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Original Article

The Influence of Basic Life Support Training on the Knowledge, Attitude and Practice of Non-Medical Personnel in Kartika Husada Clinic, Malang East Java, Indonesia

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Abstract

Cardiac arrest refers to the sudden and abrupt loss of heart function. There are many cardiac arrests and only a 14% survival rate due to delays in patient reporting and in giving Basic Life Support (BLS). The purpose of this study was to determine how basic life support (BLS) training affected the knowledge, attitudes, and BLS practices of lay officers at the Kartika Husada Clinic in Malang.

The research design was one group pretest and post-test. The population was all non-medical officers at the Kartika Husada Malang Clinic, totaling 17 people. The sample was 17 respondents using a purposive sampling technique. The research was conducted on 16-17 February 2022 at the Kartika Husada Clinic, Malang. The variables of this study were the knowledge, attitudes and practices of non-medical staff at the Kartika Husada Malang Clinic after providing BLS training interventions.

The statistical test used Wilcoxon and the results show that the knowledge with p-value of 0.02; attitude with p-value of 0.03; and practice p-value of 0.01. These three variables show the effect of BLS training on the knowledge, attitudes and practices of non-medical staff at Kartika Husada Malang Inpatient Clinic. This result was motivated by exposure to previous information, education level, and body mass index.

After this research was conducted and provided training to non-medical staff, it could be applied if they find a heart attack case at the Kartika Husada Clinic.

Keywords: *Attitude; BLS Exercise; Knowledge; Practice*

Introduction

Whether or not a person has been diagnosed with heart disease, cardiac arrest is a sudden loss of heart function. According to the (American Heart Association), the time of occurrence cannot be predicted because it occurs so rapidly that symptoms and signs appear. Out-of-hospital a cardiac arrest (OHCA), also known as cardiac arrest that occurs outside of the hospital, is the most common type of heart attack and one of the most prevalent health issues worldwide (Yunanto *et al.*, 2017).

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According to the American Heart Association, the worldwide death rate from heart attacks was at least 17.6 million per year in 2016 and is expected to rise to 23.6 million in 2030. In America, heart disease recorded 363,452 deaths in 2016 and the incidence rate. According to data from 2005 to 2014, there were 605,000 new heart attacks and 200,000 recurring events. As a result, it is estimated that a heart attack takes place approximately every 40 seconds. Heart disease is the leading cause of death in Indonesia at a rate of 26.4%. There are 2% cases of coronary heart disease, 0.43 percent cases of heart failure, and an estimated 30 heart attacks per day. Meanwhile, in Japan there were 70,000 reported cases of OCHA (Yamada *et al.*, 2016) and in Indonesia, it is estimated that there are 43,200 cases out of 4.8 million live births.

According to the American Heart Association (AHA), the survival rate for victims of cardiac arrest in 2015 was only 12 percent. Delays in patient reporting and in providing assistance with cardiopulmonary resuscitation (CPR) are the primary contributors to the low patient survival rate (Wahit, 2012). The American Heart Association (AHA) recommends immediate cardiac pulmonary resuscitation for cardiac arrest patients. The American Heart Association (AHA) has recommended that anyone be able to perform resuscitation measures through training or what is commonly referred to as bystander CPR (Yunanto *et al.,* 2017) in order to assist cardiac arrest patients. Good CPR is very helpful in patient management when treating patients who are in the golden period because it can improve spontaneous heart circulation (Behrend *et al.,* 2011).

From the results of a preliminary study at the Kartika Husada Clinic on 15th November 2020 in Donomulyo, Malang Regency, the results showed that there were 15 non-health workers who worked with the details of 2 security guards, 3 registration staff, 4 cleaning staff, 2 ambulance drivers and kitchen section 4 people. All non-health workers have never received training on basic life support / cardiopulmonary resuscitation. An incident related to cardiac arrest once occurred when a patient with a history of heart disease was queuing at the cardiac polyclinic to check, suddenly the patient became unconscious. Health workers are focusing on providing services and security guards who know are just confused and don't know what to do. This shows that the knowledge, attitudes and abilities/practices of lay people need to be improved as first aiders because they also have the potential to cause cardiac arrest and become first aiders.

