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The Influence of Health Education on Adolescents' Knowledge of Personal Hygiene Zir Bin Hubaisy

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ABSTRACT

Introduction: Personal hygiene is an essential aspect of adolescent health because this developmental stage is associated with an increased risk of health problems, including diarrhea, dental caries, skin infections, and other communicable diseases. Proper personal hygiene practices involve maintaining the cleanliness of the hair, scalp, eyes, nose, ears, skin, hands, feet, nails, and genital area. Improving adolescents' knowledge through health education is considered an effective strategy for promoting healthy hygiene behaviors.
Objective: This study aimed to determine the effect of health education on adolescents' knowledge of personal hygiene at MTAQ Zir Bin Hubaisy in 2025.
Method: This study employed a pre-experimental design using a one-group pretest–posttest approach. A total of 30 adolescents aged 12–14 years were recruited using consecutive sampling. Data were collected using a structured questionnaire to assess participants' knowledge of personal hygiene before and after the health education intervention. Data were analyzed using the appropriate statistical test with a significance level of $p < 0.05$.
Result: The findings demonstrated a significant improvement in adolescents' knowledge of personal hygiene following the health education intervention ($p = 0.001$), indicating that health education effectively increased participants' knowledge.
Conclusion: Health education significantly improves adolescents' knowledge of personal hygiene. Implementing regular health education programs in schools and other educational settings is recommended to enhance adolescents' awareness and promote healthy hygiene practices.

Keywords: adolescents, health education, personal hygiene

Introduction

Personal hygiene is one of the basic human needs. Personal hygiene, or personal cleanliness, is a person's effort to maintain personal cleanliness and health to achieve physical health and prevent disease (Hidayah, 2020). Personal hygiene includes maintaining the cleanliness of the scalp, hair, eyes, nose, hands, feet, skin, ears, nails, and genital area. Personal hygiene is carried out to maintain personal hygiene and prevent disease (Suprobo et al., 2022).

Personal hygiene plays a crucial role in adolescents. This is because the school-age group is a critical age group, prone to health problems such as diarrhea, toothache, skin diseases, and so on. Poor personal hygiene is more common in children with negative attitudes, with a prevalence of approximately 53.3% compared to children with positive attitudes, which is approximately 5.6%. Frequent health problems in school children are caused by poor personal hygiene, which can increase the prevalence of diseases such as diarrhea, worms, tooth decay, head lice, and skin diseases (Januariana, et al., 2022).

The World Health Organization (WHO) (2024) stated that the prevalence of child deaths worldwide due to poor personal hygiene practices is increasing annually, with 58% of cases occurring in 2022, 59% in 2023, and increasing to 59.6% in 2024.

Based on the Basic Health Research (Riskesdas) Report (2018), handwashing is taken for granted by the public. Proper handwashing habits among children in Indonesia are still relatively low, with soap use for handwashing only 24.5%. This significantly impacts the health of school-age children and can lead to illnesses due to poor personal hygiene.

According to the 2007 Basic Health Research (Riskesdas), the prevalence of school-age children practicing personal hygiene was 23.2% (Riskesdas, 2007). Data from 2013 showed that the prevalence of school-age children practicing personal hygiene was 47% (Riskesdas, 2013). Meanwhile, data from 2018 showed that the prevalence of school-age children practicing personal hygiene was 49.8% (Riskesdas, 2018). This indicates that personal hygiene practices among school-age children in Indonesia have increased both at home and at school. However, many school-age children still lack knowledge about personal hygiene and practice it.

As educational institutions, schools play a strategic role in health promotion efforts. This is because most children aged 5-19 years spend the longest time in educational institutions. School-age children generally spend a quarter of their daily time at school, interacting with their peers. School children have numerous activities, often neglecting personal hygiene. Children's habits that do not maintain personal hygiene will impact their health and can lead to health problems (Aminah et al., 2023).

Fulfillment of personal hygiene is influenced by various factors, such as cultural factors, individual or family social values, knowledge about personal hygiene, and perceptions of self-care (Pandowo & Kurniasari, 2019). Preventive measures that need to be provided include knowledge of personal hygiene, which plays a crucial role in a child's growth and development. Elementary school children aged 6-12 years are vulnerable to health problems during their development. (Anggraini Lutfita, et al., 2017).

