Teachers' interpretation and behavior in conducting a Clean and Healthy Lifestyle Program at elementary schools in Kediri District

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Abstract: Health development is expected to achieve a healthy Indonesia where everyone lives in a healthy and clean environment with healthy conditions and hygiene behaviors as well as can access health services and have a high level of health status. This study aims to identify teachers' interpretation and behavior levels in conducting a Clean and Healthy Lifestyle Program (PHBS) at elementary schools. This research is survey research using descriptive research designs. The population taken in this study were teachers in three elementary schools (3) in the working area of Ngletih Community Health Center, with a total of thirty-two (32) people. The samples in this study were elementary school teachers from Bawang Elementary School 1, Ngletih Elementary School, and Ketami Elementary School 2 District of Kediri City Islamic Boarding School. The results of the study found that several programs and activities had been well-implemented including the availability of school canteens and healthy snacks, the availability of latrines, sports activities, eradication of mosquito larvae in water storage, measuring body weight and height programs, and availability of measuring instruments for weight and height, availability of trash bins in every school and also waste sorting. The behavior of elementary school teachers in the Ngletih community health center's working area on school PHBS, for the most part, had carried out school clean hygiene behaviors but have not been perfect.

Keyword: Elementary School, PHBS, Teacher's interpretation

1. INTRODUCTION

A healthy and clean lifestyle is a habit done based on awareness and results of learning. Implementing a healthy and clean lifestyle can help individuals or families protect themselves and create community health. Clean and Healthy Lifestyle Program or *Perilaku Hidup Bersih dan Sehat* (hereafter, PHBS) is beneficial to avoid, control, protect an individual from disease threats, as well as educate an individual to use the qualified, effective, and efficient healthcare services (1,2)

School is one of the institutions which becomes a target of the PHBS program. The program further consists of indicators that the schools should implement. The program is carried out at schools because many young generations can learn how to continuously apply and share the values of the PHBS program to their juniors. Based on the population survey in 2019, Indonesia approximately had 266.91 million individuals, consisting of 134 million males and 132.89 million females. In addition, the age range of 0-14 years (adolescence or school-age) was 66.17 million individuals or nearly 24.8% of the total population. School-age is a golden age to invest values of the PHBS program, so it can potentially involve various agents of change to promote the program, whether at schools, family, or community. More importantly, teachers are notable for playing an essential role in every student's cleanness and health because they can be role models for their students. Hence, a healthy and clean lifestyle of the teachers at schools will be a determinant factor of the program's success.

The PHBS program is one of the health pillars programmed by community health centers as the agent of healthcare facilities in the community are essential to elevating community health status. Moreover, primary healthcare centers are expected to be not only medical and rehabilitative facilities, but also promoting and preventive agents. To identify whether a community has implemented a clean and healthy lifestyle, a sustainable and continuous census is required to evaluate the PHBS program. This study, thus, is aimed to identify teachers' interpretation and behavior levels in conducting the Clean and Healthy Lifestyle Program (PHBS) at elementary schools.

2. MATERIAL AND METHODS

Research design, population, sample, and variables

This research is a survey research using descriptive research design. The sampling used was the purposive sampling technique. The primary sample was selected based on the specific criteria related to the study. The population in this study was 32 teachers at three elementary schools in the working area of Ngletih Community Health Center. The sample in this study was 11 primary school teachers from Bawang 1 Elementary School, 14 teachers from Ngletih Elementary School, and seven from Ketami Elementary School 2, Pesantren Sub-District in Kediri District.

Instruments

The instrument of this study was a questionnaire to measure how far the teachers interpret and respond to the PHBS program at the school. In terms of the interpretation variable, there were three questions, including the teachers' familiarity with the program, the definition of school PHBS program, and types of indicators. At the same time, other ten questions were used to measure the teachers' response to the implementation of the program at the school. There were only two questions regarding hindering factors the teachers' experience during the deployment and some recommendations that they could give to each school for a more straightforward implementation of the program. In contrast, the assessment of the PHBS program at the school surroundings provided 14 closed questions. If there was one irrelevant answer related to the PHBS program, it means that the school did not well implement the program.

