

THE INFLUENCE OF OUR SCHOOLS REDUCING WASTE PROGRAM (KURASSAKI) ON STUDENTS 'PHBS IN THE PILOT PROJECT SCHOOL OF BAPPEDA, TANGERANG DISTRICT, INDONESIA

Yuni Susilowati¹⁾ and Abdul Santoso²⁾

^{1,2)}Nursing Study Program, STIKes YATSI Tangerang, Indonesia
E-mail: yunisusilo07@gmail.com

ABSTRACT

Observations on several school and community environments in Tangerang Regency where the problem of waste has not found the right solution. The school environment becomes one of the biggest waste-producing agents every day. The behavior of the community and school members towards waste is one of the factors in creating a Clean and Healthy Behavior (PHBS). The incidence of diseases caused by PHBS is still high. The most common illnesses occur because of a lack of understanding of PHBS, especially those related to environmental cleanliness, this happens because PHBS in Indonesia has only reached a percentage of 56.58% (Kemenkes RI, 2018).

The purpose of this study was to determine whether the Kurassaki program (reducing waste our schools) had an effect on the PHBS of students at the Pilot Project School of the Regional Development Planning Agency (Bappeda) Tangerang Regency. This type of research is a quantitative study with a quasi-experimental research design. The sampling technique uses stratified random sampling. The sample in this study were 175 respondents in the experimental group and 183 respondents in the control group. This research instrument using a questionnaire.

Based on the Mann-Whitney test, the p-value is 0.000 <0.05, it can be concluded that "H₁ is accepted", which means that there is an influence of the Kurassaki program on student PHBS at the Bappeda Pilot Project School in Tangerang Regency. Based on the research results, it can be concluded that the implementation of the Kurassaki program in schools has a positive effect on PHBS students and makes more concerned about the environment.

Keywords: waste, kurassaki program, PHBS, school, health

INTRODUCTION

One of the efforts to improve the degree of public health, the Ministry of Health, through the Health Promotion Center, implements a clean and healthy lifestyle program. Clean and Healthy Living Behavior (PHBS) can be carried out in various social settings, such as in households, schools, workplaces and public places. Nationally, the percentage of PHBS in 2014 was 56.58% [6]. The degree of public health can be achieved if the PHBS presentation

is good, directly good PHBS will lead to a good and healthy life order. based on observations on the environment of several schools and the environment in Tangerang Regency where the problem of waste is still very concerning. The community and school environment are big contributing agents in producing waste every day. The dominant type of waste is plastic waste. As we know, plastic waste is waste that will not decompose in the soil even though it has been buried for a long time. The high level

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of waste produced in each institution, be it educational, household, industrial and office environments is inversely proportional to the community's concern for the environment, school residents and other groups in various agencies, so that waste becomes a problem that has not found the right solution to date. Garbage is a source of problems that have not been resolved completely. The problem of waste will never find a solution if public awareness is still low.

The behavior of the community and school members towards waste is one of the factors of Clean and Healthy Living Behavior (PHBS). The problem of waste and PHBS are two things that are interrelated, the concern of the community and school residents, especially students towards waste, is a benchmark for how PHBS is in an environment. If this problem does not get serious treatment, it will cause bigger problems in the future. PHBS is a basic strategy in health science which aims to form knowledge, attitudes, and proactive actions for preventive action (maintaining and preventing the risk of disease) and playing an active role in creating a healthy environment.

Good behavior or not PHBS can be seen from the environment. An indicator that is easy to observe is how the children treat the garbage around them. Garbage is something that is not used, not used, disliked or something that is thrown away, which comes from human activities and does not happen by itself [5]. Specific waste is waste which due to its nature, concentration and/or volume requires special management [4].

Garbage is a problem that is considered important by Indonesia, because there is still a lot of waste that is not managed properly and there is a lack of human awareness of waste. Poor waste management is due to gaps between visible knowledge and behavior. Survey data from the Central Statistics Agency (BPS) 2013 shows that the knowledge of the population in terms of air

pollution is 80.57%, but only about 43.10% of the population cares about waste.

