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THE INFLUENCE OF PARENTAL ROLE AND SCHOOL FACILITIES ON HAND-WASHING BEHAVIOR AMONG PRIMARY SCHOOL STUDENTS

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ABSTRACT

Deaths from diarrhea can be reduced by up to 50%. Washing hands with soap, if done correctly, can prevent diseases such as diarrhea and ARI. The study aims to determine the relationship between the role of parents, facilities, and infrastructure with handwashing behavior in grades 3-6 students at MI Al-Asyirotussyafi'iyah Kebayoran Lama, South Jakarta. This study is a quantitative study with a cross-sectional design. The population in this study was 75 students in grades 3-6. The sampling technique was total sampling. Primary data was obtained by filling out an online questionnaire via Google Forms. There is a significant relationship between the role of parents and students' handwashing behavior with soap, with an OR value of 8.816, which means that respondents with supportive parental involvement are 8.816 times more likely to carry out proper handwashing behavior with soap. There is a statistically significant relationship between facilities and infrastructure with students' handwashing behavior with soap with an OR value of 27.1, which means that respondents with good facilities and infrastructure are 27.1 times more likely to behave well in washing their hands with soap compared to students with poor facilities and infrastructure. In conclusion, the role of parents and good facilities and infrastructure greatly influence students' handwashing behavior with soap. Therefore, parents and schools need to pay more attention to this in order to improve students' handwashing habits.

Kata Kunci:

Perilaku;
Mencuci tangan;
Sabun mandi
Pendidikan kebersihan;
Kebersihan anak

ABSTRAK

Kematian akibat penyakit diare dapat ditekan hingga 50%. Cuci tangan pakai sabun apabila dilakukan dengan benar dapat mencegah penyakit seperti diare dan ISPA. Tujuan penelitian untuk mengetahui hubungan peran orang tua, sarana dan prasarana dengan perilaku cuci tangan pada siswa kelas 3-6 di MI Al-Asyirotussyafi'iyah Kebayoran Lama Jakarta Selatan. Penelitian ini merupakan penelitian kuantitatif dengan rancangan cross sectional. Populasi dalam penelitian ini adalah siswa kelas 3-6 yang berjumlah 75 orang. Teknik pengambilan sampel adalah total sampling. Data Primer diperoleh dengan cara mengisi kuesioner online melalui Google Form. Terdapat hubungan yang signifikan antara peran orang tua dengan perilaku cuci tangan pakai sabun siswa dengan nilai OR = 8,816 yang berarti responden dengan keterlibatan orang tua yang suportif mempunyai kemungkinan 8.816 kali lebih besar untuk melakukan cuci tangan yang benar. perilaku dengan sabun. Terdapat hubungan yang signifikan secara statistik antara sarana dan prasarana dengan perilaku cuci tangan pakai sabun siswa dengan nilai OR = 27,1 yang berarti responden dengan sarana dan prasarana baik memiliki kemungkinan 27,1 kali lebih besar untuk berperilaku baik dalam mencuci tangan pakai sabun dibandingkan dengan siswa dengan sarana dan prasarana kurang baik. Kesimpulannya, Peran orang tua dan sarana prasarana yang baik sangat berpengaruh terhadap perilaku cuci tangan pakai sabun siswa. Oleh karena itu, penting bagi orang tua dan sekolah untuk memberikan perhatian lebih terhadap hal tersebut guna meningkatkan kebiasaan mencuci tangan siswa.

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INTRODUCTION

The application of clean living behavior in everyday life has benchmarks that can be used as a measure that someone is said to have carried out or fulfilled the criteria for implementing clean and healthy living behavior, so clean living behavior has 10 indicators, one of which consists of washing

hands with soap correctly (Javaid et al., 2022; Kruk et al., 2018; Oyedepo, 2012; Šostar & Ristanović, 2023; Tulchinsky & Varavikova, 2000). Deaths from diarrheal diseases can be reduced by up to 50%. Washing your hands with soap, if done correctly, can prevent diseases such as diarrhea and ARI (Ejemot-Nwadiaro et al., 2021; Idya et al., 2023; Karinja et al., 2020; Morse et al., 2019; Noguchi et al., 2021; Nwadiaro et al., 2015). The high incidence rate could be due to the low level of public knowledge about how to wash their hands and the low level of concern for living in a clean and healthy manner (Khan et al., 2021; Omari et al., 2022; Rahman Zuthi et al., 2022; Syania Zahirah et al., 2021).

