

## TRAINING ON THE CULTURAL MOVEMENT OF HAND WASHING AS PREVENTING DIARRHEA AND ORS EMERGENCY AS THE FIRST EARLY TREATMENT OF DIARRHEA AT JUNIOR HIGH SCHOOL 35 BANJARMASIN

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### ABSTRACT

Diarrhea is a public health problem in developing countries such as Indonesia, with 4,204 cases and 73 deaths. ORS and habits: Washing your hands properly and correctly can prevent this transmission of diarrhea up to 53%. Service activities This society aims to improve methods of making ORS and washing hands properly and correctly. The community can implement daily matters in life to reduce the incidence of diarrhea, especially in children. Extension activities were done on Saturday, June 5 2023, at SMP Negeri 35 Banjarmasin through two-way lectures and demonstrations with 37 students. The results of service activities in this society are that students understand how \_ to prevent diarrhea in children with manufacturing ORS as the first treatment and wash their hands properly and correctly. Expected students can be role models as well as continue understanding of prevention of diarrhea with ORS and good washing habits dreams to younger siblings or the community to achieve diarrhea-community

*Keywords: Washing hands, Emergency ORS, Prevention of diarrhea*

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### INTRODUCTION

Diarrhea is one of the problems in children's health. Diarrhea defecates 3 times or more with a liquid stool/feces consistency or a frequency greater than normal. Bacterial and parasitic viral infections can cause diarrhea. About 40% of cases are caused by norovirus and adenovirus. Bacteria cause the other 20% of cases and less than 5% of parasites. The clinical manifestations of diarrhea are vomiting, fever, and liquid feces (Imanadhia et al., 2019). One of the causes of death due to diarrhea in children is dehydration due to diarrhea complications. Dehydration is one indicator of determining the severity of diarrhea.

Treating diarrheal diseases can be done by rehydrating, giving zinc supplements, providing adequate nutrition, using selective antibiotics, and educating parents/caregivers (Imanadhia et al., 2019). The main goal of treating diarrhea is to replace the body's fluids and electrolytes lost due to diarrhea and vomiting. Rehydration can be done by administering ORS at the start of diarrhea. ORS

is a mixture of electrolyte salts, such as sodium chloride (NaCl), potassium chloride (KCl), trisodium citrate hydrate, and anhydrous glucose, which can be given orally to replace lost body fluids. Research reports that giving ORS can treat mild and moderate dehydration in acute diarrhea (Radlovic et al., 2015). Cases of death due to diarrhea are decreasing. This is because maintaining cleanliness and using ORS can reduce mortality due to dehydration caused by diarrhea.

One effort to control the transmission of diarrhea is to maintain cleanliness. Research conducted in India reported that washing hands with soap can reduce the incidence of diarrhea by up to 53% (Drancourt, 2017).

Another study reported that the habit of washing hands with soap can reduce the incidence of diarrhea by 47%. Individuals who do not have good hand-washing habits can increase the risk of diarrhea up to 7 times compared to individuals who have good hand-washing habits. Around 83.1% of people do not know about washing their hands (Amelia, 2018).

Therefore, it is necessary to conduct counseling and demonstrations regarding proper and correct hand-washing steps in the community to prevent diarrheal disease, especially in children.

### Objective

This activity aims to improve the method of washing hands properly and correctly and making ORS.

### Time and place

Service activities This community is located at SMPN 35 Banjarmasin. Extension activities will be held on Saturday, June 3 2023, from 08.00 to 11.00 WITA.

### Target

This community activity targets students in class VII of SMPN 35 Banjarmasin, as many as 37 people.

### METHOD

The method in this service begins with situation analysis, problem identification, and determining problem priorities. The intervention activity design explains material related to good and correct hand washing and how to do it ORS as early prevention in the incidence of diarrhea; subsequent participants follow steps in the design, intervene, and conduct the evaluation. Devotion is held directly or face-to-face with students at SMP Negeri 35 Banjarmasin.

#### Preparation phase

The preparation stage was completed after obtaining permission for implementation from the principal of SMPN 35 Banjarmasin. The series of activities carried out include:

Preparing a survey of the activity's location, making an activity proposal, and completing the administration of the permit application from the Muhammadiyah University of Banjarmasin to the implementation location.

#### Implementation Stage

The activity was organized by forming a committee from a team of lecturers in the nursing department in the Bachelor of Nursing Study Program, Faculty of Nursing and Health Sciences, University of Muhammadiyah Banjarmasin.

The tools needed for explaining or presenting material are an LCD laptop. Hand sanitizer and tissue were provided during the hand-washing exercise, and the ORS operation was carried out. The team provided sugar, salt, which had been

made into ready-to-use packages, and enough water.

#### Evaluation Stage

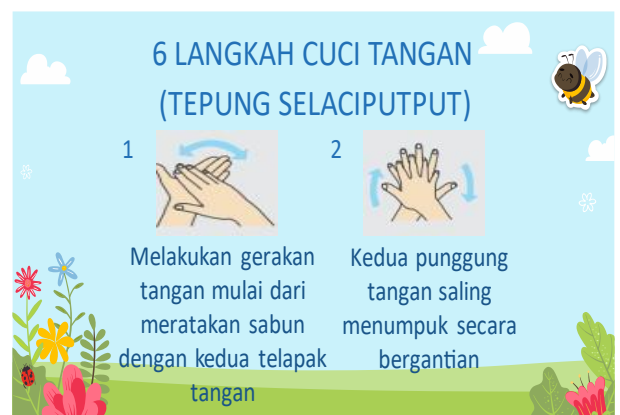
At the evaluation stage after the committee or team carries out the activity to find out the extent to which the results of the activity have been achieved in general, including achievement of goals, success of targets, number of service participants, counseling process, as well as participants' ability to understand the material and so on.

