# THE EFFECT OF BASIC LIFE SUPPORT HEALTH EDUCATION WITH VIDEO LEARNING METHOD ON MOTIVATION TO HELP VICTIMS

## Sri Anik Rustini<sup>1</sup>, Ninik Ambar Sari<sup>2\*)</sup>, Merina Widyastuti<sup>3</sup>, Ceria Nurhayati<sup>4</sup> & Faridah Faridah<sup>5</sup>

<sup>1,2,3,4,5</sup>Department of Nursing, Sekolah Tinggi Ilmu Kesehatan Hang Tuah Surabaya, Indonesia

#### Abstract

Cardiac arrest is a condition in which there is a sudden cessation of the normal circulation of blood due to failure of the heart to contract effectively during the systolic phase. Basic Life Support is an advanced life support for cardiac arrest patients which aims to stop the process leading to death. The high mortality rate due to cardiac arrest is influenced by the lack of knowledge of how to handle cardiac arrest victims so that the motivation to help victims is minimal in the community. This study aims to see the effect of Basic Life Support health education on the motivation to help victims. Pre-Experimental Research Design with One-group pre-posttest design. Population of level 3 students of STIKES Hang Tuah Surabaya. Sampling using simple random sampling. The number of samples is 88 people. The independent research variable is health education with the Basic Life Support learning video method, the dependent variable is motivation to help victims. The measuring instrument was given 2 times for health promotion. This study used a questionnaire and the data were analyzed using the Wilcoxon test. The results showed that the factors that influenced the level of knowledge with motivation to help p < 0.000 where, p value < 0.05, then there was an influence before being given health education and after being given Basic Life Support health education on the motivation to help victims. The implication of the research is that it is necessary to provide basic life support health education to students for first aid for cardiac arrest victims.

Keywords: Health Education; Basic Life Support; Motivation to Help

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\*) Corresponding author Email: ninikambarsari2020@stikeshangtuah-sbya

#### 1. Introduction

Cardiac arrest is the sudden cessation of the effective pumping activity of the heart, resulting in cessation of circulation. The causes of cardiac arrest are myocardial infarction, heart failure, and dysrhythmias (Patricia, 2013). Cardiac arrest can happen to anyone and anywhere (American Heart Association, 2010). The right first aid in dealing with cases of cardiac arrest is given cardiopulmonary resuscitation (CPR), better known as Basic Life Support (Dahlan et al., 2014). Low intellectual ability and incompetence in providing cardiopulmonary resuscitation (CPR) assistance can affect motivation which can be one of the main reasons for the many victims of cardiac arrest who do not survive when we meet on the street or in public places . Many students are not equipped with the level of knowledge and level of motivation on how to provide first aid to victims of cardiac arrest (Dahlan et al., 2014). Based on the researcher's preliminary study, students of S1 Nursing level 3 regular STIKES Hang Tuah Surabaya have not received knowledge about BHD so they need to be given knowledge about BHD so that students can help victims who experience cardiac arrest.

Cardiac arrest can occur due to acute oxygen deprivation, drug overdose, acid-base or electrolyte disturbances, accident or shock. Cardiac arrest is usually preceded by ventricular fibrillation or pulseless tachycardia (80-90%), followed by asystole (10%) and electro-mechanical dissociation (5%), cardiac arrest is characterized by a palpable pulse (carotid, femoral) accompanied by bluish (cyanosis), breathing stops, pupillary dilation does not react to stimuli (Basri & Istiroha, 2019). If this happens for more than 4 minutes, it can cause death of brain cells and can cause death of all vital organs of the body in just 10 minutes. Lack of knowledge level and low level of motivation in first aiders are one of the main reasons for the large number of cardiac arrest victims who do not survive. Increased understanding of knowledge and skills in handling cardiac arrest can have a significant impact in increasing survival rates in cardiac arrest cases, it can trigger student motivation to help victims because they already understand how to do first aid in cardiac arrest (Ganthikumar, 2016). If students gain knowledge of first aid, they want to help when there is a victim with cardiac arrest, they will not hesitate anymore when they are going to help the victim. In addition, the simulation process also requires knowledge and motivation from each student.

We can know that the learning process can be successful if it is supported and influenced by learning motivation and motivation to do BHD. Learning motivation can have a significant positive influence on the learning process, which means that if learning motivation increases, it tends to increase its competence (Silvana & Sumbawati, 2017). Based on the description above, cardiopulmonary resuscitation (CPR) learning needs to be applied to nursing students because as a part of health workers who are ready to help victims of cardiac arrest at any time (Fatmawati et al., 2019). Cardiopulmonary resuscitation (CPR) learning can add insight and knowledge so that it can motivate nursing students to take cardiopulmonary resuscitation (CPR) actions in unexpected emergency conditions and need help as soon as possible (Suharsono & Fikriana, 2016). Based on the above statement, the researcher is interested in knowing whether there is an effect of cardiopulmonary resuscitation health education with the learning method on the level of knowledge and level of motivation to help victims in level 3 students of the STIKES Hang Tuah nursing undergraduate study program in Surabaya.

