Original Article

The Relationship between Student Attitude regarding Basic Life Support with Student Motivation in Helping Victims of Cardiac Arrest among Nursing Students

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Article Information	ABSTRACT
  Correspondence* Phone: (+62)85759469101 Email: nunungliawati@dosen.stikesmi.ac.id 	Cardiac arrest is an emergency condition that often occurs. This relatively high incidence underlies the importance of attitudes about basic life support in the initial management of cardiac arrest. A positive attitude about basic life support and supported by the helper's motivation in dealing with victims of cardiac arrest can increase survival rates. Basic Life Support is a series of initial effects to restore respiratory and or circulatory function in someone who has experienced respiratory arrest and or cardiac arrest. This study was a correlational research. The population was all regular undergraduate nursing students with proportional random sampling (155 respondents). Data collection technique with a questionnaire. The analytical method used Chi-Square with a p-value of 0.000 ≤ 0.005. The results showed that students who had positive attitudes about basic life support had moderate motivation in helping victims of cardiac arrest and students who had negative attitudes about basic life support had low motivation in helping victims of cardiac arrest. The conclusion showed that there was a relationship between students' attitudes about basic life support and student motivation in helping victims of cardiac arrest among students at STIKES Sukabumi.

INTRODUCTION

An emergency is a situation where a person is in a condition that threatens his or her life and requires first aid. This condition can occur suddenly so it is difficult to predict when, where and to whom it will happen. In this emergency condition, a person needs immediate medical action to save life and

prevent disability (Permenkes RI No. 10, 2016).

Emergency situations require help quickly, precisely and accurately (Putri, 2017). The principle of emergency aid action is that time saving is life saving, meaning that all actions taken during an emergency must be truly effective and efficient (Makkasau, 2022). Handling emergency conditions includes pre-hospital, in-hospital and post-hospital, meaning that emergency conditions can be handled in pre-hospital conditions by securing the emergency victim's situation, providing Basic Life Lupport (BHD) until the victim's condition is safe (Hutabarat RY , and Putra CS, 2016).

BHD is an action carried out on someone in an emergency to save life when cardiac arrest occurs (Lufianti, 2023). BHD consists of identifying cardiac arrest and activating the integrated emergency services system (SPGDT), early cardiopulmonary resuscitation (CPR) and cardiac shock using an automated external defibrillator (AED) or automatic cardiac shock device (AHA, 2015). Basic life support according to (AHA, 2010) uses the ABC method, namely airway or freeing the airway, breathing or giving artificial respiration, and circulation or heart massage in the shock position. Meanwhile, in 2015 the AHA updated the BHD method to CAB, then in 2020 the AHA updated the BHD method again to DRCAB (Danger-Response-Circulation-Airway-Breathing) (AHA, 2020). Indications for BHD according to the American Heart Association (AHA, 2015) are cardiac arrest and airway obstruction.

Cardiac arrest is a condition where there is a sudden cessation of normal blood circulation caused by failure of the heart to contract effectively during the systolic phase (Hadisman, 2014). Many things influence the occurrence of cardiac arrest, the causes include cardiovascular disease, acute lack of oxygen, drug overdose, acid base/electrolyte disorders, accidents, electric shock, drowning, anesthesia and surgery, and shock (Gadar Medik Indonesia, 2016).

According to the World Health Organization (WHO, 2019) cardiovascular disease is the number 1 cause of death in the world, claiming around 17.9 million lives every year. Four of the cardiovascular disease deaths were caused by heart attacks and strokes. In Indonesia, based on data from the Association of Indonesian Cardiovascular Specialists (PERKI), the incidence of heart and blood vessel disease is increasing from year to year. The prevalence of cardiovascular disease in Indonesia is 15 out of 1000 people, or around 4.2 million people in Indonesia suffer from heart disease. The prevalence of heart disease in West Java is 1.8%. Around 14.4% of the causes of death in Indonesia are coronary heart disease, it is reported that 50% of people with coronary heart disease have the potential to experience cardiac arrest (Riskesdas, 2018). Cardiac arrest is an emergency event that requires BHD with cardiopulmonary resuscitation (CPR). Although attempts at resuscitation are not always successful, many more lives are lost due to non-resuscitation. Most of the victims of cardiac arrest are adults, but thousands of babies and children also experience it every year (Gadar Medik Indonesia, 2016). However, to date, only a small percentage of cardiac arrest victims have received basic CPR life support from the public who witnessed the incident. This is thought to be due to the low level of motivation of first responders being the cause of many cardiac arrest victims who do not survive (Damayanti, 2021) .

