

Application of Household PHBS Education in Improving Family Self-Care in Sub-districts Medan Tuntungan

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Article Info	ABSTRACT
<p>Keywords: Implementation of PHBS in the Household Order</p>	<p>Clean and Healthy Living Behaviors (PHBS) are a set of behaviors that are practiced on the basis of learning that enable a person or family to help themselves in the health field and play an active role in realizing public health. Based on an initial survey conducted by researchers in Mangga Village about the implementation of clean and healthy living behaviors, many families have not implemented it. This is evidenced by the fact that there are still people who suffer from diarrhea and dengue disease. This type of research is descriptive in nature which aims to describe the Overview of the Implementation of Clean and Healthy Living Behaviors in the Household Order. The sample in this study is one of the core families, which is 36 people, which were taken using a random sampling system. The data used is primary data, namely data collected using questionnaires obtained from respondents. The results of the implementation of clean and healthy living behaviors regarding the availability of clean water were good, as many as 21 people (58.3%), about washing hands were good, as many as 20 people (55.6%), about the availability of healthy latrines were good, as many as 23 people (63.9%), about eradicating mosquito larvae were sufficient, as many as 17 people (47.2%), about eating fruits and vegetables every day was enough, as many as 23 people (63.9%), about doing physical activity every day is enough, as many as 20 people (55.6%), about not smoking indoors is less, as many as 17 people (47.2%). The implementation of Clean and Healthy Living Behaviors in the Household Order in Mangga Village in 2025 is sufficient, as many as 23 people (63.9%). It is hoped that families can implement clean and healthy living behaviors in daily life, so that families do not get sick easily. It is hoped that the community/environment will be able to create a healthy environment to support the creation of healthy villages and for health workers to continue to provide health information through counseling on clean and healthy living behaviors in the household order.</p>
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INTRODUCTION

The implementation of clean and healthy living behaviors (PHBS) is one of the efforts to empower family members to understand, want, and be able to practice clean and healthy living behaviors in society. The World Health Organization (WHO) said that Clean and Healthy Living Behavior (PHBS) is a lifestyle that includes personal hygiene (washing hands, covering your mouth when coughing), environmental cleanliness (sanitation, garbage), balanced nutrition (eating fruits/vegetables), regular physical activity, getting enough rest, not smoking, and paying attention to physical, mental, and social health to minimize the risk of disease, applied consistently in all settings (home, schools, public places) (Efendi, A. E., et al, 2023).

Environmental Damage is an act that causes direct or indirect changes to its physical and biological properties that result in the environment not functioning in supporting sustainable development (Siahaan, 2004 in Zaman, M. K., KM, S., & KL, M.2022).

There are still many people who do not know/do not want to care/do not need views, the long-term benefits of natural resources, regardless of the tragedy of environmental damage that occurs. Material welfare is the main concern, while at the same time ignoring the various tragedies of environmental damage that are common even though they cause harm to them and even to others who do not know how to do it. The assumption that the environment belongs to the public, causing people in general not to feel guilty about exploiting natural resources as much as possible, throwing waste into environmental media (Hadi, 2006 in Zaman, M. K., KM, S., & KL, M, 2022). Environmental damage is affected by internal and external factors. Internal damage is damage that occurs due to nature. Meanwhile, damage due to external factors is damage caused by human actions in order to improve the quality and comfort of life (Pribadi P et al., 2023).

Environment-based diseases are abnormalities in the function/morphology of body organs caused by human interaction with their environment. The phenomenon involves regional factors such as ecosystem, environmental variables, population, administration, spatial and time dimensions. This disease occurs in groups of people who have a close relationship with the environmental components in their residence/activities. Indonesia, a tropical country, is an endemic area for infectious diseases. Some of them are prevalent in Indonesia, namely Acute Respiratory Tract Infection (ARI), diarrhea, tuberculosis (TB), malaria, filariasis, Dengue Hemorrhagic Fever (BDB) (Dompas, Sumampouw and Umboh, 2020).

