

Introduction to the 5 Pillars of Community-Based Total Sanitation (STBM) Education at Indonesian Schools in Singapore (SIS)

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Abstract

This community service activity was carried out to provide education about the 5 Pillars of Community-Based Total Sanitation (STBM) at Sekolah Indonesia Singapore (SIS). The STBM program is an approach to change hygienic and sanitary behavior through community empowerment, which has five main pillars: (1) Stop Open Defecation, (2) Hand Washing with Soap, (3) Drinking Water and Household Food Management, (4) Household Waste Management, and (5) Household Liquid Waste Management. This program aims to improve public health and prevent environment-based diseases. The service method used is Community Development, with the main activities in socialization, counseling, and evaluating grade 3 and 4 students at SIS. The results of this activity show an increase in students' knowledge, attitudes, and behaviors towards healthy sanitation. Before counseling, most students only understood the importance of washing hands, but after education, they have understood all five pillars of STBM. With the interactive delivery method using posters, students become more enthusiastic and show positive changes in a clean and healthy lifestyle. This activity has succeeded in achieving its goals and is expected to create a generation that is more concerned about environmental cleanliness and sanitation.

Keywords: STBM Education, School Sanitation, Clean Living Behavior, STBM Pillars, Singapore Indonesian School.

1. INTRODUCTION

Community-based total sanitation (STBM) is an approach to changing hygienic and sanitation behavior through community empowerment using triggering, often known as health interventions to generate positive responses from the community. The STBM program has outcome and output indicators (Nugraha 2015). The STBM outcome indicator is to reduce the incidence of diarrhea and other environmental-based diseases related to sanitation and behavior (Arfiah et al. 2021). One of the STBM output indicators is the availability of hand washing facilities (soapy water, hand washing facilities) in every household and public service facilities in a community (such as schools, offices, restaurants, health centers, markets, and terminals). STBM has five pillars, namely pillars, namely: 1) stop defecating indiscriminately, 2) wash hands with soap, 3) manage household drinking water and food, 4) secure household waste, and 5) secure household liquid waste (Mukti et al. 2016). A high level of public health can be realized through the STBM program, also known as community total sanitation (clts). This government program is planned to strengthen efforts to cultivate a clean and healthy lifestyle, prevent the spread of environmentally-based diseases, improve community capacity, and implement the government's commitment to increasing access to sustainable drinking water and basic sanitation (Arfiah et al. 2021).

Health development increases awareness and the ability to live healthily in every community to realize the highest level of public health. Then, in its implementation, it must touch all elements of society and all age groups, including school students. As an international institution, UNESCO declared, "The school environment must be healthy, comfortable, and safe." This declaration is evidence of international attention to school conditions (Azizah et al. 2023). One indicator of clean and healthy living behavior in the school environment that is important for children is hand washing. WHO notes that every year, 100,000 children in Indonesia die from diarrhea. Washing hands properly with soap can reduce the risk of diarrhea by 47% (Rafi et al.

2024). Hand washing is the most important basic technique in preventing and controlling the transmission of infection (Rahmaddiansyah et al. 2024). The concept of sanitation in schools is fundamental because the goal is to prevent various diseases in the school environment (Roisah et al. 2024). Diarrhea and typhoid fever are infectious diseases of the digestive system that impact water and food pollution by bacteria or microbes. 6 Upper respiratory tract infections, pneumonia, and pulmonary tuberculosis are infectious diseases of the respiratory tract system that are the impact of air pollution by chemicals, bacteria, or microbes. Dengue fever and malaria are infectious diseases transmitted through mosquito vector bites (Levina et al. 2024). Diarrhea is a disease that children and toddlers commonly suffer. The environment and hygiene behavior can influence diarrhea. Washing hands with soap can reduce the number of diarrhea sufferers by 44%. Sanitation can reduce the number of diarrhea cases by 32% and water supply by 25% (Mulyati et al. 2024).

In contrast, the source of processed water is 11% . So Indonesia has a target in 2045 in the form of equal distribution of infrastructure supporting sanitation. the infrastructure in question is basic infrastructure, such as sanitation, which has significant implications for public health (Sugiantoro et al. 2024). School sanitation infrastructure is closely related to the quality of education at the school. The more cleanliness is maintained in the school environment, the greater the support for learning and teaching activities will improve the quality of education at the school. Several factors that influence the quality of the school environment are the behavior of school residents related to clean and healthy living and the availability of school sanitation infrastructure. The availability of school sanitation infrastructure is likely good if all school residents have implemented clean and healthy lifestyle standards (PHBS) and the school has adequate sanitation infrastructure (Rafi et al. 2024). Adequate school sanitation infrastructure includes clean water, proper toilets, rainwater drainage channels, trash bins and temporary shelters, hand washing facilities, and menstruation facilities. Elementary schools allow young generations to learn from an early/elementary age. The role of academic education and student behavior starts here so that the quality and quality of education

2. METHOD

The method used in this service is the Community Development method. The service activity was carried out on September 24, 2024. The approach was oriented towards empowering students at school by being directly involved in the service activities. The activity was carried out for one day and was divided into three stages, namely:

a. Socialization

Socialization was carried out at the beginning of the service activity by providing information to students about the PKM activities. With Socialization, it is hoped that students will understand the PKM activities that will be carried out and be motivated to carry out each work program that has been agreed upon with enthusiasm, sincerity, or not forced in order to achieve the goal of increasing knowledge and behavior regarding Education Introduction to the 5 Pillars of Community-Based Total Sanitation (STBM) (Indriyani et al. 2016).