The goal of providing basic life support (BLS) is to restore respiratory and/or circulatory function in cases of respiratory arrest and/or cardiac arrest (Panchal *et al.,* 2020). When the heart can't beat, heart massage is needed to help the heart carry out the function of blood circulation, which carries oxygen. For chest compressions to be effective, the victim must be in a supine position on a hard, flat surface. The initial provision of BLS assistance by laypersons or observers is temporarily able to maintain cardiac and brain perfusion to the need for oxygen before members of the Emergency Medical Services (EMS) team members and ambulances arrive at the location. Patients who experience OHCA, survival rates decrease by 7-9 percent per minute if they are not given early-CPR (Peberdy *et al.,* 2008). Berg *et al.,* (2010) stated that earlier by a bystander has been shown to increase the survival rate of post-OHCA patients.

Efforts to reduce mortality due to cardiac arrest that have been developed are cardiopulmonary resuscitation. Until now, CPR has been an extremely important treatment for cardiac arrest. Since cardiac arrest can happen anywhere, BLS training is necessary. Because it can be done by anyone, even if they are not medical professionals, and anywhere when people suddenly find someone unconscious, this is a very important skill that must be owned by ordinary people as well as medical professionals (Spencer *et al,* 2010).The ability to carry out cardiac arrest assistance must always be prepared and raised according to existing developmental science (Notoatmodjo, 2010)

The Practice of BLS for Non-Medical Officers at the Kartika Husada Malang Clinic".

Methodology

The Pre-Experimental method was used in this study. The "One Groups Pre-test Post-test Design" research design was utilized in this study. All 17 non-medical staff members at the Kartika Husada

Inpatient Clinic participated in this study. Total sampling was used in this study. All 17 non-medical employees at the Kartika Husada Inpatient Clinic made up the study's sample. Statistical test using Wilcoxon. BLS training was given by expert staff from Wava Husada Malang Hospital, knowledge assessment used a questionnaire of 15 multiple choice questions, attitudes were assessed using a Likert scale questionnaire of 20 questions, while practice was assessed using an observation sheet using the SOP. The study was conducted at the Kartika Husada Clinic on 15-16 February 2022.

Ethical Consideration

The study was conducted at the Kartika Husada Clinic on 15-16 February 2022.This research has received approval from the Health Research Ethics Committee Institute of Health Science Strada Indonesia with letter number 3692/ KEPK/ II/ 2023.

Result

General data

The research was carried out at the Kartika Husada Clinic February 15-16, 2022 with a sample of 17 respondents with the following results:

Table 1: General Data

Data	F	%
Gender		
Male-Male	7	41.2%
Female	10	58.8%
Adolescent		
20-25 years	1	5.9%
26-45 years	15	88.2%
46-65 years	1	5.9%
BMI		
Normal	10	58.9%
Overweight	3	17.6%
Obesity	4	23.5%
Last Education		
SMP	2	11.8%
SMA	9	52.9%
Diploma/Bachelor Degree	6	35.3%
Received information		
Yes	12	70.6%
No	5	29 .4%
Had found cardiac arrest cases		
Received information	5	29.4%
Yes	12	70.6%
Total	**17**	**100%**

(Source: Primary Research Data, 2022)

The information in the table above indicates that the research was carried out on non-medical staff at the Kartika Husada inpatient clinic between February 15 and February 16, 2022. Of the 17 respondents, the majority were female, with 10 people (58.8%) being female and 15 people (88.2%) being 26-45 years old. The majority of respondents' Body Mass Index were within the normal range of 10 people (58.8%), while at the education level the majority were SMA as many as 9 people (52.9%). As many as 12 respondents (70.6%) had received information and only 5 people (29.4%) had seen cases of cardiac arrest directly.

