

# TEACHING HANDWASHING SOAP SKILL THROUGH DEMONSTRATION FOR KINDERGARTEN CHILDREN

Rachmawaty M. Noer<sup>1</sup>, Nurlince Siregar<sup>2</sup>, Mira Agusthia<sup>3</sup>

<sup>1,2,3</sup>STIKes Awal Bros Batam

Email: <sup>1</sup>[rachmawatymnoer1977@gmail.com](mailto:rachmawatymnoer1977@gmail.com), <sup>2</sup>[siregarnurlince@gmail.com](mailto:siregarnurlince@gmail.com) & <sup>3</sup>[agusthiamira@gmail.com](mailto:agusthiamira@gmail.com)

## Article Info

### Article history:

Received Apr 23, 2021

Revised May 18, 2021

Accepted June 25, 2021

### Keywords:

Hand Washing with Soap  
(CTPS)

Early childhood knowledge  
Demonstration Method

## ABSTRACT

The research aims to find out whether Effect of Health Education Demonstration Media on Knowledge of Handwashing with Soap (CTPS) in the Work Area of the Sei Pancur Health Center Batam City. Research methods used a quasi-experimental *one-group pre-test-post-test*. Research result shows that In the pre-test as many as 88.9% of respondents lack knowledge on washing Hands with Soap (CTPS) and on the Post-test as many as 92.6% of respondents Good knowledge of washing Hands with Soap (CTPS) in this case, there is a significant effect between the knowledge of 6 steps of handwashing before and after the intervention of health education about Hand Washing with Soap 6 Steps with demonstration media in Early Childhood in the Work Area of the Sei Pancur Health Center Batam City. Conclusion: There is an effect *Demonstration Method* on increasing the knowledge of early childhood in proper hand washing in the Work Area of the Sei Pancur Health Center Batam City. Suggestion: The school should further improve the provision of health information, especially about proper handwashing through various health education methods so that early childhood children are happy and not bored in following it.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



## Corresponding Author:

Rachmawaty M. Noer

STIKes Awal Bros Batam

Email: [rachmawatymnoer1977@gmail.com](mailto:rachmawatymnoer1977@gmail.com)

## 1. INTRODUCTION

The Covid-19 pandemic is currently engulfing various countries in the world, including Indonesia. Since early March 2020, Indonesia has been infected with the virus, which first appeared in early 2019 in the city of Wuhan, China. (Ministry of Health, 2020). In Indonesia, there were 333,000 positive cases of COVID-19 with 11,844 deaths, and in the Riau Islands, there were 2,525 cases with 60 deaths, while in Batam City alone there were 1,896 cases with 53 deaths (WHO, 2020; Batam Health Office, 2020). The World Health Organization (WHO) and the United States Centers for Disease Control and Prevention (CDC) also issued an advisory regarding what to do to prevent this new type of corona. Efforts that can be done are to take various preventive measures,

Washing hands with soap is one of the sanitation measures by cleaning hands and fingers using water and soap by humans to be clean and break the chain of germs. Washing hands with soap (CTPS) is also known as an effort to prevent disease. Washing hands with water alone is more common, but it has proven to be ineffective in maintaining health compared to CTPS. According to (Kemenkes, 2020) through the Director-General of Public Health of the Ministry of Health, given that CTPS can prevent Covid-19. "The Covid-19 pandemic has been a strong reminder for all of us that one of the simplest but most effective ways to stop the spread of the virus is washing hands with soap and running water.

Based on data from (Ministry of Health, 2020), only half the population in Indonesia over the age of 10 have practiced proper handwashing behavior. Even during the Covid-19 pandemic, only 73 percent had access to handwashing facilities. During the current Covid-19 pandemic, hand hygiene is very important, to keep children at an early age, doctors, health workers, workers, and the general public safe from the spread of Covid-19 and other infectious diseases.

---

Early childhood is an effective health promotion target. After all, it has been able to disseminate information to a population that is very sensitive to change because it is at a stage of growth and development. Health education regarding washing hands with soap in children hopes to increase children's knowledge, so that early childhood can apply handwashing behavior with soap, according to new behavior it is acceptable and lasts a long time if the process of accepting the new behavior is based on knowledge. Knowledge can be obtained by a person or educational target from the learning process with various kinds of educational aids or media (Notoatmojo, 2011).

The media that is applied to elementary school children is easy to understand, and there are various health education media about handwashing that can be used, namely the demonstration method. The selection of the demonstration method according to research from (Ni Md. Ari Wulandari, 2019) turned out to be effective in increasing students' psychomotor abilities in carrying out wound care actions with 85.10% results in the good category.

