



# The effect of health education on personal hygiene on students' knowledge

Samfriati Sinurat<sup>1</sup>, Murni S D Simanullang<sup>2</sup>, Mardiaty Barus<sup>3</sup>, Gracia A Marbun<sup>4</sup>

<sup>1,2,3,4</sup>Program Studi Ners, STIKes Santa Elisabeth Medan, Indonesia

## Article Info

### Article history:

Received Mar 25, 2023

Revised Apr 10, 2023

Accepted Apr 19, 2023

### Keywords:

Health Education;  
Knowledge;  
Personal Hygiene;  
Students.

## ABSTRACT

Personal hygiene has a very important role in the growth and development of an elementary school child who is vulnerable to health problems. So that every student strives to maintain and carry out personal hygiene to maintain and carry out personal hygiene to prevent illness. So a student needs a good understanding of knowledge about good personal hygiene to be able to improve his health. One strategy to increase children's knowledge about personal hygiene is to provide health education. Health education is a learning process which means that in education there is a process of growth, development, or change towards a better and more mature individual, to change the behavior of the target from not knowing to knowing. The aim of this research is to determine the effect of health education on personal hygiene on the knowledge of students at SD HKBP Padang Bulan, Medan. The research design used was a pre-experimental design with a one-group pretest – posttest design, with a total of 64 respondents. The knowledge of HKBP Padang Bulan Elementary School students in Medan before being given health education with sufficient knowledge results as many as 34 respondents (53.1%) and after being given health education with good knowledge results as many as 64 respondents (100.00%). The results showed that there was an effect of health education on personal hygiene on the knowledge of SD HKBP Padang Bulan Medan students with a p-value of 0.000. The results of this study can be used as information for students of SD HKBP Padang Bulan Medan as the management of personal hygiene techniques to detect how clean hair, mouth & teeth and hands are.

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## Corresponding Author:

Gracia Anggita Marbun,  
Program Studi Ners,  
Sekolah Tinggi Ilmu Kesehatan Santa Elisabeth Medan,  
Jl. Bunga Terompet No. 118 Medan, Sumatera Utara, 20131, Indonesia,  
Email: [anggitagracia50@gmail.com](mailto:anggitagracia50@gmail.com)

## 1. INTRODUCTION

Personal hygiene comes from the Greek word personal which means individual and hygiene means healthy (Smith, 2008). Personal hygiene is a way of human self-care to maintain their health. Personal hygiene is very important to note (Leibler et al., 2017) (Smith, 2008). Maintenance of personal hygiene is necessary for individual comfort, safety and health (Duff, 2012). Personal hygiene is an effort made by individuals to maintain personal hygiene in order to avoid disease. Fulfillment of personal hygiene is influenced by various factors such as cultural factors, individual or family social values, knowledge of personal hygiene and perceptions of self-care (Verarica & Mahaji, 2017). Associated with pre-school

age children, personal hygiene plays an important role. The low resistance of children at this age allows many diseases to be suffered if the child's personal hygiene is not paid attention to.

One form of personal hygiene is hair care, where hair care can be an indicator of general health status, hormonal changes, physical emotional stress, and diseases that can affect hair characteristics (Russell et al., 2012)(Rahman et al., 2018). The impact of hair care physically can be in the form of a person's appearance and well-being which often depends on the way his hair looks, because hair is a part of the body that has a function as protection and temperature regulation, and through hair changes in one's own health status can be identified (Batchelor, 2001). Another impact of hair care is psychosocial which results in a feeling of comfort (Ambarwati & Sunarsih, 2011).

In addition to personal hair hygiene, dental and oral personal hygiene needs special and good attention according to predetermined procedures (Mattson et al., 2016) (Mattoni & Sullivan, 1962). Teeth and mouth really need to pay attention to cleanliness, otherwise infection and damage to the teeth will occur (Xavier, 2000) (Rautemaa et al., 2007). Tooth decay in children is also the number one dental problem that occurs among preschoolers (Gussy et al., 2006). Tooth decay such as caries in children's teeth can be prevented by brushing your teeth properly (after eating and before going to bed), because brushing your teeth properly is the basis of an effective oral hygiene program (Susanto & Fitriana, 2015).