## 2. Method

Research design is very important in research, which allows maximizing control of several factors that can affect the accuracy of results (Arikunto, 2010). The type of research used by the researcher in this study was a pre-experimental design, while the design used by the researcher was a pretest-post-test one group design. The population in this study were students of level 3 Nursing Study Program Stikes Hang Tuah Surabaya with a total of 110 people. This study used level 3 students because they have received learning about the anatomy and physiology of cardiovascular organs, and pathophysiology. Calculation of the sample selected by the researcher using the formula from Slovin. The sample size in this study was 88 people. The sampling technique in this study uses a technique on Probability Sampling using Simple Random Sampling, meaning that the determination of the sample among the population is adjusted to

what the researcher wants and is randomized according to lottery numbers (Nursalam, 2017). Inclusion criteria : regular student of S1 Nursing level 3 at STIKES Hang Tuah Surabaya, students who actively participate in lecture activities > 80 percent, dan willing to be a respondent. Exclusion criteria : students on leave, and students who do not fill out the questionnaire to the specified limit

#### Instruments

The basic Life Support (BHD) knowledge level questionnaire was made by researchers based on the understanding, objectives, and steps of CPR. The questionnaire contains 20 questions containing 18 positive questions and 2 negative statements. The tool used to measure motivation to help in this study is a questionnaire, this questionnaire was modified from Nugroho's 2013 research and questionnaires from the research conducted (Thoyyibah, 2014).

#### Data Analysis

The data that has been processed, then analyzed with statistical tests used is the Wilcoxon test with a significant level of 0.05 meaning if p < 0.05 then the hypothesis is accepted which means that there is an effect of Basic Life Support health education with the video learning method on motivation to help level 3 students STIKES Hang Tuah. If p > 0.05, it means that the hypothesis is rejected, which means that there is no effect of BHD health education with the video learning method on the motivation to help students at level 3 STIKES Hang Tuah Surabaya.

## **Ethical Consideration**

This research has been reviewed and declared to have passed the ethical review of STIKES Hang Tuah Surabaya Ethics Committee. Ethical Approval no PE/72/VII/2021/KEPK/SHT in an effort to protect the human rights and welfare of nursing research subjects. At the time of conducting the research, the researcher guaranteed all the confidentiality of the respondents and did not violate the rights of the respondents and did not cause harm to the respondents who participated in this research.

#### 3. Results and Discussion

 Table 1. Frequency Distribution of Respondent

 Characteristic (n=88)

No	Characteristic	Ν	(%)
1	Gender		
	a. Male	20	23
	b. Female	68	77
2	Age		
	a. 19 years	14	16
	b. 20 years	37	42
	c. 21 years	37	42
3	BLS Workshop		
	a. Ever Followed	8	10
	b. Never Foollowed	80	90

Table 1 shows that the most gender is female as many as 68 people with a percentage of 77%. The most age group at the age of 20 years (42%) and 21 years (42%). Many respondents have never attended Basic Life Support training as many as 80 people (90%).

Tabel 2. Results of Analysis of the Effect of
Cardiopulmonary Resuscitation Health Education
Before and After on the Level of Motivation to

Motivation	Pre		Post	
to Help	Ν	%	Ν	%
Low	1	1,1	0	0
Moderate	87	96,6	0	0
High	0	0	88	100
Total	88	100	88	100

Statistical test Wilcoxon Signed Ranks Test  $0.000 \ (\alpha = 0.05)$ 

In the crosstab results, it was found that from 8 respondents who had received health education about CPR, there was a moderate level of motivation to help 8 respondents (100.0%) and from 80 respondents who had never received health education about Basic Life support, the crosstab results showed low motivation to help 1 respondent (1.2 %) and motivation to help was 79 respondents (98.8%). Researchers assume that there is a comparison between respondents who have never received health education about Basic Life support compared to respondents who have received health education about Basic Life support because there are still respondents with low motivation to help out of 80 respondents who have never received health education about Basic Life support.

This is supported by the results of previous studies. Providing simulation of Basic Life support actions to students is very important and beneficial for increasing the number of people trained in Basic Lifes support so that they can their become bystanders in respective environments. Giving this simulation can also increase students' insight and knowledge so that it can motivate them to take Basic Life support actions in unexpected emergency conditions that require help as soon as possible (Pravitno et al., 2020).

The level of motivation to help after being given health education was obtained with a high level of motivation to help as many as 88 students (100%). In the results of the study, it was found that the majority of 88 students had answered in accordance with positive and negative statements correctly and appropriately. From the crosstab results obtained from 88 respondents, both those who have been given health education and have not been given health education after being given health, the level of motivation to help is high to 88 respondents with a high level of motivation to help (Widyarani, 2018). The researcher assumes that the level of motivation to help after receiving health education is very influential on the level of motivation to help respondents. This can be concluded because the respondent has obtained sufficient knowledge so that the respondent can motivate himself with the knowledge that has been obtained to help the victim.

This is supported by the results of previous studies. If students gain knowledge of first aid, they want to help when there is a victim with cardiac arrest, they will not hesitate anymore when they are going to help the victim. In addition, the simulation process also requires knowledge and motivation from each student. We can know that the learning process can be successful if it is supported and influenced by learning motivation and motivation to do Basic Life support. Learning motivation can have a significant positive influence on the learning process, which means that if learning motivation increases, it tends to increase its competence (Herlina, 2019). Cardiopulmonary resuscitation (CPR) learning can add insight and knowledge so that it can motivate nursing students to take cardiopulmonary resuscitation (CPR) actions in unexpected emergency conditions and need help as soon as possible (Darwati et al., 2019).

Motivation is a conscious effort to influence a person's behavior so that his heart moves to act to do something to achieve certain results or goals where motivation is also a mover, desire, stimulus or drive that makes people act or behave in a motivational way which refers to the cause of the emergence of an activity behavior. Attitude is a reaction or response of someone who is still closed to a stimulus or object. Attitude is a predisposition to do or not do something (Fatmawati et al., 2019).

## 4. Conclusions and suggestions

The results showed that the video learning method about basic life support can have a significant effect on increasing motivation to perform basic life support and skills in performing CPR on level 3 students of STIKES Hang Tuah Nursing Study Program Surabaya.

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