### International Journal of Environmental, Sustainability, and Social Sciences ISSN 2720-9644 (print); ISSN 2721-0871 (online) https://journalkeberlanjutan.com/index.php/ijesss

Volume: 3 Number: 2 Page: 404 - 408

### Article History:

Received: 2022-04-27 Revised: 2022-05-26 Accepted: 2022-07-20



**CLEAN AND HEALTHY LIFE BEHAVIOR (PHBS) OF ELEMENTARY** 

SCHOOL STUDENTS AGAINST ENVIRONMENTAL-BASED

## Abstract:

School age is a period of vulnerability to diseases such as diarrhea, intestinal worms, caries, and anemia. This research is an analytical observational study with a cross-sectional research design with a sample of 937 elementary school students spread throughout the city of Kupang. The data analysis technique used the Chisquare test to determine the relationship between the variables studied with significant values with the help of the SPSS program. The incidence of environmental-based disease experienced by elementary school students is diarrhea and the lowest is malaria. The personal hygiene variable shows a good category, and the results of statistical tests show no relationship between personal hygiene and the incidence of environmental-based diseases. The results also show a relationship between the consumption of healthy food and the incidence of environmental-based diseases. The variable of using healthy latrines is in a good category. There is a relationship between the use of clean and healthy latrines with the incidence of environmental-based diseases. The variable presence of mosquito larvae showed free of larvae. The waste disposal variable shows that the highest level of waste disposal in the respondent's house indicates the category is not good. Hygiene variables, the presence of larvae, and waste disposal have no relationship with the incidence of environmental-based diseases in elementary school children, while the variables of healthy food consumption habits and use of latrines have a relationship with the incidence of environmental diseases. Disease-based primary school children.

**Keywords**: PHBS, Elementary school children, Environmental-based disease, Kupang

Cite this as: AGUSTINA., EKAWATI, C., WANTI, W., SULUH, D.G. (2022) "Clean And Healthy Life Behavior (Phbs) Of Elementary School Students Against Environmental-Based Disease Incidence In Kupang City In 2021." International Journal of Environmental, Sustainability, and Social Sciences, 3 (2), 193 – 197.

# **INTRODUCTION**

School age is a period of vulnerability to diseases such as diarrhea, intestinal worms, caries, and anemia. Clean and Healthy Lifestyle is a government program launched in 2006 which aims to change people's unhealthy behavior into healthy ones. Clean and Healthy Living Behavior in schools is an effort to empower students, teachers, and the school community to be able to practice PHBS.

One of the efforts to improve public health status, the Ministry of Health, through the Health Promotion Center implements a clean and healthy lifestyle program. PHBS can be carried out in various community settings, such as household arrangements, schools, workplaces and public places. Nationally, the presentation of PHBS in 2014 was 56.58% (Ministry of Health, 2015).

Based on data from Riskesdas (basic health research) in 2013, PHBS in the Indonesian population, brushing teeth every day has been carried out as much as 93.8%, but the correct brushing behavior is still low at 2.3%, while PHBS in children who have carried out brushing teeth every day as much as 95.7%, but only 1.7% have done it right. Other data relates to PHBS in general, in which there are school-age children who have performed defecation behavior (BAB) correctly in the latrine, reaching 82.6%, while washing their hands with the correct soap with a proportion of 47%. In 2007 the behavior of washing hands reached 23.2%, there will be an increase in 2013 to

#### International Journal of Environmental, Sustainability, and Social Sciences ISSN 2720-9644 (print); ISSN 2721-0871 (online) https://journalkeberlanjutan.com/index.php/ijesss

47%, then the behavior of defecating in the latrine in 2007 reached 71.1%, while in 2013 it became 82.6%. Food consumption behavior that is at risk of threatening the body is in the form of consuming food/drinks, including sweet ones reaching 53.1%, fatty reaching 40.7% and flavoring reaching 77.3% (Riskesdas, 2013)

The PHBS movement is a benchmark in health development in order to improve people's behavior. HL Blum stated that an individual's health status is closely related to his behavior, the better the behavior related to health, the better his health status will be. The achievement of PHBS indicators in NTT Special for Kupang City in 2018 regarding the habit of defecating correctly reached 88%, based on the age group 10-14 years, defecating correctly 84.45%, washing hands properly 8.52%, based on the age group 10-14 reached 15.97%, based on primary school age 16%, behavior of Disposing of waste based on trash can 5.26%. (Riskesdas NTT Province, 2018).