The problems that exist in Permata Asri Kindergarten, Sei Beduk Sub-district, Batam City students do not understand how to wash hands with soap (CTPS), or how to wash hands with the 6-step technique. Based on the results of interviews with teachers at Permata Asri Kindergarten, Sei Beduk District, Batam City, that teachers do not teach students to wash their hands with soap using the 6-step technique, the teacher only teaches students to maintain general hygiene. And some students only wash their hands when their hands look dirty, while eating at school they rarely wash their hands. The impact on students at Permata Asri Kindergarten, Sei Beduk sub-district, Batam City for the last 5 months mentioned several diseases, including stomach pain and diarrhea, because students did not understand how to wash their hands properly. Therefore, the researchers used the demonstration method in this research. The reason the researcher uses this demonstration media is that the method teaches by demonstrating how to wash hands correctly and following health education and students can be demonstrated directly by him.

## 2. LITERATURE REVIEW

### 1. Washing Hands with CTPS Soap)

Hand washing is one way to avoid food-borne diseases. The habit of washing hands regularly needs to be trained in children. If you are used to washing your hands after playing or when you are going to eat, it is hoped that this habit will carry over to old age (Mubarak, 2019).

Based on data from (Ministry of Health, 2020) The proper way to wash hands with soap (CTPS) is as follows:

- a. Wet both palms at mid-arm height using running water and scoop out the soap.
- b. Rub and rub both palms gently.
- c. Wipe and rub also the back of the hands alternately.
- d. Do not forget the fingers, rub between the fingers until clean.
- e. Clean the fingertips alternately by interlocking the palms.
- f. Rub and rotate both thumbs alternately
- g. Place your fingertips in your palms and rub gently to clean nails.
- h. Finally by rinsing all parts of the hand with clean running water and then dry using a towel or tissue.

The use of special hand washing soap in the form of bars or liquids is highly recommended for maximum hand hygiene. The importance of washing hands properly and properly using soap is to maintain overall cleanliness and prevent germs and bacteria from moving from the hands into the body.

### 2. Knowledge

Knowledge of cognition is a very important domain in shaping one's actions (over behavior). According to (Notoatmojo, Public Health Sciences And Arts, 2011) Knowledge has six levels, namely:

#### a. Know (Know)

Know is defined as remembering a material that has been studied previously after observing something. Therefore, knowing this is the lowest level of knowledge.

#### b. Understanding (Comprehension)

Understanding an object is not just knowing about the object, not just being able to mention it, but the person must be able to interpret correctly about the object he knows.

#### c. Application (Application)

This means that people who have understood the object in question can use the principles they know in other situations.

#### d. Analysis (Analysis)

Is the ability to describe a material or an object into components, but within one organization, and still have a relationship with each other.

#### e. Synthesis (synthesis)

Synthesis shows a person's ability to summarize in a logical relationship between its components.

#### f. Evaluation (Evaluation)

.....  
Evaluation relates to a person's ability to justify or evaluate an object.

### 3. Health Education

Health is a state of health both physically, mentally, spiritually, and socially that enables everyone to live socially and economically productive lives, and according to the latest WHO is indeed more broad and dynamic than the previous limitation which said that health is a perfect state. , both physically and mentally and not only free from disease and disability (Notoatmojo, Public Health Sciences And Arts, 2012).

Health education cannot be easily given by one person to another, because in the end, the goal of education itself can change his habits and behavior. (Setyaningrum, 2016).

### 4. Demonstration Method

The term method comes from the Greek "metha" and "hodos" metha means through and hodos means way or way, so the method is a path or way through which to achieve a goal. (Arif, 2010). The demonstration method is a method used to show a process or the workings of an object related to the subject matter(Djamarah, 2018).

The demonstration method is a teaching method by using demonstrations to clarify an understanding or to show how a certain formation process goes to students. To clarify this understanding in practice it can be done by the teacher or the students themselves (Yunus, 2016).

According to (Oemar, 2013) The demonstration method is a teaching method by demonstrating items, events, rules, and sequences of doing an activity, either directly or through the use of learning media that are relevant to the subject or material being presented.

The advantages or advantages of the demonstration method according to(Mulyasa, 2015) is as follows:

- a. Students' attention can be more focused on the lesson being given.
- b. Errors that occur when the lesson is lectured can be overcome through observations and concrete examples, by presenting the actual object.
- c. The concepts that students receive are deeper so that they last longer in their souls.
- d. Provide strong motivation for students to be more active in learning because students are involved with lessons.
- e. Students can actively participate and gain hands-on experience and can gain skills

Can answer all the problems that arise in the mind of each student because they participate directly.

