

THE EFFECT OF HEALTH EDUCATION USING AUDIO VISUALS ON ELEMENTARY SCHOOL CHILDREN ABOUT HAND WASHING WITH SOAP

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ABSTRACT

The sanitary act of cleaning hands and fingers using running water with soap that humans do to make their hands clean and break the chain of germs is called handwashing with soap. Hand washing with soap (CTPS) is often called one of the efforts in disease prevention. This study aims to determine the effect of health education using audiovisuals on elementary school children about hand washing with soap. This type of research is a pre-experimental design, using a one-group pre-test-post-test design. The sample in this study amounted to 70 students obtained by the accidental sampling technique. The normality test obtains the results of abnormal data distribution, and then the hypothesis test analysis uses the Wilcoxon test. The results of the Wilcoxon Test on knowledge and ability each obtained sig. = 0.000, it can be concluded that providing health education using audiovisuals has a significant effect on increasing knowledge and ability to wash hands with soap in elementary school students. It is necessary for interactive and interesting learning media so that students can more easily receive messages or information to be conveyed and can practice what they see and hear.

Keywords: Handwashing, Video, Health Education

1. INTRODUCTION

Health behaviors that encourage personal awareness in the field of health that can be carried out by families and all their members in an effort to play an active role that is able to help themselves in community activities are often referred to as clean and healthy living behavior (PHBS). Activities that can be carried out include providing educational materials to increase knowledge and improve attitudes and behaviors related to clean and healthy living. There are several elements of clean and healthy living behavior that can be applied, namely PHBS in the household, PHBS in the workplace, PHBS in health facilities, PHBS in public places, and PHBS in school. The community can carry out PHBS in order to create healthy environmental conditions. PHBS can not only be done in the home environment; it can also be done in the school environment (1). Clean and healthy living behavior in schools is a positive behavior or habit that is practiced or carried out by students, teachers, and the school community on the basis of awareness as a result of learning in an effort to prevent disease. One of the

indicators of clean and healthy living behavior in schools is washing hands with running water and using soap (2).

Handwashing with soap is one of the simple activities to prevent contracting and transmitting diseases (3). The correct handwashing with soap is done for at least 20 seconds; this ensures that the hands are completely clean, both from viruses and bacteria that are on the hands during activities. The time to do CTPS in schools can be done before entering the school and classroom area, before and after eating, after sneezing and coughing, after holding objects that are used together, after using the toilet, and others (4). The implementation of clean and healthy living behaviors in order to improve the health status of the nation and society is one of the efforts that can be made (5).

Health education is an attempt to change behavior. Health promotion is a means to change behavior and the environment. Health education is a part of health promotion that aims to encourage individuals, groups, and communities to live healthy lives by improving and facilitating health education (6). In today's

digital era, changing a person's behavior through health promotion can be done through modifying attractive media (7). Electronic media is media that moves and prioritizes messages through audio, visual, and audiovisual means. Audiovisual is one of the various media that presents information or messages in audio and visual form. This media contributes greatly to changing behavior in society, namely in the form of aspects of information and persuasion (8).

The effect of health education using audiovisuals on the level of knowledge of hand washing with soap is based on research conducted by Saputri and Suryanti (2019). From the results of their research, it was found that there was an increase in knowledge from the moderate category to the good category (9). Junardi's research (2022) found that there was an increase in knowledge before and after health education from moderate to high categories in understanding hand washing with soap (10). Likewise, according to research conducted by Sofiana, Ginting, and Sinaga (2023), there is an increase in knowledge after health education using audiovisuals, from sufficient and less to good results (11).

The ability to take steps to wash hands with soap before and after health

2. METHOD

The research design used is an experimental research design. Experimental research is research conducted with a treatment or experiment where implementation can be carried out in the laboratory or field. The type of research used is a pre-experimental design using the design / research design of one group pre-test-post-test, where the research is carried out in such a way that before the research is carried out, the respondent is given treatment / measured first (pre-test), then the treatment is carried out, and after the treatment, the respondent is measured again (post-test) (15). The study population was students in grades 4,

education using video (audiovisual) in Parasyanti, Yanti, and Mastini's research (2020) found that there was an increase in the ability to wash hands with soap from the category of unable to become able to wash hands with soap (12). The results of research conducted by Allo, Bannepadang, and Silamba (2021) show that with health education using audiovisuals, there was an increase in the ability to wash hands with soap from 31 participants who could not to 23 participants able to wash hands with soap (13). Mawakhadah, Wijayanti, and Khasanah (2022) found from the results of their research that there was an effect of Islamic animated video media on washing hands with soap (14).

