



LIFESTYLE WITHOUT TOBACCO: IMPACT OF HEALTH EDUCATION ON CLEAN AND HEALTHY LIVING BEHAVIORELEMENTARY SCHOOL

Akram¹, Hadi Pajariato², Nurwahidin Hakim³, Andi Sitti Umrah⁴, Sri Rahayu Amri⁵, Nursaqinah Galugu⁶

¹³Physical Education Study Program Faculty of Teacher Training and Education, Universitas Muhammadiyah Palopo, Indonesia

²⁶ Guidance and Counseling Study Program Faculty of Teacher Training And Education, Universitas Muhammadiyah Palopo, Indonesia

⁴⁵ Midwifery Study Program Faculty Of Health Sciences, Universitas Muhammadiyah Palopo, Indonesia

Article Info

Article History :

Received : March 2022

Revised : March 2022

Accepted : March 2022

Keywords:

Lifestyle Without Tobacco, Health Education, PHBS

Abstract

Clean and Healthy Living Behavior (PHBS) is fundamental to be instilled in children from an early age because it protects them from various diseases. One form of protection that can be given, especially for school children, is protection against diseases caused by smoking behavior. Education has been an essential part of promoting health and preventing disease throughout the ages. Health education teaches physical, mental, emotional, and social health to develop knowledge, skills, and positive attitudes about health. This study aims to analyze the impact of health education on PHBS in elementary schools for areas that apply a tobacco-free lifestyle. The research method uses collaborative quantitative research with a cross-sectional observational approach. The population and samples were students in Bone-Bone Village Elementary School as a tobacco-free lifestyle area and Salukanan Village as a control village. The number of samples used in this study was 52 people. The data was then analyzed using the Pearson correlation test. The results showed that the health education provided by the Physical Health Education (PJOK) teachers to PHBS in schools was higher in Bone-Bone Village as many as 26 people (50%) while in Salukanan Village, as many as (30.8%). The results of the Pearson correlation test obtained a value = 0.00 and a correlation value (r) = 1,000, so it can be stated that health education provided by PJOK teachers has a powerful impact on children's PHBS in schools, especially in areas that apply a tobacco-free lifestyle

INTRODUCTION

Smoking is still one of the health problems that cause Smoking behavior and is the forerunner to the emergence of various kinds of diseases and even death. More than 8 million people die every year from smoking, there are more than 7 million deaths due to direct tobacco use, while about 1.2 million are caused by non-smokers being exposed to secondhand smoke. More than 80% of the world's 1.3 billion tobacco users are in low- and middle-income countries (Musniati, 2020).

Smoking is a habit that occurs among the people of Indonesia, and has a fairly large impact on health. According to the World Health Organization (WHO), environmental cigarette smoke is the cause of disease, in both active and passive smokers. Around 225,700 people in Indonesia die from smoking or tobacco-related diseases every year (Aziizah, Setiawan, 2018).

Every time smoking a cigarette will have a harmful impact on the human body, there are 45 types of toxic chemicals contained in it. Among the hazardous compounds are lutidine, rubidine, formaldehyde, carbolic acid, metallimin, acreolite, colidi, viridine, arsenic, formic acid, nicotine, hydrogen sulfide, pyryl, furpurol, benzopyrene, methyl alcohol, hydrocyanic acid, chorodine, ammonia, methane, carbon monoxide and peridin. Colidin causes paralysis and gradually causes death. Carbolic acid and hydrocyanic acid are dangerous poisons. Every cigarette smoke contains free radicals and oxidants, all of which will enter the lungs. Information about the dangers of smoking is not a new thing. Many people already know the impact of smoking on health (Alfarisy et al., 2009).

Generally in Indonesia there are two indicators to determine the degree of public health, namely mortality and

morbidity (Atthina et al., 2014). Mortality and morbidity are two things that are interrelated. Usually when the mortality rate increases, the morbidity also increases. Mortality is usually referred to as death, while morbidity is referred to as physical pain caused by certain diseases (Satriawan, 2021).

