



# Effect of Syair Biola Katipu Education on Family Concerning Dengue Hemorrhagic Fever Prevention Knowledge



Indra Rahmad <sup>a</sup>, Akhmad Fathoni <sup>b</sup>, Ahmad <sup>c</sup>, Mas'adah <sup>d</sup>

Manuscript submitted: 27 November 2019, Manuscript revised: 09 December 2019, Accepted for publication: 31 January 2020

## Corresponding Author <sup>b</sup>



## Abstract

This study is to determine the effect of Katipu violin poetry education on family knowledge about preventing dengue in Raba Dompu, Bima City. Dengue hemorrhagic fever (DHF) is an infectious disease caused by the dengue virus and spread by mosquitoes, especially the Aedes aegypti mosquito species. Katipu Violin is a fusion of Violin, Katipu (Ketipung), Gambo (Gambus) music, Bass Guitar, Daf and Rawa Mbojo. The method used was a Quasi-experimental research design with pre-test and post-test with control group design. The number of Samples 66 Respondents. Data collection tool in the form of a questionnaire to determine respondents' knowledge about the prevention of dengue hemorrhagic fever. The results were P-value of 0.001 was obtained with a value of  $\alpha < 0.005$  indicating there was a significant difference between before and after the educational treatment of Katipu violin poetry. The Conclusion is an influence of Ketipu Violin Poetry Education on Family Knowledge about Prevention of Dengue Hemorrhagic Fever in Raba Dompu Village, Bima City.

## Keywords

dengue hemorrhagic fever;  
disease;  
Katipu Violin;  
knowledge;  
mosquitoes;

International Journal of Social Sciences and Humanities © 2020.  
This is an open access article under the CC BY-NC-ND license  
(<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Contents

Abstract.....	59
1 Introduction.....	60
2 Materials and Methods.....	60
3 Results and Discussions.....	60
3.1 Result.....	60
3.2 Discussions.....	63
4 Conclusion.....	64
Acknowledgments.....	65

<sup>a</sup> Poltekkes Kemenkes Mataram, Mataram, Indonesia

<sup>b</sup> Poltekkes Kemenkes Mataram, Mataram, Indonesia

<sup>c</sup> Poltekkes Kemenkes Mataram, Mataram, Indonesia

<sup>d</sup> Poltekkes Kemenkes Mataram, Mataram, Indonesia

References.....	66
Biography of Authors.....	67

## 1 Introduction

Dengue hemorrhagic fever (DHF) is an infectious disease caused by the dengue virus and spread by mosquitoes, especially the *Aedes aegypti* mosquito species. Dengue-transmitting mosquitoes are found in almost all corners of Indonesia, except in a place whose height is more than 1000 meters above sea level (Rahayu *et al.*, 2017). Dengue Hemorrhagic Fever is an infectious disease caused by dengue virus with clinical manifestations of fever, muscle aches and / or joint pain accompanied by leukopenia, rash, lymphadenopathy, thrombocytopenia and hemorrhagic diathesis (Kusumawardani *et al.*, 2012).

WHO data in 2009, cases of dengue in the world in 50 years increased by 30 times. More than 50 million dengue cases with 2.5 billion people in the world live in countries that are dengue-endemic and 1.8 billion people live in the South East Asia continent, including Indonesia. The case of dengue in Indonesia has been a health problem for the past 46 years (Health Profile of the NTB Provincial Health Office, 2017).

The City of Bima Health Office reported that in 2018 in the West Rasanae sub-district working area there were 7 cases of DHF and in the sub-district of the Munda sub-district work area there were 10 cases of DHF, then in the East Rasanae sub-district the Rasanae East Puskesmas working area was 4 DHF cases and in the Raba sub-district Puskesmas working area There were 13 dengue cases and in Asakota sub-district Asakota puskesmas working area, there were 2 dengue cases. From the preliminary data, it was found that in the Raba sub-district, the working area of Penanae Puskesmas in Bima had the highest DHF incidence rate and in January-February 2019 the incidence of DHF was 72 Positive and 2 people died 3% (City of Health Office of Bima, 2018).

