
The Effect of Basic Life Support Training on Knowledge about Handling Cardiac Arrest Victims in Destana Volunteers in Klotok Village, Plumpang District, Tuban

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ABSTRACT

Cardiac arrest is a condition in which there is a sudden cessation of the normal circulation of blood characterized by a loss of arterial blood pressure. Cardiac arrest can be caused by cardiovascular disease factors or by accident factors. Cardiac arrest can happen anywhere and anytime, and many people around are not able to provide help if there are victims of cardiac arrest, so if there are victims, they are left alone. The purpose of this study was to determine the effect of basic life support training on knowledge of handling cardiac arrest victims in Destana volunteers in Klotok Village, Plumpang District, Tuban. The research method used is a cross sectional study approach. The population used in this study was Destana volunteers who met the inclusion criteria as many as 40, with a sample size of 36 respondents who were determined using simple random sampling. The independent variable in this study was basic life support training, while the dependent variable was the treatment of cardiac arrest victims. The instruments used in data collection are questionnaires and SOPs. Research analysis using Wilcoxon test. Statistical results showed that the basic life support training variable had a significant effect on the treatment of cardiac arrest victims with p-value = 0.002. The results of this study are suggested to be a reference for respondents, health institutions, the community and further researchers in increasing knowledge of handling cardiac arrest.

Keywords: cardiac arrest; basic life support; Destana volunteers

INTRODUCTION

Cardiac arrest is one of the most common emergency conditions outside the hospital. Cardiac arrest can happen anywhere and at any time. Sudden cardiac arrest is a case of emergency priority. Emergency conditions are life-threatening conditions, and if not treated immediately can lead to death (Hammond, 2013). Based on data from the American Heart Association (AHA), there are at least 2 million deaths due to cardiac arrest worldwide. The death rate due to cardiac arrest ranks in the top 3 causes of death. In Indonesia, there are many reports of sudden death due to cardiac arrest.

There are several general factors that influence knowledge of cardiac arrest management, namely educational factors, age factors, motivation factors, experience factors and expertise factors (Notoatmodjo, 2007). Education can be used as a basis to be better than before and the higher a person's education the better the knowledge he has. The low level of knowledge of handling BHD makes the volunteers incapable to provide assistance to victims of cardiac arrest so that efforts can be made to increase knowledge of handling victims of cardiac arrest, one of which is BHD training to provide an overview of the actions of handling cardiac arrest victims in accident and drowning victims. Handling for victims of cardiac arrest is an effort to help and provide a temporary start to victims of cardiac arrest before receiving further help (Kartono, 2005 in Damayanti, 2016).

BHD training is provided so that Destana volunteers are able to provide first aid or treatment to cardiac arrest victims quickly and precisely before the victim is taken to a referral place (doctor/community health center/hospital). Based on this, the researchers wanted to examine "the effect of basic life support training on the treatment of cardiac arrest victims in Destana volunteers in Klotok Village, Plumpang District, Tuban".

METHODS

This research belongs to the type of pre-experimental research with a one group pre-post test design, namely by revealing a causal relationship by involving one group of subjects (Nursalam, 2016). The population in this study were all Destana volunteers, totaling 40 people. The sampling technique used is simple random sampling. The sample of this study amounted to 36 people.

This study used instruments in the form of questionnaire sheets and SOPs. Previously, the questionnaire was given to the respondent, the researcher conducted a validity test with 15 questions using the Wilcoxon test, which resulted in 115 valid questions. The question uses the Guttman scale with a weighted question score of 1 if the answer is correct and 0 if the answer is wrong. The questions were arranged based on theories related to the incidence of cardiac arrest, the characteristics of the respondents used in this study were age, gender, education and occupation.

RESULTS

Table 1. Distribution of respondents by age on Destana volunteers in Klotok Village, Plumpang District, Tuban 2020

No.	Age (years)	Frequency	Percentage
1.	27-35	19	53
2.	36-44	12	33
3.	45-53	5	14
Total		36	100

Based on table 1, it can be seen that most of the 19 (53%) respondents were aged 27-35 years.

Table 2. Distribution of respondents by gender in Destana volunteers in Klotok Tuban Village 2020

No.	Gender	Frequency	Percentage
1.	Male	34	94
2.	Female	2	6
Total		36	100

Based on table 2, it can be seen that almost all of the respondents are male, amounting to 34 (94%).

Table 3. Distribution of respondents based on recent education in Destana volunteers in Klotok Tuban Village 2020

No.	Education	Frequency	Percentage
1.	Elementary school	2	6
2.	Junior high school	9	25
3.	High school	19	53
4.	Bachelor	6	17
Total		36	100

Based on table 3 it can be seen that most of the respondents have high school education totaling 19 (53%).

Table 4. Distribution of respondents based on occupations of Destana volunteers in Klotok Tuban Village 2020

No.	Occupation	Frequency	Percentage
1.	Teacher	1	3
2.	Private	22	61
3.	Farmer	13	36
Total		36	100

Based on table 4, it can be seen that most of the 22 (61%) respondents work as private employees.

