

# The effectiveness of video promotional media in implementing hand washing with soap at State Elementary School 04 Rantauprapat

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## ABSTRACT

Health problems that often occur in school-aged children are usually always related to cleanliness and the environment, one of which is the problem of washing hands with soap. Hands are the center for germs that cause disease. Hand washing is a form of personal hygiene carried out with the aim of preventing disease. Washing your hands with soap is a sanitation action by cleaning your hands and fingers using water and soap. The aim of this research is to determine the effectiveness or influence of health promotion media via video in the implementation of hand washing with soap (CTPS). This type uses quantitative research, with a pre-experimental research design, the research design used is One-Group. Pretest-Posttest Design. The sample used in this research consisted of 73 respondents from grades 5 and 6, with a sampling technique namely purposive sampling technique. The data analysis carried out was univariate and bivariate analysis, with the results of the Wilcoxon signed rank test statistical test obtained with  $p$  value =  $0.00 \leq 0.05$ , which means that the hypothesis is accepted or there is an effect or influence from the video media of washing hands with soap on knowledge and attitude towards students. There is an influence of health promotion using video media on the knowledge and attitude of washing hands with soap among students at SD N 04 Rantauprapat.

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## INTRODUCTION

Indonesian children are children who will be the next generation of the Indonesian nation, so that children become important assets that must be looked after, one of the key parts is maintaining body health, especially during the child's growth and development period, part of the child's growth stage, namely when they are at school age, So it is important for school age children to get optimal health efforts, because lack of appropriate health behavior can damage the child's health and can cause death in children (Mansir, 2022).

Problems that often occur in school-aged children are usually related to cleanliness and the environment, one of which is washing hands with soap (CTPS). The prevalence of correct hand washing behavior in Indonesia has increased from 47.0% to 49.8% (Parasyanti et al., 2020a).

Washing hands with soap is one of the sanitation measures by cleaning hands and fingers using water and soap by humans to become cleaner and can break the chain of germs that cause disease (Elvira et al., 2021). Hands are the center for germs that cause disease, starting from shaking hands with people, holding the toilet door, touching objects that contain disease germs, after urinating or defecating and touching all objects. things that people touch, such as holding money, and so on (Husni & Ramadany, 2019). Hands that look clean are not necessarily enough to prevent infectious diseases. Hands that come into direct contact with human waste or animal waste, body fluids, food or possibly drink contaminated, when you don't wash your hands thoroughly Soap can transfer various kinds of bacteria, viruses, etc parasitic on others (Opu & Hidayat, 2021). So therefore We the importance of freeing our hands from various types of germs caused by disease. That matter This can be done by washing your hands properly and correctly. Washing your hands with water alone does not necessarily kill germs that cause disease, this has been proven to be ineffective in maintaining health compared to washing your hands with soap (Saputri et al., 2023). According to WHO (2016), there are 6 steps in washing hands properly and correctly, with the duration of the procedure, namely for using water and soap taking around 40-60 seconds, while for using antiseptic liquid taking around 20-30 seconds (Saputra & Fatrida, 2020). Before washing your hands, the first thing to do is wet your entire palm using running water and then apply enough soap (Susantiningasih et al., 2018). The first step: namely, spread all the soap into the palms of both hands; Second step: namely, place the palm of your right hand on the back of your left hand and rub the back of your left hand and between the fingers of your left hand, and vice versa; Step three: rub both palms and between fingers; Fourth step: the fingers of the inner sides of both hands interlock; Fifth step: rub the left thumb rotating in the grip of the right hand then rotate the thumb and do the opposite; Sixth step: rub by rotating the tips of the fingers of the right hand on the palm of the left hand and vice versa (Rahmatunnisa & Asep Wahyudin, 2019). Next, rinse your hands using running water, then dry them with a towel or tissue. After that, close the water tap using your hand covered with a towel to avoid direct hand contact with the water tap (WHO 2016).

Hand washing is a form of personal hygiene carried out with the aim of preventing disease due to infection or preventing the transfer of bacteria through the hands. Hand washing habits in children are still in the deficient category, as evidenced by good and correct hand washing habits in WHO data which shows only 13.7% of children in the world (Rohmah & Syahrul, 2017). The Indonesian Ministry of Health (2016) shows that only 17% of Indonesian children have good and correct hand washing habits. This low level of hand washing behavior among children is caused by a lack of health information or education.

One of the efforts made by WHO to overcome the problem of lack of awareness about hand washing is commemorating Hand Washing with Soap Day (HCTPS) on October 15, which is an effort to increase the culture of Hand Washing with Soap (CTPS) globally (Parasyanti et al., 2020a).