The death rate due to diarrhea in children under five in Nigeria and India is 42%, and the morbidity rate among children under five with diarrhea is 39% (Demissie et al., 2021; Okafor et al., 2022). Diarrheal disease is the second leading cause of death in children under five years old and is responsible for killing around 525,000 children every year (Shine et al., 2020). In Indonesia, the service coverage for diarrhea sufferers of all ages who come to health facilities is 10% of the estimated number of diarrhea sufferers (Isnawati et al., 2019).

The thoroughness of hand cleansing is more likely to be associated with health education, parents' practice of proper handwashing, greater parent-child bonding, and a greater amount of shared time with parents. Parent-child bonding and shared time are crucial in promoting children's hand hygiene (Song et al., 2013). The determinants of handwashing that were most commonly reported were knowledge, risk, psychological trade-offs or discounts, characteristic traits (like gender, wealth, and education), and infrastructure (White et al., 2020).

It is important to consider parenting practices when examining variations in early childhood health and health care and the relevance of parental behavior in designing interventions for high-risk populations (Serbin et al., 2014a). Prioritizing nutrition, physical activity and child involvement in programme decision-making may enhance parent support for school-based healthy lifestyle programmes (Fernández et al., 2021). Parents consider health education to be mainly their responsibility, or it is a mutual responsibility of the school. Parents living in rural areas and the youngest group of parents were more likely to consider that health education should be shared with schools than parents living in cities or older (Sormunen et al., 2013).

Hand-washing activities at this time have not become a cultural community in Indonesia (Asfar et al., 2020). In Indonesia, washing hands has not become a culture practiced by the wider community, whereas, in everyday life, many people wash their hands only with water (Fitrianola Rezkiki et al., 2020). This lack of hand-washing culture may contribute to the spread of diseases and illnesses, as proper hand hygiene is essential in preventing infections and promoting overall health. Public health campaigns and education initiatives must emphasize the importance of thorough hand washing with soap in order to improve hygiene practices nationwide.

Prevention and appropriate treatment efforts need to continue to be improved to reduce mortality and morbidity due to diarrhea in children under five. Public education about hygiene and healthy lifestyles must also be improved to reduce the risk of transmitting diarrheal diseases (Bauza et al., 2023; Soiza et al., 2018; Webb & Cabada, 2018). An important role is also played by vaccination and easy access to clean water in preventing diarrhea in children. With cooperation between the government, community, and health institutions, the death rate due to diarrhea is hoped to continue to decrease (McClelland et al., 2022; Merid et al., 2023). Support from various parties is also necessary to strengthen diarrhea prevention programs, such as immunization and hygiene campaigns. All these efforts must be carried out continuously so that the morbidity and mortality rates due to diarrhea can be minimized significantly (Das et al., 2013; Karinja et al., 2020).

This research aims to determine the relationship between the role of parents, facilities, and infrastructure and hand-washing behavior among students in grades 3-6 at MI Al-Asyirotussyafi'iyah Kebayoran Lama, South Jakarta. The novelty of this research is that it provides a clear picture of the factors that influence hand-washing behavior in elementary school-age children. It is hoped that the results of the research can be a reference for schools and parents in improving students' hand-washing habits.

Further research could include the need for a more in-depth analysis of specific factors influencing hand-washing behavior, such as cultural norms or individual attitudes. Additionally, exploring the effectiveness of different interventions or educational programs promoting hand-washing in primary school settings could provide valuable insights for future research.

METHOD

Research Design

This research is quantitative and cross-sectional. Quantitative research emphasizes numerical data (numbers) processed using statistical methods.

Location and Research Time

This research was located in MI Al-Asyirotussyafi'iyah Kebayoran Lama, South Jakarta.