Table 5. Distribution of knowledge on handling cardiac arrest victims before being given basic life support training in Klotok Village, Plumpang Subdistrict, Tuban 2020

No.	Knowledge	Frequency	Percentage
1.	Less	26	72
2.	Enough	8	22
3.	Good	2	7
Total		36	100

Based on table 5, it can be seen that before being given basic life support training, most of the 26 (72%) respondents had knowledge of handling cardiac arrest victims in the poor category.

Table 6. Distribution of knowledge on handling cardiac arrest victims after being given basic life support training in Klotok Village, Plumpang Subdistrict, Tuban 2020

No.	Knowledge	Frequency	Percentage
1.	Less	0	0
2.	Enough	14	40
3.	Good	22	60
Total		36	100

Based on table 6, it can be seen that after being given basic life support training, most of the 22 (61%) respondents had good knowledge of handling cardiac arrest victims.

Table 7. Analysis of the effect of basic life support training on knowledge of handling cardiac arrest victims on Destana volunteers in Klotok Plumpang Village, Tuban 2020

No.	Knowledge	Less		Enough		Good		Total	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1.	Before intervention	26	72%	8	22%	2	6%	36	100%
2.	After intervention	0	0%	14	40%	22	61%	36	100%
Wilcoxon Test: Asymp. Sing (2-sided) = 0.002									

Based on Table 7, from the results of data on 36 respondents, most of the respondents had knowledge of handling cardiac arrest in the less category 26 (72%) before being given training; Meanwhile, most of the respondents had knowledge of cardiac arrest management in the good category 22 (61%) after being given basic life support training.

DISCUSSION

Knowledge of Handling Cardiac Arrest Victims Prior to Basic Life Support Training in Klotok Village, Plumpang District, Tuban.

The results of the study using a questionnaire, it was found that most of the respondents had less knowledge about handling cardiac arrest victims. This shows that the highest percentage is classified as lacking because the knowledge possessed is very lacking.

According to Ariani (2014) explains that one of the external factors that affect knowledge is information. Someone who has more sources of information will have broader knowledge. Research Krick (2000) says 96% of a person can know BHD effectively because of the use of television as a source of information about BHD.

Based on researchers who have been conducted by researchers in Klotok Village, knowledge of handling cardiac arrest victims is very lacking, as indicated by if there are drowning victims which can lead to cardiac arrest, people prefer to take the victim to the puskesmas or hospital without being able to treat it early. Most of the respondents did not have knowledge about how to handle cardiac arrest, therefore respondents did not dare to

treat cardiac arrest in victims of accidents, drowning or other conditions, so they chose to wait for the medical team to arrive.

Knowledge of Handling Cardiac Arrest Victims After being given Basic Life Support Training in Klotok Village, Plumpang District, Tuban

The results of the study that after being given basic life support training showed that most of the respondents had good knowledge about handling cardiac arrest victims.

From this study, it is known that the increase occurred due to the participation and seriousness of the respondents in following the instructions and listening to the material delivered during the basic life support training. In this case, the benefits of the training objectives can be proven by increasing the results of the pre-test and post-test data.

According to Pryoto (2014) Knowledge is the result of knowing, and this occurs after people have sensed a certain object, while according to Herman Sofyandi (2013), training is a process of systematically changing employee behavior to achieve organizational goals.

From the change in the knowledge of the Destana volunteers after being given basic life support training, it shows that there is an increase in knowledge of handling cardiac arrest from bad to good.

The effect of basic life support training on Knowledge of Handling Cardiac Arrest Victims on Destana Volunteers in Klotok Plumpang Village, Tuban

The results from the data of 36 respondents showed that before treatment, most of the respondents had treatment for cardiac arrest victims in the poor category, while after being given treatment, treatment, most of the respondents had the treatment of cardiac arrest victims in the good category.

According to Sukiarko (2007) training is defined as an effort to increase knowledge, change behavior and develop skills. From the results of the research and the theory that basic life support training is very effective, Destana volunteers can increase their knowledge of handling cardiac arrest victims as an interest in helping victims according to the knowledge that has been obtained during the training.

According to the researchers, the changes that occurred in the pre-post showed that there was an increase in the knowledge of volunteers in understanding the handling of cardiac arrest victims in Klotok Plumpang Village, Tuban. Basic life support training is very effective given to increase the knowledge of volunteers in handling cardiac arrest victims. This is due to several factors, including training materials and methods as well as training facilities.

CONCLUSION

From the results of this study it can be concluded that:

1. Prior to basic life support training in Klotok Village, Plumpang Subdistrict, Tuban Most of the respondents had poor handling knowledge
2. After basic life support training was conducted in Klotok Village, Plumpang Subdistrict, Tuban Almost all of the respondents had good handling knowledge.
3. There is an effect of basic life support training on knowledge of handling cardiac arrest victims in Destana volunteers in Klotok Village, Plumpang District, Tuban

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