The Ministry of Health (2018) stated that the hand washing behavior activity with soap was carried out with the aim of reducing the death rate in children, especially those related to the lack of access to facilitation in health education. According to World Health Organization researchers, the behavior of washing hands with soap and clean water can reduce the risk of diarrheal disease by around 50%. Washing Hands with Soap (CTPS) if practiced correctly and correctly will make it easier and more effective to prevent various diseases such as ISPA, diarrhea, cholera, worms, flu, hepatitis and other diseases (Wijhati et al., 2021).

There are several ways to wash your hands, namely by using soap and an alcohol-based antiseptic liquid (handrub). (Nakoe et al., 2020). Washing your hands with handrub is an alternative and practical way to kill microbes on your hands quickly and practically, and is a fast

and safe hand washing facility for reducing flora on the surface of the skin (Sapitri et al., 2023). Handrub is not a substitute for washing hands, but more effective hand hygiene can only be achieved by washing hands with soap and running water (Kusbiantoro & Alamsyah, 2021).

The behavior of washing hands with soap is generally better taught and introduced to children from an early age, not only in the home environment but also well taught in the school environment (Bungai et al., 2022). Some schools have even made learning about hand washing with soap (CTPS) a routine activity at school, especially in Kindergarten to Elementary School, this is considering the age of children at this stage which is at an age that is vulnerable to being infected with various kinds of diseases. because children are more active in activities at home and outside the home (Listiadesti et al., 2020) (Noorratri et al., 2023).

The importance of quality hand hygiene can affect the quality of a person's health and also the people around them, including children (Ekasari et al., 2019). Health education about hand washing behavior using soap in the community is expected to increase their knowledge, so that people can implement hand washing behavior using soap. According to Notoatmodjo (2018), new behavior can be accepted and lasts a long time if the process of accepting the new behavior is based on knowledge (Allo et al., 2021) (Itsna et al., 2018).

Educational media has several benefits, including generating interest for the target, being able to avoid boredom and boredom, helping to overcome many obstacles in understanding, making it easier to convey information, and making it easier to receive information for the target students (Ifroh et al., 2019) (Insan & Hermawan, 2023). Health promotion media is currently developing rapidly, especially video media (Wahono et al., 2022). Video media is a tool used by individuals through several senses which are considered to most influence knowledge into the brain through the eyes and ears (Ifroh et al., 2019). Education using videos must be tailored to the target group. then the use of video media will be an appropriate medium in the school setting, one thing that can be done to improve children's abilities regarding the behavior of washing hands with soap is by providing health education (Tri Wulandari & Adam Mudinillah, 2022). School-aged children are also the time to instill PHBS values and have the potential to become agents of change, which means agents of change, to promote PHBS both in the school, family and community environment (Kurdanti et al., 2019).

The media used for the process of providing health education will influence and provide understanding to the target group, including children who like to imagine (Najuah et al., 2022). At the age of children, conveying messages requires the right media, because children like to imagine (Parasyanti et al., 2020b). There are various health education media about hand washing that can be used, one of which is video media, because it can be easier for children, including elementary school children, to understand. The use of video media will be able to achieve effectiveness in the learning process, directing children's attention to concentrate on the material being studied so that the learning process becomes more interesting and videos can also depict a process accurately and can be seen directly and repeatedly (Listiadesti et al., 2020).

Education using video media to increase knowledge about hand washing is not something new and has been done a lot. However, in this study the video used is a form of video in animation (Wilandika et al., 2023). Animated videos have the advantage of increasing interest and enthusiasm, as well as increasing motivation to carry out hand washing skills (Hambali et al., 2021). Thus, the aim of this study is to examine how big the impact of video-based hand washing with soap education is on hand washing knowledge in elementary school students.

## RESEARCH METHOD

This type of research is quantitative research, with a pre-experiment research design, the research design used is One-Group Pretest-Posttest Design. Technique The sampling in this study used a non-probability sampling technique, a type of purposive sampling where the number of samples was 73 respondents from grades 5 & 6.

This design begins with the promotional media intervention giving the respondent a video about washing hands with soap before being given a pretest to measure the extent of the respondent's knowledge before being given a video about washing hands with soap. After being given a video of washing hands with soap, respondents will then be given a posttest to measure their knowledge after being given intervention in the form of a video of washing hands with soap. So we can find out how influential the hand washing with soap video is on the changes that occur before and after the intervention is given, but in this study there was no control for comparison between groups. This research was conducted at SDN 04 Rantau prapat, Rantau Utara District.

Analysis to determine the relationship between each variable using the Wilcoxon tests *signed ranktest*.

