Role Play in Health Education and Clean Lifestyle Behavior Through Hand Washing

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Abstract. Hand washing is very effective in preventing disease and reducing the spread of bacteria when eating. Correct hand washing behavior is influenced by the level of knowledge possessed by the community, especially elementary school children. The importance of knowledge about PHBS, especially hand washing during school-age children which is considered to have the potential to be an agent of change for the community and the surrounding environment. Community service activities for health education PHBS hand washing through the role play method were carried out for students in grades 1 & 2 of Elementary School 014 Sungai Bawang Cultural Village. The results of the activity show that there is an increase in knowledge about hand washing in students so that the knowledge they already have can be maintained and improved through application in everyday life through the supervision of teachers and parents.

Keywords: Elementary School, Role Play, Washing Hand

1 Introduction

Health problems that are prone to be experienced by school-age children are generally related to personal and environmental hygiene such as proper and proper tooth brushing, personal hygiene, the habit of washing hands with soap, and cleaning nails and hair [1]. Based on WHO reports, around 80% of children experience health problems such as infectious diseases (Listiadesti et al., 2020). Children in Indonesia are susceptible to infectious diseases such as respiratory infections, diarrhea, intestinal worms and others [3]. So it is necessary to make efforts in implementing the PHBS program in the school environment regarding hand washing or maintaining hand health (hand hygiene), hand hygiene which is a way to improve individual hygiene. Hand washing day is commemorated every October 15 [4].

Hand washing behavior has been taught and introduced to children from an early age. Hand washing is important because hands are the limbs that are most often in direct contact with the mouth, so they must always be kept clean, especially before and after eating, defecating and urinating, and immediately after and before preparing food. Maximum hand washing is done with clean water, running water and using soap [5]. The act of washing hands is beneficial for keeping hands clean because it can kill microorganisms on hands and has been proven to prevent infectious diseases such as infections that cause diarrhea, ISPA, Covid-19, hepatitis, typhoid, bird flu, diarrhea and other infectious diseases.

According to WHO (2016), there are 6 steps in washing hands properly and correctly with a duration of 20-30 seconds. Before starting, first wet your palms using running water and then add sufficient soap (1) spread the soap with both palms; (2) palm over the back of the left hand and rub the back of the left hand and between the fingers of the left hand, and vice versa, (3) rub both palms and between the fingers; (4) the fingers on the inside of both hands interlock (5) rub the left thumb rotating in the grip of the right hand and do the opposite (6) rotate the fingertips of the right hand in the palm of the left hand and vice versa. Then rinse with running water, then dry with a towel. After that, close the water faucet using a hand covered with a towel to avoid direct contact with the faucet.

Handwashing that is practiced properly and correctly is the easiest and most effective way to prevent the spread of diarrheal diseases. The result of activity conducted by [4] shows that diarrhea, bird flu and pneumonia can be prevented by carrying out the habit of washing hands with soap, and can be used as an indicator of success for Clean and Healthy Behavior (PHBS). Hand washing is very effective in preventing disease and reducing the spread of bacteria when eating [6]. Correct hand washing behavior is influenced by the level of knowledge possessed by the community, especially elementary school children. Knowledge about hand washing, which is one of the determinants of hand washing behavior in school-age children, needs to be studied as basic data in providing nursing interventions [7]. Knowledge can come from experience that individuals have or information from other sources who know better such as parents, teachers, friends, various literature and others. The importance of knowledge about PHBS, especially hand washing at school age which is considered to have the potential to become an agent of change, is the reason for this community service activity to be carried out for students in grades 1 and 2 of the 014 State Elementary School, Sungai Bawang Cultural Village.