Population and Sample

The population of this study was 75 students from grades 3-6 at MI Al-Asyirotussyafi'iyah Kebayoran Lama, South Jakarta. The sampling technique in this research was total sampling. Total sampling is a technique where the sample is equal to the population because the population is less than 100. The researchers chose this particular school due to its convenient location and willingness to participate in the study. Potential biases from this selection include the limited generalizability of the findings to other schools.

Data Collection

Primary data in this research was the students in grades 3-6 at MI Al-Asyirotussyafi'iyah Kebayoran Lama, South Jakarta, who completed an online questionnaire via Google Form. Secondary data for this research was obtained from previous research, official journals, and others. To assess the role of parents and school facilities on students' handwashing behavior, questions with a nominal scale were used. The results of the questionnaire were then entered into an Excel program and interpreted using the SPSS 25 program.

Processing and Analysis of Data

In quantitative research, validity refers to how well research techniques are carried out so that findings and conclusions can be accepted as universal truths. The validity and reliability of the instrument must be evaluated before any data is collected. The data obtained was processed using Excel. The results of the research test were processed using the Chi-square. The software used is SPSS 25. A total of sixty respondents participated in the validity test. Because the population was only 75, 60 samples were used to test the validity and reliability of the questionnaire. A minimum sample size of 30 respondents will be sufficient to assess the reliability of the questionnaire (Bujang et al., 2024). The data processing output (reliability test results) indicates that the role questionnaire has a 0.775 reliability rating. The reliability of the questionnaire is determined by Cronbach's alpha (α) > 0.60. This research has passed the ethical test from Ibn Khaldun University Bogor with the number 010/K.11/KEPK/FIKES-UIKA. Data analysis used the chi-square test with standard p-value, p-value < α (0.05).

RESULT

Table 1 shows that the average age of respondents is between 10 and 12, with the majority of respondents being women. The role of parents is good on average, with a percentage of 81%. Facilities and infrastructure are good on average, with a percentage of 83%. Hand-washing behavior is good on average, with a percentage of 59%.

Table 2 shows that, from a total of 75 respondents, most respondents have poor parental roles and poor handwashing behavior. A small number of respondents have poor parental roles and good handwashing behavior. The results of the research test have a p-value of 0.002 or "p-value <α (0.05)," which means that there is a statistically significant relationship between parental roles and students' handwashing behavior with soap. grades 3-6 MI Al-Assyirotussyaf'iyah Kebayoran Lama, South Jakarta, with an OR value = 7.51, which means that respondents who have good parental roles are 8.816 times more likely to behave well in terms of washing hands with soap compared to students with poor parental roles. The results of this study can be integrated into a broader health education curriculum in schools, emphasizing the importance of hygiene practices as part of a healthy lifestyle.

Table 3 shows that most of the 75 respondents are in poor facilities and infrastructure and have poor hand-washing behavior. Most respondents are in the category of good facilities and infrastructure and good hand-washing behavior. The results showed that the p-value is 0.000 or "p-value < α (0.05)," which means there is a statistically significant relationship between facilities and infrastructure and students' hand-washing behavior with soap. Class 3-6 MI Al-Assyirotussyaf'iyah Kebayoran Lama, South Jakarta, with a value of OR = 27.1, which means that respondents with good facilities and infrastructure are 27.1 times more likely to behave well regarding washing hands with soap than students/ female students with poor facilities and infrastructure.

Table 1. Respondent Characteristics

Variable	N	Percentage
Age		
8-9	29	39%
10-12	46	61%
Gender		
Male	31	41%
Female	44	59%
The role of parents		
Poor	14	19%
Good	61	81%
Facilities and infrastructure		
Poor	13	17%
Good	62	83%
Hand-washing Behaviour		
Poor	31	41%
Good	44	59%

Table 2. Relationship between the role of parents and the hand washing behavior of students at MI Al-Assyirotussyaf'iyah

	Hand Washing Behavior							
The role of parents	**Poor**		**Good**		Total		**P-Value**	**OR (CI 95%)**
	n	**%**	**n**	**%**	**n**	**%**		
Poor	11	78.6	3	21.4	14	100	0.002	7.51 (1,883-29,998)
Good	20	32.8	41	67.2	61	100		
Total	31	41.3	44	58.7	75	100		