Today, education has become an important part of promoting health and preventing disease. Health education teaches about physical, mental, emotional and social health that can develop students' knowledge, skills, and positive attitudes about health. Schools should not only be educational centers for academic learning, but also as places to provide support for basic education and health services. Schools are also one of the institutions that play a role in shaping student behavior. In addition to shaping student behavior at school, the most important thing is the family environment, so that students can interact with the community. Health education in schools is an indispensable component, consisting of a combination of learning experiences that help individuals and communities to improve their health, by increasing knowledge or influencing everyone's attitudes when adopting a healthy lifestyle (Mustar et al., 2018).

Currently in Indonesia there are more than 147,503 public and private elementary schools. The number of primary school age children in Indonesia reaches 25.5 million of the total population of Indonesia. School-age children are a critical age group because they are vulnerable to various health problems. Health problems faced by school-age children are basically quite complex and diverse (Mulyadi et al., 2018). Various countries in the world prioritize health education among children and adolescents, especially those related to cigarettes and alcoholic beverages. The main reason is because adolescence is an important period in determining the future health of the

nation's children (Hagquist & Starrin, 1997). Bappenas data shows an increase in the prevalence of smoking among children in 2013 by around 2.9 million children (7.2%), increasing in 2020 to 9.99%. The national target of reducing the prevalence of smokers by 5.4% has not been met, and is an obstacle to achieving quality human resources (IAKMI, 2020).

Health is a right that is owned by everyone in order to be able to carry out all the physical activities of daily living. For the sake of living a healthy life, we must have a Clean and Healthy Lifestyle (Chandra, Akhmad, 2017). Clean and healthy living behavior is a picture of a family's lifestyle to always pay attention to and maintain the health of family members. The awareness that is carried out in every health behavior can help family members in the health sector and can play an active role (Zitty, Barends, 2015).

Clean and healthy living behavior is very important to be instilled from an early age, because this behavior will provide protection from various diseases, including dangerous infectious diseases, and most importantly can improve children's health status. However, health education in schools is still lacking in Indonesia. Clean and healthy living behavior (PHBS) is an obligation that needs to be carried out by everyone. PHBS is an effort to protect the welfare of families and early childhood. For approximately 18 years this program has been running, but it is far from what was expected (Purba, 2020).

Bone-Bone Village is one of the villages that is famous as a village that implements a lifestyle without tobacco. This idea was born out of consultation with community, religious, and traditional leaders, who saw that many teenagers and even school children, from elementary to high school, were smoking before the regulation was implemented. Even religious leaders, communities, customs,

and teachers at schools are worried about the impact it will have, this greatly affects the future of children. Based on the above phenomenon, this study aims to analyze the impact of health education on Clean and Healthy Life Behavior (PHBS) in Elementary Schools (SD) between Bone-Bone Village and Salukanan Village, Enrekang Regency. This research contributes to assisting local governments in implementing a lifestyle without tobacco in general in the area and in school areas in particular.

METHODS

This research is a type of quantitative research with a cross-sectional namely research with data measurement methods conducted in the same period of time to see the independent and dependent variables (Sugiyono, 2013).

Sampling Procedures

The population and sample in this study were elementary school children (SD) in Bone-Bone Village as a village that implemented a Non-Smoking Area (KTR)/lifestyle without tobacco and Salukanan Village as a control village (non-KTR) in Enrekang Regency. Sampling technique used cluster sampling, ie samples were taken in grades 4 (four) and 5 (five) in the Bone-bone Village Elementary School and Salukanan Elementary School with a total sample of 52 people (26 people in each elementary school).

Materials and Apparatus

The research instrument used a questionnaire containing questions on each of the variables studied, namely health education with 5 question items and Clean and Healthy Life Behavior (PHBS) with 8 (eight) indicators, namely hand washing, healthy canteen, clean and healthy latrines,

regular exercise, eradicating mosquito larvae, not smoking at school, throwing garbage with a total of 26 questions. The answer choices use the Guttman scale (Yes and No). The research instrument was carried out by picking test, with r arithmetic value > 0.444 and Cronbach's Alpha value = 0.982. This means that all question items are declared valid and reliable.