Apart from brushing teeth, washing hands with soap is one of the personal hygiene that needs to be taught to children from an early age (Vivas et al., 2010) (Ahmadu et al., 2013). Washing hands with soap is one of the hygiene actions by cleaning hands and fingers using water and soap by humans to keep them clean and break the chain of microorganisms as a source of disease (Jumaa, 2005) (Amar, 2021). Washing hands with soap is also known as an effort to prevent disease, this is done because hands are often carriers of microorganisms and cause these microorganisms to be transferred from one person to another, either by direct contact or indirect contact (using other surfaces such as towels, glasses, and so on (Susanto & Fitriana, 2015).

Based on data from the United States (2001), personal hygiene problems are ranked 3rd in causing death in children. Meanwhile, every year, on average, 100 children die due to poor personal hygiene. According to Riskesdas (2013), 25.9% of underage children have dental and mouth problems. The prevalence shows that under 12 years of age suffers from dental and oral problems. Based on the Riskesdas report (2018)(RI, 2018), hand washing is considered trivial by the community. Good and correct hand washing habits in children. Indonesia is still relatively low, namely the use of soap when washing hands is only 24.5%. Previous research conducted by Fatmawati, 2017, regarding Student Behavior and Personal Hygiene at SD Negeri Jambi City, found that 48% of respondents still behaved poorly towards personal hygiene. This means that there are still many elementary school students who still behave poorly in personal hygiene.

Prevention efforts that need to be given are about personal hygiene knowledge or personal hygiene which has a very important role in the growth and development of a child, because elementary school children aged 6-12 years have growth and development that are vulnerable to health problems (Firmansyah, 2018). So it is very important to teach how to maintain personal hygiene in school-age children. (Anggraini et al., 2017). Knowledge of personal hygiene is very important because good knowledge can improve health. Individuals with knowledge of personal hygiene will always maintain personal hygiene to prevent illness or conditions (Dingwall, 2010) (Tarrant et al., 2003) (Parker, 2004) (Rimmer, 1999). One strategy to increase children's knowledge about personal hygiene is by providing health education. Health education is a learning process which means that in education there is a process of growth, development, or change in a more mature, better and more mature direction in individuals, groups or communities that aims to change the behavior of the target from not knowing to knowing (Notoatmodjo, 2011) (Masic, 2008) (Bradley, 2006) (Kaufman, 2018).

## 2. RESEARCH METHOD

The research design used in this study was a pre-experimental design with a one-group pretest – posttest design (Devangamath & Raddi, 2016) (Knapp, 2016). The design of this study is to identify the effect of health education on personal hygiene on knowledge and attitudes of HKBP Padang Bulan Medan 2022 elementary students. Research instruments are tools used to collect data so that research can run smoothly (Stake, 2010)(Salmons, 2017). Researchers used tools in the form of SOP personal hygiene which contained procedures for cleaning hair, mouth and teeth, and hands (Ali et al., 2021). Knowledge questionnaire.

### Knowledge of the instrument

Researchers used questionnaire knowledge adopted by Prasetyo (2016) (Nadlifatin et al., 2022) (Lin, 2011) (Majid et al., 2011). Researchers no longer carried out valid tests because they had been tested valid by previous researchers. In the knowledge questionnaire there are 20 questions. The questionnaire has 2 answer choices (true and wrong) with correct answer choices = 1, wrong = 0, and is divided into 3 classes (less, enough, good).