PHBS in schools is an effort to empower students, teachers, and the school community to know, want, and be able to practice PHBS and play an active role in realizing healthy schools. PHBS must be instilled from an early age so that it can be carried into adulthood. Elementary school children are still relatively young, so they need help from people around their immediate environment, namely, parents, teachers and friends (Sari et al., 2016)

## **METHODS**

This research is an observational analytic study with a cross sectional study design. The population in this study were all 4th, 5th and 6th grade students at a Catholic elementary school in Kupang City, the sample was determined based on the slovin formula with a total of 937 students, the sampling technique was random sampling. The variables in this study were the incidence of diarrheal disease, personal hygiene, healthy food consumption, use of healthy latrines, presence of mosquito larvae and waste disposal. Observations were made on the Independent variable to get a relationship with the Dependent variable by using the form assessment and questionnaire sheet. (Notoatmodjo, 2010)

# **RESULT AND DISCUSSION**

The Performance of environmental-based disease incidence is the incidence of environmentalbased diseases that have been experienced by elementary school students during the research period.

Table 1. Diseases experienced by students (last 1 month)					
Category		Amount	percent %		
Sick		157	16.75		
Painless		780	83.24		
	Amount	937	100		
Types of diseases					
ARI		20	2		
Diarrhea		53	5.6		
DHF		39	4.2		
Worms		28	2.98		
Malaria		17	1.8		
	Amount	157	16.75		

Table 2. The relationship between PHBS students at a basic level with the incidence of environme	ental-
based diseases in Kupang City in 2021	

Research variable	Environmentally based disease incidence		n Valua
	Sick	Painless	p-vuiue
Personal hygiene			
Well	161 (17) %)	696 (74)	0.961
Enough	11 (1.2%)	52 (5.5%)	
Not enough	3 (0.32 %)	24 (2.5%)	

International Journal of Environmental, Sustainability, and Social Scie	ences
ISSN 2720-9644 (print); ISSN 2721-0871 (online)	
https://journalkeberlanjutan.com/index.php/ijesss	

Eat healthy food			
Well	33 (3.5%)	128 (13.7%)	
Enough	55 (5.9%)	322 (34.36%)	0.029
Not enough	87 (9.3%)	312 (33.29%)	
Use of Clean and Health			
Well	136 (14.5%)	652 (69.58%)	
Enough	32 (3.4%)	102 (10.88%)	0.004
Not enough	7 (0.74%)	8 (0.8%)	
Flickr Presence			
Flick Free	77 (8.2%)	363 (38.74 %)	0.056
Not Flicker Free	399(42,58 %)	98 (10.45%)	
Waste disposal			
Well	23 (2.45%)	146 (15.58%)	0.96
Enough	62 (6.61%)	281 (29.98%)	
Not enough	80 (8.53%)	335 (35.75%)	

## CONCLUSION

Clean and Healthy Life Behavior (PHBS) is a set of behaviors that are practiced on the basis of awareness as a result of learning, which makes a person, family, or group or community able to help themselves (independently) in the health sector and play an active role in realizing public health. Thus, PHBS includes hundreds or even thousands of behaviors that must be practiced in order to achieve the highest degree of public health. In the field of disease prevention and control as well as environmental health, it is necessary to practice the behavior of washing hands with soap, managing drinking water and food that meets the requirements, using clean water, using healthy latrines, managing liquid waste that meets the requirements, eradicating mosquito larvae, etc. (3)

The results of the study on the personal hygiene variable showed that it was not significant, meaning that there was no relationship between the independent and independent variables. In line with research conducted by Hadji, 2016 regarding clean and healthy living behavior (PHBS) in students at Sapa State Elementary School, Tenga District, South Minahasa Regency, 36 (52.2%) respondents who have a good attitude and respondents who have a bad attitude are as many as 36. 33 (47.8%).

The results of research on the healthy food consumption variable show that there is a relationship between healthy food consumption habits and environmental-based disease incidence, in line with research conducted by Aditio Purnomo 2018 in 4th and 5th grade students at SDN 139 Sukarasa Bandung, which shows that fruit and vegetable consumption of the population aged above 10 years in Indonesia is still less than their daily needs.