In general, health promotion has a vision according to the World Health Organization (WHO), the general vision is to increase people's ability to maintain and improve their health, both physically, mentally and socially so that they are economically and socially productive [7]. PHBS on school is a set of behaviors that are practiced by students, teachers and the community in the school environment on the basis of awareness, so that they can independently prevent disease, improve their health, and play an active role in creating a healthy environment [3]. PHBS must be instilled from an early age so that it becomes a good habit that can be carried over to adulthood. The age of school children is still relatively young, so they need help from people around the closest environment, namely parents, teachers and friends. PHBS can be applied to all groups of society including school age children. School children are the nation's next generation whose health must be maintained, improved, and protected because children are the golden generation of a nation. The number of children is quite large, namely 30% of the total population of Indonesia. Approximately 73 million people are a golden age to instill the values of PHBS so that they have the potential to become agents of change to promote PHBS, both within schools, families and communities [8].

Since 2012 the Tangerang Regency government has begun to think about the concept of how to reduce waste production. Because until whenever the waste will continue to exist and become a problem if we don't care, the Tangerang Regency government is thinking about concepts and techniques so that this can be overcome. After several programs implemented by the Tangerang District Regional Development Planning Agency (Bappeda) were successfully implemented, one of them was the Sanisek (waste water) program which created heal-

thy, clean and comfortable toilets. The Tangerang Regency Government moved into the waste sector and the Kurassaki (Reducing Our School Waste) program was born. This program is one of the flagship programs of the Fun School Movement (GSM), which is an innovation in the educational environment that educates students and all school members how we behave towards waste. This program has the slogan "Dispose of Trash with its Place". According to the Tangerang District Bappeda WSES Working Group in 2019, the Kurassaki program is an effort made to change the mindset and culture of the people who have been indifferent to garbage, so that they start thinking about the waste problem.

The Kurassaki program arises because waste has not been properly managed at the community level; access to waste services in Tangerang Regency has only reached 27%, technical regulations related to waste management, have not been prepared as a program reference; GEMARIPAH as one of the leading programs for tackling waste has not been effective in the midst of society; Limited management (personnel, fleet, budget, etc.) by SKPD which should be responsible; Embedding PHBS habits; Starting from the most basic level; The fact that the management of garbage at the school level (Elementary and Middle School) is not friendly; It is necessary to take sides and the involvement of all parties in terms of waste management in Tangerang Regency, including in schools; creating PHBS agents at the community level; The success of the SANISEK (waste water) program which allows its pattern or method to be replicated for other programs such as waste management [2].

Schools that are pilot projects for this program are not allowed to provide trash cans in their school environment, school canteens are prohibited from providing plastics and students are encouraged to bring supplies and containers to buy food

and drinks at school. The Kurassaki program is a complementary program to the previous flagship program which also focuses on indicators of increasing PHBS. In the beginning, students who produce trash from snack packs every day are now required to bring food and drink from home, or use the food and drink place to buy snacks, this is useful for reducing the volume of waste from packaged snacks in schools (Bappeda Kabupaten Tangerang).

If this program is implemented optimally by all school members, it is not a dream to create a generasi that cares about the environment, especially a sense of caring for waste, which has been a problem. Generations who care about the environment will have good PHBS. The problem in this research is whether there is an effect of the Kurassaki program on PHBS students at the Tangerang District Bappeda pilot school? The hypothesis of this research is that this program will have an influence on PHBS students both at school and in the environment where they live. Based on the explanation above, the researcher wants to know the effect of the Kurassaki Program on PHBS students at the Tangerang District Bappeda pilot project school. Knowing the optimization of the implementation of the Kurassaki program in pilot project school.

METHOD

This research method uses quantitative research methods. The quantitative research method is a research method that is based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, data analysis in the form of statistics with the aim of testing hypotheses [9]. This study used a quasi-experimental method. quasi-experimental or quasi-experimental methods. This experimental method is a development of the true experiment method which is difficult to implement. The definition of quasi-experimental [10]. The form of research design chosen was post-test only control group design. In this design

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the experimental group and the control group were not chosen randomly. In this design, both the experimental group and the control group were compared. treatment while the control class received no treatment. The following is the post-test only control group design scheme shown in table 1 below:

Table 1. Post-test only control group design

Group	Treatment	Post Test
Experiment	X	O
Control	-	O

The location of this research was conducted at SDN Kaduagung 2 Tigaraksa, SDN Kosambi 1 Sukadiri and SDN Mekar Jaya (experimental group) and SDN Serdang Kulon and SDN Gintung 2 Sukadiri (control group). The sample in this study used stratified random sampling, where the sample in this study had a different class level. The experimental group in this study consisted of 175 respondents from a population of 312 respondents in grade 4 and 5 elementary schools at the pilot project school, with the number of each class strata, namely class 4 (four) 87 respondents and class 5 (five) 88 respondents, while at control group sample of 183 respondents from 337 respondents with each class strata, namely class 4 (four) 84 respondents and class 5 (five) 99 respondents.

