

Health Education About Tepid Water Sponge Efforts to Increase Family Knowledge and Skills in Handling Fever

Rama Nanda¹, Isna Hikmawati²

^{1,2}Department of Health, Universitas Muhammadiyah Purwokerto, Indonesia

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ABSTRACT

Fever is a condition of an increase in body temperature above normal. Parents, especially mothers, have an important role in dealing with children with fever, however, not many mothers have the knowledge and skills in early handling of fever, one of which is the tepid water sponge. The purpose of this study is to provide health education about handling fever using the tepid water sponge method. This research with pre-experimental design (one group pretest-posttest). The sample in this study amounted to 30 mothers who have children aged 1-5 years and registered at the Posyandu Bantarkawung Village, Bumiayu District, Brebes Regency. Samples were taken by total sampling technique. Collecting data using a questionnaire sheet for the level of knowledge and observation sheets for skills. Data analysis using paired sample t test. The results showed that the skills before health education were 28 (93.3%) lacking in skills and decreased to 14 people (46.7%) after the intervention. The level of lack of knowledge was 14 (46.7%) and decreased to 5 (16.7%) after the health education intervention. There is a relationship between health education about the tepid water sponge on knowledge and skills in handling fever in the family (p value 0.000). Good public understanding is needed, how to deal with fever in the family through health education.

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Corresponding Author:

Isna Hikmawati

Department of Health, Muhammadiyah University of Purwokerto,

Soepardjo Rustam Street KM. 7, Banyumas, Indonesia

Email: isnahikmawati@ump.ac.id

1. INTRODUCTION

Fever is one of the common diseases that can certainly attack children under five, followed by other diseases such as respiratory infections and diarrhea. The World Health Organization (WHO) estimates that the number of fever cases worldwide reaches 16-33 million with 500-600 thousand deaths each year [1].

This incident occurred in the age range of 1 month to 5 years where the highest incidence occurred at the age of 14 months-18 months. The prevalence of fever cases in the United States and Europe is around 2-5%, which is two times that of fever cases in Asia. In Japan the incidence of fever is quite high, ranging from 8.3% - 9%, even in Guam it reaches 14%, in Indonesia, fever sufferers reached as many as 465 (91.0%) out of 511 mothers who used touch to assess fever in their children and the remaining 23.1 used a thermometer [2].

Broadly speaking, fever is divided into two categories, namely infectious and non-infectious fever. Infectious fever is caused by germs, pathogens and bacteria, while non-infectious fever is caused by abnormalities in the body that are acquired from birth [3]. Handling high fever in children under five can be

done in two ways, namely pharmacological and non-pharmacological or a combination of both. Non-pharmacologic therapy that can be done to reduce body temperature is to keep the child's fever from increasing so that the risk of possible febrile seizures and dehydration in children can be avoided. The most common and frequently used method is the administration of fever/fever-reducing drugs such as paracetamol and Ibuprofen, but drugs alone are not enough so that other measures need to be given. One way to reduce fever is physical therapy by giving certain actions or treatments independently. One of the non-pharmacological actions is the tepid water sponge. A tepid water sponge warm compress is a physical therapy to lower body temperature by using a cloth or towel soaked in warm water and affixed to certain areas of the body so as to provide a sense of comfort. The tepid water sponge compress technique uses the block and wiping technique. This technique is used to improve body heat control through evaporation and conduction. This technique is usually done on clients who have a high fever[4].

Giving compresses to children under five requires knowledge and skills, therefore mothers have an important role in providing appropriate and effective treatment. Lack of knowledge causes treatment to be less precise, so that healing is less than optimal [5]. Based on the results of Tarigan's research[6], what mothers do when their children have a fever need to know how to handle them. Handling a child's fever is one form of health recovery behavior for children who are exposed to fever. A phenomenon that often occurs in the community in handling fever, mothers use thick blankets when their children have a fever. In addition, the compresses given still use cold compresses or plasters in the forehead area. Giving compresses in the forehead or head area is not effective because the skull is blocked [7].

The results of a presurvey of 10 mothers found that in handling fever, mothers gave compresses to the forehead area. Giving compresses in the forehead area is less effective [7]. Meanwhile, regarding the Tepid Water Sponge from 10 mothers, 5 of them said they had received the information but did not understand it. Therefore, information or education is needed so that the mother's skills in dealing with fever in children become better.

2. RESEARCH METHOD

This research is a quantitative, the design of this research is pre experimenta with one group pre test post test. This research was conducted on July 04-12 2022 at the the Posyandu in Bantarkawung Village. The population in this study were 30 mothers who have children aged 1-5 years and registered at the Posyandu Bantarkawung Village. The sample of this study was 30 respondents.

The sampling technique in this study was using total sampling technique. The data collection tool in this study was a questionnaire sheet for the level of knowledge and observation sheets for skills.

Data analysis used is univariate analysis to determine the frequency distribution of respondent characteristics (age, last education and profession). The research data were processed through the process of editing, coding, scoring, tabulating, processing and cleaning. The statistical test used is the paired sample t test.

3. RESULT AND DISCUSSIONS

3.1. Univariate

Table 1. Frequency Distribution of the Mother in Posyandu Bantarkawung Village

Characteristics of Respondents	Frequency	Percentage
Age		
23-30	20	67%
31-41	10	33%
Last Education		
Junior High School	4	13%
Senior High School	23	78%
Associate's Degree	1	3%
Bachelor	2	6%
Profession		
Housewife	27	90%
Teacher	2	7%
Nurse	1	3%
Total	30	100%

Based on Table 1 above shows that the number of respondents as many as 30 respondents with the majority of the youngest age 23-30 years as many as 20 people or with a percentage of 67%. the latest education data shows that the majority of respondents last education is Senior High School as many as 23 respondents (78%) and data on employment, the majority of respondents work as housewives as many as 27 respondents (90%).