## 2 Materials and Methods

The research method used in this study is quasy experiment with pre-test and post-test design with control group design. This design is to reveal the causal relationship by involving the control group in addition to the experimental group. The experimental group was given treatment while the control group was not and both groups performed pre-test and post-test (Nursalam, 2013). The design of this study aims to look at the Effect of Katipu Violin Poetry Education on Increasing Family Knowledge about Prevention of Dengue Hemorrhagic Fever in Raba Dompu Village, Bima City

## 3 Results and Discussions

### 3.1 Results

#### *Characteristics of respondents*

Based on the results of data collection that have been done, the obtained characteristics of respondents include:

Table 1  
Frequency distribution of treatment respondent characteristics

Variable	Intervention	Control
Gender	n	n
		(%)
Male	4	4
	12,1%	12,1
Women	29	29

	87,9 %	87,9 %
Total	33	33
	100 %	100 %
Age	Intervention	Control
17-25 years	4	4
	12.1 %	12.1 %
26-35 years	16	16
	48.5 %	48.5 %
36-45 years	10	10
	30.3 %	30.3 %
46-55 years	3	3
	9.1 %	9.1 %
Total	33	33
	100 %	100 %
<b>Educational Level</b>	<b>Intervention</b>	<b>Control</b>
SD	9	9
	27.3 %	27.3
Middle School	2	2
	6.1 %	6.1
High School	21	20
	63.6 %	60.6
S1	1	2
	3.0 %	6.1
Total	33	33
	100 %	100
<b>Work</b>	<b>Intervention</b>	<b>Control</b>
Does Not Work	3	3
	9.1 %	9.1 %
Farmer	9	9
	27.3 %	27.3 %
Enterpreneur	20	19
	60.6 %	57.6 %
Civil Servant	1	2
	3.0 %	6.1 %
Total	33	33
	100 %	100 %

Based on table 1 it can be seen that the characteristics of the majority of respondents treated are female, the characteristics of the majority of respondents are female, the frequency of treatment characteristics of the majority of respondents aged 26-35 years. Frequency Characteristics of Control Respondents the majority are aged 26-35 years. Frequency Characteristics the majority of respondents were treated with a high school education level. Frequency Characteristics Respondents control the education level of the majority control respondents with a high school education level. Frequency Characteristics of Respondents treated by the majority of respondents treated with self-employed work. Frequency Characteristics of Control Respondents the majority of respondents control with self-employed work.

*Respondent knowledge before / pre performed Katipu Violin education*

Table 2  
Frequency Distribution Pre/pre violin education was carried out for treatment respondent Katipu

Knowledge before	Intervention	Control
Good (15-20)	0 0 %	0 0 %
Enough (12-14)	4 12.1 %	5 15.2 %
Less (0-11)	29 87.9 %	28 84.8 %
Total	33 100 %	33 100 %
Knowledge after	Intervention	Control
Good (15-20)	27 81.8 %	10 30.3 %
Enough (12-14)	6 18.2 %	20 60.6 %
Less (0-11)	0 0 %	3 9.1 %
Total	33 100 %	33 100 %

Based on table 2, it can be seen that the majority of respondents' knowledge of Pre/pre-treatment is done with Katipu Violin Education with less knowledge of 29 people (87.9%). Knowledge of Control respondents Before/pre the majority of Katipu Violin Education was carried out with 28 people (84.8%) lacking knowledge. Frequency After/post-Katipu violin education is done. Respondents of the treatment are known that the knowledge of the After/post treatment is conducted by Katipu Violin Education, the majority with good knowledge as many as 27 people (81.8%). Frequency After/post-Katipu violin education is conducted by Control Respondents that the majority of respondents' Knowledge Control Before doing Katipu Violin Education is sufficient knowledge of 20 people (60.6%).

*Cross-tabulation between mother behavior before and after Katipu Violin education*

Table 3  
Maternal behavior before and after the education of Violin Katipu treatment respondents

Knowledge prior to Katipu Violin Education						Knowledge After Katipu Violin Education						T-Test
Good		Enough		Less		Good		Enough		Less		P-Value
F	%	F	%	F	%	F	%	F	%	F	%	
0	0	4	12,1	29	87,9	27	81,8	6	18,2	0	0	0,001

From the results of table 3 in the treatment group respondents prior to the education of the Violin Katipu, it was found that the majority of respondents' knowledge in the Less category was 29 respondents (87.9%), and the Enough category was 4 respondents (12.1%). After giving a violin education treatment, most respondents in the Good category were 27 respondents (81.8%), and in the Enough category were 6 respondents (18.2%). Data were analyzed using Paired T-Test and P-value of 0.001 was obtained with a value of  $\alpha < 0.005$  indicating there was a significant difference between before and after the educational treatment of Katipu Violin poetry.

