

Research Article

The Effectiveness of Peer Group Health Education Against Behaviour Change Personal Hygiene for Primary School Students

Arinil Hidayah*, Nurul Hidayah Nasution, Febrina Angraini Simamora, Nanda Masraini Daulay and Yanna Wari Harahap

Faculty of Health, University of Aufa Royhan Padangsidempuan City, Indonesia

Abstract.

Elementary school students is a group of people which has a big share in the continuity of this country so it is very necessary improved ability to live healthy, one of them by increasing knowledge and attitudes of children about health especially about personal hygiene. The purpose of this research is know the effectiveness Peer Group Health Education behavior personal hygiene for elementary school students. Special target in this study, namely examine behavior personal hygiene of students before and after given health education with the peer group method in the experimental group and the lecture method in the control group. Types of research used is pre-experimental research, by using Non-Equivalent Control Group design. Sampling in this research performed with purposive sampling technique, with the number of samples as many as 50 students with details of 25 students as an experimental group and 25 students as a control group. The Data analysis using Paired sample t test and Independent sample t test. Statistical test results $p = 0.000$ show statistically there is a difference meaningful between personal hygiene behavior before and after peer group health education. The result of statistical test also $p = 0.000$ show statistically there is a difference meaningful between personal hygiene behavior before and after health education with the lecture method. But it can be concluded that there is no significant difference between Group behavior Peer Group Health Education and Group Behavior Health Education With the Lecture Method ($p = 0.565$). With the results of this study expected to open the knowledge and the mindset of health workers to be more active and creative in empowering the community in an effort to improve public health status.

Keywords: Personal hygiene; primary schools students; health education

Corresponding Author: Arinil Hidayah; email: arinilhidayah1987@gmail.com

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1. Introduction

Personal hygiene is one of basic human needs, personal hygiene or personal hygiene is someone's efforts in maintaining cleanliness and his health to obtain physical health and aim to prevent disease. Personal hygiene which is no good in school age children raises some health problems, such as respiratory infections, worms, anemia, and flu. Poor health can lead to lack of cognitive development a child both the occurrence of physiological changes or lack of motivatio to study[1].

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Elementary school students is a group of people which has a big share in the continuity of this country so it is very necessary enhanced ability live healthy, one of them by increasing knowledge and attitudes of children about health especially about personal hygiene. Students' abilities and attitudes can be improved one of them with provide health information / education As an educational institution, the school has role and strategic position in health promotion efforts.

This is due to because in large part children aged 5-19 years exposed in educational institutions in a period of which is quite a long time. School age children generally every day takes a quarter of his time in school, and interact with peers. School children have a lot of activity so often ignore personal hygiene. Children's habits that's not keeping up personal hygiene will have an effect against health and can cause a health problem Positive relationship with peers is the important thing in school age children. Relationships with peers can help in overcoming problems (Huston & Ripker, in Santrock, 2008). Peer group has a role which is very important for development school age children good emotionally as well as socially.

School age children who are at the stage middle or age 9-10 years have an intensita the highest in developing social activity with peer groups or also called is in the industrial phase. School age children who is playing with his close friends or be in the environment friends of the same age, will usually do what is being done by his friend. The influence is given by friend peer group will have an impact on children's daily behavior, including will affect individual hygiene behavior. In the research conducted researchers in 2019 show it is intermediate influence Peer Group Health Education Against change personal hygiene behavior elementary school students at Hanopan Public Elementary School with a mean different of 18.6 ($p_value = 0.002$)[1].

