



Health Education on Diarrhoea Disease Prevention and Hand Washing Demonstration with Competition for School-Aged Children

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ABSTRACT

Diarrhoea is a disease characterised by changes in the shape and consistency of soft to liquid stools and an increase in the frequency of bowel movements more than 3 or more times a day which may be accompanied by vomiting or bloody stools. The method of implementing this activity is diarrhoea counselling, discussion, question and answer, pre-posttest, demonstration and hand washing competition. Based on the results of a survey that has been conducted, there are still school-age children in Cot Mancang village who do not know about diarrhoea and how to wash hands 6 steps properly and correctly. Activities carried out to 24 school-age children who attended the health education event. With this activity, it is hoped that it can trigger awareness of school-age children to wash their hands. This community service activity may be a good forum for the Cot Mancang village community, especially for school-age children to increase motivation about diarrhoea and how to wash hands 6 steps properly and correctly.

Keywords: Community Health Education, Diarrhea Prevention, Hand Hygiene, School-age Children, Six-step Handwashing

1. Introduction

School-age children are a nutritionally vulnerable and disease-prone age group, especially infectious diseases. Epidemiologically, the spread of environment-based diseases among school children in Indonesia is still high, especially cases of infections such as diarrhoea. Diarrhoeal disease is usually a symptom of infection in the intestinal tract, which can be caused by various bacterial, viral and parasitic organisms (Ministry of Health, 2023). The infection spreads through contaminated food or drinking water, or from person to person as a result of poor hygiene. Diarrhoea can last for several days and can lead to water and salt dehydration necessary for survival (Kelly et al., 2018; Pérez-Gaxiola et al., 2018).

Diarrhoeal disease is still a public health problem in developing countries such as Indonesia (Kyu et al., 2025), due to its high morbidity and mortality (WHO, 2024). In Indonesia, according to the Indonesian Ministry of Health, diarrhoeal disease is an endemic disease and is also a disease that has the potential to become an Extraordinary Event (KLB) accompanied by death. In 2019, the coverage of services for diarrhoea patients at all ages was 61.7% and for children under five was 40% of the target set (Ministry of Health, 2023).

Diarrhoea is a disease characterised by changes in the shape and consistency of soft to liquid stools and an increase in the frequency of bowel movements more than 3 or more times a day which may be accompanied by vomiting or bloody stools (Rohmah & Syahrul, 2017). The high incidence of diarrhoea is caused by many factors including contaminated food and drink due to poor hygiene (Tuang, 2021), viral (Rahmah et al., 2016)

and bacterial infections (Lestari, 2016). Many risk factors can cause diarrhoeal disease. One of the factors includes poor environmental sanitation, unhygienic water supply, and lack of knowledge. In addition, poor personal hygiene factors can cause diarrhoea such as poor hand washing habits, ownership of unhealthy latrines (Rahman et al., 2016).

Based on data obtained in Gampong Cot Mancang from 58 children, 14 (24%) of them have diarrhoeal diseases so that more attention is needed so that it can reduce the prevalence rate in Gampong Cot Mancang. One of the efforts that can be done is to provide health education to children or parents so that diarrhoeal diseases can be prevented then increasing PHBS in preventing the incidence of diarrhoea in Gampong Cot Mancang can be done by conducting a proper Hand Washing Competition in increasing diarrhoeal disease efforts.

2. Methodology

This community service activity was carried out in Gampong Cot Mancang, Aceh Besar with 24 participants consisting of school-age children. The method of implementing this activity is diarrhoea counselling, discussion, questions and answers to facilitate interactive learning. At the beginning of the event, an initial assessment (pretest) will be carried out to see the level of understanding of the participants regarding diarrhoea, causes, signs and symptoms, and preventive measures before being given counseling. At the end, a posttest will also be conducted to evaluate the level of understanding that has been given about diarrhoea and handwashing. The next activity was a demonstration of the 6 steps of proper handwashing and a 6 steps of proper handwashing competition.

3. Results and Discussion

This community education and socialisation activity took place on 20 November 2024 in Cot Mancang village, Aceh Besar, starting at 14.00 and lasting until the event was over. The event began with the registration of participants, after which the facilitator gave a clear explanation of the purpose of the activity. The main focus of this event was to educate participants about diarrhoea, its complications, preventive measures and the next event was a demonstration and competition on proper 6-step handwashing.

The participants were school-aged children in Cot Mancang village, who participated in this health education activity consisting of 24 participants. Before the health education and demonstration activities were carried out, there were 24 school-age children who did not understand about diarrhoea and how to wash their hands. However, after the health education and demonstration, school-age children became more aware of diarrhoea and how to wash hands 6 steps properly and correctly.

From ongoing observations, it appears that there are several lifestyle factors that contribute to the increased risk of diarrhoea in school-age children. Among these factors are unhealthy environment, food and especially improper handwashing habits. School-age children very often do not wash their hands before and after eating and after urinating or defecating, which is a risk factor for diarrhoea.

At the group discussion session, some participants openly expressed their lack of knowledge about the triggers of diarrhoea. For example, they were surprised to learn that there is a strong association between handwashing after urination and defecation. Some participants did not realise that handwashing after urination and defecation can cause diarrhoea. So it also needs parents' support in applying 6-step handwashing in daily life and reminding children to do 6-step handwashing properly.

The objectives of the health education activities have been achieved, it is known from the evaluation carried out by school-age children that they already understand about health education about diarrhoea and how to wash hands 6 steps properly and correctly. The target of service activities to school-age children carried out by the Abulyatama service team. Overall the activities carried out had a positive impact and the activities were well received by the local community, especially school-age children. The participants were actively involved during the discussion and question and answer activities. The response of school-age children showed a strong interest in the activity. Especially because it was held directly in their village, so the

information was more accessible to them. The event ended with closing remarks from the moderator who emphasised the importance of the knowledge gained.

This was followed by a documentation session that captured the participants' enthusiasm and engagement throughout the programme.



Figure 1. Health education on diarrhoea



Figure 2. Demonstration of 6-step handwashing



Figure 3. Handwashing Competition

4. Conclusion

The understanding of school-age children in Gampong Cot Mancang regarding diarrhoeal diseases can be significantly improved through targeted educational efforts. This includes providing comprehensive knowledge about the definition of diarrhoea, its modes of transmission, causes, signs and symptoms, methods of prevention, and possible complications. Furthermore, incorporating demonstrations and practical sessions on proper handwashing techniques, specifically the correct six-step method, has proven to be an effective approach to enhancing their awareness and personal hygiene practices.

To further support these efforts, it is recommended that the provision of knowledge about the impact of diarrhoea be optimised. Emphasis should be placed on the health consequences if the disease is not properly managed, so that children understand the importance of prevention. Additionally, the handwashing demonstrations should be reinforced regularly, enabling school-age children to integrate proper hygiene practices into their daily routines, thereby reducing the risk of diarrhoeal disease transmission.

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