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The Effect of Health Education About Toileting on Knowledge, Attitude and Independence of Children Age School in SDN Gedongtengen

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ABSTRACT

Background Knowledge: *Health is a prosperous condition in the form of physical, mental and social health that is free from disease. An effort to improve health is the Clean and Healthy Living Behavior program. The lowest percentage was in the city of Yogyakarta, namely 59.97%. The problem that arises in school children is not using latrines (toileting) properly. Children who do not toilet and then detained can cause the child to wet the bed (enuresis) or defecate in their pants.* ***Objective:*** *This study aims to determine the effect of health education on toileting on the knowledge, attitudes and independence of school age children.* ***Method:*** *This research method is a quantitative study with a pre-experimental design (one group pretest-posttest). Data were collected by means of a questionnaire and analyzed by Wilcoxon.* ***Results:*** *The results of Wilcoxon analysis showed that the p-value of the knowledge variable was 0.000 and 0.000; the attitude variable was 0.000 and 0.000; and the independence variable was 0.027 and 0.006.* ***Conclusion:*** *The conclusion of this study is that there is an effect of health education on toileting on the knowledge, attitudes and independence of school-age children at SDN Gedongtengen Yogyakarta.*

INTRODUCTION

According to the World Health Organization (WHO) in 1948 health is a prosperous condition in physical, mental and social health which is not only free from a disease or disability. An effort can be made to improve health is through the PHBS (Clean and Healthy Living Behavior) program. One

of the PHBS's indicators is the availability of healthy latrines (Gani, et al. 2015).

Based on the health profile in 2018, as many as 49.283 villages in Indonesia implement clean and healthy living behaviors. The villages achievement on Stop Defecating Anywhere (Stop *BAB Sembarangan* (SBS)) in Indonesia is as much as 5.407 (6,69%) of the total number of villages/ villages.

The highest number of village/village achievements is in Central Java Province which is 1.722 villages, while the lowest number is in West Papua Province which is only 1 village.

Villages carrying out Stop Defecating Anywhere reached 19.745 villages or 24,44%, while the achievement of villages that have conducted clean and healthy living behaviors has been as much as 60,99%. The achievement target of RPJMN included in Universal Access 2019 is 100% of villages must conduct clean and healthy living behavior, and 50% of villages targeted to be achieved by Stop Defecating Anywhere.

The percentage of use of defecating facilities by DIY Health Profile in 2018 is 80,55%. The highest percentage of defecating facilities usage is Gunungkidul by 90,31% and the lowest in Yogyakarta by 59,97%.

Poor Clean and healthy behaviors started from school children aged 8-9 years when problems of lack of knowledge, awareness and independence in toileting often occur. Based on the developmental tasks, children aged 8-9 years should have been independent in toileting, however, at SDN Gedongtengen there are still many children who do not know about toileting.

Children experiencing enuresis or passing of stool (usually involuntarily) into clothing if cannot do toileting independently, resulted in inferior feeling, embarrassed and unconfident. Cannot do toileting independently can also lead to discomfort disorders, social interaction disorders, become selfish, careless in doing daily things, and tenacious, then the results of poor toileting will have an impact until the upcoming grades (Sintawati, 2016). One of the government's programs is *Germas* (Healthy Living Community Movement), one of which is healthy latrines usage. *Germas* (Healthy Living Community Movement) is an activity carried out together so that people can practice healthy living and free from diseases (Ministry of Health, 2016).

This research uses different variables from previous research, there are three variables: knowledge, attitude and independence at SDN Gedongtengen Yogyakarta, therefore it can

update previous research. Based on the results of the previous study on October 24 2019 in grade 3 elementary school students there were 53 children aged 8 to 9 years. The interviews results with the homeroom teacher there is 1 child who is still wet the bed and 16 out of 53 children performed inappropriate attitude in toileting (leave without flushing). By the 53 children interviewed, there are 40 children who knew toileting but the could not practice it, due to the lack of knowledge, attitude and independence about the importance toileting.

Based on this background, the problem formulation in this study is that: is there an influence of health education on toileting towards the knowledge, attitude and independence of school-age children at SDN Gedongtengen Yogyakarta? This study aimed to find out the influence of health education on toileting on the knowledge, attitudes and independence of school-age children. The references in this study covers health education, toileting, knowledge, attitudes and independence of school children.

METHODS AND MATERIALS

This research implements a pre experiment one group pretest-posttest research).

Pretest and posttest 1 are given on the first day using slide media by presentation method followed by peer group learning by playing using flash card and evaluation. Posttest 2 is given 5 days after posttest *1* by sharing a questionnaire.