While the lack of demonstration methods according to(Prof. Dr. Nasution, 2005) is as follows:

- a. Requires quite a lot of time
- b. If there is a shortage of media, the demonstration method becomes less efficient.
- c. It costs quite a bit, especially to buy the ingredients
- d. Requires a lot of energy.
- e. If students are not active, the demonstration method becomes ineffective.

## 3. METHODS

This research method is pre-experimental with the research design used is the one Group Pre-test Post-test design. This research was conducted in Permata Asri Kindergarten, SEI Beduk District, Batam City. Data were collected through questionnaires and observation methods. Analysis of the data used with Univariate Analysis, Bivariate Analysis and processed with SPSS 26.

## 4. RESULTS AND DISCUSSION

### 1. Univariate Analysis

In this study, a univariate analysis was carried out to describe the knowledge of 6 steps of handwashing in early childhood before and after the administration of demonstration media.

**Table 1. Distribution of Respondents Frequency Based on Knowledge Level of Pre-test Before the implementation of media demonstrations for early childhood in the Work Area of the Sei Pancur Health Center Batam City in 2021**

Variable	Pretest	
	f	%
Knowledge		
Less	24	88.9%
Enough	3	11.1%
Good	-	-

Based on Table 1, the results show that the majority of students lack knowledge before the implementation of the demonstration media (pre Test) as many as 24 students or 88.9%.

**Table 2. Frequency Distribution of Respondents Based on Post-test Knowledge Levels In the implementation of demonstration media for early childhood in the Work Area of the Sei Pancur Health Center Batam City in 2021**

Variable	Pretest	
	f	%
Knowledge		
Less	2	7.4%
Enough	-	-
Good	25	92.6%

Based on Table 2, the results show that the majority of knowledge is good after the implementation of the demonstration media (post-test) as many as 25 students or 92.6%.

### 1. Bivariate Analysis

The results of the marginal homogeneity test in this study were to determine the difference in the average level of knowledge of handwashing with soap (CTPS) in early childhood before and after the demonstration method was carried out on respondents by measuring through pre-test and post-test questionnaires. The results of the analysis are shown as follows:

**Table 3. Analysis of the Effect of Knowledge Level Pre-test and Post-test implementation of demonstration media in early childhood in the Work Area of the Sei Pancur Health Center Batam City**

Variable	n	mean	SD	Min-Max	P-Value
Respondent					
Knowledge Level pre test	27	549,900	194.173	6	0.00
Knowledge level post test	27	1508,200	-4.935	27	

By using the help of a computer application, namely SPSS, the Marginal Homogeneity Test was carried out, the average value of the pre-test was 549,900 and the post-test decreased with an average value of 1508,200 with a p-value of 0.000 ( $P < 0.05$ ). Thus  $H_0$  is rejected, so it can be concluded that there is an effective knowledge implementation of demonstration media in early childhood in the Work Area of the Sei Pancur Health Center Batam City.

Handwashing behavior is an activity carried out in cleaning the palms, backs of hands, and fingers so that they are clean from dirt and kill germs that cause diseases that are detrimental to human health and make hands smell good. (Notoatmojo, Public Health Sciences And Arts, 2011) Based on the existing phenomena, it can be seen that early childhood children have a habit of not paying attention to the need for handwashing in everyday life, especially in the school environment. They usually just eat the food they buy around the school without washing their hands first, whereas before they were playing. This behavior is certainly influential and can contribute to the occurrence of diarrheal disease. Hand washing is the most important basic technique in preventing and controlling infection transmission (Fermi Avisa, 2018).

The same thing was also researched by (Setyaningrum, 2016) shows the results that the level of knowledge of respondents about CTPS is mostly in the good category, namely as much as 86.67% at SDN Batuah I and 76.67% at SDN Batuah III, respondents' attitudes about CTPS are mostly in the good category as many as 83.33% in SDN Batuah I and SDN Batuah III. Furthermore, it was also investigated by (Sustainable, 2020) which shows the results that giving demonstrations is effective in increasing the level of knowledge of school children about proper handwashing.

According to the researcher's assumptions, before the intervention of providing health promotion, it was known that overall respondents, namely early childhood, lacked knowledge of doing 6 steps of handwashing correctly, where most of the respondents were unable to take actions ranging from distributing soap with their hands to foaming, unable to take action. washing hands at the step of washing between the fingers, the tips of the fingers, the act of washing the thumbs properly. Where respondents wash their hands only with irregular rubbing movements so that they are not able to reach every crevice between and fingertips which causes the actions taken by respondents to not be able to clean their hands as a whole.