The percentage of households has the highest source of drinking water, namely bottled water (41.67%). This means that from the type of drinking water source in North Sumatra Province in 2025, households will choose bottled water sources as many as (41.67), followed by pumps (21.29%), plumbing (12.32%), while the lowest is unprotected wells (2,325). Based on an initial survey conducted by researchers on families in Medan Tuntungan District about the application of household PHBS education in improving family self-care, many of the families have not implemented clean and healthy living behaviors in daily life. It is evidenced by the presence of people who suffer from diarrhea and dengue. So that the research team of lecturers of the DIII Nursing Study Program and Bachelor of Health Administration STIKes Darmo is interested in conducting research on the application of household PHBS education in improving family self-care in Medan Tuntungan District.

METHODS

The research is cross-sectional analytical, the researcher wants to find out how the application of household PHBS education in improving family self-care in Medan Tuntungan District where the research was carried out from September 2025 to January 2026. The research population is one of the core families in Medan Tuntungan District which totals 110 families. A sample is a part of the entire object being studied, considered to represent the entire population. Research to measure large sample taking used formulas. The population size ≤ 1000 , then samples can be taken (20-30%) from the total population, so that the research sample amounts to $180 \times 20\% = 36$ families, taken using a random sampling system. The data used in the study is primary data, namely data collected using questionnaires obtained from respondents. Secondary data was obtained by the researcher based on data from the head office of Medan Tuntungan District. Measuring the aspect of the implementation of Clean and Healthy Living Behavior in the Household Order, 21 questions were given questions with 7 variables and each variable was given 3 questions made in the form of a questionnaire with the answers (yes) scored (1) and (not) given (0). Then it is categorized into the categories of good, sufficient and less.

RESULTS AND DISCUSSION

Frequency Distribution of Respondent Characteristics based on age, education, occupation and income in Medan Tuntungan District

No	Respondent Characteristics	(f)	(%)
1	Age		
	23-31 Year	9	25.0
	32-41 Year	7	19.4
	42-51 Year	14	38.9
	52-60 Year	6	16.7
	Total	36	100
2	Education		
	SD	3	8.3
	SMP	6	16.7
	SMA	20	55.6
	D-III	4	11.1
	S-I	3	8.3
	Total	36	100
3	Jobs		
	PNS	7	19.4
	Self-employed	20	55.6
	IRT/ Not working	9	25
	Total	36	100
4	Income		
	Rp 500.000-Rp 1.000.00	22	61.1
	Rp 1.100.000-Rp 1.500.000	6	16.7
	Rp 1.600.000-Rp 2.000.000	8	22.2
	Total	36	100

From the table above, it can be seen that the age group with the most age is 42-51 years old as 14 respondents (38.9%), the most education is high school as many as 20 respondents (55.6%), the most self-employed job is 20 respondents (55.6%), the most income is IDR 500,000-IDR 1,000,000 as many as 22 respondents (61.1%).

Distribution of the Frequency of Implementation of Clean and Healthy Living Behaviors on the Availability of Clean Water in Medan Tuntungan District

No	Category	(f)	(%)
1	Good	21	58.3
2	Enough	9	25.0
3	Less	6	16.7
	Total	36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors regarding the availability of clean water is good, namely 21 respondents (58.3%).

Distribution of the Frequency of Implementation of Clean and Healthy Living Behaviors about Washing Hands in Medan Tuntungan District

No	Category	(f)	(%)
1	Good	20	55.6
2	Enough	14	38.9
3	Less	2	5.5
	Total	36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors regarding hand washing is good, namely 20 respondents (55.6%).

Distribution of the Frequency of the Implementation of Clean and Healthy Living Behaviors on the Availability of Healthy Latrines in Mangga Village, Medan Tuntungan District

No	Category	(f)	(%)
1	Good	23	63.9
2	Enough	10	27.8
3	Less	3	8.3
Total		36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors regarding the availability of healthy latrines is good, namely 23 respondents (63.9%).

