



The Effect of Health Education Based on Islamic Teachings on Knowledge Level of Toddlers' Parents Regarding Singapore Flu

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A B S T R A C T

HFMD is an infectious disease that occurs in children under five, especially at school or daycare. This research aims to determine the effect of providing health education according to Islamic teachings on the level of parents' knowledge about HFMD in toddlers. The research design used Quasi-Experimental with Group Pretest and Post Test Design. The sample in this research was 22 respondents with a total sampling technique. The analysis used in this research was univariate analysis and paired t-test analysis. The results of the study used the paired t-test and found that there were significant differences in the pretest and posttest values of parents' knowledge about HFMD in children under five with a p-value of 0.000 (<0.05). This research concluded that there was an effect of providing health education according to Islamic teachings on the level of parents' knowledge about HFMD in children under five.

INTRODUCTION

Hand, foot, and mouth disease (HFMD), or Singapore flu is an acute viral infectious disease. It is most often caused by coxsackievirus A16 (CVA 16) and enterovirus 71 (EV71) and is self-limiting (Purwanthi, 2016). This disease is also often referred to as "Singapore flu", allegedly because, in 2000, this disease became epidemic in Singapore and caused the death of several children (Purwanthi, 2016). HFMD most often affects children under 10 years of age and rarely affects adults.

HFMD is a disease caused by enterovirus infection, especially Coxsackie A 16 (CVA 16) and Enterovirus 71 (EV 71) viruses (Purwanti, 2016). HFMD is generally characterized by a rash or bumps appearing in the mouth, hands, and feet. It is sometimes accompanied by blisters. In certain cases, they can also be found on the knees, elbows, buttocks, or genital area. Symptoms and signs of HFMD will usually appear within 3-6 days after infection with the virus. Symptoms that will appear are usually pain in the throat or mouth, fever, decreased appetite, malaise, and headache. These initial symptoms will usually last up to 1-2 days. However, not everyone who has HFMD will experience these symptoms. It is because most adults often do not experience any symptoms at all but are potential carriers of the HFMD virus and spread the virus.

In the case of HFMD, the most common complications are oral ulceration pain and dehydration which due to lesions in the mouth area can make it difficult to drink and eat. However, in some cases, HFMD can also

cause severe complications such as meningitis and encephalitis, and even death. Several other cases also show that HFMD can cause complications in the form of loose fingernails and toenails and occurs several weeks after the acute phase of HFMD. However, the disorder is temporary and the nail may grow back. However, not everyone who gets HFMD will experience all of these symptoms.

HFMD can be transmitted through direct contact from person to person through the respiratory route, air (sneezing, coughing), nasal secretions, saliva, throat (saliva, sputum), fluid from vesicles or feces of infected people, close contact with people infected (talking, hugging, kissing). HFMD is also a common disease that occurs in schools, orphanages, hostels, Islamic boarding schools, and daycare centers. This is because those places have frequent diaper changes and bowel practices.

Singapore flu is an infectious disease that spreads easily, especially at school, and occurs in toddlers. Based on the previous research, data on epidemic cases of Singapore flu that occurred in toddlers at the KB and TPA Bunayya ICBB were obtained. In addition, there are teachers and parents at the KB and TPA Bunayya ICBB who don't know how to deal with the Singapore flu. Therefore, the researchers wanted to know the effect of Singapore flu health education according to Islamic teachings on the level of parental knowledge in KB and TPA Bunayya ICBB in 2022.

METHOD

This type of research is a quasi-experimental research with One Group Pre test and Post Test Design. The research started with the initial data collection in May 2022 and the implementation of this research was carried out in August - September 2022. The research location was at KB and TPA Bunayya ICBB. The population in this study were all parents. Samples were taken by purposive sampling technique with a total sample of 22 people. The data collection technique uses a questionnaire on the level of teacher knowledge about Singapore flu/HFMD/PTKM which has been tested for validity and reliability (Qi et al., 2019). The data analysis used was paired t-test.

RESULT

The results of research conducted at the KB and TPA Bunayya ICBB regarding the influence of Singapore flu health education based on Islamic teachings on the level of parental knowledge are known as follows:

Table 1. Frequency Distribution of Respondent Characteristics

Characteristic	Frequency	
	n	%
Gender:		
Female	22	100
Education Level:		
a) University	18	81,82
b) High school or equivalent	4	18,18
Monthly income:		
a) Low	4	18,18
b) Moderate	9	40,91
c) High	2	9,09
d) Very high	7	31,82
Age:		
a) 20-29 years	6	27,27
b) 30-39 years	11	50
c) ≥ 40 years	5	22,73
Total	22	100

Data source: Primary data for 2022

According to Table 1, the most gender is female of 22 people (100%). The highest level of education is tertiary education for 18 people (81.82%). The highest income per month is the medium category with 9 people (40.91%). The most age is 30-39 years old of 11 people (50%).