Motivation is a conscious effort to influence someone's behavior so that they are moved to take action to do something to achieve certain results or goals (Irman, 2019). Where motivation is also the main driver for the helper in providing first aid to the victim. With motivation growing within a person, that person will become increasingly aware of the urge to act or act (Sunaryo, 2013 in Barus 2017). Building motivation in a person is closely related to a positive attitude.

Attitude is a person's response to remaining closed to a stimulus or an object. Attitude

has not yet become an action or activity (Irawan, 2021). Attitude in carrying out first aid measures is a condition which is the result of positive and negative sensing and response to emergency events (Rahman, 2022). A positive attitude can form high motivation, while a negative attitude can form low motivation (Irman, 2019).

So it is very important for someone to have a positive attitude about basic life support in order to encourage motivation to provide assistance in emergency cardiac arrest conditions. Emergency treatment of cardiac arrest outside the hospital or Out-of-hospital cardiac arrest (OCHA) by carrying out BHD in the early minutes can increase the patient's survival rate (Manurung, 2022). Therefore, every health worker, lay person or special lay person (Medical First Responder), must be able to carry out BHD (Keenan, et al, 2013). According to Pro Emergency (in Prayitno, et al, 2020), according to their role, lay people are divided into two, namely ordinary lay people and special lay people. Specific lay people include Health Students including Nursing Students.

Undergraduate nursing students are prospective nurses who will later work in hospitals or pre-hospital settings. According to (AIPNI, 2021), the basic competency in Bachelor of Nursing education is that students are able to master the principles and carry out basic trauma and cardiac life support (BTCLS) procedures in emergency/disaster situations according to their standards and authority. As part of society and the spearhead of the medical team in the future, it is very important for nursing students to have a positive attitude and high motivation to provide assistance to someone who is in an emergency, especially cardiac arrest.

Based on the results of research conducted by Khedher, et al (2017), the results show that students' attitudes towards BHD are negative. Research conducted by Irman (2019), where the research results show that there is a relationship between attitude and motivation in providing first aid.

METHOD

This type of research uses a correlational method with a Cross Sectional approach. The population in this study were all students from the Bachelor of Nursing Study Program levels III and IV at the Sukabumi College of Health Sciences, totaling 245 students from 4 classes with a sample of 155 respondents. Using proportional random sampling. Data collection techniques using questionnaires. The analysis method uses Chi-Squre

RESULTS

1. Univariate Analysis Description of Respondent Characteristics

Table 1
Description of Respondent Characteristics Based on Age

Age	Frequency	Percentage (%)
18-21	75	48.4%
22-25	80	51.6%
Total	**155**	**100%**

Based on table 1, it shows that the majority of respondents were 22-25 years old, namely 80 people or (51.6%), and a small portion were 18-21 years old, namely 75 people or (48%).

Table 2
Description of Respondent Characteristics Based on Gender

Gender	Frequency	Percentage
Male	60	38.7%
Female	95	61.3%
Total	**155**	**100%**

Based on table 2, it shows that the majority of respondents were female, namely 95 people or (61.3%), and a small portion were male, namely 60 people or (38.7%).

Table 3 Description of Respondent Characteristics by Class

Class	Frequency	Percentage
Level III Class A	38	24.5%
Level III Class B	38	24.5%
Level IV Class A	38	24.5%
Level IV Class B	41	26.5%
Total	**155**	**100%**

Based on table 3, it shows that the majority of respondents were level IV class B, namely 41 people or (26.5%), and a small portion were level IV class and level III class A and B, namely 38 people each. or equal to (24.5%).