The questionnaire in this study implemented guttman scale consisting knowledge questionnaire in 16 question items, attitude questionnaire in 18 question items and self-reliance questionnaire in 19 question items. Validity test results on the knowledge questionnaire from the 20 questions items there are 16 valid question items with a range of r values calculated 0.668 – 0.961. There are 18 valid items of Attitude questionnaires from 20 question items with a range of calculated r values of 0.535 – 0.879. Self-reliance questionnaire there are 19 valid items out of 21 items with a range of calculated r values of 0.536 – 0.922.

The reliability test results of the knowledge questionnaire of 16 question items were considered valid by 0.983 (outstanding), the attitude questionnaire of 18 question items were considered valid by 0.963 (outstanding) and the independence questionnaire of 19 question items were considered valid by 0.965 (outstanding). Therefore, the reliability of the questionnaire is considered reliable. This study was carried out on grade 3 SDN Gedongtengen Yogyakarta with 53 children

taken by total sampling techniques. All variables were analyzed using Wilcoxon.

RESULTS AND DISCUSSION

The results of data analysis in table 1 with wilcoxon test of children's knowledge obtained signification values of 0.000 and 0.000. The statistical result of p 0.000 is smaller than 0.05 ($p < 0.05$) so it can be concluded that the hypothesis (Ha) was accepted and Ho was rejected which means that health education about toileting has an effect in raising children's knowledge at SDN Gedongtengen Yogyakarta.

Based on the data, the knowledge of children who have been given health education on toileting is increasing. shown by the results of pretest *1,* children tend to understand how to use toilet properly, the purpose of using toilet and the impact caused of not knowing how to toileting. The availability of health education, there is a learning process from oneself so that it can affect the knowledge of someone who previously did not know to become know.

The posttest *2* carried out five days later after health education. The *Wilcoxon* pretest and posttest 2 test results were obtained 0.000 which means that there is an influence of health education on children's knowledge. The data, pretest and posttest 2, compared to pretest and posttest *1* resulted the same, because the time distance between health education and posttest 2 is close and at the age of 8-9 years old children have good memory so that the child can maintain and remember the information that has been given before.

Respondents in this study were children aged 8-9 years who are children of this age already understand the problems in toileting. If the child does not have toileting knowledge will have an impact on further development. At this age the child has a fairly rapid cognitive development. This is because at school age children can add insight, find talents, understand objects around them. According to Piaget theory, school-age children are in a concrete operational stage which means that children can think logically, can think more rationally and maturely, can solve existing problems, can receive information well and improve learning abilities, interact with peers (Bujuri, 2018). At this child's age, health education is the right way to provide insight to children to increase children's knowledge (Putra, 2014).

Providing information about toileting using the slide and flashcard method for children is easier for children to accept. This is because children have skills in logical thinking and are able to receive information which then describes an object in themselves.

In addition, it can increase children's motivation because they learn together, in groups with their peers so that they can develop children's thinking patterns with their surroundings.

This research is in line with the research (Aulia, 2015). This study explained that children's knowledge was influenced by education, social relationships, experience. The existence of social relationships between peers could increase children's knowledge and their enthusiasm for learning, this was because at school age children tended to be influenced by their peers.

In addition, this research is supported by a research (Hermanto & Yulianto, 2018) mentioning that health education had a big effect on a person. Health education can create a process for the occurrence of new abilities and new knowledge. Then in providing health education, it is necessary to conduct an evaluation to find out the knowledge that a person still remembers.

Table 1. The results of the Wilcoxon test analysis of children's knowledge about toileting at SDN Gedongtengen Yogyakarta.

	N	Mean	Min	Max	Std Deviasi	Uji Wilcoxon
Pretest	53	10,89	6	15	2,082	0,000
Posttest 1	53	11,77	7	15	2,025	
Pretest	53	10,89	6	15	2,082	0,000
Posttest 2	53	12,26	8	15	2,095	

Based on table 2, the results of data analysis using the Wilcoxon test for children's attitudes showed a significance value of 0.000 and 0.000. The statistical results p value 0.000 is smaller than 0.05 ($p < 0.05$) so it can be concluded that the hypothesis (Ha) is accepted and Ho is rejected, which means that health education about toileting has an effect on improving children's attitudes at SDN Gedongtengen Yogyakarta.

School-age children, especially those aged 8-9 years, have good affective development. Affective development is different from cognitive development; this affective intelligence is attitude. Attitude is a person's readiness to take action or a reaction to conditioned social stimuli responses (Pakpahan, 2017). This attitude formation is suitable for school-age children. This is done in schools accompanied by children's cognitive development so that children are not only smart but also active and have good behavior (Aripin & Haryadi 2016).

Affective development needs to be trained to carry out an activity that the child will do, control children's emotions, reduce egocentricity towards others. There are still many stages of child development regarding toileting in school age children, which should have been overlooked in pre-school age

children. This is due to the lack of awareness of children about toileting properly.