2. Methode

2.1. Study Design and Samples

The method in this research using type Quasi research experiment, by using Non-Equivalent Control Group design by giving a pretest and posttest in the experimental group and control. This research compare between groups given the intervention-peer group health education with the group untreated peer group health education. The research was carried out in Elementary School (SD) No. 100403 ARSE and SD Negeri No. 100405 HUTAPADANG. When the research was carried out starting July 2020 until November 2020. The population in this study are all students at the State Elementary

School (SD) No. 100403 ARSE and SD Negeri No. 100409 HUTAPADANG by inclusion criteria 9-10 years old which numbered 72 people. Sampling in this research performed with purposive sampling technique, number of samples The selected totaled 50 students with details of 25 students Elementary School (SD) No. 100403 ARSE in the experimental group and 25 students of SD Negeri No. 100409 HUTAPADANG in the control group, and 3 peer educators.

2.2. Measure

Collection process performed with several stages. Starting with a pre test in each group, then the experimental group given health education with the peer group method while the control group given health education with the lecture method. After being given health education each group given a pre test questionnaire to measure changes in personal hygiene behavior.

2.3. Analysis

The Data analysis method in this research using Paired sample t test, to see difference change personal hygiene behavior before and after intervened on each sample group with a confidence level of 95% ($\alpha \leq 0.05$). Independent sample t test, to know difference change personal hygiene behavior between the experimental group and control group with a confidence level of 95% ($\alpha \leq 0.05$) (Sugiyono, 2012)

3. Result

3.1. Univariate Analysis

The majority of respondents in the experimental group and the control group is female, is 56% in the experimental group and 64% in the control group. The majority of respondents with the work of parents as a farmer (68% in the experimental group and 80% in the control group).

From table 2 the average result is obtained personal hygiene behavior of students before it is given health education by method peer group is 16.68 and after get intervention rose to 20.08

TABLE 1: Frequency Distribution Respondent Characteristics by Gender and parental work in the peer group method group and lectures respondent characteristics.

Karakteristik Responden	Peer Group Health Education		Health Education With Lecture Method	
	n	f	n	f
Gender Male Female Total	11 14 25	44 56 100	9 16 25	36 64 100
Parent's job Farmer Civil servants Private employees Entrepreneur Total	17 5 1 2 25	68 20 4 8 100	20 5 0 0 25	80 20 0 0 100

TABLE 2: Frequency Distribution Personal Hygiene Behavior Experiment Group.

	Mean	Median	Min-Max	SD
Experimental Group Behavior Before Peer Group Health Education Interventions Experimental Group Behavior After Peer Group Health Education Interventions	16,68 20,08	16 20	12-22 17-24	2,78 1,91

TABLE 3: Frequency Distribution Personal Hygiene Behaviour Control Group.

	Mean	Median	Min-Max	SD
Behavior Control Group Behavior Before Health Education Interventions With the Lecture Method Control Group Behavior After Health Education Interventions With the Lecture Method	16,88 19,2	16 19	12-22 17-22	2,65 1,29

From table 3 the average result is obtained personal hygiene behavior students before being awarded health education with the lecture method is 16.88 and after getting intervention rose to 19.2.

3.2. Bivariate Analysis

TABLE 4: Analysis Results Personal Hygiene Behavior Experiment Group.

	Median (Minimum-Maksimum)	p_Value
Experimental Group Behavior Before Peer Group Health Education Intervention (n = 25)	16 (12-22) 20 (17-24)	0,000
Experimental Group Behavior After Peer Group Health Education Intervention (n = 25)		

Source: Primary Data, 2020; Wilcoxon Test, 23 respondents increased behavior and 2 fixed

Table 4 show comparisons personal hygiene behavior before and after peer group health education, there are 23 respondents with increased behavior and 2 regulars. Statistical test results $p = 0.000$ show statistically there is a difference meaning full between personal hygiene behavior before and after peer group health education. From the test results show difference in averages as much as 4 after being given health education with the peer group method

TABLE 5: Analysis Results Personal Hygiene Behavior Control Group.