The evaluation results are used as the basis for preparing activity reports. Activity reports are prepared as accountability reports for what has been carried out based on the process of outreach activities in community service.

### RESULTS AND DISCUSSION

This community service was carried out on Saturday, June 5, 2023, which went smoothly and well. After conducting counseling related to hand washing and making ORS, students can understand and demonstrate how to wash hands properly and correctly and how to make ORS properly.

The research results show that washing hands significantly influences the incidence of diarrhea. Washing Good and correct hands can prevent this transmission of diarrhea. Research reports that using ORS and clean living behavior can reduce the death consequences of diarrhea in developing countries. Research conducted in India reported that washing your hands with soap could lower diarrhea incidence \_ by up to 53%. So, with knowledge and understanding about methods of washing hands properly and correctly, students can apply matter in life daily to reduce the incidence of diarrhea, especially in children (Reza, 2022).





Washing hands with soap is one of the sanitation actions by cleaning hands and fingers using water and soap to become clean (1). Washing hands with soap is the process of mechanically removing dirt and dust from the skin of both hands using water and soap. It is a simple, easy, and useful way to prevent various diseases from causing death, which can be



prevented by proper hand washing. Frequent diarrhea and ARI become the reason for the death of children. Likewise, Hepatitis, Typhus, and Bird Flu (2).

People think CTPS is not important, and they wash their hands with soap when their hands smell oily and dirty. Research results from the partnership between the government and private sector about CTPS show that knowledge The public's opinion about CTPS is already high; however, practice in the field is still low (fajarudin, 2018).

Washing Hands with Soap (CTPS) is a simple, easy, cheap, and useful way to prevent several diseases. Because there is several disease and cause of death that can be prevented by proper hand washing. Like a disease, Frequent diarrhea and ARI become the reason for the death of children. Likewise, hepatitis, Typhus, and Bird Flu. The Ministry of Health (2015) stated that the activity of washing hands

with soap was carried out for this purpose lower level Child deaths are mainly related to lack of access to sanitation and health education. According to World Health Organization researchers, washing hands with soap and clean water reduces diarrhea risk by up to 50%. Washing Hands with Soap (CTPS), if practiced in a manner right and correct, is also the Easiest and most effective to prevent outbreak diseases such as ISPA, cholera, worms, flu, and hepatitis A (Ekawaty, 2022)

Based on Avianti's research cited in the journal, Arly stated that during Counseling and Training on Handling Diarrhea in Children and Toddlers at Posyandu "Demak" Banjarmasin Village. The results are: Treating diarrhea at home starts with preventing dehydration when the child has diarrhea, then immediately giving ORS when the child has diarrhea until the diarrhea stops. ORS is given to replace fluids and electrolytes in the body that are wasted during diarrhea. Although water is very important to prevent dehydration, drinking water does not contain electrolyte salts, which are needed to maintain electrolyte balance, so ORS is preferred. The glucose and salt in ORS can be absorbed well by the intestines of diarrhea sufferers.

Children who suffer from diarrhea but are not dehydrated should get additional fluids at home to prevent dehydration. Teach mothers about the 4 rules for caring for them at home (such as mild/moderate dehydration). Give as much fluid as the child can drink; for children aged < 2 years, give 50-100 ml every time the child defecates, and for children aged 2 years or more, give  $\pm$  100-200 ml every time the child defecates. Babies or children with diarrhea are often given breast milk, but if the child does not receive exclusive breast milk, then give other fluids, namely ORS solution, household fluids (such as soup, starch water, and vegetable soup), and boiled water. ORS is given immediately if the child has diarrhea until the diarrhea stops, utilizing children less than 1-year-old being given 50-100 cc of ORS fluid for each bowel movement and children over 1 year of age being given 100-200 cc of ORS fluid for each bowel movement (early, 2018).

In Rahmadini's research (2020), Giving ORS to treat children who experience diarrhea is believed long ago. ORS is also there for sale, but mothers prefer to make ORS themselves at

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home to save more costs. The results of this study follow research conducted by Nugroho (2018) that giving ORS can help treat diarrhea in children. ORS is believed to be able to overcome diarrhea in children because of the content of salt (sodium chloride) and glucose in ORS. According to Indriyani (2017), the glucose content in ORS helps increase the reabsorption of water and electrolytes secreted into the intestinal lumen during diarrhea. This can happen because there is a co-transport mechanism between sodium and glucose. The process of sodium ion receptors and glucose work together to help increase the reabsorption of sodium ions from the intestinal lumen to the plasma cells, which can reduce sodium ion levels in the intestinal lumen. This process can increase fluid absorption by the intestinal mucosa, thereby reducing the water content in the intestinal lumen, which results in improved stool consistency in the event of diarrhea.

## **CONCLUSIONS & RECOMMENDATIONS**

Community service activities regarding using ORS for children's diarrhea and demonstrations of good and correct hand washing through this counseling method provide increased knowledge and understanding to students. In this activity, ORS is also distributed to increase the use of ORS for children's diarrhea and also distribute soap. Washing hands is an effort to maintain hand hygiene and prevent diarrhea. Students and community service participants can understand how to prevent diarrhea in children as the first treatment by making ORS and understanding and demonstrating how to wash hands properly and correctly.

## **SUGGESTION**

Devotion team We hope that the program that has been implemented can be useful and sustainable even though this activity has ended. It is hoped that students and readers will understand that preventing diarrhea with ORS can free society from diarrhea and wash your hands at the right time, namely before and after doing light good activity and weight.

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