Distribution of Frequencies of Implementation of Clean and Healthy Living Behaviors on Mosquito Larval Eradication in Medan Tuntungan District

No	Category	(f)	(%)
1	Good	8	22.2
2	Enough	17	47.2
3	Less	11	30.6
Total		36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors regarding the eradication of mosquito larvae is sufficient, namely 17 respondents (47.2%).

Distribution of the Frequency of Implementation of Clean and Healthy Living Behaviors about Eating Fruits and Vegetables Every Day in Medan Tuntungan District

No	Category	(f)	(%)
1	Good	7	19.4
2	Enough	23	63.9
3	Less	6	16.7
Total		36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors about eating fruits and vegetables every day is adequate, namely 23 respondents (63.9%).

Distribution of the Frequency of Implementation of Nurturing and Healthy Living Behaviors about Doing Physical Activity Every Day in Medan Tuntungan District

No	Category	(f)	(%)
1	Good	7	19.4
2	Enough	20	55.6
3	Less	9	25
Total		36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors about doing physical activity every day is sufficient, namely 20 respondents (55.6%).

Distribution of the Frequency of Implementation of Clean and Healthy Living Behaviors about Not Smoking in the House in Medan Tuntungan District

No	Category	(f)	(%)
1	Good	12	33.3
2	Enough	7	19.5

3	Less	17	47.2
Total		36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors about not smoking in the house is lacking, namely (47.2%).

Distribution of the Frequency of Implementation of Clean and Healthy Living Behaviors in the Household Order in Medan Tuntungan District

No	Category	(f)	(%)
1	Good	13	36.1
2	Enough	23	63.9
3	Less	-	-
Total		36	100

From the table above, it can be seen that the majority of the implementation of clean and healthy living behaviors in the household order is adequate, namely 23 respondents (63.9%).

CONCLUSION

Implementation of Clean and Healthy Living Behavior in Household Settings Based on Clean Water Availability Indicators

The results of the research conducted by the research team on respondents about the availability of clean water showed that the majority of respondents as many as 21 people (58.3%) had good implementation. This can be seen from the 36 respondents answering the question with a score of 3, which is 21 people from the questions given by the research team. According to Simanihuruk, H. L., Ludang, Y., Arifin, S., Firlianty, F., Nawan, N., & Amelia, V, 2023, the availability of clean water for households that have access to clean water, used for daily life needs comes from bottled water, tap water, pump water, sheltered wells, rainwater storage. Wells and springs must be protected 10 meters from sewage or sewage reservoirs. Clean water is very important for life, especially for drinking needs. Therefore, for drinking purposes (including cooking) water must have requirements, namely: tasteless, colorless, and odorless so as not to cause disease. According to the research team's assumption, the implementation of clean and healthy living behaviors based on clean water availability indicators is good. This is evidenced because respondents have implemented the availability of clean water in their daily lives to improve family health.

Implementation of Clean and Healthy Living Behaviors in the Household Order Based on Handwashing Indicators

From the results of the research conducted by the research team on respondents about hand washing, it shows that the majority of respondents as many as 20 people (55.6%) have good implementation. This can be seen from the 36 respondents who were able to answer the question with a score of 3, which is as many as 20 people from the questions given by the research team. According to Zulfa, V., & Patricia, A. 2023 said that washing hands with soap can eliminate a large number of viruses and bacteria that cause various diseases, especially diseases that attack the digestive tract. Washing hands must be done with clean running water, either through a faucet or flushed with a dipper. Hands that have been moistened with running water are then rubbed with soap to the fingers of the hand in a circular motion for about 30 seconds. After that it is dried with a dry towel or dry tissue paper. Hand washing can be done at any time, namely before and after eating, after defecation, after coughing or sneezing, and so on. According to the research team's assumption, the implementation of clean and healthy living behaviors based on handwashing indicators is good. This is proven because the respondents have carried out hand washing in their daily lives. For this reason, it is hoped that respondents will further improve the implementation of handwashing in daily

life.