While the level of knowledge is good as many as 25 respondents or (92.6%). Health implementation is any combination of health education and interventions related to economics, politics, and organizations designed to

facilitate changes in behavior and a good environment for health (Notoatmodjo, 2012). One method of implementing health is to use the Demonstration method.

The same thing was also researched by (Diamond, 2019) the results that after giving the demonstration students can know how to wash their hands properly and correctly. This is following research conducted by (Ashari, 2020) shows that there is a significant difference in knowledge, attitude, and practice between the pre-test and post-test in the control group, in the intervention group there is no significant difference in knowledge, attitude, and practice between before and after.

According to the researcher's assumption, after the implementation, namely the implementation of health education with Demonstration Media, it can be seen that respondents who have good knowledge of doing hand washing actions 6 steps correctly. This looks better when compared to before the intervention where overall respondents lacked knowledge of doing the 6-step challenge wash action correctly.

## **5. CONCLUSION**

In a study conducted on 27 respondents in Early Childhood in the Working Area of the SEI Pancur Health Center, Batam City, namely: In the pre-test, 88.9% of respondents lacked knowledge on Handwashing with Soap (CTPS). Meanwhile, in the post-test, 92.6% of respondents had good knowledge of handwashing with soap (CTPS). Furthermore, there is a significant influence between the respondents' knowledge of 6 steps of handwashing before and after the health education intervention about Hand Washing with Soap 6 Steps with demonstration media in Early Childhood in the Work Area of the Sei Pancur Health Center Batam City. The results obtained p.value 0.00 (<0.05).

Based on the results of the research that researchers have done, the influence of early childhood knowledge on handwashing in 6 steps is expected to be used as input and reference for comparison for further researchers and also to increase the knowledge of researchers, as well as evaluation material for students' understanding of Early STIKes Bros Batam on preparation to become a professional nurse.

There are several limitations in this study, namely: With this pandemic situation researchers cannot collect children at once because they are divided into 2 groups, Respondents at an early age have obstacles where children cannot read on their own so they must be accompanied by parents, Schools do not have tools that can help in the research process so researchers prepare the tools alone, in the room the lighting is not clear so that children can't see clearly.

Acknowledgments The researcher would like to thank all those who have helped in the process of this research, especially to my family, as well as to my supervisor, as well as to the campus and research place who have permitted for me to conduct research.

## **REFERENCES**

- [1] Wise. (2010). Introduction to Islamic Education Methodology. Jakarta: Ciputat Press.
- [2] Ashari, AE (2020). Permas Scientific Journal: Kendal Stikes Scientific Journal. Scientific Journal of Permas : Scientific Journal of Stikes Kendal, 10(1).
- [3] Berliana, NM (2019). Increasing Students' Knowledge About Good And Correct Hand Washing At Sdn 37 / I Bajubang District. Journal of the Devotion of Hope for Mothers (Jphi), 1(2), 59–64.
- [4] Djamarah. (2018). Teachers And Students In Educational Interaction. Jakarta: Pt. Rineka Cipta.
- [5] Fermi Avissa, N. (2018). The Effectiveness of Health Education Demonstration Methods and Lecture Methods with Booklet Media on Changes in Knowledge and Handwashing Actions in Preschool Children. Faculty of Nursing Universitas Airlangga, .
- [6] Ministry of Health. (2020). Handwashing Behavior with Soap Prevents Covid-19. 1-8.
- [7] Lestari, NK (2020). The Effect of Hand Washing Dance Demonstration on the Knowledge Level of Early Childhood Schools About Correct Hand Washing at Sdn 2 Pemecutan. National Journal of Health Research, 4(1), 14–20.
- [8] Mubarak. (2019). Community Nursing Textbook 2. Jakarta : Cv Sagung Seto.
- [9] Mulyasa. (2015). Teachers in the Implementation of Curriculum 2013. Bandung: Pt Remaja Rosdakarya.
- [10] Notoatmojo. (2011). Public Health Sciences And Arts. Jakarta: Rineka Cipta.
- [11] Notoatmojo. (2012). Public Health Sciences And Arts. Jakarta: Rineka Cipta.
- [12] Oemar, H. (2013). Learning Curriculum. Jakarta: Earth Literacy.
- [13] Prof. Dr. Nasution . (2005). Education technology. Jakarta: Earth Literacy.
- [14] Setyaningrum, RA (2016). "Level of Knowledge and Attitude About Handwashing with Soap (Ctps) on Students of Sdn Batuah I and Batuah III Pagatan. Journal of Health Periodic, 1(1), 43–47.
- [15] Yunus, A. (2016). Design of Learning Systems in the Context of Curriculum 2013. Bandung: PT. Aditama Refika.

**THIS PAGE HAS INTENTIONALLY BEEN LEFT BLANK**