Table 4  
Maternal behavior before and after the education of Violin Katipu control respondents

Knowledge prior to Katipu Violin Education						Knowledge After Katipu Violin Education						T-Test
Good		Enough		Less		Good		Enough		Less		P-Value
F	%	F	%	F	%	F	%	F	%	F	%	
0	0	5	15,2	28	84,8	10	30,3	20	60,6	3	9,1	0,001

From the results of table 4 in the Control group respondents before the Katipu violin education, it was found that the majority of respondents' knowledge in the Less category was 28 respondents (84.8%), and in the Enough category as many as 5 respondents (15.2%). After being given violin education treatment, most respondents in the Enough category were 20 respondents (60.6%), and in the Good category were 10 respondents (30.3%), and a small proportion of respondents in the Less category were 3 respondents (9, 1%). Data were analyzed using the Paired T-Test and P-value of 0.001 was obtained with a value of  $\alpha < 0.005$  indicating there was a significant difference between before and after the educational treatment of Katipu Violin poetry.

### 3.2 Discussion

#### *Respondents' knowledge before and after Katipu violin education*

In this study, the respondent's knowledge was obtained before Katipu Violin Education about the prevention of Dengue Hemorrhagic Fever for treatment respondents who had Enough knowledge of 4 people (12.1%), and those with Less knowledge of 29 people (87.9%). For Control respondents who have Enough knowledge of 5 people (15.2%), and those who have Less knowledge are 28 people (84.8%).

After Katipu Violin Education about the prevention of Dengue Fever for treatment respondents who have Good knowledge are 27 people (81.8%), and those who have Enough knowledge are 6 people (18.2%). For Control, respondents who have Good knowledge are 10 people (30.3%), those who have Enough knowledge are 20 people (60.6%), and those who have Less knowledge are 3 people (9.1%). The results showed that most respondents' knowledge of treatment and control after the Katipu Violin Education had good and Enough knowledge. There was a significant difference in value after giving a violin education in increasing knowledge about preventing dengue fever (Arip *et al.*, 2018). This is caused because if someone has Good knowledge about DHF then they have Good precautions against DHF. Referring to the results of this study, knowledge has a very important correlation to be able to mobilize good preventive actions because one's behavior is driven by relevant knowledge. Knowledge or cognitive domain is a very important domain in shaping someone's actions with respondents who have Less knowledge. This is consistent with the theory put forward by Rogers (1974), who argues that behavior based on knowledge will be more lasting than behavior that is not based on knowledge, which results from processes of awareness, interest, evaluation, trial and adoption. In his book, Notoatmodjo also believes that knowledge has 3 levels, including knowing, understanding and application (Notoatmodjo, 2003). When the respondent knows and understands that dengue is a disease that can cause death which is transmitted through the *Aedes aegypti* mosquito vector and can be prevented by regularly doing 3M Plus.

#### *Effects of Katipu Violin education on family knowledge about prevention of Dengue Hemorrhagic Fever in the Village of Raba Dompu, Bima City*

Family knowledge about the prevention of Dengue Hemorrhagic Fever before and after doing education obtained  $p \text{ value} > 0.05$  so that the data is normal. From the results of the analysis of respondents' data treatment with the t-test, a significance value of 0.001 ( $p < 0.05$ ) was obtained, the value of  $t = 20.888$  indicates that there was a strong influence between the two variables seen from the correlation coefficient interpretation table according to (Boonchutima *et al.*, 2017). While the value of  $p = 0.001$  is smaller than the  $\alpha$  value of 0.05 which means that  $H_0$  is rejected and  $H_a$  is accepted. From the results of this study, education by

using the Violin Katipu greatly affects the level of family knowledge about DHF. Another study by [Sudoyo et al. \(2009\)](#), suggested that the influence of music on improving academic ability, in addition to having a positive effect on the quality of children's lives, stimulates long-term academic success, because music and lyrics make it easier for individuals to remember. Research into the use of music to help the learning process has been going on for a long time. This is supported by research [Sudoyo et al. \(2009\)](#), which states there is an influence of listening to music on cognitive skills in children. [Gardiner et al. \(1996\)](#) in [Goleman \(2006\)](#), from his research, said that art and music can make students smarter because music can help the brain focus more on other things learned.