Table 4
Description of Respondents' Characteristics Based on Participating in Training/Outreach on Basic Life Support

BHD Training/ Socialization	Frequency	Percentage
Once	41	26.5%
Not yet	114	73.5%
Total	**155**	**100%**

Based on table 4, it shows that the majority of respondents have never attended training/socialization on basic life support, namely 114 people or (73.5%), and a small number have never attended training/socialization on basic life support, namely 41 people. or equal to (26.5%).

2. Univariate Analysis of Research Variables

Table 5
Description Student Attitudes Regarding Basic Life Support

Category	Frequency	Percentage (%)
Positive	79	51.1%
Negative	76	49.0%
Total	**155**	**100%**

Based on table 5, it shows that the majority of students have a positive attitude about basic life support, namely 79 people or (51.1%), and a small percentage of students have a negative attitude about basic life support, namely 76 people or (49.0%).

Table 6
Description of Motivation in Helping Cardiac Arrest Victims

Category	Frequency	Percentage
Tall	15	9.7%
Currently	45	29.0%
Low	95	61.3%
Total	**155**	**100%**

Based on table 6, it shows that the majority of students' motivation in helping cardiac arrest victims is in the low category, namely 95 people or (61.3%), and a small percentage of students' motivation in helping cardiac arrest victims is in the high category, namely 15 people or amounted to (9.7%).

3. Bivariate Analysis

Table 7
Analysis of the Relationship between Student Attitudes Regarding Basic Life Support and Student Motivation in Helping
Cardiac Arrest Victim

Attitude Category	Motivation High	Medium	Low	Total
Positive	14	34	31	79
(%)	17.7%	43.0%	39.2%	100%
Negative	1	11	64	76
(%)	1.3%	14.5%	84.2%	100%
Total	**15**	**45**	**95**	**155**
(%)	**9.7%**	**9.0%**	**61.3%**	**100%**

Based on table 7, it shows that there are 14 students who have a positive attitude about basic life support with high motivation in helping cardiac arrest victims (17.7%), and students who have a positive attitude about basic life support with moderate motivation in helping cardiac arrest victims. heart disease, namely 34 people (43.0%), and students who had a positive attitude about basic life support with low motivation in helping cardiac arrest victims were 31 people (39.2%). Then students who have a negative attitude about basic life support with high motivation in helping cardiac arrest victims are 1 person (1.3%), and students who have a negative attitude about basic life support with moderate motivation in helping cardiac

arrest victims are 11 people (14.5%), as well as students who had a negative attitude about basic life support with low motivation in helping cardiac arrest victims, namely 64 people (84.2%).

DISCUSSION

1. **Description of Student Attitudes Regarding Basic Life Support**

   Based on the results of the research in table 5 with a total of 155 respondents showed that the majority of students' attitudes about basic life support were in the positive category, namely 79 people or (51.0%) out of 155 respondents. This shows that undergraduate nursing students at STIKes Sukabumi have a positive attitude regarding basic life support.

   This is in line with research conducted by (Narayan et al, 2015) in India where the research results stated that students had a positive attitude towards basic life support, namely 59.9%. Other research that is also in line is research conducted by (Dwitanta & Yusuf, 2023). The results of this research stated that the majority of nursing students had a positive attitude towards providing basic life support by 80%.

   The results of the research show that students in the STIKes Sukabumi undergraduate nursing study program have a positive attitude because students in the level III and IV undergraduate nursing study programs have received the critical and emergency nursing course curriculum which also discusses and trains students to carry out basic life support.

   A positive attitude towards the information a person receives can influence every action he takes. Someone who has a positive attitude will tend to correctly understand any information or knowledge that exists, whereas a negative attitude will sometimes give the wrong understanding of the information. This is in accordance with research results which show that it was found that a small number of students have a negative attitude about basic life support. .

   Attitude is readiness or willingness to act or readiness to react to objects in a certain environment as a response to objects (Notoadmodjo, 2018). This attitude has three main components, namely belief, ideas and concepts about life, emotions or evaluation of an object, and the tendency to act. When these components come together to form a complete attitude in Notoadmodjo (Cahyono et al, 2016).

   One of the factors forming a person's attitude is age. According to Budiman & Riyanto (2013) age influences a person's grasping power and thought patterns, the older a person gets, the more his grasping power and thought patterns develop. According to Monks (in Hafizhuddin, 2019) states that student age is divided into 2 parts, namely the late adolescent category with an age range (18-21 years) and the early adult category with an age range (22-25 years).