To determine the length of the class (interval) using statistical formulas, as follows:

$$P = \frac{\text{Highest score} - \text{Lowest score}}{\text{Lots of classes}} \quad (1)$$

$$P = \frac{(20 \times 1) - (20 \times 0)}{3}$$

$$P = \frac{20}{3}$$

$$P=7$$

Where P is the length of the class with a range of 7 (the difference between the highest score and the lowest score) and the number of classes is 3 classes (not good enough).

Then the value of the knowledge interval is obtained as follows: (a). Less if the respondent's answer has a score of: 0-6. (b). Enough if the respondent's answer has a score of: 7-13. (c). Good if the respondent's answer has a score of: 14-20.

## 3. RESULTS AND DISCUSSIONS

SD HKBP Padang Bulan Medan is located on Jl. Lt. Gen. Guarantee Giting No. 24, Beringin, Medan Selayang District, North Sumatra Province with a land area of 3,000 M<sup>2</sup> led by a school principal named Sondang R RajagukGuk DRA. This school was founded in 1968. From a geographical perspective, Durin Simbelang A Village has boundaries to the north which are bordered by HKBP Padang Bulan Medan High School and to the east which are bordered by St. Peter Medan. The vision of SD HKBP Padang Bulan Medan faith, knowledge and service and mission Instill over time as a basic model for creating success and education and awareness of the environment, Educating students to achieve educational success and managing the environment, Character and achievements that can be proud of in education and organize the environment, Always take the initiative consistently to apply a culture of thinking, saying and acting commendably in order to create a clean and beautiful environment.

Table 1. Distribution of Respondents Based on Demographic Data (Age and Gender) at SD HKBP Padang Bulan Medan in 2022 (n=64).

Characteristics(c)	Frequency(f)	Presentation(%)
Age 9-12 tahun (Anak)	64	100%
<b>Total</b>	<b>64</b>	<b>100</b>
<b>Gender</b>		

Characteristics(c)	Frequency(f)	Presentation(%)
Man	31	48,4%
Woman	33	51,6%
<b>Total</b>	<b>64</b>	<b>100%</b>

From the table above shows that 64 respondents based on age all aged 9-12 years a total of 64 respondents (100%). Based on gender, 33 respondents (51.6%) were more female, then 31 respondents (48.4%) were male.

Table 2. Distribution of Respondents Based on Knowledge Before Health Education About Personal Hygiene Was Given to Students' Knowledge at SD HKBP Padang Bulan Medan in 2022 (n=64).

knowledge	Frequency(f)	Presentation(%)
not enough	0	0%
Enough	34	53,1%
Good	30	46,9%
<b>Total</b>	<b>64</b>	<b>100%</b>

From the table shows that of the 64 respondents who had knowledge before being given personal hygiene health education, it was found that there were sufficient knowledge of 34 respondents (53.1%), then respondents who had good knowledge were 30 respondents (46.9%) and there were no respondents who had less knowledge, namely 0 respondents (0%).

Table 3. Distribution of Respondents Based on Knowledge After Being Given Personal Hygiene Health Education at SD HKBP Padang Bulan Medan in 2022 (n=64).

knowledge	Frequency(f)	Presentation(%)
not enough	0	0%
Enough	0	0%
Good	64	100%
<b>Total</b>	<b>64</b>	<b>100%</b>

From the table showed that from 64 respondents after being given personal hygiene health education it was found that all respondents' knowledge was good knowledge, 64 respondents (100.0%), had sufficient knowledge and lacked knowledge, each 0 respondents (0%).

Table 4. The Effect of Health Education About Personal Hygiene on Students' Knowledge at SD HKBP Padang Bulan Medan in 2022

Knowledge	N	Mean	SD	CI 95%	p-value
Pre Intervensi	64	13,41	1,908	12,93-13,88	0,000
Post Intervensi	64	19,08	0,914	18,85-19,31	

The results show that before and after being given personal hygiene health education to the knowledge of respondents, the value obtained based on the Wilcoxon Sign Rank Test statistical test obtained p value = 0.000 ( $p < 0.05$ ). These results indicate that there is a significant effect of personal hygiene health education on students' knowledge at SD HKBP Padang Bulan Medan in 2022, so the hypothesis of the effect of health education about personal hygiene on students' knowledge at SD HKBP Padang Bulan Medan is accepted. Based on the results of research conducted by researchers at SD HKBP Padang Bulan Medan, it was obtained from 64 respondents before conducting personal hygiene health education, it was found that 34 respondents (53.13%) had sufficient knowledge, then with good knowledge, 30 respondents (46.9%). This means that respondents have more knowledge before being given health education about personal hygiene.