Pre-test Data

Table 2: Pre-test Data Knowledge, Attitudes and practice

Variable	Category	Pre-Test	
		f	(%)
Knowledge Level	Less	5	29.4%
	Moderate	8	47.1%
	Good	4	23.5%
Attitude	Negative	8	47.1%
	Positive	9	52.9%
Practice	Failed	6	35.3%
	Passed	11	64.7%

(Source: Primary Research Data, 2022)

Based on research data from 15-16 February 2022 on non-medical workers at the Kartika Husada inpatient clinic which has been summarized above, obtained data on the level of knowledge of the respondents before the intervention (pre-test) the majority were in the category of sufficient knowledge (47.1%), as many as 8 respondents while the other 5 respondents (29.4%) were in the category of good knowledge and no respondents (0%) were in the less knowledge category.

In the attitude variable before the intervention (pre-test), more than half of the respondents (9 respondents) or 52.9% had a positive attitude and the rest (8 respondents) or 47.1% had a negative attitude.

In the practice variable before the intervention (pre-test), 11 respondents (64.7%) were included in the pass category while the other 6 respondents (35.3%) did not pass the practice.

Post-test Data

Table 3: Post-test Data Knowledge, Attitudes

Variable	Category	Post-Test	
		f	%
Knowledge Level	Less	1	5.9%
	Moderate	8	47.1%
	Good	8	47.1%
Attitude	Negative	2	11.8%
	Positive	15	88.2%
Practice	Failed	3	17.6%
	Passed	14	82.4%

(Source: Primary Research Data, 2022)

Based on the above-mentioned research data from February 15-16, 2022 on non-medical workers at the Kartika Husada inpatient clinic, the level of knowledge of the respondents after the intervention (post-test) was determined to be high for the majority, with 8 people (47.1%) and 1 respondent (5.9%) having less knowledge.

In the attitude variable, 15 respondents (88.2%) had a positive attitude and 2 respondents (11.8%) had a negative attitude with an increase of 6 respondents experiencing a change in attitude at the pre-test and post-test.

In the practice variable, there were 14 respondents (82.4%) who passed the practice exam, while 3 respondents (17.6%) did not pass.

Results of Cross Tabulation

Table 4: Crosstab General Data and knowledge

Variable	Knowledge Pretest			Knowledge Postest		
	Less	Moderate	good	Less	Moderate	good
Gender						
Male	1	3	2	0	2	4
Female	4	5	2	1	6	4
Age						
(12-25)	0	1	0	0	1	0
Adult (26-45)	4	7	4	0	6	8
Elderly (46-65)	1	0	0	1	0	0
BMI						
Normal	4	6	0	0	5	5
Overweight	0	0	3	0	0	3
Obesity	1	2	1	1	3	0
Qualification						
Junior high school	1	1	0	1	1	0
Senior high school	3	2	1	0	4	2
Diploma/Sarjana	1	5	3	0	3	6
Received information						
Yes	3	2	0	1	4	0
No	2	6	4	0	4	8
Had found cardiac arrest cases						
Ever	3	2	0	1	2	2
No	2	6	4	0	6	6

(Source: Primary Research Data, 2022)

Based on table 5 above, the cross-tabulation data between pre-test and post-test knowledge with respondent characteristics such as gender, age, BMI, last education, receive information, and had found cardiac arrest case or not.

Table 5: Crosstab General Data and Attitude

Variabel	Attitude Pre-test		Attitude Post-test	
	(-)	(+)	(-)	(+)
Gender				
Male	2	4	0	6
Female	6	5	2	9
Age				
20-25 years	0	1	0	1
26-45 years	7	8	2	13
46-65 years	1	0	0	1
BMI				
Normal	6	4	1	9
Overweight	0	3	0	3
Obesity	2	2	1	3
Qualification				
Junior high school	1	1	1	1
Senior high school	3	3	0	6
Diploma/Sarjana	4	5	1	8
Received information				
Yes	2	3	1	4
No	6	6	1	11

Had found cardiac arrest cases				
Ever	4	1	2	3
No	4	8	0	12

(Source: Primary Research Data, 2022)

Based on table 4.5 above, tabulated data obtained crosses between pre-test and post-test attitudes with respondent characteristics such as gender, age, BMI, last education, initial information, and ever found a case of cardiac arrest or not.

