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Availability of Facilities to Encourage Clean and Healthy Living Behavior

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ABSTRACT
The habit of CHLB in school-age children can be influenced by various factors, including knowledge, attitudes, parental education level and the availability of infrastructure that supports students' CHLB. This study aims to determine the factors associated with CHLB in elementary school students. The study was conducted in February-August 2019 in all northern elementary schools in Kramatwatu District with a sample of 170 grade 5 elementary school students who were taken by purposive sampling. This study used a cross-sectional design with bivariate data analysis. This study shows that as many as 45.3% of respondents have a bad CHLB, the level of education of their parents is in the high category (SMA), have a good level of knowledge (80%), a positive attitude (51.8%), good infrastructure (70%) and there is a relationship between the availability of infrastructure and CHLB among elementary students. The availability of infrastructure encourages changes in CHLB in elementary school students.

Keywords: Clean and Healthy Living Behaviors (CHLB), Availability Of Infrastructure, Knowledge, Attitude

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BACKGROUND

Clean and healthy living behavior instillment at school must start from the elementary school level given that elementary school years constitute a golden period for inculcating clean and healthy behavior. CHLB in elementary school becomes essential is that because elementary school age is the age of agent of change(Departemen Kesehatan, 2008), children of elementary school age can also act as health promoters for their parents and society. It is thus expected that promoting health through school will provide a leverage for behavioral change in school children, parents, and society(Departemen Kesehatan, 2008). Elementary-school-age children are also an age group highly susceptible to transmission of diseases, particularly those transmitted through poor clean living behavior like URTI (Upper Respiratory Tract Infection), diarrhea, and intestinal worm infection. In support of this finding, Lubis stated that 40–60% of school-age children are with intestinal worms(2). Diarrhea is another frequent disease in school-age children. It is recorded by the World Health Organization (WHO) that, per annum, 100,000 Indonesian children die from diarrhea. Out of a nationally estimated of 6,897,467 diarrheal cases found at health facilities in Indonesia in 2016, only 2,544,084 (36.9%) received treatment(Kementerian Kesehatan Republik Indonesia, 2016)

Such behavior-based disease rate of incidence can be attributed to wide-ranging factors, including poor CHLB in elementary school children, lack of knowledge, parents' and students' attitude toward CHLB and school environmental condition which fall short of health requirements. As pointed out in Lina's study, the CHLB indicators least exhibited by students were buying food and beverages from the school canteen, having the body weight and height measured, eradicating mosquito larvae at school, and using the toilet facility at school(Lina, 2016). Another study found that the CHLB of elementary school students fell within the poor category (57.8%) and that it was associated with the students' knowledge level(Sulastri, Purna, & Suyasa, 2014). Some other studies revealed that the knowledge level and attitude of elementary school students in relation to CHLB were within the good category(Diana, Susanti, & Irfan, 2014).

Health education at school contributes to the development of physically, mentally, morally, and intellectually healthy young generation. For this reason, it is highly encouraged that schools are built into a condusive, healthy environment in the effort to realize students' independence in CHLB by involving all sectors and maximizing the roles of all CHLB-supporting factors.

Kramatwatu District, one of the districts in the Province of Banten, has 31 elementary schools across its area, consisting of 21 schools in the north and 10 in the south. A study at the elementary schools in Kramatwatu District showed that 32% of the respondents had poor CHLB and that 35.5% of the elementary schools revealed no health-promoting media were in place(Kusuma & Pertiwi, 2019). On account of the abovementioned, the authors were interested in conducting an analysis of the factors linked to CHLB in fifth graders in Kramatwatu District in 2019. This research aimed at figuring out what factors were related to CHLB in elementary school students in Kramatwatu District in 2019.

METHODS

This research employed a cross-sectional research design with the independent variables knowledge, attitude, exposure to health-promoting media, parents' role, teachers' role, parents' education level, and availability of facilities and infrastructure—and the dependent variable CHLB being observed simultaneously.