This study used two questionnaire variables PHBS and Kurassaki which were given to respondents through online methods and face-to-face for students with limited online access. This study will seek answers to an assumption of the influence of Kurassaki program on students' PHBS at the Tangerang District Bappeda pilot school. The results of the PHBS level of respondents obtained through a questionnaire were analyzed using the Mann-Whitney test. The use of the Mann-Whitney test because the data in this study were not normally distributed, the Mann-Whitney test is a non-parametric statistical test that aims to look for differences in the mean value of the 2

unpaired groups. This research is said to be influential if the p value <0.05, which is obtained from the results of data processing using SPSS.

RESULTS

Univariate Analysis

This study aims to determine the implementation of the Kurassaki program in the Kurassaki program pilot school. The following are the results of research on the Kurassaki variable and Clean and Healthy Living Behavior (PHBS) obtained through the distribution of questionnaires.

Table 2. Distribution of frequency of implementation of Kurassaki program in pilot project school

Implementation Program	Pilot Project School	
	N	%
Optimal	175	100
Not Optimal	0	0
Total	175	100

Source: Data processed (2020)

Based on table 1 above, the results show that all 175 students (100%) of the respondents implemented the Kurassaki program optimally.

Table 3. PHBS level freq. distribution

PHBS	Experiment	
	N	%
Good/High	107	61.14
Medium	68	38.86
Low	0	0
Total	175	100

Source: Data processed (2020)

Based on Table 3, the results level of the PHBS in the experimental group with 107 respondents (61.14%) were in the good category, 68 respondents (38.86%) were in the medium category.

Table 4. PHBS level freq. distribution

PHBS	Control	
	N	%
Good/High	45	24.59
Medium	76	41.53
Low	62	33.88
Total	183	100

Source: Data processed (2020)

Based on table 4 in the control group as many as 45 respondents (24.59%) were

in the good category, there are 76 respondents (41.53%) were in the medium category and 62 respondents (33.88%) were in the low category.

Bivariate Analysis

To determine the effect of the Kurassaki program on student PHBS at the Tangerang District Bappeda pilot school, two groups were analyzed. The experimental group as a pilot project school group and the control group as a non-pilot school group for the Tangerang Regency Bappeda project. This analysis uses the Mann-Whitney test. The test of significance used the alpha significance limit (0.05). The results of the data are as follows:

Table 5. The influence of Kurassaki prog.

Kelompok	PHBS						Total		P Value
	Baik		Cukup		Kurang		N	%	
	N	%	N	%	N	%			
Eksperimen	107	61.14	68	38.86	0	0	175	100	0
Kontrol	45	24.59	76	41.53	62	33.88	183	100	

Source: Data processed (2020)

Based on table 2 the level of PHBS in the Kurassaki pilot project school program, out of 175 students as many as 107 students (61.14%) were in good category, 68 students (38.86%) were in enough category and none were in poor category. Whereas in the non-pilot project school for the Kurassaki program, the results obtained from 183 students as many as 45 students 24.59 in good category, 76 students (41.53%) in sufficient category and 62 students (33.88) in poor category. Based on the Mann Whitney test, the p-value = 0.000 <0.05, which means "H₁ is accepted" or there is an influence of the Kurassaki program on student PHBS at the Bappeda Pilot Project school in Tangerang Regency.

DISCUSSION

This study uses a questionnaire measuring tool which consists of 2 parts: the first part is the Kurassaki program questionnaire for respondents at the pilot project scho-

ol and the second part is the PHBS questionnaire for all research groups. The two parts of the questionnaire will be described as follows.

Implementation of the Kurassaki prog.

The results of univariate analysis based on table 1 regarding the implementation of the Kurassaki program in the Bappeda Tangerang Regency Pilot Project school showed that a total of 175 students (100%) implemented the Kurassaki program optimally. This means that the implementation of Kurassaki in each school runs well and optimally. The implementation of the Kurassaki program can be carried out well if all school members, especially students, have a high awareness of the environment. This high awareness can be obtained from the motivation given by the teacher as well as motivation from himself. The Kurassaki program will continue to run optimally if all school members are consistent in implementing the Kurassaki program. These results are in line with research conducted by Devi Kurnia in 2019 that the implementing school for the Kurassaki program was in a good category with a total number of respondents as many as 100 students (83.3%).