Implementation of Clean and Healthy Living Behavior in the Household Order Based on Indicators of Availability of Healthy Latrines

From the results of the research that has been conducted by the research team on the respondents about the availability of healthy latrines, it shows that the majority of respondents as many as 23 people (63.9%) have good implementation. This can be seen from the 36 respondents who answered the question with a score of 3, which is 23 people from the questions given by the researcher. According to Wulansari, M. C., Wijaya, D., & Hamzah, Z.2024 said that the availability of healthy toilets for households that have or use gooseneck toilets with septic tanks or fecal storage holes as final disposal. The latrines used do not cause odors, are not accessible to insects and are easy to use, thus avoiding diseases. According to the research team's assumption, the implementation of clean and healthy living behaviors based on indicators of the availability of healthy latrines is good. This is evidenced because respondents have implemented the availability of healthy latrines in their daily lives. For this reason, it is expected that the respondents will further improve the implementation of healthy latrines in daily life.

Implementation of Clean and Healthy Living Behavior in the Household Order based on Mosquito Larvae Eradication Indicators

From the results of the research that has been conducted by the research team on the eradication of mosquito larvae, it shows that the majority of respondents as many as 17 people (47.2%) have sufficient implementation. This can be found based on the results of respondents' answers to the questionnaire submitted by the research team about mosquito larvae, it turns out that there are still some respondents who do not implement it in their daily lives. According to Kamidi, P., Indriyati, E., & Damanik, H. 2020 said that the eradication of mosquito larvae by giving medicines to the mosquito larvae. One of the methods used for the eradication of mosquito larvae is by means of 3 M (draining, closing and burying) and can also be done by sprinkling abate powder on water reservoirs. According to the research team's assumption, the implementation of clean and healthy living behaviors based on mosquito larval eradication indicators is still lacking. This is because respondents do not often eradicate the mosquito larvae. For this reason, it is expected that respondents will further improve the implementation of mosquito larval eradication in daily life to improve health.

Implementation of Clean and Healthy Living Behaviors in the Household Order based on Indicators of Eating Fruits and Vegetables Every Day

From the results of the research that has been conducted by researchers on respondents about eating fruits and vegetables every day, it shows that the majority of respondents as many as 23 people (63.9%) have sufficient implementation. This is known from the results of respondents' answers to the questionnaire submitted by the research team about eating fruits and vegetables every day, it turns out that there are still some respondents who do not carry it out in their daily lives. According to Yuniarti, E.2023 said that households aged 10 years and older who consume at least 3 servings of fruit and 2 servings of vegetables every day eat fruits and vegetables. Consuming fruits and vegetables every day is very important. Because fruits and vegetables contain vitamins and minerals that regulate the growth and maintenance of the body and contain high fiber. By consuming fruits and vegetables every day, our body avoids diseases and makes the body more fresh and energetic. According to the research team's assumption, the implementation of clean and healthy living behaviors based on the indicators of eating fruits and vegetables every day is still lacking. For this reason, it is hoped that respondents will further improve the implementation of consuming fruits and vegetables every day.

Implementation of Clean and Healthy Living Behaviors in the Household Order based on Indicators of Physical Activity Every Day

From the results of the research conducted by the research team on respondents about doing physical activity every day, it shows that the majority of respondents as many as 23 people (63.9%) have sufficient implementation. This can be seen from the results of the respondents' answers to the questionnaire submitted by the research team about doing physical activity every day, it turns out that there are still some respondents who do not carry it out in their daily lives. According to Wahyudin, N. S.2024 doing physical activity every day is residents/family members aged 10 years and above doing physical activity for at least 30 minutes every day. Doing physical activity every day can maintain the quality of the body to stay healthy and fit throughout the day. Activities that we can do are walking, washing clothes, washing cars and gardening. The advantage of doing physical activity every day is that it can make muscles more flexible and bones stronger. Families should be able to do 30 minutes of physical activity every day. According to the research team's assumption, the implementation of clean and healthy living behaviors based on indicators of physical activity every day is still lacking. For this reason, it is expected that respondents will further improve the implementation of physical activity in daily life.