Research procedures and analysis

The inclusion criteria in this study were elementary school teachers in the working area of the Ngletih community health center who were willing to participate in this study. This study, furthermore, was conducted at Bawang 1 Elementary School, Ngletih Elementary School, and

Ketami 2 Elementary School, Pesantren Sub-District, Kediri District, in July 2019. The variables of this study were the interpretation and behavior of elementary school teachers about the PHBS program in the working area of Ngletih community health center, Kediri District.

Knowledge, behavior, and action of the school PHBS program should be done by each individual at school to improve the health status. The indicators of healthy and clean lifestyle at school involve handwashing in running water and applying soap, eating healthy meals at school canteens, using clean restroom, routine and measurable exercise, removing mosquito larvae, no smoking at school area, measuring body weight and height every six months, and disposing rubbish to the rubbish can.

The data were obtained through a questionnaire about the interpretation and behavior of elementary school teachers about the school PHBS program as well as the implementation of the program at the school. First, the authors surveyed Bawang 1 Elementary School, Ngletih Elementary School, and Ketami 2 Elementary School, Pesantren Sub-District, Kediri District. Next, the authors researched three elementary schools based on the permission letter issued by the primary healthcare centers before disseminating questionnaires to the respondents. After that, the authors introduced themselves, informed the objectives and benefits of this study before they asked the respondents to fill the questionnaires. Lastly, the results from the questionnaires were then analyzed with SPSS 22, then tabulated using SPSS 21 by using crosstabulation and frequency distribution.

3. RESULTS

Elementary School Teachers' Interpretation of the PHBS Program

Tables 1 and 2 displayed the percentage results of the knowledge of elementary school teachers in the working area of the Ngletih community health center to the school PHBS program.

Table 1. Frequency Distribution of Teachers' Interpretation of 8 Indicators of the School PHBS Program.

Elementary Schools

Variables

	Bay	Bawang 1		Ngletih		Ketami 2	
	n	%	N	%	n	%	
Ever heard about th	e school PHBS	program.					
Yes	8	72.7	13	92.90	7	10	
		0				0	
No	3	27.3	1	7.10	0	0	
		0					
Total	11	100	14	100	7	10	

						0
Definition of school PHBS	s progran	n.				
Correct	0	0.	2	14.30	0	0
Wrong	11	100	12	85.70	7	10
						0
Total	11	100	14	100	7	10
						0
Eight indicators of the sch	ool PHB	S program.				
>50 % Correct Answers	0	0	3	21.40	0	0
< 50 % Correct Answers	8	72.7	9	64.30	7	10
		0				0
Totally Wrong	3	27.3	2	14.30	0	0
		0				
Total	11	100	14	100	7	10
						0

Table 2. Frequency Distribution of Elementary School Teachers' Interpretations of Eight Indicators of the PHBS Program.

Answers	Working Are	Elementary School Teachers in Working Areas of Ngletih Community Health Center		
	N	%		
Ever heard about the school PHB	S program.			
Yes	28	87.50		
No	4	12.50		
Total	32	100		
Definition of school PHBS progr	am.			
Correct	2	6.20		
Wrong	30	93.80		
Total	32	100		
Eight indicators of the school PH	BS program.			
>50 % Correct answers	3	9.40		
<50 % Correct answers	24	75.00		
Totally wrong	5	15.60		
Total	32	100		

Based on those tables, it can be seen that almost all elementary school teachers in the working area of the Ngletih community center have heard about school PHBS with a percentage of 87.5% even though few have never heard of it. Then, regarding the definition of school PHBS, 6.3% of the respondents correctly answer the question, while 93.8% answer incorrectly, or did not understand about school PHBS.

Meanwhile, to answer the PHBS indicators, 75.0% of respondents categorized in "<50% correct answer" For a correct answer <50% each teacher can only correctly answer 1 to 4 school PHBS indicators from 8 existing PHBS indicators. Whereas for "correct answers >50%," there are teachers who can answer 4 to 8 school PHBS indicators correctly out of eight existing PHBS indicators, which are 9.4%.

Elementary School Teachers' Behavior towards the School PHBS Program
Tables 3 and 4 further show an overview of the behavior of elementary school teachers in
the Ngletih community health center's working area towards the PHBS of schools

Table 3. Distribution Frequency of Elementary School Teachers' Behavior towards Eight Indicators of PHBS Program.