	Median (Minimum-Maksimum)	p_Value
Control Group Behavior Before Health Education Interventions With the Lecture Method (n = 25)	16 (12-22)	0,000
Control Group Behavior After the Health Education Intervention With the Lecture Method (n = 25)	19 (17-24)	

Source: Primary Data, 2020; Wilcoxon Test, 18 respondents increased behavior, 5 fixed and 2 decreased

Table 5 show comparisons personal hygiene behavior before and after health education with the lecture method, there are 18 respondents with increased behavior, 5 people who remain and 2 people decreased. Statistical test results $p = 0.000$ show statistically there is a difference meaning full between personal hygiene behavior before and after health education with the lecture method.

TABLE 6: Analysis Results Personal Hygiene Behavior Experiment and Control Group

	Median (Minimum-Maksimum)	p_Value
Post test differences between Group Behaviors Peer Group Health Education and Group Behavior Health Education With the Lecture Method (n = 50)	19 (17-24)	0,565

Source: Primary Data, 2020

Table 6 shows the results of statistical analysis $p = 0.565$, statistically can be concluded that there is no significant differences between personal hygiene behavior Group given Peer Group Health Education with Groups Health Education With the Lecture Method

4. Result

The results of this study illustrates that, there is no difference which is quite significant between groups which is given health education by method peer group with the lecture method, where the p value is obtained = 0.565. The results of this study support

research conducted by Reza, et al, 2012 which shows the results there is no difference significant among peer group outreach with counseling by health workers towards the level of knowledge about hand washing clean at SD N 01 and SD n 02 Bonosari, Sempor, Kebumen with a p value = 0.083 [2]. In the research of Tamiru, et al, 2017 as well shows the same result that not found a meaningful difference between personal hygiene behavior control group with the experimental group with p = 0.860 [3]. However, if seen of the difference in average increased behavior change in each treatment, there is an increase which shows difference between each group where obtained 4 increases the average in the group with peer group health education and 3 in the group with the lecture method.

This means health education with the peer group method still more effective compared with lecture method. The results of the research conducted at semporkebumen-States that there is a difference in effectiveness in counseling conducted by the peer group and counseling which is conducted by health workers with a small range of values [2]. In other studies also shows that there is influence education through peer groups against knowledge and attitudes about personal hygiene in elementary school children in Bengkulu City in 2017. [4]. Changes in behavior based on changes in knowledge, the better the knowledge the better personal hygiene behavior.

Health education which is given with the peer group method will certainly have an impact on the respondent's knowledge so that it produces changes in behavior. According to Sumardiawati (in Husodo and Widagdo, 2008; Nurleny, 2018), there is a change in knowledge after target to participate in health education activities. In conveying information, an educator has an important role in improving someone's knowledge so this educator selection must be precise with the master material related to the topic raised [5].

Besides being effective in increasing knowledge, the peer group method is also effective in changing behavior. According to Blankhadrt (in Kusumawati, Astuti, Darnoto, Wijayanti and Setiadi, 2015; Nurleny, 2018) States that peer education is an educational method which is more useful because it can change behavior well because of the transfer of knowledge done between peer groups who have a close relationship, use the same language, and can be done anywhere and anytime by way of delivery relaxed [5].

Behavior is influenced by two factors, namely internal factors and external factors. According to Notoadmojo (in Nugraheni, 2018) Internal factors that affects is age and intelligence (level of intelligence), while external factors are information, social and cultural factors [6]. Based on research results can be seen the majority of respondents with

the work of parents as farmers (68% in the experimental group and 80% in the control group). This condition indicates that children will be together longer with peers compared to parents, so much personal hygiene activities done together with peers. The customs of the local people too its not really limit children's play activities outside the house make personal hygiene child in the area greatly influenced by their playmates.

5. Conclusions

The data contained in this study were collected directly by researchers using valid and accountable measuring instruments. Researchers did not experience significant obstacles and problems during the research process starting from the permit application to the data collection and analysis process. So far the research has been running smoothly according to the research team who already have their respective duties. This research has been approved by the Health Research Ethics Commission, Faculty of Nursing, University of North Sumatra and is feasible to be carried out on respondents.

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