Knowledge of personal hygiene is crucial because it can improve health. Individuals with knowledge of personal hygiene will consistently maintain personal hygiene to prevent illness. One way to increase knowledge about personal hygiene is through health education. Health education can be provided through outreach in schools or the community (Hidayah, 2020).

Providing health education using the lecture method regarding personal hygiene to children can increase children's knowledge, awareness, and enthusiasm for implementing personal hygiene at home and at school so that children can avoid disease. This is supported by Fuad's (2019) research conducted using an experimental method in a "One Group Pretest-Postest" design on 32 student respondents aged 12 to 14 years old. The results showed that before the provision of health education, more personal hygiene was poor than good. After the provision of health education, more personal hygiene was good than bad. This research shows that there is an effect of health education on personal hygiene. In this study, personal hygiene includes washing, bathing, caring for hair, ankles, hands, nails, teeth, mouth, and genital area cleanliness. In addition, Hidayah's (2020) research also proved that there was a significant difference between the level of knowledge, attitudes, and personal hygiene actions before and after being given health education using the lecture method. This study explains that changes in children's personal hygiene behavior are also influenced by internal factors such as age and intelligence level, as well as external factors such as information, social, and cultural factors.

Based on a survey conducted by researchers in January 2025 among 34 children at MTAQ Zir Bin Hubaisy, several conditions related to hygiene were identified, including understanding, behavior, and available facilities. Observations indicated that many students had not yet implemented personal hygiene practices, such as knowledge and practice of handwashing.

Based on the above background, the authors were interested in conducting research on the influence of health education on personal hygiene on adolescents at MTAQ Zir Bin Hubaisy in 2025.

Objective

. The purpose of this study was to determine the effect of health education on personal hygiene knowledge among adolescents at MTAQ Zir bin Hubaisy in 2025.

Method

This study employed a quantitative research design using a pre-experimental one-group pretest and posttest approach to determine the effect of health education on adolescents' knowledge regarding personal hygiene. The study was conducted at MTAQ Zir Bin Hubaisy from July 25 to August 5, 2025.

The population consisted of all adolescent students aged 12–14 years enrolled at the institution during the study period. A total of 30 respondents were selected using a consecutive sampling technique based on the inclusion criteria. The inclusion criteria were adolescents aged 12–14 years, willing to participate in the study, able to communicate effectively, and present during the intervention sessions. Respondents who did not complete the pretest or posttest questionnaires were excluded from the study.

The intervention consisted of health education regarding personal hygiene delivered through lecture and audiovisual educational media. The educational materials included hand hygiene, body cleanliness, oral hygiene, nail care, hair care, and genital hygiene. Before the intervention, respondents completed a pretest questionnaire to assess their baseline knowledge of personal hygiene. After the health education session, respondents completed the same questionnaire as a posttest to evaluate changes in knowledge levels.

Data were collected using a structured questionnaire that had been adapted to the respondents' characteristics. The questionnaire measured respondents' knowledge related to personal hygiene practices and was administered directly by the researchers.

Data analysis was performed using univariate and bivariate analyses. Univariate analysis was used to describe respondents' demographic characteristics and knowledge scores before and after the intervention. Bivariate analysis was conducted using the Paired Sample t-test to determine differences in respondents' knowledge levels before and after receiving health education. Statistical significance was established at a p-value <0.05 with a 95% confidence interval.

Result

Table 1. Average Respondents' Knowledge Score Before and After Health Education on Personal Hygiene

Variabel	Mean	SD	SE	*p -value*
Pretest	2.10	0.316	0.100	0.001
Post test	2.80	0.422	0.133	

The table above shows that the average level of respondents' knowledge before receiving health education on personal hygiene was 2.10, categorized as sufficient, while the average level of respondents' knowledge after receiving health education on personal hygiene increased to 2.80, categorized as good. The statistical analysis yielded a p-value of 0.001 ($p < \alpha = 0.05$), thus rejecting H2. This indicates a significant difference between the average level of respondents' knowledge before and after receiving health education on personal hygiene. Therefore, it can be concluded that health education significantly improved respondents' knowledge.