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The present research was conducted at all elementary schools in the northern part of Kramatwatu District (21 elementary schools) from February through August of 2019. The population of this research was grade 5 elementary school students with sample of 170 fifth graders was purposively sampling. The primary was obtained directly from the respondents using questionnaires, interviews with elementary school students, and observations of facility and infrastructure availability. Questionnaire contains questions about clean and healthy living behavior, knowledge and attitudes of respondents towards PHBS taken from previous questionnaires and modified again by researchers. Variables of education level, facility availability are self-developed by researchers. Data analysis was performed univariately and bivariately using the Chi-Square Test at a significance level α (alpha) = 5% and 95% Confidence Interval. This research has received ethical approval from The Research and Community Engagement Ethical Committee of Faculty of Public Health Universitas Indonesia, Number: Ket-475/UN2.F10/PPM.00.02/2019.

RESULT

The research results are outlined in the table below.

Table. 1 Research Variables' Frequency Distribution

Variable	Frequency (n)	Percentage (%)
CHLB		
- Poor	77	45.3
- Good	93	54.7
Education Level		
- Low	85	50.0
- High	85	50.0
Knowledge		
- Poor	34	20.0
- Good	136	80.0
Attitude		
- Negative	82	48.2
- Positive	88	51.8
Facility Availability		
- Poor	51	30.0
- Good	119	70.0

Source: *Primary Data, 2019*

Based on Table 1, 45.3% of the respondents had good CHLB, 50.0% of the respondents' parents were of high education level, 80.0% of the respondents had good knowledge, 51.8% of the respondents exhibited positive attitude, 89.4% of the respondents stated they were exposed to CHLB-related media, 52.9% of the teachers performed their role adequately, 60.4% of the parents performed their role adequately, and 70.0% of the respondents stated good facility availability.

Table. 2 Analysis of Clean and Healthy Living Behavior in Fifth Graders

	Clean and Healthy Living Behavior (CHLB)						
	Poor		Good		Total	P Value	
Variable	f	%	f	%			OR
Education Level							
Low	43	50.6	42	49.4	85	0.218	

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High	34	40.0	51	60.0	85		
Total	77	45.3	93	53.7	170		
Knowledge							
Poor	64	47.1	72	59.8	136	0.464	
Good	13	38.2	21	61.8	34		
Total	77	45.3	93	54.7	170		
Attitude							
Negative	41	50.0	41	50.0	82	0.300	
Positive	36	40.9	52	59.1	88		
Total	77	45.3	93	54.7	170		
Facility Availability							
Poor	34	66.7	17	33.3	51	0.000	3.535
Good	43	36.1	76	63.9	119		
Total	77	45.3	93	54.7	170		

Source: *Primary Data, 2019*

Based on Table 2, there were no significant relationships of education level, knowledge, and attitude of students' parents to CHLB in fifth graders, and there were significant relationships of exposure to health-promoting media, parents' role, teachers' role and availability of CHLB facilities to CHLB in fifth graders.

DISCUSSION

CHLB is a behavior resulted from learning and practiced voluntarily for the realization of maximum degree of health. It also refers to an instructional program for an individual, family, group, or community through communication, information, education, or improvement of knowledge of, skills in, and attitude toward clean and healthy living behavior. It is developed in all settings, including the educational one. It is necessary that CHLB as a program through which the attitude and performance of clean and healthy living behavior is taught is developed and delivered from a school age or even earlier. CHLB in school-age children is the most effective way of health promotion and education given that these children are agents of change who are highly sensitive to any form of change.

As suggested by the research results, 45.3% of the respodents demonstrated poor CHLB, a proportion approaching that of respondents who showed the otherwise (54.7%). This is consistent with the finding of previous research which shows nearly balanced proportions of good and poor CHLB in students(Bawole et al., 2018). If we are to refer to the CHLB indicators in school settings, there were some that fell short of the requirement. The highest-percentage poor CHLB found in this research was body weight and height measurement. The healthy snacking behavior also fell into the poor category. The behavior in the indicator of school toilet for defecating and urinating was also still categorized as poor. These results are in line with those of previous study, in which the handwashing behavior indicator was categorized as adequate, healthy snacking, no-smoking indicator and no-littering as poor(Messakh, Purnawati, & Panuntun, 2019).