Based on table 4 regarding the PHBS level in the experimental group, it was found that the results of the tendency of the PHBS level were in the good category, as many as 107 students (61.14%). Whereas in the control group the tendency of the PHBS level was in the sufficient category, namely as many as 76 students (41.53%). When viewed based on the results mentioned above, it is clear that schools that have implemented the Kurassaki program and in high optimization students have good levels PHBS, seen from the absence of students who are in the poor category. In the control group there were 45 students whose PHBS level was in the low category. This can happen because in the implementation of the Kurassaki program, stimulus and monitoring are always given to all school members, especially students, on how to

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create good habits within the scope of PHBS.

The assumption of the researchers that what makes students tend to have sufficient and less PHBS levels is that the stimulus and habituation are not optimal, both from outside and from within the students. In addition, this can be due to several factors, namely predisposing factors or respondent's knowledge and attitudes towards health, enabling factors, which include the physical environment, available or unavailability of facilities or facilities, and strengthening factors. This research is in line with the results of Devi K's research in 2019 at the pilot school for the Kurassaki Bappeda Tangerang Regency, that what is more dominant is good PHBS behavior, with a total of 78 students (65%) of respondents.

The effect of the Kurassaki Program

Based on the results of research conducted at 3 schools which are pilot projects of the Kurassaki program, the results of respondents with good PHBS levels were 107 students (61.14%), respondents with sufficient PHBS were 68 students (38.86%), while respondents who had their PHBS bad doesn't exist. In 2 schools which are non-pilot projects of the Kurassaki program in 2020, the results of respondents with good PHBS were 45 students (24.59%), respondents who had sufficient PHBS were 76 students (41.53%), while respondents who had PHBS in the poor category were 62 students (33.88%). From these results, it can be seen that the education carried out by the Kurassaki program gave differences in student behavior in their PHBS level, especially the behavior of how to treat waste.

Based on table 3 which has been analyzed to compare the mean of the two groups using the Mann-Whitney test, statistical results are obtained and the p-value is $0.000 \geq 0.05$, it can be stated that there is a difference in the mean so that it can be concluded that H_1 is accepted, meaning that there is an influence on the Kurassaki program. (Reduce waste our schools) on Clean and

Healthy Living Behavior (PHBS) of students at the Bappeda pilot project school in Tangerang Regency. This is not in line with research conducted by Devi Kurnia in 2019 where the p-value is $0.497 \geq 0.05$, which means that H_1 is rejected or there is no effect of the Kurassaki program (reducing our school waste) on clean and healthy living behavior (PHBS) of students at school. Tangerang Regency Bappeda pilot project.

Many factors can cause a program to affect the subject or target object. In this Kurassaki program research, the results show that there is a significant effect of the Kurassaki program on students' PHBS. This can occur because of several factors including the high consistency carried out by schools in implementing the Kurassaki program, students already having good knowledge about PHBS added to the Kurassaki program guidance and a high sense of awareness in students to care for the environment that has been embedded and exemplary given by the teacher.

The implementation of the kurassaki program if carried out nationally through periodic outreach and monitoring will provide solutions to the waste problem in Indonesia. Monitoring that is carried out not only from Bappeda to schools but internal school monitoring also needs to be done. Internal monitoring can be done by always reminding students to bring bottles and containers from home, always keeping clean and not causing trash.

CONCLUSION

Based on the results and discussion of this study by involving 5 schools, 3 of them were the experimental group and 2 of them were the control group with the number of each group being 175 respondents and 183 respondents. So the researchers concluded this study as follows:

- a. The implementation of the Kurassaki program in the pilot project schools shows that all respondents are optimally implementing the Kurassaki program. This can occur because of the high con-

sistency of these schools in implementing this program and as a form of love for the environment and health and awareness of a better quality of life.

- b. The level of PHBS in the pilot project school for the Kurassaki program was dominated by the good PHBS category and in the non-pilot project school the Kurassaki program was dominated by the level of adequate PHBS and there were 62 students in the category of PHBS being deficient. This can happen because in the Kurassaki program pilot school, education and monitoring are always carried out as an evaluation to assess the extent to which the program is implemented in each school. Meanwhile, in non-pilot project schools, there were 62 students (33.88%) in the poor category of PHBS because there was no periodic monitoring of the implementation of the Kurassaki program, causing the students' PHBS level to be unable to be controlled optimally.
- c. Based on the explanation of point (b) and the results of statistical analysis that the p-value is $0.000 < 0.05$, it means that there is an influence of the Kurassaki program on PHBS students in the pilot project school for the Kurassaki Bappeda program, Tangerang Regency.

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