Preliminary studies that have been carried out at SD Negeri 56 Puser on the knowledge and ability to wash hands with soap of 20 students obtained the results that the average knowledge of students and students at SD Negeri 56 Puser is 8.35 and the ability of students and students to wash hands with soap is 2.35. Based on the results of preliminary studies and existing study sources, researchers are interested in examining the effectiveness of health education using audiovisuals with elementary school children about hand washing with soap.

5, and 6 at SDN 56 Puser. The sampling technique used in this study was nonprobability sampling using the accidental sampling technique (16). The sample in this study amounted to 70 students. The research was conducted in October 2023 at SDN 56 Puser. Data analysis in the study is done before univariate and bivariate analyses; first, the normality test is carried out. The hypothesis test analysis used is the dependent T-test (paired sample), where the hypothesis test is used to analyze differences between two groups or two dependent populations. Dependent is defined as between one group and another, interdependent or related, carried out on

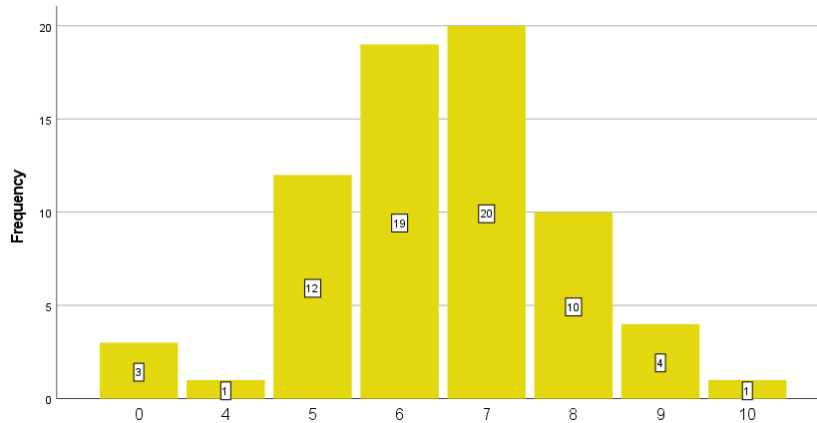
the same person to see differences before and after being given treatment / an intervention. The dependent T-test can be done if the data distribution is normal;

otherwise, if the data distribution is not normal, the hypothesis test analysis uses the Wilcoxon test (17).

3. RESULTS

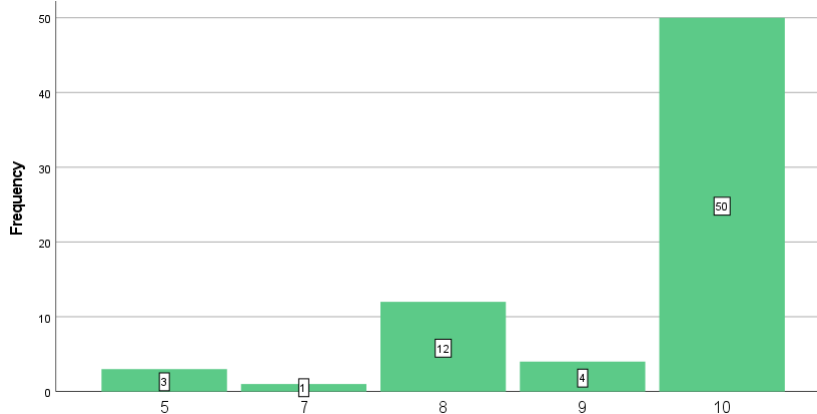
A. Frequency Distribution of Knowledge of Handwashing with Soap Before and After Health Education

Figure 1.1. Frequency Distribution of Knowledge of Handwashing with Soap Before Health Education



From the results of the research that has been carried out on the knowledge of hand washing with soap before being given health education using audiovisuals about hand washing with soap, it was found that students who answered the highest question correctly gave 7 correct answers, namely 20 students.

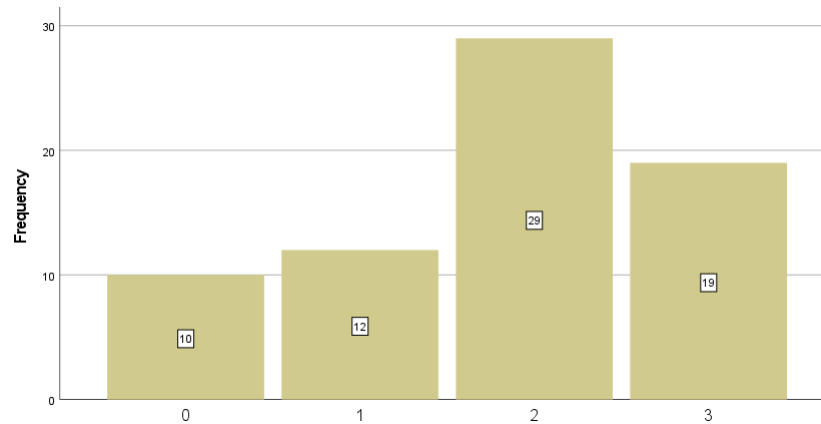
Figure 1.2. Frequency Distribution of Knowledge of Handwashing with Soap After Health Education



From the results of the research that has been carried out on the knowledge of hand washing with soap after being given health education using audiovisuals about hand washing with soap, it is found that students who answer the highest question correctly have 10 correct answers (all correct answers), namely 50 students.