Procedures

The procedures in this study are as follows: (a) compiling research instruments; (b) perform a sampling test to determine the validity and reliability of the instrument used. This test was carried out in the Kendenan village area as a village that has the same characteristics as the research location; (c) collecting data by distributing research instruments to 52 respondents; (d) perform data analysis and draw conclusions.

Design or Data Analysis Data

analysis used univariate analysis to see the frequency distribution of respondent characteristics, health education variables and PHBS. Furthermore, bivariate analysis was carried out to see the impact between variables using the Pearson correlation test.

RESULTS

The following are the findings of the study:

Characteristics of respondents

Table 1. Characteristics of Respondents

Characteristics of respondents	Frequency (F)	Percentage (%)
Age		
10 years	26	50.0
11 years	26	50.0
Total	52	100.0
Class		
4 SD	28	53.8
5 SD	24	46.2

Total	52	100.0
Domicile (Address)		
Bone-bone Village (KTR)	26	50.0
Salukanan Village (Non KTR)	26	50.0
Total	52	100.0

Based on the table. 1 above shows that the characteristics of respondents based on age are 10 and 11 years respectively 26 people (50%). As for the class, the most respondents were in grade 4 SD, namely 28 people (53.8%) and the domicile of each respondent was 26 people (50%). 50% in Bone-Bone and Salukanan Villages.

The following is the health education obtained by respondents in Bone-Bone Village as a lifestyle without tobacco village and Salukanan village as a control village (not implementing a tobacco).

Table 2. Health Education Received by Respondents in Schools between Bone-Bone and Salukanan Villages

Health education	Frequency (F)	Percentage (%)
Bone-bone Village		
Good	26	50.0
Less	0	0.0
Salukanan Village		
Good	16	30.8
Less	10	19.2
Total	52	100.0

Based on table 2, it is stated that good health education is given by Physical Education, Sports, and Health (PJOK) teachers to the highest respondent in Bone-Bone Village (50%). While in Salukanan Village as a control village, PJOK teachers only provide good health education about 30.8%. The following are the health education items given by the PJOK teachers in each village:

Table 3.Health Education items given by the PJOK teachers in schools

No	Question Items	Bone-Bone		Village, Salukanan Village	
		Yes	No	Yes	No
1.	The PJOK teachers provided information to me about food intake nutritious	26 (100%)	0	15 (57.7%)	11 (42.3%)
2.	PJOK teacher provides information to me about the importance of physical activity in the form of exercise at least 2-3 times a week	26 (100%)	0	26 (100%)	0
3.	PJOK teachers provide information about instilling healthy living habits	26 (100%)	0	15 (57.7%)	11 (42.3%)
4.	PJOK teachers provide information about supervising and checking students' hygiene	26 (100%)	0	15 (57.7%)	11 (42.3%)
5.	PJOK teachers perform first aid and light treatment within their capabilities	26 (100%)	0	26 (100%)	0

Based on table 3, regarding the question items about health education given by PJOK teachers in each of the highest school domiciles in Bone-Bone Village as In the implementation of the Non-Smoking Area (KTR) village, 26 people (100%) of respondents received health education at school. While in Salukanan Village as the highest control village on item number 2 (importance of physical activity) and number 5 (first aid and light treatment) as many as 26 people (100%) respondents.