2 Methodology

The implementation of this community service activity was carried out by a team of STIKES Dirgahayu Samarinda lecturers through the role-playing method which was attended by 8 students of grades 1 & 12 students of grades 2 of State Elementary School 014 Sungai Bawang Cultural Village. The implementation of the activity is divided into three stages, namely the preparation stage where the executor submits a permit to the puskesmas in charge of the area and the school principal and discusses the type and schedule of activities to be carried out, then the implementing team prepares the tools and materials used, namely soap, hand sanitizers, tissues, trash bins, as well as a flip chart containing the material to be presented. The second stage is the implementation stage which begins with introductions, conveying the objectives of the activity and sharing perceptions through questions and answers as well as a pre-test to determine the level of knowledge of students about hand washing. In the second phase, material was also delivered regarding the important reasons for washing hands, the consequences of not washing hands, when to wash hands and the stages of washing hands in six steps. The role play was carried out during the hand washing practice which was followed by all students enthusiastically. The role play begins with the practice of 6-step hand washing by the activity implementing team, then students are invited to carry out their respective roles and demonstrate how to wash hands in full. each student was given an order "what to do before eating or after going to the toilet" etc. The third stage is evaluation, at this stage all students are asked to directly practice the six steps of washing hands and explain the reasons and the right time to wash hands.

3 Results and Discussion

The implementation of community service activities was attended by students of grades 1 & 2 at State Elementary School 014 Sungai Bawang Cultural Village in full from the beginning to the end of the activity.

ariabel	Before	After
Knowledge		
Not complete	15	0
Complete	5	20

Table 1. The Difference of Hand Washing Knowledge of Students at Elementary School 014 SungaiBawang Cultural VillageYear 2023 (n=30)

The results at table 1 showed that there was an increase in the knowledge of the activity participants which was known from the results of role playing, namely at the beginning of the activity only 5 students were able to do how to wash hands completely, but at the end of the activity all students were able to practice the complete six-step hand washing. The activities are shown in the image below.



Figure 1. Do the Role Play of Hand Washing



Figure 2. Do the Discussion With the Students

Internal and external factors in individual children have an important influence on the ability to wash hands with soap properly. The factors influence the ability to do the hand wash such as lack of facilities available for washing hands at school and lack of health education provided by teachers and health workers, so children do not get complete knowledge about the importance of washing hands with soap with the correct technique so that children are less enthusiastic about washing hands with soap soap and there are still many children who are unable to perform the correct hand washing technique with soap. Elementary school children are a golden period in instilling clean and healthy living knowledge and behavior. At this stage, children are very sensitive to stimuli, so they are easy to guide, direct, and instill good habits because children feel that they are in a period of growth and development. Even though the act of washing hands is a simple activity, it has a big impact on health problems, such as preventing the transmission of infectious diseases. There was statement has written that there is a correlation between hand washing in preventing infection[8]. The same thing was also found in Utomo's statement (2013), which stated that there was a relationship between the behavior of washing hands with soap and the incidence of diarrhea in school-age children ([4]).

There are several factors that influence hand washing, such as knowledge, attitudes, teacher support, peer support, and the availability of hand washing facilities at schools[9]. According to Kushartanti in (Kusumawardani et al., 2020) which explains that there are three factors that influence a child's ability to wash their hands with soap, namely the host (for example, age, gender, level of education, and motivation), environment (for example, environment physical, social environment, health facilities), and agent (lifestyle from using soap to wash hands, school rules, parenting style, availability of educational media, information and existence of UKS). In addition, educators also need to use creative and innovative media in providing health education. One type of method that can be used is the role play method, role play provides opportunities for acting and interacting with peers. Role playing method is one the type of method of simulation that is

implemented involve more than one sense. In role playing, students are required to play an active role, so get experience from playing that role. This method can be used for improve discussion, practice skills, experience, and feel a certain event. By role-playing real-life situations, people will more easily understand the cause of the problem them and the results of their own behavior. The results of this community service activity show that the use of the role play method provides increased knowledge about PHBS hand washing activities for students, this is in line with the results of the study, namely health education using the role play method is more permanent in the memories of school age children due to a deeper reflection process through exploration. feelings and emotions in portraying role play characters. This community service activity result shows that the role play method is effective in increasing the knowledge of school-age children significantly [10]

4 Conclusion

The results of health education community service activities regarding PHBS hand washing activities using the role play method show an increase in students' knowledge, so this method can be applied to providing other health education. The knowledge of students regarding hand washing needs to be maintained through real examples from educators as well as continuous action or applied in everyday life of course through the control role of parents and teachers, so it is also necessary to ensure that parents and teachers have received knowledge of PHBS washing hands properly and correctly.