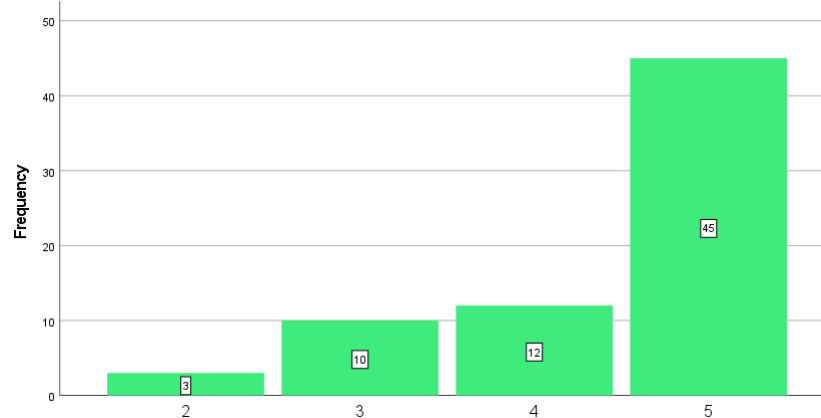
B. Frequency Distribution of Handwashing with Soap Ability Before and After Health Education

Figure 1.3. Frequency Distribution of Handwashing with Soap Ability Before Health Education



According to the results of the research that has been carried out, the ability of students to wash their hands with soap before being given health education using audiovisuals about hand washing with soap is such that the majority of students can wash their hands correctly until step 2, as many as 29 students.

Figure 1.4. Frequency Distribution of Handwashing with Soap Ability After Health Education



According to the results of the research that has been carried out, the ability of students to wash their hands with soap before being given health education using audiovisuals about hand washing with soap is such that the majority of students can wash their hands correctly until the 5th step, as many as 45 students.

C. Effect of Health Education using Audio Visual on Elementary School Children's Knowledge of Handwashing with Soap

Table 1.1. Wilcoxon Results The Effect of Health Education using Audio Visual on Elementary School Children's Knowledge of Handwashing with Soap

Variable		N	Mean Rank	Sum of Ranks	Sig.
Knowledge After – Knowledge Before	Negative Ranks	5 ^a	12.80	64.00	0,000
	Positive Ranks	63 ^b	36.22	2282.00	
	Ties	2 ^c			
Total		70			

Based on the results of the analysis, the mean value of the positive rank is 36.22, the negative rank is 12.80, and the sig value is 0.000. From these results, there is an increase in student knowledge after getting health education using audiovisuals about hand

washing with soap. Thus, it can be concluded that providing health education using audiovisuals has a significant effect on increasing knowledge about hand washing with soap among students at SDN 56 Pular.

D. The Effect of Audio-Visual Health Education on Elementary School Children's Ability to Wash Hands with Soap

Table 1.2. Wilcoxon Results The Effect of Health Education using Audio Visual on the Ability of Elementary School Children to Wash Hands with Soap

Variable		N	Mean Rank	Sum of Ranks	Sig.
Ability After – Ability Before	Negative Ranks	0 ^a	.00	.00	0,000
	Positive Ranks	67 ^b	34.00	2278.00	
	Ties	3 ^c			
	Total	70			

Based on the results of the analysis, the mean value of the positive rank is 34.00, the negative rank is 0.00, and the sig value is 0.000. From these results, there is an increase in the ability to wash hands with soap after getting health education using audiovisuals about the correct steps to wash hands with soap. Thus, it can be concluded that providing health education using audiovisuals has a significant effect on improving the ability to wash hands with soap in students of SDN 56 Pular.

4. DISCUSSION

The results of the study from the analysis of the knowledge variable obtained a mean value of positive rank = 36.22, negative rank = 12.80, and a sig value of 0.000. From these results, there is an increase in student knowledge after getting health education using audiovisuals about hand washing with soap. Thus, it can be concluded that providing health education using audiovisuals has a significant effect on increasing knowledge about hand washing with soap among students at SDN 56 Pular.