Table 4. Clean and Healthy Life Behavior (PHBS) Between Schools

Clean and Healthy Life Behavior (PHBS)	Frequency (F)	Percentage (%)
Bone-bone Village		
Good	26	50.0
Less	0	0.0
Salukanan Village		
Good	16	30.8
Less	10	19.2
Total	52	100.0

Based on table 4, regarding PHBS between schools, the highest PHBS in good PHBS is in the village of bone-bone. The following items are PHBS between Schools in Bone-Bone and Salukanan Villages

Table 5. Items of Clean and Healthy Life Behavior (PHBS) Between Schools in Bone-Bone and Salukanan Villages

No	Question Items	in Bone-Bone		Village, Salukanan Village	
		Yes	No	Yes	No
1.	Wash hands with water flowing and using soap	26 (100%)	0	15 (57.7%)	11 (42.3%)
2.	Consuming healthy snacks in the	26 (100%)	0	14 (53.8%)	12 (46.2%)

	school canteen				
3.	Using clean and healthy latrines	26 (100%)	0	14 (53.8%)	12 (46.2%)
4.	Regular exercise	26 (100%)	0	26 (100%)	0
5.	Eradicating mosquito larvae	26 (100%)	0	26 (100%)	0
6.	No smoking in school	26 (100%)	0	3 (88.5%)	11 (41.5%)
7.	Weighing and measuring height every month	26 (100%)	0	5 (57.7%)	11 (42.3%)
8.	Dispose of garbage in its place	26 (100%)	0	5 (57.7%)	11 (42.3%)

Based on table 5, it is stated that Bone-Bone Village as a village that implements KTR has PHBS behavior the highest is 26 people (100%). Meanwhile, Salukanan Village as a control village had the highest PHBS in school on items not smoking at school (88.5%), regular exercise and eradicating mosquito larvae (100%), and on items washing hands with running water and using soap (57.7%), weighed and measured height every month (57.7%), used clean and healthy latrines (53.75), consumed healthy snacks in the school canteen (53.75).

Table 6. Correlation Results Using SPSS Impact of Health Education on Clean and Healthy Life Behavior

Correlations			
		Education	PHBS
Health education	Pearson Correlation	1	1,000**
	Sig. (2-tailed)		,000
	N	52	52
PHBS	Pearson Correlation	1,000**	1
	Sig. (2-tailed)	,000	
	N	52	52

Based on table 6, Pearson correlation test to see the impact of health education on Clean and Healthy Life Behavior (PHBS), it was obtained data that

the value of $p = 0.000 < p = 0.05$, with a correlation value $(r) = 1,000$. This shows that health education on PHBS has a very strong impact. This means that students who receive health education from PJOK teachers have a very strong impact on students' PHBS behavior in schools, especially for areas that apply KTR, not only in schools but throughout the local area.

DISCUSSION

Based on the results of research that has been carried out, it is stated that students who receive health education from PJOK teachers have a very strong impact on students' PHBS behavior in schools, especially for areas that apply KTR. This behavior is not only carried out in the school environment, but throughout the local area. In line with previous research by Bayu Pranoto and Nurhadi Yuhastina (2020) which states that schools play an important role in overcoming smoking behavior in school children. Analysis of the importance of preventing smoking behavior in schools has been studied through Structural Functional Theory from Talcott Parsons. Society as a system that is interconnected with each other. In the sense that teachers and students have a relationship with each other to carry out the values that exist in the school environment, so that it can run well. In carrying out their roles, teachers provide health education to students in general, including smoking prevention/ban.

Education is very important, because it is part of the adjustment between humans and the surrounding environment, both in the form of theory and its application in society (Sardiman, 2018). The provision of health education with the interaction method between teachers and students will of course provide maximum results in launching

PHBS independently.

In line with previous research by Probo Yusuf Wicaksono (2017) stated that PJOK teachers have an important role in providing health education. Most PJOK teachers provide good health education (80%) in the form of healthy living habits, first aid for accidents at school.

The behavior of lifestyle without tobacco as part of healthy living habits is indeed appropriate if it is launched as early as possible through elementary school education. The interactions that occur in the teaching and learning process between students and teachers will produce a deep understanding, so that students in particular, and the general public will be accustomed to being in a No Smoking Area that implements a lifestyle without tobacco

CONCLUSION

Based on the results of the study, it can be concluded that there are differences in health education on behavior Clean and Healthy Living (PHBS) between Bone-Bone Village which implements a lifestyle and Salukanan Village as a control village (which does not implement tobacco). This shows that health education on PHBS has a very strong impact. Students who receive health education from PJOK teachers have a very strong impact on students' PHBS behavior in schools, especially for areas that implement KTR, which is not only in schools but throughout the local area.