Consuming food with a balanced nutritional menu needs to be familiarized with school-age children. School-age children have a lot of physical activity and rapid physical growth, so it is important to pay attention to the nutritional content of each menu of food consumed. Vegetables and fruit are one of the nutritional needs that are rarely liked and often ignored by school-age children, they tend to prefer foods that are interesting and tasty but do not have good nutritional quality. Vegetables are one of the important foods that must be consumed at every meal because they are one of the requirements to meet a balanced nutritional menu.

Many factors cause children to be less accustomed to consuming vegetables and fruit, including the characteristics of children/individuals, characteristics of parents and environmental factors. Children prefer junk food, the majority of which does not provide a menu of vegetables and fruit. Parents have an important role in the food menu consumed by children, besides parents also need a balance with children's behavior. Children's behavior in consuming vegetables and fruit needs to be improved by increasing the knowledge capacity of school-age children about the importance of vegetables and fruit through Health Education. However, Health Education is rarely able to attract children's attention if the method is not appropriate.

#### International Journal of Environmental, Sustainability, and Social Sciences ISSN 2720-9644 (print); ISSN 2721-0871 (online) https://journalkeberlanjutan.com/index.php/ijesss

A latrine can simply be said to be a sanitation facility consisting of a place for excreta disposal equipped with a drain to a fecal collection (cupluk) or septitank. (Winarsih, p.41). A healthy latrine is a latrine that has met the health requirements for use, has a waterproof floor, is closed from a goose's neck, has a latrine house and is equipped with ventilation, and sufficient water is available for its users. In order to keep the latrine clean and senate, it is necessary to pay attention to its use, such as not throwing away tissues or sanitary napkins in the closed, flushing the closed after using, providing hand washing soap in it and not spilling detergent on the closed hole.

The results of the research on the use of healthy latrines are in a Good category. However, the results of statistical tests show that there is a relationship between the use of healthy latrines and the incidence of environmental-based diseases. A similar study conducted by Agustina 2016 on the relationship between latrine use and the incidence of diarrheal disease showed the value of P Value 0.00 OR value of 12.71 means that there is a relationship between the use of healthy and clean latrines to the incidence of diarrheal disease. Research by Sanfia Tesabela Messakh 2019 shows that in the sufficient category (63.73%), handwashing behavior is in the sufficient category (66.58%) schoolchildren group is part of a community group that can play a strategic role, considering the number of them is very large about 20% of the total population of Indonesia are elementary, junior and senior high school students. School children are spread across all regions of Indonesia, both urban and rural areas. In an effort to prevent dengue transmission, school children can play a role in efforts to eradicate mosquito nests (PSN) both at school and at home.

The results of the study on the presence of larvae in the respondent's home environment showed that they were free of larvae (51%) or 476 homes, statistical tests showed p = 0.054 there is a relationship between the use of healthy latrines on the incidence of environmental-based diseases. The study (Joni Hendri, 2020) concluded that there was a significant relationship between container draining and the presence of Aedes sp. in the studied schools.

The government has created the Jumantik program as an effort to implement PHBS as early as possible and prevent the incidence of dengue fever in schools. Joni's 2020 research, which involved 300 students, consisted of 98 male students and 202 female students. The average age of elementary school students is around 10.7 years, and junior high school students are 14 years while the average age of senior high school children is 16.5 years. Based on the results of the interview, it can be seen that the percentage of students with good knowledge about DHF for SD level is 49.5%; JSS 38.89%; high school 37.50% while knowledge about dengue vector control at SD level 3.4%; 3.7% junior high school and high school 2.5%. Percentage of students who perform vector control measures for SD level 0.49%; junior high school 9.26%; and 5% high school. Age and gender did not show a relationship with knowledge and action on DHF.

The behavior of disposing of garbage is an individual's physical activity that is clearly visible as a result of habituation formed by the environment. The results of research on waste disposal on the incidence of environmental-based diseases in the unfavorable category are 45.5% or 425 respondents, statistical tests show p = 0.096 it means that there is no significant relationship between the independent variable and the dependent variable. The results of the research conducted by (Tia Anifa, 2019) the training method obtained that the pre-test calculation results were 33.3% and the post-test calculation results were 86.7%. These results showed a significant increase in the behavior of students throwing garbage in its place and according to color. Also supported by the results of hypothesis testing, the results obtained t = -4.164 < -2.093. This shows that the research hypothesis, which states there is a difference in students' waste disposal behavior between before and after being given live and symbolic modeling treatment is accepted. The results of this study are in line with the findings of thirteen studies conducted by Huffman and colleagues (in Brannon, 2010), which showed that there was a decrease in littering behavior among subjects who witnessed modeling behavior.