The research is in line with research conducted by Saputri and Suryanti (2019). It was found that there was an effect of health education using audiovisuals on the knowledge of hand washing with soap in grade IV children (p value = 0.000) (9). In research conducted by Junardi (2022), it was found that providing health education on hand washing with soap using video media had an effect on the level of knowledge in elementary school children

(p value = 0.000) (10). Sofiana, Ginting, and Sinaga (2020) found that the results of research that has been conducted show that counseling using audio-visual media affects the knowledge of schoolchildren (p value = 0.042) (11).

Students' ability to do hand washing with soap, based on the results of the analysis, obtained a mean value of positive rank = 34.00, negative rank = 0.00, and Sig value. = 0.000. From these results, there is an increase in the ability to wash hands with soap after getting health education using audiovisuals about the correct steps to wash hands with soap. Thus, it can be concluded that providing health education using audiovisuals has a significant effect on improving the ability to wash hands with soap in students of SDN 56 Pular.

The research that has been conducted is in line with the research of Sofiana, Ginting, and Sinaga (2020). From the results of the research that has been conducted, it is found that counseling using audiovisual media affects attitudes

toward washing hands with soap in schoolchildren (p value = 0.031) (11). Research by Parasyanti, Yanti, and Mastini (2020) found that there was an effect of health education on hand washing with soap with video media on the ability to wash hands with soap in third grade students (p value = 0.000) (12). According to Allo, Bannepadang, and Silamba (2021), the results of the study found that there was an effect of counseling using audio-visual media on the ability to wash hands with soap in elementary school students (p value = 0.000) (13). In research conducted by Junardi (2022), it was found that providing hand washing with soap health education using video media had an effect on the level of hand washing with soap behavior in elementary school children (p value = 0.000) (10). Likewise, research conducted by Mawakhadah, Wijayanti, and Khasanah (2022) found that there was an effect on the ability to wash hands with soap after being given animated video media about hand washing with soap in kindergarten pre-school children (p value = 0.000) (14).

Health promotion is an effort to influence someone by providing information in order to increase knowledge and awareness in order to empower themselves to maintain and control the determinant factors around them in maintaining their health status. The purpose of health promotion is so that individuals or communities can overcome health problems independently in order to achieve optimal health status (18). According to Maulana (2014), one of the targets of health promotion is individuals / families, where information obtained in the form of health information is obtained either directly or through mass media so that knowledge and willingness to maintain, improve, and be able to protect their health can be gained. The scope of health promotion, according to Fitriani (2011), is namely individual skills, which are activities to maintain and improve

public health by providing skills in the form of information (19).

Health information can be conveyed through various forms of media, one of which is electronic media, where electronic media is media that can move and prioritize audio, visual, or audio-visual messages. The advantages of electronic media in message delivery are that many people know that all five senses can participate, that it is easy to understand, that it is very interesting because the media has sound and moving images, that it is easy to present, that it has a wide range, and that it can be repeated (8). The pattern of interaction in this new era forces and provides opportunities for health promoters to think again in an effort to convey messages, especially in the health sector, to the wider community. Health workers develop methods and media for delivering messages, which will have an impact on changing attitudes and improving the skills and abilities of the community in carrying out a healthy lifestyle (20).

Audio-visual media used in providing handwashing with soap health education to special communities in research that has been conducted, namely focusing on elementary school children in grades 4, 5, and 6. In receiving messages conveyed by researchers to children, they feel there is interest because there are sounds and images that can be seen and heard. They focus more on learning because they think the media used is interesting and easy to understand. It can be seen from the average results that both students' knowledge and abilities regarding hand washing with soap have increased. In today's sophisticated era, health workers, especially in the field of health promotion, are required to be more creative in developing promotional media that will be used in delivering health messages so that the public can easily accept them and in the hope that promotional media can be seen and heard by the wider community.

5. CONCLUSION

The research that has been conducted can be concluded that the knowledge variable, after being treated in the form of a pre-test and post-test, it is found to have a decrease in knowledge after being given health counseling using audiovisual media about hand washing with soap. As many as 5 respondents, 2 respondents have the same value between pre-test and post-test, and as many as 63 respondents have increased knowledge with an average of 36.22.

Ability Variables: After being treated in the form of ability before (pre-test) and ability after (post-test) it was found that there was no decrease in the ability to wash hands with soap after being

given health counseling using audiovisual media about hand washing with soap. 3 respondents had the same score between the pre-test and post-test, and as many as 67 respondents experienced an increase in the ability to wash hands with soap with an average of 34.

Based on the output of the test statistics that have been carried out, it can be concluded that there is a difference between students' knowledge and ability to wash their hands with soap before and after counseling using audio-visual media, so it can also be concluded that there is an effect of using audio-visual media about hand washing with soap on knowledge and abilities in grade 4, 5, and 6 students at SDN 56 Pusar.

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