Table 6: Crosstab General Data with Practices

VariabeVariables	**Practices Pre-test**		**Practices Post-test**	
	Failed	**Pass**	**Failed**	**Pass**
Gender				
Male	1	5	0	6
Female	5	6	3	8
Age				
20-25 years	0	1	0	1
26-45 years	5	10	2	13
46-65 years	1	0	0	0
BMI				
Normal	4	6	2	8
Overweight	1	2	0	3
Obesity	1	3	1	3
Qualification				
Junior high school	1	1	1	1
Senior high school	2	4	1	5
Diploma/Sarjana	3	6	1	8
Received information				
Yes	2	3	2	3
No	4	8	1	11
had found cardiac arrest cases				
Ever	3	2	2	3
No	3	9	1	11

(Source: Primary Research Data, 2022)

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Based on table 4.6 above, data were obtained from cross tabulation between pre-test and post-test practices with respondent characteristics such as gender, age, BMI, last education, initial information, and have found cases without cardiac arrest or not.

Table 7: Data Analysis

Variable	Category	Pre-Test		Post-Test		P Value
		f	(%)	F	%	
Knowledge Level	Good	5	29.4%	1	5.9%	Wilcoxon Z = -2.309[b] P = 0.02*
	Moderate	8	47.1%	8	47.1%	
	Les	4	23.5%	8	47.1%	
Attitude	Positive	8	47.1%	2	11.8%	Z = -2.121[b] P = 0.03*
	Negative	9	52.9%	15	88.2%	
Practice	Passing	6	35.3%	3	17.6%	Z = -2.889[b] p = 0.01*
	Failed	11	64.7%	14	82.4%	

(Source: Primary Research Data, 2022)

Based on table above, data obtained from data analysis on variable level of knowledge results with p of 0.02 (<0.05) and Z score -2.309 which means there is an effect of basic life support training (BLS) on knowledge of non-medical staff at the Kartika Husada Inpatient Clinic Malang In the attitude variable with p-value of 0.03 (<0.05) and Z score -2.121, which means that there is an effect of BLS training on attitudes of non-medical staff at Kartika Husada Malang Inpatient Clinic.

The practice variable obtained a p-value of 0.01 (<0.05) and a Z score of -2.889, which means that there is an effect of BLS training on the practice of non-medical staff at the Kartika Husada Inpatient Clinic in Malang.

Discussion

Level of Knowledge Prior to BLS Training

In the study, it was obtained data on the level of knowledge of respondents before the intervention (pre-test), the majority were in the category of sufficient knowledge (47.1%), as many as 8 respondents while 5 other respondents (29.4%) were in the category of good knowledge and 4 respondents (23.5%) who are in the less knowledge category.

In this study, the results showed that 12 respondents (70.6%) had received information about BLS, while 5 respondents had never received information.

Nori (2012) asserts that knowing is the outcome of sensing an object, which results in knowledge. The five senses—sight, hearing, smell, taste, and touch—are what humans use to sense. A person's knowledge of how to carry out an action is influenced by a number of factors, including experience and information, according to Trinurhilawati *et al.,* (2019). In contrast, according to Notoadmodjo (2010), knowledge can be influenced by education, work, experience, beliefs, and social and cultural factors.

The researcher considered that the initial information that had been obtained influenced the results of the pre-test of knowledge based on the description above. Eight respondents had sufficient and good knowledge, while only four had less knowledge.

