on data from the Minahasa Regency Health Office, it is known that around 20% of adolescents in the region experience hygiene-related health problems, such as respiratory tract infections and diarrhea (Minahasa Health Office, 2023). This shows that although knowledge about PHBS exists, its implementation in daily life is still lacking.

At SMA Negeri 2 Tondano, the knowledge and attitudes of adolescents related to PHBS need to be a special concern. This is because the school environment is a place where teenagers spend most of their time and interact with peers. Where clean and healthy living behaviors have not been fully implemented optimally because there is still a lack of infrastructure to support the implementation of clean and healthy living behaviors such as the provision of sinks, hand soap, there are some teachers who are not optimal in implementing PHBS, for example, there are still teachers who smoke in the school environment, there has been no socialization about PHBS in this school. Research by Tarussy, et al., (2025) also found that the implementation of PHBS in schools has not been optimal in several indicators. Research conducted by Farhaini et al. (2022) shows that socialization of PHBS in the educational environment has a great influence on adolescent behavior. Therefore, it is important to explore the extent to which the knowledge and attitudes of adolescents at SMA Negeri 2 Tondano are related to PHBS.

RESEARCH METHODS

This study is a quantitative research with an observational descriptive method that aims to describe, describe, and analyze adolescents' knowledge and attitudes related to clean and healthy living behaviors (PHBS) at SMA Negeri 2 Tondano. The type of research used is descriptive with a cross-sectional design, i.e. data collection is carried out only in one specific time. This descriptive approach aims to obtain an objective picture of the extent of students' knowledge level and attitudes towards the implementation of PHBS in the school environment.

The population of this study is all students at SMA Negeri 2 Tondano which totals 89 people. The sample in this study is total sampling. This study uses a data analysis method, namely univariate analysis. Univariate analysis is used to determine the distribution and frequency of one or more research variables.

RESULTS AND DISCUSSION

Table 1. Characteristics of respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	47	52,8%
Women	42	47,2%
Age		
14 Years	18	20,2%
15 Years	30	33,7%
16 Years	18	20,2%
17 Years	23	25,8%
Classes		
Class X	34	38,2%
Class XI	28	31,5%
Class XII	27	30,3%
Total	89	100%

Based on gender, males amounted to 47 respondents (52.8%) and females amounted to 42 respondents amounted to 47.2%). Based on the age of the respondents, 18 respondents were 14 years old (20.2%), 30 respondents were 15 years old (33.7%), 18 respondents were 16 years old (20.2%), and 23 respondents were 17 years old (25.8%). Based on the existing classes consisting of 3 classes, namely, class X, XI, and XII, class X amounted to 34 respondents (38.2%), class XI amounted to 28 respondents (31.5%), and class XII amounted to 27 (30.3%).

Table 2. PHBS Knowledge Overview

PHBS Knowledge	Frequency	Percentage (%)
Less	5	5,1%
Enough	18	18,2%
Good	66	66,7%
Total	89	100 %

Based on the table, it can be seen that most of the respondents have good knowledge about clean and healthy living behaviors (PHBS), namely 66 respondents (66.7%). Meanwhile, 18 respondents (18.2%) had sufficient knowledge, and only 5 respondents (5.1%) were included in the category of insufficient knowledge.

Table 3. Overview of PHBS Attitude

PHBS Attitude	Frequency	Percentage (%)
Less	30	33,7%
Good	59	66,3%
Total	89	100 %

Based on the table, it can be seen that most of the respondents have a good attitude towards clean and healthy living behavior (PHBS), namely 59 respondents (66.3%), while 30 respondents (33.7%) have a lacking attitude.

Table 4 Overview of Clean and Healthy Living Behavior (PHBS)

Clean and Healthy Living Behavior (PHBS)	Frequency	Percentage (%)
Less	3	3,4%
Enough	55	61,8%
Good	31	34,8%
Total	89	100 %

Based on the table, it is known that out of a total of 89 respondents, most of them have clean and healthy living behaviors (PHBS) in the adequate category, namely 55 respondents (61.8%). A total of 31 respondents (34.8%) were included in the good category, while only 3 respondents (3.4%) had poor PHBS behavior.