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References

- [1] E. Gustina, F. Abdussalam, and W. Saputra, "Peningkatan Perilaku Sehat Pada Siswa Sekolah Dasar Melalui Phbs Di Desa Gondanglegi Dan Pucangan, Kecamatan Ambal, Kabupaten Kebumen," J. Pemberdaya. Publ. Has. Pengabdi. Kpd. Masy., vol. 2, no. 1, pp. 59–64, 2019, doi: 10.12928/jp.v2i1.470.
- [2] L. U. Ayi, M. N. Salman, and M. Yesi, "Efektivitas Media Video Terhadap Perilaku Cuci Tangan Pakai Sabun Pada Anak Sekolah: A Literature Review," *J. Menara Med.*, vol. 2, no. 2, pp. 119–127, 2020.
- [3] Kemenkes R1, Profil Kesehatan Indonesa 2019. 2019. [Online]. Available: https://pusdatin.kemkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/Profil-Kesehatanindonesia-2019.pdf
- [4] R. A. Sinanto and S. N. Djannah, "Efektivitas Cuci Tangan Menggunakan Sabun Sebagai Upaya Pencegahan Infeksi," J. Kesehat. Karya Husada, vol. 2, no. 8, pp. 2655–8874, 2020, [Online]. Available: https://doi.org/10.36577/jkkh.v8i2.403
- [5] P. Asda, N. Sekarwati Sekolah Tinggi Ilmu Kesehatan Wira Husada Yogyakarta Jln Babarsari, T. bayan, and C. tunggal, "PERILAKU CUCI TANGAN PAKAI SABUN (CTPS) DAN KEJADIAN PENYAKIT INFEKSI DALAM KELUARGA DI WILAYAH DESA DONOHARJO KABUPATEN SLEMAN Behavior Of Soap Hand Washing And Incidence Of Infection Disease In The Family At Donoharjo Village District Of Sleman," *Politek. Kesehat. Makassar*, vol. 11, no. 01, pp. 2087–2122, 2020.
- [6] N. S. R. Sagune, S. Engkeng, and M. I. Punuh, "Pengaruh Penyuluhan Cuci Tangan Pakai Sabun terhadap Sikap Pencegahan Diare Pada Peserta Didik di SD GMIST Imanuel Ondong Kabupaten Sitaro," *J. KESMAS*, vol. 10, no. 1, pp. 23–30, 2021, [Online]. Available: https://ejournal.unsrat.ac.id/index.php/kesmas/article/view/32215
- [7] F. S. Ikasari and R. Anggana, "Pengetahuan Anak Usia Sekolah tentang Cuci Tangan yang Benar di Kecamatan Martapura," *J. Perawat Indones.*, vol. 4, no. 1, p. 316, 2020, doi: 10.32584/jpi.v4i1.437.
- [8] M. M. Zubaidi, T. Hariyato, and V. M. Ardiyani, "Hubungan Personal Hygene (Cuci Tangan Menggunakan Sabun) dengan Kejadian Penyakit Cacingan pada Anak Kelas I-VI MI Nahdlatul Wathan (NW) Bimbi Desa Rensing Raya Kec. Sakra Barat Kab. Lombok Timur," *Nurs. New*, vol. 2, no. 3, pp. 361–367, 2017.
- [9] N. Mukminah, V. Istiarti, and S. BM, "Faktor Faktor Yang Berhubungan Dengan Praktik Cuci Tangan Pakai Sabun Pada Siswa SD Di Wilayah Kerja Puskesmas Banyuurip Purworejo," J. Kesehat. Masy., vol. 4, no. 5, pp. 354–361, 2016.

[10] L. H. Kusumawardani, A. Kartikasari, and K. N. Pratama, "Efektivitas Role Play Terhadap Pengetahuan Keamanan Makanan pada Anak Usia Sekolah," J. Ilmu Keperawatan Komunitas, vol. 3, no. 2, pp. 22– 28, 2010, [Online]. Available: http://journal.ppnijateng.org/