## RESULTS AND DISCUSSIONS

### Univariate Analysis

**Table 1.** Frequency distribution based on respondent characteristics

Category	N	%
Gender		
Man	31	42.47
Woman	42	57.54
Age		
10 years	7	9.59
11 years old	34	46.58
12 years old	29	39.73
13 years old	3	4.11
Total	73	100

Source: Primary Data, 2024

**Table 2.** Frequency distribution of knowledge before and after being given video media on washing hands with soap to state elementary school students 04 Rantau prapat

Variable	N	Mean	Std. Deviation	Min	Max
Prior Knowledge	73	4.22	1,294	1	7
Knowledge after	73	7.89	0.657	6	10

Source: Primary Data, 2024

Based on table 2, the results obtained from the knowledge score before, namely 4.22 and after, namely 7.89, from 73 respondents have shown an increase in understanding of the hand washing video promotional media.

**Table 3.** Frequency distribution of attitudes before and after being given the video media washing your hands with soap to state elementary school students 04 Rantau prapat

Variable	N	Mean	Std. Deviation	Min	Max
Prior Attitude	73	28.78	1,774	24	33
Attitude after	73	37.21	2,166	31	40

Source: Primary data, 2024

Based on table 3, the results obtained from the attitude score before, namely 28.78 and after, namely 37.21, from 73 respondents have shown an increase in the hand washing video promotional media.

## Bivariate Analysis

**Table 4.** Frequency distribution of influence and attitudes before and after being given video media on washing hands with soap to elementary school students 04 Rantau Utara

Variable	N	Before		After		Mean Difference	P Value
		Mean	elementary school	Mean	elementary school		
Knowledge	73	4.22	1,294	7.89	0.657	3.67	
Attitude	73	28.78	1,774	37.21	2,166	8.43	0.00

Based on table 4, which shows the results of the knowledge and attitude data test using the Wilcoxon signed rank test, the p value =  $\leq 0.05$  using a confidence level of 95%, then  $H_a$  is accepted, meaning that the results of the data test show that there is an influence of video media promotion on knowledge and attitudes about washing hands with soap in SD N 04 Rantau Utara children in grades V and VI.

## Discussion

Health promotion methods are one of the health domains for increasing knowledge and skills in school-aged children. Health education in schools is important, because it consists of a combination of learning experiences designed to help individuals and society to improve health, by increasing knowledge or influencing the attitudes of each individual in implementing what is received. Knowledge is influenced by various factors, which include media, education and information provided. Learning media or health education is one thing that is effective, especially increasing a person's knowledge, including washing hands with soap using video media, because this media will attract attention to action and can stimulate the five senses of sight, hearing and touch, and can increase knowledge, and can motivate children, including when studying, because it can be anticipated and change their attitudes in behaving in a more positive direction, especially regarding health. The final aim of this research is to change behavior and attitudes carried out educationally, use hand washing videos to provide hand washing knowledge and skills use soap withThe information displayed on the video is in the form of color image information and sound which can attract attention.This research activity was attended by students of SDN 04 Rantauprapat classes V and IV using a health promotion method in the form of a video of washing hands with soap.

In this study, the results showed that providing hand washing with soap (CTPS) education to 73 respondents increased students' knowledge, because it can be seen from the increase in knowledge after being given video promotional media. The results of the frequency distribution of knowledge from 73 respondents showed an increase in knowledge before the intervention, namely 4.22 and after the intervention, namely 7.89, so that it can be seen that overall there was a difference in the mean knowledge before and after the respondents after being given the intervention using the hand washing video media. In terms of attitude, there was a difference in the mean attitude of students before being given the intervention, namely 28.78 and after being given the intervention, namely 37.21.

The results of the distribution data test for all variables in this study based on the results of the Wilcoxon signed rank test show the results obtained Asymp.Sig. (2talled)p value =  $0.000 \leq 0.05$  using a confidence level of 95%, then  $H_a$  is accepted, which means that there is an effect or influence from video promotional media on students' knowledge and attitudes about washing hands with soap in children at State Elementary School 04 Rantauprapat in grades 5 & 6.

## CONCLUSION

Based on the results of research conducted at SD N 04 Rantauprapat on 73 students that there was an influence from health education on washing hands with soap using video media, it can be

concluded that from the results of the Wilcoxon statistical test *signed rank test* Which obtained with a value of  $p = 0.00 \leq 0.05$  using a confidence level of 95%, which means that the hypothesis is accepted or there is an influence from the video media of washing hands with soap on the knowledge and attitudes of students at Rantauaprat State Elementary School 04.

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