


The Influence Of BTCLS Training On Emergency Knowledge Of Akkes Dharma Husada Kediri D III Nursing Program Students

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Article Info	ABSTRACT
Keywords: Training, Basic Trauma Cardiac Live Support, Knowledge	Background: Basic Trauma Cardiac Life Support (BTCLS) is one of the knowledge and skills that a nurse must have. This training is an activity to improve skills, knowledge and skills for nurses in providing appropriate and fast services to patients. Research objective: To determine the effect of BTCLS training on emergency knowledge of students at the Dharma Husada Kediri Health Academy, Nursing Study Program. Method: Research design with a pre-experimental method with a one group pre-post test design approach. Population research is aimed at final year students. The research sample is 27 respondents consisting of 6th semester students. Research data collection uses questionnaires and data analysis uses t-test. Results: Research using a paired sample t-test of knowledge before and after training obtained a calculated value of 25.25 and a significance value of 0.000. Conclusion: There is an influence of BTCLS training on students' emergency knowledge. Suggestions for the need for BTCLS training to be carried out continuously to increase emergency knowledge competency.
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INTRODUCTION

Basic Trauma Cardiac Life Support (BTCLS) is one of the basic training for nurses in handling emergency problems due to trauma and cardiovascular disorders. (Projo Angkasa, Nofianto, & Penyami, 2023) An emergency is a clinical condition that requires immediate medical attention from the patient/sufferer. to save lives and further disability. (Nirmalasari & Winarti, 2020) Nurses must always be ready to provide assistance both outside and inside the hospital, handling this problem is aimed at providing basic life support so that it can save lives and minimize organ damage and disability of sufferers. (Projo Angkasa et al., 2023) Emergency conditions can occur anywhere, and at any time. It is the duty of health workers to handle this problem, through BTCLS training activities which of course really help the knowledge of health care workers in responding to emergency events apart from aiming to prepare nursing students to be able to handle patients with trauma and cardiovascular cases. (Sartono, Suryati, & Oyoh, 2022) The rapid development of human living facilities demands an instant and fast life, this will lead to an increasingly high risk of accidents, which can lead to work accidents, fatal accidents and even death in the form of heart attacks. (Arianto, 2022) In connection with this problem, every nurse should be able to

provide fast and appropriate assistance to emergency patients. The success of emergency treatment of victims depends on several conditions, namely speed of discovery, speed of response of health workers, ability and quality of health workers and speed of asking for help. (Elfiana, 2020)

Apart from traffic accidents, heart disease is also known to be very deadly. The latest data from the World Health Organization (WHO) states that heart attacks are still the number one killer of people in developed and developing countries, contributing 60 percent of all deaths. Cardiac arrest is the main cause of death in several countries. Occurs both outside the hospital and inside the hospital. It is estimated that around 350,000 people die annually from cardiac arrest in America and Canada. This estimate does not include those who are thought to have died from cardiac arrest and did not receive resuscitation.

The success of emergency treatment of victims depends on several conditions, namely speed of discovery, speed of response of health workers, ability and quality of health workers and speed of asking for help (Smart, 2019: 13). The National Police handled 7,180 traffic accidents throughout Indonesia from 1 to 21 August 2023 (IRSMS Korlantas Polri, 2023). Based on previous research, cardiovascular disease, traffic accidents, trauma and cancer are the most important etiologies of death in the emergency department (IGD). However, conflicting findings have been reported regarding deaths in the emergency department, 2907 patients (969 (59.9% men) in the case group and 1938 (62.2% men) in the control group) were evaluated. Cardiovascular disease (39.2%), severe trauma (18.5%), and cerebrovascular accident (17.7%) were the most common etiologies of patient deaths in the ER. Trauma or injury cases resulting from traffic accidents amounted to around 151.87%, with a proportion of 44.8% of injuries originating from the home and environment, 31.8% on the road, 9% at work and 7.4% at school and the environment. (Riskedas, 2018). Meanwhile in Indonesia, the prevalence or data on cardiac arrest sufferers each year is unclear, but it is estimated that around 10,000 Indonesians suffer from heart disease (Riskedas, 2013). In another study in England there were 28,000 cases of heart attack outside the OHCA hospital (in 2014 (Arianto, 2022)

Based on the curriculum and vision and mission of Akkes Dharma Husada Kediri D III Nursing Study Program, it is very important for students who excel in emergency management to provide basic Trauma Cardiac Life Support (BTCLS) training to improve knowledge and skills. BTCLS training is all the efforts made by nurses to be able to treating trauma patients and cardiovascular cases so as to reduce and reduce disability and death rates. According to training, it is a series of individual activities that systematically improve skills and knowledge so that they are able to have professional performance in their field. (Sartono et al., 2022) BTCLS training is actually a continuation of BLS (Basic Heart Support Training) skills and knowledge. It is hoped that this will be a person's skills. will increase after training in the form of a BTCLS simulation. Based on this description, researchers are interested in conducting research on the effect of BTCLS training on emergency knowledge for graduates of the Dharma Husada Kediri Akkes Nursing Study Program

METHOD

This type of research is quantitative research. Pre-experimental design with a one group pretest design approach. The sampling technique was simple random sampling using a total sampling of 27 people. Data analysis used a paired difference test (paired sample t-test).