Indicators of PHBS Program.							
	Elementary Schools						
37 ' 11	Bawan		NT 1			Ketami	
Variables	g 1		Ngl	etih	2		Total
	n	%	N	%	n	%	
Handwashing culture at		70		70		70	
schools							
		2		4		2	
Exist	1	3	1	4	7	1.0	22
	1	4.4	4	3.8	1	1.9	32
		0	1 4 0	0		0	
Not exist	0	0	0	0	0	0	0
Handwashing before and after							
eating							
Yes	1	3	1	4		2	
	1	4.4	1	3.8	7	1.9	32
	1	0	4	0		0	
No	0	0	1 4 0	0	0	0	0
Handwashing with running	Ü	Ü	Ü	Ü	Ü	Ü	O
water and soap		2		4		2	
Yes	1	2.2	1	- 4 2	7	2	21
	0	2.3	4	5.2	/	2.6	31
		0	1 4	0		0	
No	1	1	0	0	0	0	1
	1	00	O	O	O	O	1
Smoking							
Yes	2	7	1	2	0	0	4
	3	5	1	5	U	U	4
No		2	1	4		0 2 5	
	8	8.6	1	6.4	7	_ 2	28
		0	3	0		5	
Consumption of cigarette		Ü		Ü			
packs							
-		1					
<1 pack	2	00	0	0	0	0	2
11-	0		0	0	0	0	0
1 pack	0	0	0	0	0	0	0
>1 pack	0	0	0	0	0	0	0
Not smoking		3	1	4		2	
	9	0.0	4	6.7	7	3.3	30
		0	7	0		0	
Smoking around school							
Yes		6		3			
	2	6.7	1	3.3	0	0	3
		0		0	-	-	
No		3	1	4		2	
110	9	1.0	3	4.8	7	4.1	29
		1.0	5	┯.0		7.1	

		0		0		0	
Sport at school Exist		3		4		2	
LAIST	0	2.3	1 4	5.2	7	2.6	31
	U	0	4	0		0	
Not exist	1	0	0	0	0	0	1
Routine exercise							
Yes		2		4		1	
	4	3.5	8	7.1	2	3.3	17
		0		0		0	
No	_	4	_	4	_	1	
	7	6.7	6	0.0	2	3.3	17
		0		0		0	
Weekly exercise		2		4		2	
1 time	2	2	2	4	2	2	7
	2	8.6	3	2.9	2	8.6	7
2.4:		0		0		0	
2 times		3	0	5	2	1	10
	6	3.3 0	9	0.0	3	6.7 0	18
3 times		1		U		U	
3 times	2	00	0	0	0	0	2
>3 times		2		4		1	
>5 times	1	0.0	2	0.0	2	3.3	15
	1	0.0	2	0.0	2	0	13
Socialization of the School		O		O		Ü	
PHBS Program							
Yes		2		1		2	
	4	0.0	1	6.7	3	5.0	20
		0	2	0		0	
No		5		1		2	
	7	8.3	2	6.7	3	5.0	12
		0		0		0	

Table 4. Frequency Distribution of Elementary School Teachers' Behavior towards 8 Indicators of the School PHBS Program.

Vorighlas	Elementary School Teachers in the Working Areas of Ngletih			
Variables	Primary Healt	hcare Centers		
	N	%		
Handwashing culture at school				
Exist	32	100		
Not Exist	0	0		
Total	32	100		
Handwashing before and after eating				
Yes	32	100		
No	0	0		
Total	32	100		
Handwashing with running water and soap				

Yes	31	96.90
No	1	3.10
Total	32	100
Smoking		
Yes	4	12.50
No	28	87.50
Total	32	100
Consumption of cigarette packs		
<1 pack	2	6.20
1 pack	0	0
>1 pack	0	0
Not smoking	30	93.80
Total	32	100
Smoking around school		
Yes	3	9.40
No	29	90.60
Total	32	100
Sport at school		
Exist	31	96.90
Not exist	1	3.10
Total	32	100
Routine exercise		
Yes	17	53.10
No	15	46.90
Total	32	100
Weekly exercise		
1 time	7	21.90
2 times	18	56.30
3 times	2	6.30
>3 times	5	15.60
Total	32	100
Socialization of the School PHBS Program		
Yes	20	62.50
No	12	37.50
Total	32	100

There were ten questions arranged to measure the daily implementation of school PHBS by elementary school teachers, and it was almost 100% implemented. Starting from the handwashing indicator, 100% of primary school teachers have cultivated hand washing in their schools and carry it out before and after meals, which is 100%. It appears that 96.9% of the respondents wash their hands with soap and running water; however, 3.1% of teachers still wash their hands without soap.