Implementation of Clean and Healthy Living Behaviors in the Household Order Based on Indicators of Non-Smoking in the House

From the results of the research that has been conducted by the research team on respondents about not smoking in the house, it shows that the majority of respondents as many as 17 people (47.2%) have less implementation. This can be seen from the results of respondents' answers to the questionnaire submitted by the research team about not smoking in the house, it turns out that there are still some respondents who do not carry it out in their daily lives. According to Aeni, H. F. R.2023 does not smoke in the house of residents/household members aged 10 years and older do not smoke while with family members. Smoking can be harmful to health, because cigarettes are like chemical factories. Cigarettes contain harmful substances, namely Nicotine and Tar. According to the research team's assumption, the implementation of clean and healthy living behaviors based on the indicator of not smoking in the house is still lacking. It is expected that respondents will further improve the implementation of not smoking in the house in daily life.

Implementation of Clean and Healthy Living Behavior in the Household Order

The results of the research on the implementation of clean and healthy living behaviors in the household order with sub-variables used as follows: The implementation of clean and healthy living behavior in the household order based on the indicator of the availability of clean water in the majority of households is good with a total of 21 people (58.3%), Implementation of clean and healthy living behavior in the household order based on the indicator of washing hands in the majority household order with a total of 20 people (55.6%), The implementation of clean and healthy living behaviors in the household order based on the indicators of the availability of healthy latrines in the majority household order is good with a total of 23 people (63.9%), The implementation of clean and healthy living behavior in the household order based on the indicator of mosquito larval eradication in the majority household order is sufficient with a total of 17 people (47.2%), The implementation of clean and healthy living behavior in the household order based on the indicator of eating fruit and vegetables every day in the majority household order is enough with a total of 23 people (63.9%), The implementation of clean and healthy living behaviors in the household order based on the indicator of doing physical activity every day in the majority household order is enough with a total of 20 people (55.6%), The implementation of clean and healthy living behavior in the household order based on the indicator of not smoking in the house in the majority household order is less with a total of 17 people (47.2%).

It was concluded that as many as 23 respondents (63.9%) had sufficient implementation of clean and healthy living behaviors in the household order. This can be seen from the 36 respondents who carried out clean and healthy living behaviors as many as 23 respondents

(63.9%). This is because the majority of respondents are between 42-51 years old as many as 14 respondents (38.9%) and the average education level is high school as many as 20 respondents (55.6%). According to the research team's assumption, if the respondents' education is getting higher, then the respondents can receive information conveyed both from the mass media, as well as from other individuals and print media, so that the respondents can carry out the implementation of clean and healthy living behaviors in daily life, in order to improve health.

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It was concluded that there is a relationship between the implementation of clean and healthy living behaviors in the household order based on the indicators of the availability of clean water, there is a relationship between the implementation of clean and healthy living behaviors in the household order based on the indicator of washing hands, there is a relationship between the implementation of clean and healthy living behaviors in the household order based on the indicators of the availability of healthy latrines, there is a relationship between the implementation of clean and healthy living behaviors in the household order based on the indicator of the availability of healthy latrines. Indicators of the availability of healthy latrines, there is a relationship between the implementation of clean and healthy living behaviors in the household order based on mosquito larval eradication indicators, there is a relationship between the implementation of clean and healthy living behaviors in the household order based on the indicators of eating fruits and vegetables every day, there is a relationship between the implementation of clean and healthy living behaviors in the household order based on the indicators of doing physical activity every day, there is a relationship between the implementation of clean and healthy living behaviors in the household order based on the indicator of not smoking in the house, there is a relationship between the implementation of clean and healthy living behaviors in the household order.

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