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The Effectiveness Of Health Promotion On Handwashing Behavior With Soap In School Children

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ABSTRACT

Handwashing with soap (HWWS) is a clean and healthy lifestyle behavior that is effective in preventing various infectious diseases such as diarrhea and respiratory tract infections. School-age children are a group that is vulnerable to disease due to lack of hygiene practices. Health promotion in schools is an important strategy to improve HWWS behavior in children. This study aims to determine the effectiveness of health promotion on handwashing with soap behavior in school children. The study used a quasi-experimental design with a pretest - posttest approach. The study sample was 60 elementary school students selected using a purposive sampling technique. Data were collected through observation and questionnaires on HWWS behavior before and after health promotion. Data analysis used a paired t- test. The results showed a significant increase in HWWS behavior from an average score of 56.4 ± 9.2 to 78.6 ± 8.5 after the health promotion intervention ($p < 0.001$). It was concluded that health promotion is effective in improving handwashing with soap behavior in school children.

Keywords: Health Promotion, Handwashing with Soap, Health Behavior, School Children

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1. Introduction

Clean and healthy living behaviors are crucial for maintaining public health. One crucial hygiene practice is handwashing with soap (HWWS). HWWS has been proven to reduce the risk of transmitting various infectious diseases, particularly diarrhea and acute respiratory infections.

School-age children are a highly vulnerable group to infectious diseases due to their frequent group activities and suboptimal hygiene habits. Lack of knowledge and awareness about the importance of handwashing with soap and water (CTPS) can increase the risk of disease transmission in the school environment.

Health promotion is an effective strategy for improving public health knowledge, attitudes, and behaviors. Through appropriate educational activities, students can understand the importance of hand hygiene and incorporate handwashing (HWHS) habits into their daily lives.

This study aims to analyze the effectiveness of health promotion on changes in handwashing behavior with soap in school children.

2. Research Methods

a. Research Design

This study uses a quasi-experimental design with a pretest - posttest approach.

b. Population and Sample

The research population was all elementary school students in the research area. The research sample consisted of 60 students selected using purposive sampling technique.

c. Inclusion Criteria

1) Students in grades IV–VI of elementary school
2) Willing to participate in health promotion activities
3) Present during the research process

d. Research Variables

Independent variables:

- Health promotion

Dependent variable:

- Hand washing behavior with soap

e. Research Procedures

1) Measurement of CTPS behavior before intervention (pretest)
2) Providing health promotion through CTPS counseling and demonstrations
3) Re-measurement of CTPS behavior after intervention (posttest)

f. Data collection

Data is collected through:

- CTPS behavior questionnaire

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- Direct observation of hand washing practices

g. Data analysis

Data analysis using:

- Descriptive analysis
- Paired t- test with a significance level of 0.05.

3. Research Results And Discussion

a. Research Result

1) Respondent Characteristics

This study involved 60 elementary school students in grades IV, V, and VI. Respondent characteristics included gender and grade level.

Table 1.
Respondent Characteristics

Characteristics	n	%
Gender		
Man	32	53.3
Woman	28	46.7
Class		
Class IV	20	33.3
Class V	22	36.7
Grade VI	18	30

The distribution of respondents shows that the majority of students are in grade V. Children at elementary school age have good learning abilities and are relatively easy to accept new information, so that health promotion interventions in this age group can have a significant impact on changes in health behavior.

2) Handwashing Behavior Before Health Promotion

Table 2.
Distribution of CTPS Behavior Before Intervention

Behavior Category	n	%
Good	18	30
Not enough	42	70

The results of the study showed that before being given health promotion, most students did not have good handwashing habits with soap.

Lack of CTPS behavior in students can be caused by several factors, including:

- Lack of knowledge about the importance of washing hands
- Habits that have not been formed early on

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- Limited hand washing facilities in the school environment

This condition shows that health education interventions are very necessary to increase students' awareness of the importance of maintaining hand hygiene.

3) Handwashing Behavior After Health Promotion

Table 3.
Distribution of CTPS
Behavior After Intervention

Behavior Category	n	%
Good	44	73.3
Not enough	16	26.7

After receiving health promotion, there was a significant improvement in student's handwashing behavior. Most students began to understand the importance of washing their hands before eating, after playing, and after using the toilet.

This increase shows that health education conducted through counseling and demonstration methods can have a positive impact on changing student behavior.

4) Comparison of CTPS Behavior Scores Before and After Intervention

Table 4.
Handwashing Behavior Score

Measurement	Mean ± SD
Pretest	56.4 ± 9.2
Posttest	78.6 ± 8.5

The average increase in CTPS behavior scores was 22.2 points after providing health promotion.

The results of the paired t- test show the following values: $p < 0.001$

This shows that health promotion has a significant influence on increasing handwashing behavior with soap in school children.

5) Analysis of CTPS Behavior Improvement

Table 5.
Changes in CTPS Behavior

Change Category	n	%
Increase	38	63.3
Still	16	26.7
Decrease	6	10

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Most students experienced an improvement in their CTPS behavior after receiving health promotion. This indicates that the educational intervention was able to positively influence students' health behavior.

b. Discussion

The study results showed that health promotion significantly increased handwashing behavior with soap among schoolchildren. Following health education, there was a significant increase in students' handwashing with soap (CTPS) practices.

Health promotion through education and demonstrations provides students with a better understanding of the importance of maintaining hand hygiene. Furthermore, the demonstration method helps students directly understand the steps for proper handwashing.

According to health behavior theory, behavioral change is influenced by increased individual knowledge and awareness of the importance of a health practice. When students receive sufficient information about the benefits of handwashing with soap, they tend to be more motivated to implement this behavior in their daily lives.

In addition to knowledge, the school environment also plays a crucial role in shaping students' health habits. The availability of adequate handwashing facilities, such as handwashing stations and soap, can encourage students to regularly practice handwashing (HWHS).

The findings of this study are in line with various previous studies which state that health promotion in schools is an effective strategy in improving clean and healthy living behavior in children.

Changes in health behavior are not solely influenced by health promotion. Other factors such as teacher support, family habits, and the social environment can also influence children's CTPS habits.

Efforts to improve CTPS behavior in school children need to be carried out sustainably through an integrated school health program.

- **Implications of School Health Programs**

The results of this study indicate that health promotion plays a crucial role in improving clean and healthy living behaviors among school children. Therefore, health education activities regarding hand hygiene need to be conducted routinely in the school environment.

Providing adequate sanitation facilities and support from teachers and health workers can help establish good handwashing habits in students.

4. Conclusion And Suggestions

a. Conclusion

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Health promotion has proven effective in increasing handwashing with soap among schoolchildren. After health education, there was a significant increase in students' handwashing with soap (HWWS) practices.

b. Suggestion

1) Schools need to increase health promotion activities regarding hand hygiene.
2) The provision of hand washing facilities in schools needs to be improved.
3) Further research can examine other factors that influence CTPS behavior in school children.

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