According to researchers, knowledge is a person's understanding of something that is obtained through any experience. The results of the research on the respondent's knowledge of personal hygiene were that the respondent had never received personal hygiene health education. Respondents only obtained knowledge about personal hygiene from family members who also had sufficient knowledge. In this case, it is necessary to provide personal hygiene health education to respondents so that their

knowledge is better so that they can carry out personal hygiene practices such as washing hair, brushing teeth and washing hands so that respondents are healthy and protected from disease.

The findings of the respondent's knowledge researcher are sufficiently supported by the findings of Fatmawati's research (2017), prior to the intervention most of the respondents had sufficient and insufficient knowledge, so that many students had never performed personal hygiene, this had an impact on the respondents' lack of action due to a lack of stimulus for understanding personal hygiene, this has resulted in many students not caring about the changing conditions that may occur in hair, teeth and hands so that they are less healthy. Likewise, only with Nurjannah (2012), in her research on personal hygiene of elementary school students, overall personal hygiene was obtained as much as 3.2% of respondents included in the less hygiene category and 96.8% did not. According to Silalahi & Putri (2017) where children cannot remember and understand personal hygiene, it will become a portal of entry for germs because they do not understand and remember personal hygiene and vice versa if children can understand and remember personal hygiene. will minimize the entry of microorganisms.

The findings of the researchers on the respondents also found that out of 64 respondents, 30 respondents (46.9%) had good knowledge. According to the researcher, respondents who have good knowledge get good intervention from the role of parents at home and in the environment. In this case it is necessary to provide support to the respondent so that the respondent's good knowledge about personal hygiene can be applied properly to stay healthy.

The findings of the researchers are supported by Triasmari & Kusuma (2019) it is known that out of 73 respondents who practice good personal hygiene, there are 51 respondents (69.9%). Children in Kalanganyar Village have carried out personal hygiene well, such as changing clothes twice a day after bathing, washing clothes using detergent and clean water, wearing ironed clothes, bathing twice a day, washing hands before and after eating, brushing their teeth. after breakfast and before going to bed, for boys the hair looks neat.

The results of this study indicate that children's knowledge of personal hygiene is good. Knowledge can be given directly or indirectly. The direct way is by teaching and practicing a clean and healthy way of life, for example health workers can give examples of how to keep clothes, skin, hair, nails, mouth and teeth clean. Indirectly, namely the provision of knowledge given to children by parents, teachers and health workers. With this effort is expected to increase children's knowledge of personal hygiene.

#### 4. CONCLUSION

Based on the results of the study with a sample of 64 respondents, regarding the effect of personal hygiene health education on students' knowledge at SD HKBP Padang Bulan Medan in 2022. The effect of personal hygiene health education on the knowledge of SD HKBP Padang Bulan Medan students found a p-value of 0.000 where  $p < 0.005$ , then  $H_a$  is accepted that there is an effect of personal hygiene health education on the knowledge of HKBP Padang Bulan SD students in 2022. The results of this study can be used as information for SD HKBP Padang Bulan Medan students as technical management of personal hygiene to detect how clean hair, mouth & teeth and hands are. The results of this study can be used as information for SD HKBP Padang Bulan Medan students as technical management of personal hygiene to detect how clean hair, mouth & teeth and hands are. It is hoped that the results of this study can be a source for further researchers by paying direct attention to the personal hygiene of each respondent to obtain more accurate data.

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