ACKNOWLEDGEMENT

Thank the LPDP scientific research team for giving us the opportunity to participate in scientific research, and to the LPDP and Palopo Muhammadiyah University for helping fund this research activity.

REFERENCES

- Alfarisy, S., Lestari, W., Studi, P., Keperawatan, I., & Riau, U. (2009). Efektifitas pendidikan kesehatan terhadap peningkatan pengetahuan remaja tentang dampak merokok.
- Adriani, S. W., Anggriawan, R., Al Imani, M. T., & Wahyudi, A. (2021). Pendidikan Kesehatan untuk Mencegah Green Tobacco Sickness Pada Petani Tembakau. *Jurnal Pengabdian Masyarakat IPTEKS*, 7(1), 37-45.
- Atthina, N., Kesehatan, D., & Tengah, J. (2014). Klasterisasi Data Kesehatan Penduduk untuk Menentukan Rentang Derajat Kesehatan Daerah dengan Metode K-Means.
- Aziizah, Setiawan, L. (2018). Hubungan Tingkat Pengetahuan Tentang Dampak Rokok Terhadap Kesehatan Rongga Mulut dengan Tingkat Motivasi Berhenti Merokok pada Mahasiswa Universitas Kristen Maranatha. 3(1).
- Chandra, Akhmad, F. (2017). Hubungan Antara Pengetahuan Dan Sikap Dengan Perilaku Hidup Bersih Dan Sehat (Phbs) Pada Siswa Sekolah Dasar (Sd) Di Kecamatan Cerbon Tahun 2016.
- Dewi, E. U. (2015). Pengaruh pendidikan kesehatan terhadap perilaku hidup bersih dan sehat pada pemulung di TPA Wonokromo-Surabaya. *Jurnal Keperawatan*, 4(1), 13-20.
- Hagquist, C., & Starrin, B. (1997). Health Education In Schools - From Information To Empowerment Models. *Health Promotion International*, 12(3), 225-232. <https://doi.org/10.1093/heapro/12.3.225>
- IAKMI, T. (2020). Atlas Tembakau Indonesia Tahun 2020. 33.
- Mulyadi, M. I., Warjiman., & Chrisnawati. (2018). Efektivitas Pendidikan Kesehatan Dengan Media Video Terhadap Tingkat Pengetahuan Perilaku Hidup Bersih Dan Sehat. *Jurnal Keperawatan STIKES Suaka Insan*, 3(2), 1-9.
- Musniati, P. S. (2020). Dengan Perilaku Merokok Pada Siswa SMK Muhammadiyah 09 Jakarta Selatan 2020

- Hubungan Agama dan Faktor Lainnya dengan Perilaku Merokok Siswa SMK Muhammadiyah 09 Jakarta Selatan Tahun 2020. 0326128802.
- Mustar, Y., Susanto, I., & Bakti, A. (2018). Pendidikan Kesehatan: Perilaku Hidup Bersih dan Sehat (PHBS) di Sekolah Dasar. 2(2), 89–95.
- Purba, N. (2020). Clean and Healthy Lifestyle Behavior (PHBS Program) for Children with Intellectual Disability. 14(2).
- Sardiman. (2018). Interaksi dan Motivasi Belajar Mengajar. Rajawali Pers.
- Satriawan, D. (2021). Gambaran Kebiasaan Merokok Penduduk Di Indonesia. Jurnal Litbang Sukowati : Media Penelitian Dan Pengembangan, 4(2), 51–58. <https://doi.org/10.32630/sukowati.v5i2.243>
- Zitty, Barens, R. (2015). Hubungan Antara Pengetahuan Dan Sikap Dengan Perilaku. 4(4), 290–294.