Furthermore, for indicators of not smoking in the school environment, it turns out that it has not been 100% implemented. There were 12.5% of teachers, especially men, who smoke, while 87.5% did not smoke. 6.3% of teachers who smoke spend less than one pack of cigarettes. Of all those who have daily smoking habits, those who still smoke in the school environment are 9.4%. But the majority of teachers do not smoke in the school environment with a percentage of 90.6%. Then, for regular and measurable sports indicators, 96.9% of all schools implemented sports programs. However, 46.9% of the teachers did not do routine sports in schools. Most teachers (56.3%) exercise twice a week. Then regarding additional questions

about school PHBS counseling, around 62.5% of the teachers have received school PHBS counseling.

The Implementation of the School PHBS Program

Table 5 shows the implementation of the PHBS program in the school environment.

Table 5. Distribution Frequency of Implementation of School PHBS Program at Schools in the Working Areas of Ngletih community health center.

	Elementary Schools in the Working Areas of Ngletih				
Variables	community health center				
	N	%			
Washbasin and soap are available		,,,			
Yes	30	93.80			
No	2	6.20			
Total	32	100			
The school has a canteen	-				
Yes	32	100			
No	0	0			
Total	32	100			
Meals are healthy					
Yes	32	100			
No	0	0			
Total	32	100			
Availability of toilets	3 -	100			
Yes	32	100			
No	0	0			
Total	32	100			
Available toilet ratio	32	100			
Yes	17	53.10			
No	15	46.90			
Total	32	100			
Clean toilet	32	100			
Yes	29	90.60			
No	3	9.40			
Total	32	100			
Exercise at school	32	100			
Yes	29	90.60			
No	3	9.40			
Total	32	100			
Mosquito eggs in the water tank	32	100			
Yes	3	9.40			
No	29	90.60			
Total	32	100			
There is a removal program of mosquito	32	100			
breeding sites					
Yes	28	87.50			
No	4	12.50			
Total	32	100			
Pamphlet of smoking prohibition	52	100			
Yes	29	90.60			
105	<i>47</i>	<i>5</i> 0.00			

No	3	9.40
Total	32	100
Smoking around school		
Yes	10	31.20
No	22	68.80
Total	32	100
Tools to measure body weight and height		
Yes	32	100
No	0	0
Total	32	100
Measurement program of body weight and		
height		
Yes	31	96.90
No	1	3.10
Total	32	100
Rubbish bin		
Yes	32	100
No	0	0
Total	32	100

Of all the available indicators, all of them almost meet the index of the PHBS program in schools. The percentage of 100% for clean and healthy life behavior in schools is found in the indicators of the availability of school canteens, healthy snacks, the availability of rubbish bins and the availability of weight/height measurements but not for the program and availability of restrooms but not for latrine cleanliness

4. DISCUSSION

The findings showed that the elementary school teachers' interpretation of the school PHBS program was still lacking. They mostly ever heard about the program but did not completely understand the program, as seen from the way they mentioned the definition of the program and its indicators. Most of them have attended socialization about the school PHBS program. Lack of interpretation can be further caused by external factors, such as ineffective and monotonous teaching methods applied by the health workers so that teachers do not understand the topic. Another reason is that the teachers were absent from the socialization. The internal factors may be teachers' knowledge and self-action, which were strongly associated. Teachers who know the program but neglect to implement it in everyday life will lack interpretation. It also occurs due to incomplete facilities at schools (3-6).

Cognitive knowledge is a prominent domain in shaping someone's action. There are six levels of cognitive knowledge, which consist of knowing, understanding, applying, analyzing, synthesizing, and evaluating. Knowing is the lowest knowledge level where someone only can remember lessons ever taught to the teachers in the socialization about the school PHBS program. Mostly, the teachers ever heard about the program. The next stage is understanding, which is an ability to explain correctly about an object and accurately interpret materials (3,4).