Music is a language that contains universal elements, namely the use and selection of poetic language that can be understood and enjoyed by many people not only by certain groups or not only by sex, race, religion, and nationality. Music appears at all levels, social classes, educational achievements ([Campbell et al., 2001](#)). Therefore in the research, the researcher used the Katipu violin method in delivering the prevention of DHF in the community in Bima. This is done because the Katipu Violin is sung using the language of the Bima region or called mbojo swamp which is one part of Mbojo's art as a fruit of creativity, taste and intention of the Mbojo tribe for centuries. Rawa Mbojo or the song of Mbojo (Bima) people fill the face of Mbojo culture in various activities, Rawa Mbojo has always been a part of the life of the Mbojo community. Rawa Mbojo humming is sung spontaneously and adjusted to the conditions and circumstances. This song contains poetry and rhymes which are full of moral and religious messages so that it attracts the interest of the people of Bima to listen. Public interest in violin katipu is a fusion of violin music, katipu (ketipung), gambo (gambus), bass guitar, daf and mbojo swamp which are characteristic.

With the results of this study, where knowledge seems to have a correlation with actions/events. Knowledge about Dengue Hemorrhagic Fever, vector causes and factors that influence the presence of *Aedes aegypti* mosquito larvae is needed to prevent transmission of DHF. Lack of knowledge can affect actions to be taken because of Awaluddin - Correlation of Knowledge and Attitudes. *Endurance Journal* 2 (3) October 2017 (263-269) Kopertis Region X 268 knowledge is one of the predisposing factors for behavior. Someone's behavior will affect the environment. The expected behavior is an effort to Eradicate Mosquito Nest (PSN).

In this study, it can be seen that the majority of respondents in the treatment and control have jobs as entrepreneurs. In his research, Akmadi said that the work of self-employed respondents caused a level of knowledge of positive attitudes and actions, there were other things such as facilities and entrepreneurs. Work as an entrepreneur who can influence a person to spend more to behave and act. behave time at home taking care of a family whose health is affected by 3 (three) assumed to have many chance factors namely predisposing factors, enabling factors to get information about DHF through and reinforcing factors.

The availability of facilities and print and electronic media in terms of infrastructure is a possible factor for implementing PSN to prevent DHF, that is, someone, committing health behaviors. The attitude through house cleaning and good activities is to reach the surrounding receiving stage by doing 3M. Work (receiving), responding (responding), respecting someone influences knowledge and even wants to be responsible for acting 8 and attitudes and behaviors to carry out DHF prevention and control ([Mulyani et al., 2017](#)). action, because people who work will be more attitudes consisting of various levels such as a lot of interacting with the outside world Good friends accept, respond, respect and or the environment. Knowledge of responsibility. The education level of the majority of the respondent's treatment and control with the level of high school education is because the level of education can affect one's mindset and digestibility. The higher the information that can be absorbed and the high amount of information absorbed affects its continuing knowledge in decision making. Higher educated people are more concerned about health problems. They get much knowledge about DHF through friends of relatives of health workers and social media such as television. most respondents more often get information through health workers when visiting the puskesmas.

## 4 Conclusion

- a) Before counseling, the results showed that most respondents' knowledge of treatment and control prior to the education of Katipu Violin was knowledgeable.
- b) After Katipu Violin Education the results show that most respondents' knowledge of treatment and control after Katipu Violin Education is knowledgeable about Good and Enough.

- 
- c) There is a strong and significant influence between Knowledge before Katipu Violin Education and after Katipu Violin Education about Prevention of Dengue Fever in the village of Raba Dompou, Bima City.

#### *Acknowledgments*

We are grateful to two anonymous reviewers for their valuable comments on the earlier version of this paper.