Respondent characteristics

Table 1: Frequency distribution of knowledge

Knowledge	Pre		Post	
	f	%	f	%
Very Good	-	-	20	74
Good	-	-	7	26
Enough	15	55	-	-
Not Enough	12	45	-	-

Based on table 1, it can be seen that the increase in respondents' knowledge mostly increased to good and very good scores.

Table 2: Effect of BTCLS Training on Emergency Knowledge for Students of Dharma Husada Kediri Health Academy, D III Nursing Study Program

Knowledge	Hasil Analisis				P	t
	N	Me an	Std deviati on mean	Std err or		
Pre-Test	27	43.74	11,76	1,66	0.000	23,25
Post Test	27	81	3.01	0,42		

Based on table 2, it can be seen that the Paired Sample T-test obtained a t-count of 23.25 and a significance value of 0.000 ($p < 0.05$), which means there is a significant influence on previous knowledge and after being given BTCLS training. This can also be seen from the mean score before training which was 44 and after training it increased to 81. The results of this statistical test can conclude that there is an influence of BTCLS training on emergency knowledge for students of the Dharma Husada Kediri Health Academy, D III Nursing Study Program.

Discussion

This comparative study compares respondents' knowledge about emergencies before and after receiving BTCLS training. Testing is carried out by comparing knowledge scores before and after training. Based on table 1, the increase in respondents' knowledge mostly increased to a good score of 74%, and in table 2 it can be seen that the average pre-test knowledge score was 43.74 and post-test was 81. The results of the paired sample t-test concluded that There is an influence of BTCLS training on the level of knowledge before and after the training of Prospective Graduate Students and Graduates of the Pekalongan DIII Nursing Study Program (pvalue = 0.000). According to the research (Vina et al. 2020) there is a significant influence between BHD training and knowledge ($p=0.000$) and skills ($p=0.000$). Endiyono, et al. In 2018 there was an influence of the Basic Life Support Training

on the Knowledge and Skills of the Muhammadiyah Banyumas Disaster Management Team (MDMC) using the Wilcoxon test, obtained a Z value of -3.326 and a significance value of 0.0001 ($p < 0.05$). According to research by Irawan (2019) entitled The effect of health education using the simulation method on first knowledge for hotel employees, health education uses the simulation method with a calculated t score of 14.22 and a significance value of 0.000. From the research above, training influences the level of knowledge of training participants. Training is an educational process in a short time that combines learning in theory and practice, so that training becomes one of the factors that can improve a person's knowledge ability, (Hasan, Pratiwi, & Puspita, 2020) Training can influence knowledge significantly because it has supporting factors. One of the factors that makes training using the simulation method able to increase knowledge is because participants are guided directly by trainers who have provider certificates. In accordance with research which states that training with feedback from trainers can immediately provide corrections and orders if carrying out procedures is not correct. (Science, University, & Banjarmasin, 2020) Participants can directly ask questions and discuss, so that participants understand better and are skilled in the training process. Training is a learning process that focuses on skills/psychomotor skills. Training becomes the basis for applying one's skills. Training should be ongoing with the aim of remembering and updating knowledge and skills. Retraining should occur 6-12 months to maintain basic life support skills.

The factors of panic, anxiety, nervousness during demonstrations, lack of self-confidence, shyness also influence skill results. (Lontoh, Kilig, & Wongkar, 2013) In this case, the factors of cooperation and trainer intervention are very necessary to overcome this. The combination method with more complete guidance and providing modules can increase self-confidence during demonstrations, this is what influences the results where even though the combination method is not statistically different, the average results are slightly better compared to the training method with instructors and audio visuals. (Rina, Dwi Anggeini, & Amalia, n.d.) BTCLS training aims to provide information in the form of knowledge to respondents about the appropriate way to provide assistance in cases of trauma and cardiovascular. Knowledge is a person's provision of evidence from the process of remembering or recognizing information and ideas from previously acquired knowledge processes. (Masruri, Nursalam, Arifi, Ayatulloh, & Priyantini, 2023) By providing information, it is hoped that the respondent's knowledge regarding emergency situations in handling trauma and cardiovascular cases improve for the better. Trauma management and basic life support (BHD) can be taught to anyone (Nirmalasari & Winarti, 2020). Every adult must have these skills, even children can also be taught according to their capacity, especially health workers and non-health workers must be taught about handling trauma cases and basic life support to provide immediate safety assistance. (Projo Angkasa et al., 2023)

CONCLUSION

There is an influence of Basic Trauma Cardiac Life Support (BTCLS) training on emergency knowledge among students at the Dharma Husada Kediri Nursing Study Program Health

Academy with an p value of 0.000 (< 0.05). This shows that training can increase knowledge

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