The results illustrate that the teachers did not explain correctly about the definition of the school PHBS program and its indicators. If they have mastered the understanding level, they will move to the application level, where they use knowledge to be implemented daily. This level will thus correlate with external factors, including colleagues, facilities, and infrastructures. If the teachers implement the program on a daily basis, they will memorize what they have learned (3,4).

All teachers involved in this study mostly implemented the program even though not all

indicators are carried out. They have done handwashing, did sports twice a week, and did not smoke, even though some do not apply soap, attend regular sport, and smoke. Behavior is divided into closed behavior and open behavior. Closed behavior is someone who only gives attention, perception, knowledge, but does not give real actions. Meanwhile, open behavior is a real action that someone takes as a stimulus comes. Such open behavior is required to make a good or bad change. Most of the teachers have shown open behavior to make a good or bad change in the school PHBS program.

Based on previous aspects mentioned, the school PHBS program is not perfect because it lacks knowledge and encouragement to promote the advantages of applying for the program. Moreover, there was no reward for those who applied the school PHBS program and punishment for teachers who did not apply it. Furthermore, role modeling on the application of the program because the teachers do not see their colleagues do the program perfectly, and the teachers have no personal intention to implement it. The teachers need not only knowledge of the program but also an understanding of its advantages. Therefore, schools are recommended to formulate Standard Operating Procedures of reward and punishment system for the teachers and appoint some teachers to be the cadres of the school PHBS program (7).

The implementation of the school PHBS program was further measured from the existence of the program, activities related to the program, facilities, infrastructure, behavior of teachers, students, administrative staff, cleaning service staff, and canteen sellers. The findings of this study showed that several programs and activities had been implemented. For instance, the school's canteen provides healthy food, clean toilets, exercises, removal of mosquito breeding sites, measuring body weight and height program, and the availability of rubbish bins with its waste sorting system. However, the schools mostly have problems in the supporting facilities, such as the availability of washbasin and soap. Moreover, some schools did not provide soap and sinks in each class, and the faucet gets oily (8).

The supporting facilities at schools required the availability of clean water free from mosquito larvae. The water is used for many purposes, including handwashing to prevent diarrhea, dysentery, typhoid, hepatitis A, respiratory system infection, influenza, and more. The availability of soap is useful to cleanse dirt and bacteria in hands. Besides, some schools have limited toilets with clean water in comparison with the number of students. Most of the schools only have two proper toilets (8).

The Standard Facilities and Infrastructures of elementary schools, junior high schools, and senior high schools mention that at least there is one toilet for 60 male students, one toilet for 50 female students, and one toilet for teachers. In total, there are three toilets, ideally. The schools required to have one squat toilet with a design like a gooseneck, water tank approximately 200 liters, a dipper, clothing hangers, and rubbish bins. The number of toilets is not balanced with the number of students. For instance, there are 288 students and teachers, but only four toilets are available. Another example is 147 students and teachers with only two available toilets. Besides, clean water is available and free from mosquito larvae even though dirt is settled in the base of the water tank (1,9)

Another obstacle in the implementation of the school PHBS program is lacking socialization of the program to improve awareness of teachers, students, and other school inhabitants as well as parents who need to educate their kids at home. In terms of home education about a clean and healthy lifestyle, many parents still buy their kids unhealthy meals and do not provide them with packed lunch. Students sometimes still buy lunch outside the school canteen even though the schools prohibit them from doing so. Moreover, the teachers still cannot give good examples to the students. Some teachers still smoke around the schools, do not wash their hands before and after eating and going to the toilet, and litter. Therefore, schools and parents play important roles in shaping the mindset of students. They have to work together to make the students apply a clean and healthy lifestyle. The school also needs to consider more interesting

teaching methods in delivering knowledge and advantages of the program so that teachers, students, and other stakeholders apply it on a daily basis (10).

5. CONCLUSION

The school PHBS program empowers students, teachers, and other school stakeholders to identify, intend, and be able to implement the program and achieve a healthy school. The interpretation level of the elementary school teachers in the working areas of the Ngletih community health center is still lacking. In terms of behavior, the teachers have implemented some activities of the program. Some obstacles that may affect the teachers' behavior are personal factors, lack of infrastructure and facilities, and no reward and punishment system.

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