Education is a formal endeavor to improve one's knowledge, attitude, and skills. Parents' education backgrounds have a role in shaping the students' clean and healthy behavior as parents become role models to their children in terms of behavior. According to the research results, parents of high education levels and those of low education levels were at an equilibrium. Parents' education levels would be categorized as low if their latest formal

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education was at junior high school, elementary school, if they failed to graduate from elementary school, or if they never attended any school.

The parents of most of the repondents in this research were graduates of senior high school (42.4%), some of junior high school (24.1%) and elementary school (20.6%). As indicated by the research results, respondents with poor CHLB and whose parents were of low education levels made up a bigger proportion than did those with good CHLB. This shows that the higher the parents' education level, the bigger the potential of an individual to have good CHLB. Unlike this finding, Rismasari stated there was a difference in CHLB based on the education level of elementary school students' parents. The respondens' parent were of high education level were better than those whose parents were of lower education level(Rismasari, 2015).

Based on the research results in the knowledge variable, respondents with good knowledge were greater in proportion than those with poor knowledge. Those who exhibited poor knowledge and good CHLB were observed to compose a larger proportion than did those who had poorer CHLB. This suggests that knowledge level had a miniscule influence on CHLB. This research is in agreement with a previous study which stated that no relationship was present between knowledge level and CHLB in students of grade five of elementary school(Kusuma & Pertiwi, 2019) yet at odd with another study which stated that knowledge was significantly related to students' CHLB (Chandra, Fauzan, & Aquarista, 2017; Sondakh, Engkeng, & Tilaar, 2016; Wulandari & Pertiwi, 2018).

Behavioral change is influenced not only by knowledge but also several other factors. As Green put, behavioral change can be influenced by predisposition, supporting, and reinforcing factors(Green, 1980). These factors, then, in addition to knowledge, influence each other to shape one's behavior. Out of the 8 indicators of CHLB at school, one was the indicator the students had little knowledge of, namely smoking. Results showed 85.3% of the respondents stated that smoking was healthy and no impact on health. This was assumed to be attributed to the respondents' lack of knowledge of the harmful substances contained in the cigarette smoke. Results indicated that the respondents' knowledge of cigarette was lacking, lelading to the need for the school or local public health center (*puskesmas*) to conduct health socialization to improve the students' knowledge.

Based on the research results, showed no significant relationship between attitude and CHLB. This finding deviated from that of previous research. There were more students with positive attitude toward CHLB than those with negative one(Bawole et al., 2018; Chandra et al., 2017; Janis, Umboh, & Malonda, 2014). The research results showed that the students strongly disagreed with the notion that skipping handwashing before eating can lead to intestinal worm infections (30.6%). This implies that the students had a negative attitude toward handwashing in its role in preventing intestinal worm infections. Negative attitude was also showcased toward garbage discarding. The students agreed and strongly agreed that dropping garbage to the garbage bin was not an obligation and the students did not find any problem in snacking at school with disregard for the health impact. Poor attitude was also demonstrated toward smoking. Based on the results as detailed above, it is obviously necessary that the school, families, and relevant institutions conduct a more intensive education to make a remedy in the students' poor attitude toward a number of indicators.

The CHLB facilities available served as a factor that could foster students' CHLB, as was shown by the finding that there were more students with good CHLB in schools with adequate availability of facilities. The analysis results showed that schools possessing adequate CHLB facilities having 4 times potential of having students with good CHLB than those with poor CHLB facility availability. Facility and infrastructure availability becomes

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a driving factor in behavioral change. Even if the knowledge, attitude, and parents' and teachers role are within good category, without adequate facilities and infrastructure, behavioral change in students will be impossible. For this reason, it is critical that schools provides CHLB supporting facilities that meet the indicators of CHLB at school.

CONCLUSION

Facility and infrastructure availability becomes a driving factor in behavioral change.

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CONFLICTS OF INTEREST

There is no conflicts of interest in this research.

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