Table 3. Relationship between Facilities and Infrastructure and Handwashing Behavior of Students at MI Al-Assyirotussyaf'iyah

Facilities and infrastructure	Hand Washing Behavior						P-Value	OR (CI 95%)
	Poor		Good		Total			
	n	%	n	%	n	%		
Poor	12	92.3	1	36.4	13	100	0,000	27.1 (3,292-224,058)
Good	19	30.6	43	69.4	62	100		
Total	31	41.3	44	58.7	75	100		

DISCUSSION

There is a relationship between the role of parents and hand-washing behavior among respondents. Respondents with good parental roles tend to have good hand-washing behavior, while respondents with poor parental roles tend to have poor hand-washing behavior. This shows that the role of parents has a significant influence on children's handwashing behavior. Parents need an active role in teaching and reinforcing good hand-washing habits in children in order to prevent the spread of disease through contact with germs and bacteria (Fradianto et al., 2022; Sobel & Stricker, 2022; Younie et al., 2020a). Parents can set a good example by always washing their hands before eating or after using the toilet (Admasie et al., 2022; Lange et al., 2022; Mihalache et al., 2023; Ramli et al., 2022). A good culture of hand washing can also be instilled in the family by implementing everyday habits such as singing songs when washing hands or giving rewards to children who wash their hands diligently (Nurhanifah, 2022). This way, good hand-washing behavior will become part of the family's daily habits. Socioeconomic and parental education can also influence children's hand-washing habits, so parents must pay more attention. With attention and support from parents, it is hoped that children will get used to always washing their hands properly and keeping their bodies clean.

Apart from that, parents can also teach children about the importance of washing their hands by providing simple explanations and practicing it regularly at home (Biezen et al., 2019; Mengistu et al., 2022; Wijiastuti et al., 2021; Xuan et al., 2013). In teaching good hand-washing habits, parents can also use visual media, such as posters or videos that show the correct steps for washing hands (Criony, 2022; Crosby et al., 2020). Parents can also involve children in hand-washing activities together so that children feel that washing their hands is a fun and important thing to do. This can help children understand and remember the correct hand-washing steps. Parents can also set a good example by always washing their hands before and after eating and after using the toilet so that children will imitate this habit. Parents can increase children's motivation and desire to do it regularly by providing praise and rewards when children wash their hands properly. Parents can also teach children the importance of washing their hands to maintain health and prevent the spread of disease (Rezkiki et al., 2020).

This study's results show that parents' role has a significant influence on the hand-washing behavior with soap of students in grades 3-6 at MI Al-Assyirotussyaf'iyah Kebayoran Lama, South Jakarta. Respondents with a good parental role have a greater chance of behaving well when washing their hands with soap. This shows the important role of parents in forming good hand-washing habits in children. By providing good examples and guidance, parents can influence children's behavior in maintaining their cleanliness and health (Serbin et al., 2014b). According to (Chowdhury & Chakraborty, 2017) research, parental support in forming good hand-washing habits in children can also help prevent the spread of infectious diseases in the school environment and surrounding communities. Therefore, the role of parents in educating children about the importance of washing their hands with soap should not be underestimated.

Parents can also teach children the importance of washing their hands with soap after using the toilet, playing outside the house, and before eating. Moreover, parents can also remind children always to bring hand sanitizer when traveling to keep their hands clean. By instilling these habits early on, children can develop good hygiene practices that will benefit them throughout their lives. Teaching children about proper hand hygiene is essential in preventing the spread of germs and illnesses (Younie

et al., 2020b). This can help protect themselves and those around them from getting sick. By prioritizing hand hygiene, parents can help their children stay healthy and reduce the risk of infections.

The role of parents and facilities has a significant effect. This is because parents greatly influence children's character and behavior, while good facilities can create a healthy and safe environment for child development. The combination of these two factors can have a significant positive impact on the growth and development of children. Parents can also provide children with important emotional support and motivation, while adequate facilities can improve their overall quality of life. Thus, parents and good facilities complement each other in creating ideal conditions for children's development (McConkey et al., 2023).