Level of Knowledge after BLS Training

The data on the level of knowledge of respondents after the intervention (post-test) were based on data collected from non-medical officers at the Kartika Husada inpatient clinic from February 15-16, 2022. These data revealed that the majority of respondents had adequate knowledge, with each of the 8 respondents (47.1%) and one respondent (5.9%) having less knowledge. There was a +4 increase in the good knowledge category in the post results compared to the pre-test results.

This change in the level of knowledge and skills is due to the fact that in the BLS training there is the provision of information, in which there is a learning process. The learning process according to Notoatmodjo (2010), can be interpreted as a process to increase knowledge, understanding and skills obtained from experience or conducting studies (teaching and learning process) from individual learning is expected to be able to explore what is hidden within them being encouraged to think and develop personalities by free from ignorance.

Another factor that contributed to an increase in knowledge was the education level of the respondents, where in this study the results showed that the education level of the majority of respondents was high school, as many as 9 people (52.9%) and diploma/graduate education level as many as 6 people (35.3%).

Iqbal (2012) defines education as instruction given to another person in order to comprehend something. It goes without saying that a person's ability to absorb information and ultimately their level of knowledge increase with their level of education. Education and knowledge are very closely linked, and it is hoped that a person will gain a wider range of knowledge as a result of higher education (Wawan & Dewi, 2010). According to Iqbal (2012), the ease with which a person absorbs and comprehends new information is directly correlated with their level of higher education.

The researcher selects that the increase in knowledge post test results cannot be separated from the factor of the respondent's level of education. The higher the education level of the respondent, the easier it is to understand the science of basic life support.

The Effect of BLS Training on Knowledge Level

Based on statistical tests using Wilcoxon, the results of data analysis on the knowledge level variable obtained results p = 0.02 (<0.05) and Z score -2.309, which means that there is an effect of basic life support training (BLS) on the knowledge of non-medical staff at Kartika Husada Malang Inpatient Clinic these activities (Notoatmodjo, 2010). The selection of educational methods must take into account the limitations of time, cost, effort, taste and condition of the participants. The educational method used in this study is the lecture and demonstration method. According to Hasibuan, (2009), the lecture method is a way of explaining and explaining the meaning of ideas or messages verbally to individuals or groups so as to obtain information. The demonstration method also plays a very important role in this research because the method used demonstrates or reveals how the process of an activity occurs. The demonstration method is a very effective teaching method because it makes it easier for respondents to apply it directly (Sudjana, 2010).

The use of learning modules about BLS also has an influence on the training process. The lecture process assisted by learning modules and demonstrations will have an impact on increasing knowledge about BLS actions in respondents. This statement is also reinforced by research from Jamil *et al,* (2021), which states that BLS training conducted with the help of instructors and learning modules will increase knowledge about BLS.

According to the researchers, the provision of BLS training, which was provided with a combination of lectures and practice made it easier for respondents to understand the material, easier for respondents to remember and work on.

Description of Respondents' Attitudes before BLS Training

Based on research data from 15-16 February 2022 non-medical officers at the Kartika Husada inpatient clinic obtained attitude data before the intervention (pre-test), more than half of the respondents (9 respondents) or 52.9% had an attitude positive and the rest (8 respondents) or 47.1% had a negative attitude.

The elements that impact mentalities incorporate individual experience, broad communications and others who are thought of as significant. The appreciation of social stimuli will be shaped and influenced by something that people have experienced and are experiencing at the present time. One of the foundations upon which attitudes will be formed will be the response.

5 of the people who took part in this study (29.4%) had been in a cardiac arrest, while the remaining 12 people (70.6%) had never seen or experienced one.

Attitude is a type of evaluation or reaction to an object that is impartial or impartial. It is characterised by a certain regularity in terms of feelings (affection), thoughts (cognition), and a person's predisposition to action (conation) towards an aspect of the environment around them. Attitudes, according to Gerungan (2009), are learned or formed over time in relation to an object and can be influenced by personal experience. They are not innate. Respondents' personal experiences can typically influence attitudes; personal experiences leave a lasting impression, making it easier to form attitudes.