   The results of this research showed that the majority of respondents were aged 22-25 years, namely 80 people or (51.6%), where the age range of 22-25 years was included in the early adulthood category. This is in line with research (Andrayoni et al, 2019) which states that the majority of respondents are in the early adulthood age range, 92.1%. This is also supported by the age theory which shows the time frame of an individual's growth and development. Age correlates with knowledge, understanding and views of an event so that it will shape perceptions and attitudes (Tampun, 2014).

2. **Description of Student Motivation in Helping Cardiac Arrest Victims**

   Based on research results in table 4.6 with a total of 155 respondents, it was found that the majority of students' motivation

in helping cardiac arrest victims was in the low category, namely 95 people or (61.3%) out of 155 respondents. This shows that undergraduate nursing students at STIKes Sukabumi have low motivation in helping cardiac arrest victims.

Motivation is an effort that is based on influencing a person's behavior so that his heart is moved to take action to do something in order to achieve certain results or goals where motivation is also a driving force, desire, stimulation or encouragement that makes people act or behave in a motivational way which refers to the cause of the emergence of a behavior. Siagan (in Irman, 2019).

Factors that can influence motivation according to Siagan in (Syaiful et al, 2019) are internal and external factors. Internal factors include self-esteem, responsibility, desires, hopes and mood, while external factors include environmental factors, organizational groups joined, peers, attractiveness and the people around them.

The results of this research found that the majority of students had low motivation in helping cardiac arrest victims, this was possibly due to internal factors which included students' desire to take part in training/socialization about BHD, where the research results showed that only a small number of students had attended training/socialization regarding basic life support outside of the learning obtained in lectures, namely 41 people (26.5%).

3. **The Relationship between Student Attitudes Regarding Basic Life Support and Student Motivation in Helping Cardiac Arrest Victims**

The results of research conducted by researchers regarding the relationship between student attitudes regarding basic life support and student motivation in helping cardiac arrest victims in the Sukabumi STIKes Bachelor of Nursing Study Program, the results of

the research show that the majority of respondents have a positive attitude with moderate motivation, 34 people or 43. 0% and 95 respondents had a negative attitude with low motivation or 61.3%. The statistical test results obtained p-value (0.000) ≤ 0.05, so Ho was rejected and H1 was accepted. It can be concluded that there is a significant relationship between student attitudes regarding basic life support and student motivation in helping cardiac arrest victims in the STIKes Sukabumi Undergraduate Nursing Study Program. This is in line with research conducted (Irman, 2019), the results of this research show that there is a relationship between attitude and motivation to provide first aid in traffic accident cases to Maumere State Vocational School students and it was found that respondents who have a positive attitude have high motivation to provide help.

Motivation is an urge from within humans to act or behave (Hamzah, 2016). Motivation to provide help or what is called prosocial behavior is all the encouragement, desire, desire and driving force that comes from within oneself to carry out an action to help other people who are in a difficult situation, Ahmadi said in (Damayanti, 2021).

The moderate motivation that students have in providing assistance in this research can be caused by various factors that influence both internal and external factors.

This is in line with research (Syaiful et al, 2019) which reveals that students who have motivation are influenced by intrinsic (internal) motivation, namely where students have positive desires, high hopes, but they have low confidence that they can socialize and are able to solve the problems faced.

Apart from that, the factor that influences a person's motivation is

attitude. Attitude is a response of someone who is still closed to a stimulus, attitude is also a predisposition to do or not do something. A person's attitude is influenced by personal experience, the influence of other people who are considered important, culture, educational institutions and emotional factors Azwar in (Syaiful et al, 2019). Attitude is related to motivation. A positive attitude can form high motivation, while a negative attitude can form low motivation.