Table 2. Differences in Mean Pretest and Posttest Knowledge Levels of Parents in TK and KB Bunayya ICBB in 2022

Parameter	Value
<i>mean pre-test</i>	6,04
<i>mean post-test</i>	12
<i>95% Confidence Interval of the Difference:</i>	
<i>Lower</i>	-6,61
<i>Upper</i>	-5,29
<i>Std. Deviation</i>	1,49
<i>Sig. (2-tailed)</i>	0,00

Data source: Primary data for 2022

Based on Table 2, the mean value of the level of parental knowledge before being given Singapore flu health education based on Islamic teachings (pretest) is 6.04. The mean value of the level of knowledge of parents after being given Singapore flu health education according to Islamic teachings (posttest) is 12. The significance value of the difference in the mean pre and post-test values is 0.00.

DISCUSSION

The result of the research by Mansur & Ahmad (2021) stated that the age, occupation, education level, and income of respondents affect the level of knowledge of HFMD ($p < 0.05$). This is based on Table 1. The mean pre-test value is lower than the mean post-test value shown in Table 2 due to information related to the Singapore flu, which is less, the effect of age, level of education, and level of income. And the result of the research conducted by Mansur & Ahmad (2021) stated that the age, occupation, education level, and income of respondents affected the level of knowledge of HFMD ($p < 0.05$). Another reason for the low

mean level of knowledge is that health workers have never been given health education related to the Singapore flu. This is in line with the research by Negara & Prabowo (2018) which stated that there is no effect between education and knowledge.

The mean value of the level of parental knowledge after being given health education on Singapore flu based on Islamic teachings is 12. This is because the respondents received health education about the Singapore flu. In addition, the level of education that is not too diverse, namely only two categories of high school and diploma/bachelor is one of the supporting factors for easy acceptance of knowledge through health education. Mansur & Ahmad (2021) stated that the age, occupation, education level, and income of respondents affected the level of knowledge of HFMD ($p < 0.05$). This is in line with the research of Negara & Prabowo (2018) which stated that there is an influence between age and knowledge. This is following the research of Ivoryanto et al., (2017) which stated that the level of community formal education correlated positively with the level of knowledge in the use of oral antibiotics.

According to the paired t-test, a p-value of 0.000 ($p < 0.05$) was obtained which indicated that there was a significant difference between the mean level of parental knowledge before and after. This research is in line with the research by Arifin & Sulasih (2021) that there is an effect of providing health education on the level of mothers' knowledge about Singapore flu in toddlers with a p-value of 0.006 (< 0.05). Research results by Wartiani (2013) also stated that there was a significant effect of health education on Hand, Foot, and Mouth Disease (Singapore Flu) on increasing knowledge and behavior with a value of $p = 0.000$. The result of research by Sari et al (2022) showed an increase in the knowledge of residents of Dukuh Menanggal District by 20% in terms of characteristics, symptoms, ways of transmission, and ways of preventing HFM after being given exposure to HFMD.

The research by Guo et al., (2018) stated that there was no effect of the hand-washing intervention on the parents' HFMD knowledge score with a p-value of 0.111 (> 0.05). This is because, even though the level of knowledge is high, the level of attitude and behavior for HFMD prevention is not necessarily high.

The health education material according to Islamic teachings that were delivered included the arguments of Al-Qur'an and hadith related to the Singapore Flu. The Qur'anic argument used is the Surah Yunus verse 57 (*Surat Yunus Ayat 57 Arab, Latin, Terjemah Dan Tafsir*, n.d.) which means "O humanity! Indeed, there has come to you a warning from your Lord, a cure for what is in the hearts, a guide, and a mercy for the believers." In addition, the Surah As-Sajdah verse 21 (*Surat As Sajdah Ayat 21 Arab, Latin, Terjemah Dan Tafsir*, n.d.) means " We will certainly make them taste some of the minor torment 'in this life' before the major torment 'of the Hereafter', so perhaps they will return 'to the Right Path'." Another Surah used is Asy-Syu'ara verse 80 (*Surat Asy-Syu'ara Ayat 80 Arab, Latin, Terjemah Dan Tafsir*, n.d.) means "And He 'alone' heals me when I am sick." Meanwhile, the Hadith is used in HR. Bukhari: 5246 – About Diseases and Medicines (*HR. Bukhari: 5246 – Tentang Penyakit Dan Obatnya*, n.d.) Meanwhile, the Hadith used is

HR. Bukhari: 5246 - About the Mercy which means "God did not send down the disease unless He also sent down the antidote and the medicine."

When someone gets health education, ignorance or misinformation, or perception can be minimized or even straightened out. Thus, through health education, it can improve the level of knowledge.

The limitation of the research that has been conducted is the inability to control the characteristics of the respondents in terms of age, education level, and income level.

CONCLUSION

According to the description above, it can be concluded that there is an effect of Singapore flu health education on parents' knowledge of TK and KB Bunayya ICBB.

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