Discussion

Knowledge is a cognitive domain that forms the basis for the formation of health attitudes and behaviors. Increased knowledge is usually preceded by a process of information acquisition, understanding, and memory storage, which then influences intentions and actions (knowledge → attitude → practice). In health promotion, knowledge change can be achieved through systematic health education strategies, one of which is utilizing audiovisual media. This media has proven effective because it combines visual and auditory channels, thereby increasing attention, comprehension, and information retention. This aligns with Bandura's social-cognitive learning theory, which emphasizes the importance of observational learning, where individuals can more easily imitate correct behavior after seeing examples or models through audiovisual media. Therefore, procedural material, such as personal hygiene steps, will be more easily remembered when presented visually and auditorily simultaneously.

The results of this study indicate that the average knowledge of respondents before the intervention was 2.10, categorized as sufficient, and increased to 2.80, categorized as good after receiving health education on personal hygiene. The statistical test results showed a significant difference with a p-value of 0.001 ($p < 0.05$), thus concluding that the intervention was effective in improving respondents' knowledge. This increase in the average score indicates that respondents not only received information but were also able to understand and internalize the material presented, resulting in changes in their cognitive domain.

This finding aligns with various previous studies. Research conducted by Sari (2021) demonstrated a significant increase in students' knowledge after receiving health education using audiovisual media on clean and healthy living behaviors. Another study by Handayani (2022) also found that the use of educational videos in personal hygiene education for adolescents in orphanages significantly increased knowledge scores. Furthermore, a study by Putri et al. (2023) demonstrated that audiovisual media was more effective than conventional lecture methods in improving housewives' understanding of hand hygiene practices. These results further strengthen the findings of this study that audiovisual media is an effective educational tool for improving health knowledge. Furthermore, research by Freeman et al. (2014) in a systematic review reported that hygiene promotion programs utilizing education and visual media were able to improve handwashing knowledge and behavior in various countries, and WHO (2009; 2020) emphasized that interventions that integrate education, visual reminders, and real-life demonstrations can improve adherence to hand hygiene practices. In line with this, Notoatmodjo (2012) stated that knowledge is a very important predisposing factor in influencing health behavior, while Arsyad (2013) emphasized the effectiveness of audiovisual media in clarifying messages and reducing cognitive load so that information is easier to understand.

Based on theory and previous research evidence, researchers argue that health education on personal hygiene using audiovisual media has been proven effective in significantly increasing respondents' knowledge. This success is likely influenced by the presentation of clear, concrete material, accompanied by easy-to-understand visual examples. However, researchers believe that increasing knowledge alone is not enough to guarantee consistent behavioral change, so further strategies are needed in the form of reinforcement such as visual reminders in the respondents' environment, skills training (return demonstration), and environmental support in the form of the availability of adequate hygiene facilities. Researchers also have two important assumptions: first, the more frequently respondents are exposed to consistent and high-quality audiovisual media, the higher their knowledge retention will be; second, education level and previous experience can influence the speed at which respondents understand the material, so groups with lower educational backgrounds may require higher intensity of counseling. With these ongoing efforts, it is hoped that the knowledge gained can be translated into better and more sustainable daily personal hygiene practices.

Conclusion

Based on the discussion in the previous chapters and answering the problem formulation, research objectives, and referring to the process and results of data analysis in this study, the following conclusions can be drawn: There is a significant influence of providing health education on the level of children's knowledge about personal hygiene before and after being given health education interventions in the research environment in 2025.

Authors' contribution

Each author contributed equally in all the parts of the research. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

Conflict of interest

The researchers stated that there is no conflict of interest related to the implementation and publication of the results of this research. The entire research process, from planning, data collection, analysis, to report preparation, was carried out independently without any influence or pressure from any third party. A commitment to research ethics is upheld throughout the research process, ensuring transparency, accuracy and honesty in reporting results. Respondents' participation was voluntary with informed consent, and their confidentiality and privacy were maintained in accordance with applicable research ethics standards. With this statement, researchers hope that the research results can be trusted and used as a valid reference for the development of science and health practices related to ethnomedicine and reproductive health.

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