Table 5. Overview of Knowledge on PHBS Behavior

Knowledge	PHBS Behavior					
	Less	%	Enough	%	Good	%
Less	0	0%	4	4,5%	1	1,1%
Enough	1	1,1%	12	13,5%	5	5,6%
Good	2	2,2%	39	43,8%	25	28,1%

Based on the table above, it is known that most of the respondents have good knowledge of clean and healthy living behaviors (PHBS), namely 43.8% with adequate PHBS behavior and 28.1% with good behavior. Respondents with sufficient knowledge most also have PHBS behavior in the sufficient category as much as 13.5% and only 5.6% have good behavior. Meanwhile, respondents with less knowledge mostly showed that PHBS behavior was sufficient as much as 4.5% and only 1.1% were in the good category.

Table 6. Overview of Attitudes towards PHBS Behavior

Attitude	PHBS Behavior					
	Less	%	Enough	%	Good	%
Less	3	3,4%	17	19,1%	10	11,2%
Good	0	0%	55	61,8%	31	34,8%

Based on the table above, it is known that most of the respondents have good knowledge of clean and healthy living behaviors (PHBS), namely 43.8% with adequate PHBS behavior and 28.1% with good behavior. Respondents with sufficient knowledge most also had PHBS behavior in the sufficient category as much as 13.5%, and only 5.6% had good behavior. Meanwhile, respondents with less knowledge mostly showed adequate PHBS behavior as much as 4.5%, and only 1.1% were in the good category. In terms of attitudes, it can be seen that respondents with a good attitude towards PHBS dominated the research results, namely 61.8% had adequate PHBS behavior and 34.8% were in the good category. Meanwhile, respondents with a lacking attitude mostly had adequate PHBS behavior as much as 19.1%, and 11.2% had good behavior.

The results showed that the majority of respondents had a good attitude towards PHBS, namely 59 respondents (66.3%), while 30 respondents (33.7%) had a negative attitude. This shows that students with a good attitude also have good healthy and clean living behaviors. In line with research by Penaonde, et al., (2024) which shows that there is a significant relationship between PHBS knowledge level and personal hygiene behavior. The results of the research of Alfaidah et al., (2024) show a similar thing, that a good attitude towards PHBS is significantly related to healthy behavior in schools. Salsabilla's research (2024) also supports this, a positive attitude has a dominant contribution to the better implementation of PHBS. These results are also in line with an international study from Kose (2023), that positive attitudes towards a healthy lifestyle in high school adolescents produce good healthy living behaviors, this shows the role of the majority of attitudes as predictors. This shows that most students already have a positive awareness and view of the importance of maintaining personal and environmental hygiene. This positive attitude is reflected in the habits of those who support the implementation of PHBS in schools, such as participating in maintaining classroom cleanliness and participating in school environment cleanliness activities.

Nevertheless, some other studies show different results. Research by Wahyuni et al., (2025) on students in urban areas found that even though knowledge is quite good, the majority of students still have negative attitudes towards PHBS so that clean and healthy living behavior remains low. Research conducted by Gualie and Tayachew (2018) also found a similar thing, where the attitudes of high school students tend to be low or neutral and are not the main predictors of clean and healthy living behaviors, but are more influenced by other factors such as the availability of facilities, peer influence, and family habits.

CONCLUSION

Most of the respondents had a good level of knowledge, namely 66 respondents (66.7%). This shows that students have understood the importance of clean and healthy living behaviors, such as maintaining personal hygiene, washing hands properly, and maintaining the cleanliness of the school environment.

Most of the respondents had a good attitude towards PHBS, namely 59 respondents (66.3%). This shows that students have a positive outlook and awareness to apply clean and healthy living behaviors in daily life.

There are still some students who are in the category of sufficient to insufficient knowledge and attitudes, which indicates that the implementation of the PHBS program in schools is not fully optimal. Efforts are needed to coach, supervise, and educate health on an ongoing basis so that all students can implement PHBS consistently both at school and at home.

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