b. Counseling by providing education

Student representatives attended Counseling in the classroom according to the agreement between the partner and the proposing team so as not to interfere with the ongoing activity process. The material will be delivered by the service provider using the poster media that has been provided (Ahyanti and Rosita 2022). Environmental-Based Total Sanitation (STBM) was designed by the government through the five pillars of STBM, namely: (1) Washing hands with soap; (2) Stop defecating in the open; (3) Management of drinking water and household food (4) Management of household liquid waste; (5) Management of household waste.

c. Evaluation Stage

The evaluation stage involves evaluating the knowledge of student representatives through pre-tests and post-tests (using short interviews/test forms) before and after conducting Counseling on the Introduction to Education for the 5 Pillars of Community-Based Total Sanitation (STBM) (Rahmuniyati and Sahayati 2021).

3. RESULT AND DISCUSSION

This community service activity was carried out in September 2024 at the Indonesian School in Singapore. This service activity was attended by 16 students divided into classes 3 (three) and 4 (four). The Counseling activity with Education Introduction to the 5 Pillars of Community-Based Total Sanitation (STBM) aims to improve students' knowledge, attitudes, and behavior towards healthy sanitation. This service activity is based on efforts to form students' awareness and healthy habits; education about good sanitation and personal hygiene in the school environment is fundamental to students' health; this activity not only improves the quality of student's health but also instills clean and healthy living habits from an early age (Herniwanti et al. 2021).

This service activity is based on conditions where children's growth period is between 6 and 12 years old, an age that is prone to disease. From this activity, it can be seen whether students at the Indonesian School in Singapore (SIS) understand healthy sanitation. By increasing students' knowledge about Community-Based Total Sanitation (STBM) after education is carried out, students are expected to create a generation that cares more about sanitation and environmental cleanliness (Muhid and Fahmi 2018).

The initial activities carried out were introducing the community service personnel and socialization carried out at the beginning of the community service activities, in the form of providing information to students of the Indonesian School of Singapore (SIS) about the PKM activities carried out, which was then continued with counseling carried out in the classroom and evaluation stages by evaluating the knowledge of student representatives through pre-tests and post-tests using short interviews conducted before and after counseling was carried out on the Introduction to Education of the 5 Pillars of Community-Based Total Sanitation (STBM) (Hasibuan et al. 2021).

The STBM education activities for students are carried out through educational media such as explanations on posters with the theme '5 Pillars of Community-Based Total Sanitation'. In educational activities, students are taught about stopping open defecation, washing hands with soap, managing safe drinking water and food, managing waste properly, and managing household waste by doing it directly with interactive delivery. All educational posters are distributed and posted in the classroom at the end of the education (Indah et al. 2021).



Figure 1. Introduction of Service to Grade 3 and 4 Students of Singapore Indonesian School (SIS)



Figure 2. Education 5 Pillars of Community-Based Total Sanitation

After understanding the material, students were given education about the 5 Pillars of Community-Based Total Sanitation. Students were very enthusiastic about listening to this education; some students still washed their hands using only water without using soap and ignored hygiene; this was an effort to avoid contamination caused by microorganisms. At the final stage of education, students were given a final evaluation in the form of several questions asked by the community service to students related to the delivery of the material to determine students' understanding of the 5 Pillars of STBM education. Based on the results of short interviews with students, it can be concluded that students have understood the pillars of STBM, which, of course, will implement these pillars in their daily lives.



Figure 3. Introduction and Delivery of the 5 Pillars of STBM to Students of the Indonesian School of Singapore (SIS)

Overall, the community service activities went well and smoothly; the students were also very enthusiastic about participating in education to improve their knowledge and understanding of community service. During the activity, no difficulties were found in the education process because the students were very enthusiastic about this activity. This educational activity hopes that students can apply the 5 Pillars of STBM and apply it as a clean and healthy lifestyle.



Figure 4. *Implementation of the 5 Pillars of STBM Educational Service at the Indonesian School of Singapore (SIS)*

4. CONCLUSION

Community service activities carried out in September 2024 at Sekolah Indonesia Singapura (SIS) successfully improved students' knowledge, attitudes, and behavior towards healthy sanitation. With an interactive delivery method using poster media, education about the 5 Pillars of STBM was successfully delivered to 16 students from grades 3 and 4. The increase in students' knowledge of the importance of good sanitation can be seen from the results of the pretest and posttest. Before the activity, most students only knew how to wash their hands with soap. However, after the education, students understood the five pillars of STBM, namely stop defecating in the open, wash hands with soap, manage safe drinking water and food, manage waste properly, and manage household waste safely. Students' enthusiasm for this educational activity was very high and showed increased clean and healthy living behavior. This activity also instills healthy habits expected to be applied in everyday life, both at school and at home. Overall, this community service activity went well and smoothly without significant obstacles. The hope from this activity is that students can continue to apply the 5 Pillars of STBM in their daily lives, creating a generation that cares more about sanitation and environmental cleanliness.

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