Table 2. Frequency Distribution of Knowledge Before and After Health Education

Variable	Frequency	Percentage
Knowledge before		
Not enough (<56)	14	46.7%
Enough (56-79)	16	53.3%
Good (80-100)	-	-
After		
Not enough (<56)	5	16.7%
Enough (56-79)	24	80%
Good (80-100)	1	3.3%

Based on Table 2. above, it shows that the category of respondents before being given health education was 14 respondents (46.7%) in the poor category and 16 respondents (53.3%) in the sufficient category and the results after showing the difference where 24 respondents (80%) were in the sufficient category and 1 respondents (3.3%) in good category.

Table 2. Frequency Distribution of Skills Before and After Health Education

Variable	Frequency	Percentage
Skills before		
Less skill (0-10)	28	93.3%
Quite skill (11-15)	2	6.7%
Skilled (16-24)	-	-
After		
Less skill (0-10)	5	16.7%
Quite skill (11-15)	20	66.7%
Skilled (16-24)	5	16.7%

Based on the data in table 3 shows that there are differences in the results before and after being given health education from 28 respondents (93.3%) less skilled to 20 respondents (66.7%) in the moderately skilled category and 5 respondents (16.7%) in the skilled category.

3.2. Bivariat

Table 3. The Effect of Health Education on tepid water sponge on knowledge and skills for handling fever in family

Variabel	<i>Paired t test</i>			p-value
	Min	Max	SD	
Knowledge				
Before	39	70	8.124	0,000
After	43	83	10.771	
Skill				
Before	4	8.30	2.008	0.000
After	8	13.00	2.421	

Based on Table 4 above, it shows that respondents experienced an increase in knowledge and skills in handling fever in the family with a p-value of 0.000. This can be seen from the difference in average knowledge and skills before and after being given health education which shows the average prior knowledge is 54.7, the maximum minimum value (39-70) and the standard deviation of 8.124. After being given health education, it becomes 64.7 the maximum minimum value (43-83) and the standard deviation of 10,771. The skill result before being given health education was 8.03 with a maximum minimum value (4-13) and a standard deviation of 2.008.

3.3 The Effect of Health Education on Tepid water sponge on Knowledge and Skills for Handling Fever in Family

The results of the study on the knowledge and skills in handling fever in the family with a p-value of 0.000. The results of this study are in line with research conducted by Anggita & Rakhmat [8] which concluded that there is an effect of health education on mother's knowledge and attitudes about the concept of halal and healthy in MPASI in the Bojongsari health center area with a significant p value (0.000).

An increase in one's knowledge can be caused by several factors, one of which is information. Information can be obtained from the mass media, print, and even the internet. In addition, information can also be obtained through formal and non-formal education, such as health education. Health education is an activity or effort with the aim of shaping the behavior of an individual, group, or community that prioritizes health. The provision of health education can affect a person's knowledge. The results of research conducted by Novia Kharisma Putri [9] showed that after health education the respondents experienced an increase with $p = 0.002$. Research conducted by Said & El-Maghawry [10] concluded that there was a statistically significant difference after conducting a health education program.

Health education has several methods in its implementation. In this study, the health education method used leaflets and demonstration media. Media is a tool that is used physically to convey a message or information. Leaflets or flipcharts are one of the print media that can be used in providing information and education. This is in line with research conducted by Fitria Nur Khayati [11] concluding that providing education using flipchart media is an effective way to increase the knowledge of parents, especially mothers, about handling febrile seizures in toddlers. This flipchart contains writings and pictures about an information, as well as leaflets containing pictures and writing used as a medium of information in this research. While demonstration is the process of practicing or demonstrating an event by involving the sense of sight, sense of smell, and sense of touch with the help of tools or media to facilitate the receipt of information from the speaker or teacher. This demonstration method is the most effective method in informing the procedure for implementing the Tepid Sponge compared to other methods. This is in accordance with the theory of Notoatmodjo (2007) in Purwandari & Alfian [12] which states that information conveyed by this method will last for 20 seconds which then goes into long-term memory with the absorption of information by 70%. Through the method of health education regarding the handling of fever with the tepid water sponge, there is a transfer of information to mothers of toddlers.

The results of research conducted by Goga and Turban [13] at Craovia University, Romania, showed that the provision of audiovisual education in the form of learning video media provided information retention of 45.95%. In addition to using audiovisual, the age of the respondents in this study is classified as young/early adulthood, which has similarities to the research conducted by the researcher. The increase in knowledge and skills shows that the use of leaflets and this demonstration method can increase knowledge and skills. The results of this study are in accordance with the research of Siti Nur & Sunaryo [14] with the title of training on the Tepid Water Sponge Compression Skill as an effort to prevent febrile seizures during the Covid-19 period, showing that there is an increase in knowledge and skills of Posyandu cadres. The results of this study are in line with the research of Purwandari & Alivian [12] entitled the effect of fever management training at home to increase the knowledge and skills of mothers/caregivers. The results that support this research are the results of research conducted by Rini Mulyati [15] at Cibabat Cimahi Hospital with the result that there is an effect of the demonstration method on the mother's ability to do tepid sponge with p value = 0.001.

4 CONSLUSION

Most of respondents in this study were young adults aged 23-41 years with the majority of respondents having high school / vocational education as many as 23 people with a percentage of 78% and 27 respondents working as housewives with a percentage of 90%, there is an increase in knowledge before and after health education from an average of 54.27 to 64.67. There is an increase in skills before and after health education from an average of 8.03 to 13.00. There is an effect of health education about the tepid water sponge on the knowledge and skills of handling fever in the family with p value (0.000).

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