According to the researchers' assumptions, more than half of the respondents' attitudes before the training (52.9%) were motivated by the experiences of the respondents who had seen or faced cases of cardiac arrest. Personal experiences that have been obtained by pool staff can generally shape attitudes, personal experiences with the non-medical staff at the Kartika Husada inpatient clinic leave a strong impression so that officers' attitudes are more easily formed.

Description of Respondents' Attitudes after BLS Training

Based on research data collected on February 15-16, 2022 on non-medical officers at the Kartika Husada inpatient clinic, attitude data was obtained after the intervention (post-test) on the attitude variable, there were 15 respondents (88.2%) had a positive attitude and 2 respondents (11.8%) had a negative attitude with an increase of 6 respondents who experienced a change in attitude from negative to positive. In this study, 15 respondents (88.2%) were found to be in the adult category (26-45). Meanwhile, in the age range of adolescents and the elderly, there was only 1 respondent each.

Notoatmojo, (2010) asserts that a person's level of maturity and strength will increase with increasing maturity in thinking and adapting as they get older. Age affects a person's comprehension and mindset. Age is also related to how mature a person's mind is at accepting and responding to things. As a person gets older, the maturity of their mind also gets stronger, which helps them have a positive attitude. Basically, the more experience a person has, the older they are.

According to the researchers, in this study, the age of the respondents included those who had a mature mind and were able to react to something, the assessments of everything were more objective and positive.

Effect of BLS Training on Respondents' Attitudes

The attitude variable had a *p*-value of 0.03 (0.05) and a Z score of -2.121, indicating that BLS training had an effect on the attitudes of non-medical staff at the Kartika Husada Inpatient Clinic Malang, as determined by the Wilcoxon statistical test results.

In this BLS training, lectures/theories about what cardiac arrest is, goals, steps, and what they can do when they encounter a case of cardiac arrest are delivered.

This is also in line with the theory of Hariza, (2017) that the levels of attitude are: accept (acceptance), respond (response), appreciate (valuing) and be responsible (responsible). In this case, health promotion affects a person's attitude, which can change from not caring to being concerned about the management of BLS that has been given. Because basically this attitude has been formed since birth, along with the influence of health promotion, attitudes that were previously closed can open up, and attitudes that were previously indifferent become caring.

According to the researchers, training can change attitudes but apart from the fact that humans are basically social beings who always have a soul to help, the training methods provided are also able to inspire this social spirit to rise. In this training, respondents who had the experience of dealing with cardiac arrest were given the opportunity to retell their experiences and be able to share experiences to change attitudes from initially negative to positive. The re-explanation from the respondent made other respondents feel able to help, even though it looks simple but can still be useful.

Description of Respondents' Practices before BLS Training

Based on research data from 15-16 February 2022 on non-medical officers at the Kartika Husada inpatient clinic which has been summarized above, obtained data on abilities / practices before intervention (pre-test), 11 respondents (64.7 %) fall into the pass category while the other 6 respondents (35.3%) do not pass in practice.

Sri Hadiati and Anggiat M. Sinaga say that a person's ability is more about how well they can do any kind of work. Therefore, a person's ability is the foundation for performing a task efficiently and effectively. Age, education level, body mass index, sources of information, and sources of experience all have an impact on ability.

In this study, about 12 respondents (70.6%) had previously received information about BLS and the remaining 5 respondents (29.4%) had never received information.

According to Notoatmodjo (2010) that a person's ability is not only influenced by education but there are other factors, one of which is exposure to information. Initial information can help provide an overview related to the abilities of BLS respondents. One's initial knowledge also influences practice, where the better one's knowledge, the better the practice will be.

According to the researchers, this affected the practice pre-test results of the respondents, more than half of whom passed the skill test with a score of > 75%.