## References

- Arip, M., Cembun, -, & Emilyani, D. (2018). Strategy to improve knowledge, attitude, and skill toward clean and healthy life behaviour. *International Journal of Social Sciences and Humanities*, 2(3), 125-135. <https://doi.org/10.29332/ijssh.v2n3.222>
- Boonchutima, S., Kachentawa, K., Limpavithayakul, M., & Prachansri, A. (2017). Longitudinal study of Thai people media exposure, knowledge, and behavior on dengue fever prevention and control. *Journal of infection and public health*, 10(6), 836-841. <https://doi.org/10.1016/j.jiph.2017.01.016>
- Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: growth curves from an early childhood educational experiment. *Developmental psychology*, 37(2), 231. <https://psycnet.apa.org/doi/10.1037/0012-1649.37.2.231>
- Gardiner, M. F., Fox, A., Knowles, F., & Jeffrey, D. (1996). Learning improved by arts training. *Nature*, 381(6580), 284-284.
- Goleman, D. (2006). *Emotional intelligence*. Bantam.
- Hidayat, A. (2013). The use of songs in teaching students' listening ability. *Journal of English and Education*, 1(1), 21-29.
- Kusumawardani, E., Arkhaesi, N., & Hardian, H. (2012). *Pengaruh penyuluhan kesehatan terhadap tingkat pengetahuan, sikap dan praktik ibu dalam pencegahan demam berdarah dengue pada anak* (Doctoral dissertation, Fakultas Kedokteran).
- Mulyani, S., Subiyanto, A., Anantanyu, S., Respati, S. H., & Wiboworini, B. (2017). Path analysis: knowledge, motivation factor, and their relationship with readiness to provide exclusive breastfeeding among pregnant women. *International Research Journal of Management, IT and Social Sciences*, 4(1), 8-14.
- Notoatmodjo, S. (2003). Pendidikan dan perilaku kesehatan.
- Nursalam, S. (2013). Metodologi penelitian ilmu keperawatan pendekatan praktis. *Jakarta: Salemba Medika*.
- Rahayu, Y., Budi, I. S., & Yeni, Y. (2017). Analisis partisipasi kader jumatik dalam upaya penanggulangan demam berdarah dengue (dbd) di wilayah kerja puskesmas indralaya. *Jurnal Ilmu Kesehatan Masyarakat*, 8(3).
- Rogers, T. B. (1974). An analysis of two central stages underlying responding to personality items: The self-referent decision and response selection. *Journal of Research in Personality*, 8(2), 128-138. [https://doi.org/10.1016/0092-6566\(74\)90014-2](https://doi.org/10.1016/0092-6566(74)90014-2)
- Sudoyo, A. W., Setiyohadi, B., Alwi, I., Simadibrata, M., & Setiati, S. (2009). Buku Ajar Ilmu Penyakit Dalam Jilid II edisi V. *Jakarta: Interna Publishing*, 310, 1973-1982.



### Biography of Authors

	<p>Hj. Indra Rahmad, S.ST., M.Pd. is senior lecturer in Poltekkes Kemenkes Mataram, College in Mataram, West Nusa Tenggara, on Jl. Prabu Rangkasari, Dasan Cermen, Kec. Sandubaya, Kota Mataram, Nusa Tenggara Barat. 83232.  <i>Email: <a href="mailto:indra20141963@gmail.com">indra20141963@gmail.com</a></i></p>
	<p>Akhmad Fathoni, S.Kp., M.Kes. is a lecturer Poltekkes Kemenkes Mataram, College in Mataram, West Nusa Tenggara, on Jl. Prabu Rangkasari, Dasan Cermen, Kec. Sandubaya, Kota Mataram, Nusa Tenggara Barat. 83232. He is interested in basic medical science specialization physiology. He lives on Jln. Gunung Merapi Rt. IV No. 155 Lingkungan Pelita Mataram.  <i>Email: <a href="mailto:afathoni72@gmail.com">afathoni72@gmail.com</a></i></p>
	<p>H. Ahmad, SH., S.Kep. Ns., M.Pd. is a senior lecturer in Poltekkes Kemenkes Mataram, College in Mataram, West Nusa Tenggara, on Jl. Prabu Rangkasari, Dasan Cermen, Kec. Sandubaya, Kota Mataram, Nusa Tenggara Barat. 83232.  <i>Email: <a href="mailto:ahmadaisyah2014@gmail.com">ahmadaisyah2014@gmail.com</a></i></p>
	<p>Mas'adah, M.Kep. is a lecturer in in Poltekkes Kemenkes Mataram, College in Mataram, West Nusa Tenggara, on Jl. Prabu Rangkasari, Dasan Cermen, Kec. Sandubaya, Kota Mataram, Nusa Tenggara Barat. 83232. She lives at Taman Mutiara, Jl. Kakap No. 60 Pagutan.  <i>Email: <a href="mailto:masadah.1979@gmail.com">masadah.1979@gmail.com</a></i></p>