The results of research by Winnet et al. (in Lehman & Geller, 2008) who conducted a largescale intervention related to increasing conservation behavior, resulted in findings about the significance of the role of modeling in the formation of conservation behavior. Conservation behavior can be defined as the behavior of the preservation and maintenance of the environment. One of them is the behavior of disposing of garbage in its place and according to it.

# REFERENCES

Hapsari, II (2016). Child Development Psychology. Index PT: Jakarta

- Harrington J, Perry I. J & Lutomski J. (2013). Living Longer and Feeling Better: Healthy Lifestyle, Self Rated Health, Obesity and Depression in Ireland.
- European Journal Public Health Volume 20, Issue 1: 91-95 Doi: 10.1093/EURPUB/CKP 102 ISSN 1464-360x.
- Kholid, A. (2015). Health Promotion with Behavioral Theory Approaches, Media, and Applications. Jakarta: Rajawali Press.
- Khoiruddin, Kirnantoro, & Sutanta. (2015). Knowledge Level Associated with Attitude of Washing Clean Hands with Soap Before and After Eating at Elementary School Students Ngebel, Tamantirta, Kasihan, Bantul, Yogyakarta. Journal of Nurses And Midwifery Indonesia Vol. 3 Mo. 3 ISSN 2354-7642, pp. 176-180. <u>https://doi.org/10.21927/jnki.2015.3(3).176-180</u>
- Lina, HP (2016). Clean and Healthy Life Behavior (PHBS) of Students at SDN 42 Korong Gadang, Kuranji Padang District. Journal of Promkes vol 4. no 1, 92-103. <u>https://doi.org/10.20473/jpk.V4.I1.2016.92-103</u>
- Lisafatur, R. (2013). Relationship between Characteristics and Knowledge of Personal Hygiene with Clean and Healthy Life Behavior (PHBS) at MI Matholiul Ulum Mencu Wedung Demak, Semarang. Journal of Nursing Science.
- Notoatmodjo, S. (2010). Health Promotion and Behavioral Science. Jakarta: Rineka Cipta. \_\_\_\_\_, (2014). Behavioral Health Sciences. Jakarta: Rineka Cipta.
- Maryam, S. (2015). Health Promotion in Midwifery Services. Jakarta: EGC.
- Paulik E, Boka F, Kertesz A & Balogh H. (2014). Determinants of health-promoting lifestyle behavior in the rural areas of Hungary.
- Health Promotion International Volume 25, Issue 3: 277-288 doi: 10.1093/heapro/daq025 ISSN 1460-2245. Proverawati, A., & Rahmawati, E. (2012).
- Clean and Healthy Life Behavior. Yogyakarta: Nuha Medika. Raharjo, AS, & Indarjo, S. (2015).
- The Relationship Between Knowledge, Attitude, And Availability Of Facilities In Schools In The Application Of Phbs Disposing Of Garbage In Its Place. Unnes Journal of Public Health, pp. 1-11 ISSN 225-6528.
- Rahayu A. S, Muhlisin A & Sudaryanto A. (2016). Relationship between Milk Bottle Care and Handwashing Behavior with Diarrhea in Toddlers in the Delanggu Community Health Center Work Area. Accessed from: eprints.ums.ac.id/42539/. On December 20, 2017
- Riskesdas. (2018). Province of NTT Basic Health Research.
- Sari, NI, Widjanarko, B., & Kusumawati, A. (2016). Factors Associated with Clean and Healthy Living Behavior as an Effort to Prevent Diarrhea in Students at SD N Karangtowo, Karang Tengah District, Demak Regency. Journal of Public Health - FKM UNDIP Vol. 4 No. 3. ISSN: 2356-3346.
- Suhri M, Sudaryanto A & Sulastri. (2014). Description of Attitudes About Clean and Healthy Life Behavior in State Elementary School Children in Gonilan Village, Kartasura District, Sukoharjo Regency. Accessed from: eprints.ums.ac.id/28617/. On December 18, 2017