Based on the results of this research, it is stated that the majority of students in the undergraduate nursing study program at STIKes Sukabumi have a positive attitude about basic life support and moderate motivation in helping cardiac arrest victims and a negative attitude about basic life support and low motivation in helping cardiac arrest victims. Based on facts in the field, students have a positive attitude about basic life support because they have gained knowledge during lectures at levels III and IV in the emergency nursing course, which discusses and trains students to carry out basic life support. On the other hand, with students who have low motivation in helping cardiac arrest victims, the low motivation possessed by students is influenced by internal and external factors. Internal factors include self-esteem, where students are afraid to apply the knowledge they have acquired because they feel they are not worthy of basic life support due to their lack of experience. Apart from that, external factors are environmental factors where currently in society there is still a low level of culture regarding basic life support.

CONCLUSION AND RECOMENDATION
There was relationship between student attitudes regarding basic life support and

student motivation in helping cardiac arrest victims in the Bachelor of Nursing Study Program at STIKes Sukabumi. It is hoped that this research will be useful and serve as reference material for future researchers, especially those related to BHD and emergency events. It is hoped that future research will use a larger sample size and examine other factors related to student motivation in helping cardiac arrest victims.

REFERENCES
Heart Association. (2020). 2020 American Heart Association Critical Events CPR and ECC Guidelines.

Association of Indonesian Nurse Educational Institutions (AIPNI). (2021). Indonesian Nursing Education Core Curriculum 2021 Association of Indonesian Nursing Education Institutions. (https://aipni-ainec.org/) accessed March 19, 2023.

Damayanti. (2021). *"The Effect of Cardiopulmonary Resuscitation Health Education Using the Video Learning Method on the Level of Knowledge and Motivation to Help Victims in Level 3 Students of the S1 Nursing Study Program at Stikes Bang Tuah Surabaya".*Surabaya: Thesis Stikes Bang Tuah Surabaya.

Dwitanta, Sucipto & Yusuf, Baharuddin. (2023). *Description of Knowledge, Attitudes and Practices of Nursing Students towards Providing Basic Life Support at the Poltekkes Kemenkes Plangka Raya.*Indonesian Nursing Scientific Journal Vol.6 No.2 2023.

Irawan, Dhani,. et al. (2021). The Relationship between Knowledge and Attitudes and the Behavior of Code Blue Team Nurses in Implementing Basic Life Support (BHD). National Seminar on Research and Community Service, 685-692, 2021.

Irman, Ode. (2019). Attitude with Motivation in Providing First Aid in Traffic Accident Cases to Female Students at SMK Negeri 1 Maumere. Journal of Nursing Care & Biomolecular. Vol. 04, No. 1 of 2019.

Manurung,Melva., et al. (2022). *Level of Knowledge About Basic Life Support*

STIKES Arjuna D3 Pharmacy Study Program.Cikini Nursing Journal, Vol. 3, no. 2, July 2022, p. 68-74

Education Database (PDDikti) of the Indonesian Ministry of Education and Culture (Kemendikbud). (2023). *Data on the Number of Students for the Undergraduate Nursing Study Program in Sukabumi City in 2022/2023.*(https://pddikti.kemdikbud.go.id) accessed March 10, 2023

Nursing Stikes Dharma Husada Bandung. (2020). *Journal for Healthy Communities (JUKMAS). Vol. 4, no. October 2, 2020*

Princess, Bucika. (2017). Differences in Knowledge and Attitudes in Carrying out Basic Life Support in Undergraduate Nursing Students and Professional Nurses. Yogyakarta Muhammadiyah University. (http://repository.umy.ac.id).

Rahman, Irfandi,. et al. (2021).*The Relationship between Public Knowledge and First Aid Attitudes for Traffic Accident Victims on Jalan Basuki Rahmat.*Nursing Inside Community Journal. Vol. 4, no. April 2, 2021.

Sugiyono, Prof. Dr. (2022). Quantitative, Qualitative, Combination, R&D and Educational Research Methods. Bandung: Alphabeta

Sutanta., et al. (2022). *The Relationship between Level of Knowledge and Readiness to Provide First Aid for Accident Victims among Nursing Students at STIKES Estu Utomo.*Healthy Indonesia Journal: healthy Indonesia Journal. Vol. 1, No. 1, April 2022, E-ISSN: 2828-4631, p. 6-14.

Syaiful., et al. (2019).*Students' Knowledge About Basic Life Support (BHD) with Motivation to Help Victims of Cardiac Arrest in High School Students.*Bima Nursing Journal. Vol.1 No. 1.