To overcome these problems, it is necessary to carry out health education about toileting to improve children's attitudes, because children can learn to control the feelings or attitudes they have received. Through this health education, it can train children to control emotions because it is carried out in a peer group so that it can reduce children's egocentricity. The existence of this health education can provide information which then has an impact on positive attitudes in children. A child's attitude can last a long time if they are able to receive information and carry it out well on a regular basis.

This research is in line with the research (Buston & Septiyanti 2017). This study showed that a good child's attitude would result in successful toileting in children. This research got meaningful results, so we can know the attitude at one time. Parents who supported the implementation of toileting for their children from an early age would help their children achieve better and faster toileting, parents who taught children to always maintain health and cleanliness would affect the health status of the child to adulthood.

Table 2. The results of the Wilcoxon test analysis of children's attitudes about toileting at SDN Gedongtengen Yogyakarta.

	N	Mean	Min	Max	Std Deviasi	Uji Wilcoxon
Pretest	53	14,04	9	18	1,990	0,000
Posttest 1	53	15,49	10	18	1,825	
Pretest	53	14,04	9	18	1,990	0,000
Posttest 2	53	15,79	12	18	1,598	

Based on table 3, the results of data analysis with the Wilcoxon test for children's independence revealed a significance value of 0.000 and 0.000. The statistical results showed p value 0.000 is smaller than 0.05 ($p < 0.05$) so it can be concluded that the hypothesis (Ha) is accepted and Ho is rejected, which means that health education about toileting has an effect on increasing children's independence at SDN Gedongtengen Yogyakarta.

These data, the independence of children who have been given health education about toileting were proven from the results of the pretest 1. It was known that children were confident and responsible in carrying out their activities. Health education could provide additional information for children so that they could apply it according to the information they have received.

After the health education was carried out, posttest 2 was carried out five days later. The results obtained were 0.006, which means

that there is an effect of health education on children's knowledge. The results of pretest and posttest 2 with pretest and posttest 1, the results were increasing, this happened because there was encouragement from the child's thoughts, feelings and willingness to be independent in implementing toileting.

Inappropriate application of children's independence regarding toileting still often occurred in school-age children. Actually they should be able to apply it themselves at pre-school age. This independence was included in the psychomotor aspect. The psychomotor aspects of school age children were quite well developed. This can be seen from the physical development of children who were able to carry out independent toileting, had confidence in what they did, were disciplined in acting, were easy to get along with the surrounding environment, were responsible for the actions they have carried out and could solve problems independently (Rakhma, 2017).

The independence of children in toileting can be improved by providing health education to children about toileting. Health education is a method for delivering information, in this case information about toileting which can increase children's knowledge and independence in toileting. Information that has been received can increase children's knowledge, thereby increasing children's independence. The delivery of information through health education about toileting is very influential in increasing the independence of school age children. The stimulation of teachers or educators in schools has a major effect on an effective learning approach for school-age children. Especially with the concept of learning using peer group, this learning for children can increase self-confidence, discipline, responsibility and cooperation between peers (Nurjanah & Fitriani 2017).

The results of this study are in line with Titisari's research (2015) mentioning that knowledge and attitudes had a relationship, especially in children's independence, in which this method produced an opinion that knowledge was the dominant important for the formation of a person (over behavior). A person's knowledge of objects would lead to an inner response in forming attitudes towards known objects, giving rise to further responses, namely in the form of action or behavior, so that children could carry out independently.

Table 3. The results of the analysis of the Wilcoxon test for children's independence on toileting at SDN Gedongtengen Yogyakarta.

	N	Mean	Min	Max	Std Deviasi	Uji Wilcoxon
Pretest	53	11,34	3	16	2,441	0,027
Posttest 1	53	11,57	5	17	2,398	
Pretest	53	11,34	3	16	2,441	0,006
Posttest 2	53	11,77	7	17	2,478	

CONCLUSIONS AND SUGGESTIONS

Based on the results of data analysis and discussion of "The Effect of Health Education on Toileting on Knowledge, Attitudes and Independence of School-Age Children at SDN Gedongtengen Yogyakarta", the results of the analysis of this study can be concluded that there is an effect of health education on toileting on children's knowledge, attitudes and independence of school age children at SDN Gedongtengen Yogyakarta.

It is suggested that students majoring health can use media or health promotion materials about toileting. Suggestions are also given to children or respondents so that they can receive information so that their knowledge, attitudes and independence about children's toileting increase. Elementary school teachers are suggested to apply the lecture method with slides and peer groups with flashcards about toileting to improve the knowledge, attitudes and independence of children at SDN Gedongtengen Yogyakarta. In addition, further researchers are expected to be able to conduct research with other media on children regarding toileting.

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