There is a relationship between the quality of facilities and infrastructure and the respondent's hand-washing behavior. Respondents with poor facilities and infrastructure tend to have poor hand-washing behavior. Meanwhile, respondents with good facilities and infrastructure tend to have good hand-washing behavior. This shows that the quality of facilities and infrastructure significantly influences respondents' handwashing behavior. According to (Ezezika et al., 2023) research, the government and related institutions need to improve the quality of sanitation facilities and infrastructure to increase society's handwashing behavior. In this way, it can be hoped that cleanliness and public health can improve.

Efforts are needed to improve the quality of facilities and infrastructure to encourage good handwashing behavior in the community. These efforts can be made by improving clean water facilities, providing soap and hand sanitizer that are easily accessible, and providing education about the importance of washing hands regularly. In addition, it is also important to involve the community in planning and developing infrastructure that suits their needs in order to increase compliance in maintaining hand hygiene (Gould et al., 2017).

It is hoped that with adequate facilities, all students will be more motivated to keep their hands clean. This can help prevent the spread of disease in the school environment and improve students' overall health. As a preventive measure, schools need to pay attention to this aspect to make the learning environment healthier and more comfortable for students. In this way, students' welfare and learning achievements can be well maintained. The important role of schools in providing adequate facilities can also create a safer and more comfortable learning environment for students. In this way, efforts to prevent the spread of disease can be carried out effectively. According to (Monteiro et al., 2021), research shows that collaboration between schools, students, and parents in maintaining the cleanliness of the school environment is the main key to creating an optimal learning environment. Through this joint effort, a healthy and comfortable learning environment is hoped to be created for all parties involved.

There is a need for support from the government or related institutions to improve sanitation facilities in schools. The role of parents can be more practical, such as encouraging socialization or training parents about clean living habits. With strong support from the government or related institutions, schools can obtain the funds and technical assistance needed to improve their sanitation facilities. In addition, involving parents in this effort can also help create a healthier and cleaner school environment for students.

The findings could be integrated into broader health education curricula in schools, emphasizing the importance of hygiene practices as part of a healthy lifestyle. This can help improve overall health outcomes among students and promote positive behaviors that can prevent the spread of illnesses in school settings. Additionally, further research could explore the impact of parental involvement on other health-related behaviors among students to enhance the effectiveness of health education programs.

Further research could include a more in-depth analysis of specific factors influencing handwashing behavior, such as cultural norms or individual attitudes. Additionally, exploring the effectiveness of different interventions or educational programs promoting hand washing in primary school settings could provide valuable insights for future research. The limitation is the limited generalisability of the findings to other schools.

CONCLUSION AND SUGGESTION

The role of parents has a strong influence on children's hand-washing habits with soap. Out of a total of 75 respondents, 11 (78.6%) respondents in the category of the parental role are not good and have poor hand-washing behavior, and 3 (21.4%) have a poor parental role and good hand-washing behavior. Respondents in the good parental role and poor hand washing behavior category are 20 (32.8%), and the good parental role and good hand washing behavior are 41 (67.2%). Therefore, parents must provide good examples and education regarding the importance of hand hygiene. Environmental factors also influence children's handwashing habits at school. Therefore, schools need to ensure that adequate hand-washing facilities are available. Support from schools and a clean environment can help strengthen children's handwashing habits. Collaborative efforts between parents, schools, and the environment can increase awareness of the importance of maintaining hand hygiene. Through cooperation between all relevant parties, it is hoped that children's hand-washing habits can be maintained well and the spread of disease will be prevented. This is expected to positively impact the health and welfare of children in the school environment. The specific strategy can be implemented by implementing handwashing education programs in schools and at home, reinforcing the importance of proper hand hygiene practices. By working together, parents and educators can create a supportive environment encouraging children to develop lifelong habits that promote good health and well-being. Suggestions that can be made are to maximize the role of schools in providing facilities and the role of parents in forming habits from home. Support from schools and a clean environment can help strengthen children's handwashing habits. Through good cooperation between all related parties, it is hoped that children's handwashing habits can be adequately maintained and prevent the spread of disease, which will positively impact the health and well-being of children in the school environment.

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