Description of Respondents' Practices after BLS Training

Based on research data collected on February 15-16, 2022 for non-medical staff at the Kartika Husada inpatient clinic, which has been summarized above, the ability or practice data of the respondents were obtained after the intervention. There were 14 respondents (82.4%) passed the practical exam while 3 respondents (17.6%) did not pass. There was an increase of 3 respondents in the pass category.

In the study, data were obtained from respondents who had a normal body mass index (BMI) with a total of 10 people or 58.9%, a body mass index (BMI) over weight with a total of 3 or 17.6%, and an obese body mass index (BMI) of 4 people or 23.5%.

BMI has a strong relationship with physical fitness, according to Jaafar *et al.,* (2015), who found that BMI is strongly related to physical fitness. When compared to a normal BMI, BMI has a stronger negative correlation with cardiorespiratory endurance status—the higher the BMI, the lower the cardiorespiratory endurance level. People may experience rapid exhaustion as a result of diminished cardiorespiratory endurance (Ock, *et al.,* 2011; Chalkias *et al.,* 2013) In line with the theory above, a person's body mass index (BMI) will greatly affect the ability of respondents or helpers to perform BLS in phantom. With a good BMI, it will be easier for respondents to practice the BLS and pass the practice exam.

Effect of BLS Training on Respondents' Practice

In this study, the results of the practice variable obtained *p*-value of = 0.01 (<0.05) and a Z score of -2.889, which means that there is an effect of BLS training on the practice of non-medical officers at Kartika Husada Malang Inpatient Clinic.

Improving skills are actually inseparable from the provision of training, so that the level of skills shows a change after being given training, this has been proven by researchers that by taking a nursing approach, providing training has brought good skills results.

The educational method used in this study is the lecture and demonstration method. According to Hasibuan, (2009), the lecture method is a way of explaining ideas or messages orally to individuals or groups so as to obtain information. The demonstration method also plays a very important role in this research because the method used demonstrates or shows how the process of an activity occurs. The demonstration method is very effective because it makes it easier for respondents to apply it directly (Sudjana, 2010).

The training process is also influenced by the use of BLS learning modules. Respondent’s awareness of BLS actions will rise as a result of the lecture process and the learning and demonstration modules.

This assertion is also supported by research from Jamil *et al*., (2021), which claims that BLS training provided by instructors and learning modules will raise awareness of BLS.

According to the researchers, the provision of BLS training, which was provided with a combination of lectures and practice made it easier for respondents to understand the material, remember it, and work on it.

This study's educational methodology is the lecture and demonstration method. According to Hasibuan, (2009), the lecture method is a way of explaining ideas or messages verbally to individuals or groups so as to obtain information. The demonstration method also plays a very important role in this research because the method used demonstrates or shows how the process of an activity occurs. The demonstration method is very effective because it makes it easier for respondents to apply it directly (Sudjana, 2010).

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According to the researchers, the provision of BLS training which was provided with a combination of lectures and practice made it easier for respondents to understand the material, easier for them to remember and work on.

The majority of respondents in this study had completed high school, with 9 (52.9%) and as many as 6 (35.3%) receiving a diploma or graduate education. According to Mubarak and Chayatin (2009), education is the act of imparting knowledge to others so that they can comprehend it. It is undeniable that the higher a person's education, the easier it is for them to acquire knowledge. Respondents' skills or practices are real examples of knowledge that can be put into practice.

Conclusion

According to the findings of this study's 17 respondents, it can be said that: 8 respondents (47.1%) had pre-test knowledge that was deemed to be sufficient, 5 respondents (29.4%) to be deficient, and 4 respondents are good (23.5%). The 47.1% in the Good category and 47.1% in the sufficient category had post-test knowledge. For every knowledge level, there were 4 more respondents. With a p value of 0.02, BLS training had an impact on respondents' knowledge. Pre-test attitudes in this study were positive in 9 of the respondents (52.9%) and negative in 8 of the respondents (47, 1% 1). The Post-test Attitude grew by 6 respondents and turned to a positive attitude in 15 respondents (88.2%).

Conflict of Interest

The authors declare that they have no competing interests.

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