

The Effect of BTCLS Training on Emergency Knowledge of Dharma Husada Nursing Academy Kediri Graduates

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ABSTRACT

Basic Trauma Cardiac Live Support (BTCLS) training for nurses is an effort to improve skills to overcome emergency events that occur outside the hospital due to accidents / trauma or in the hospital due to diseases that impact cardiac arrest. Training is an activity to increase skills, knowledge and skills for nurses in providing appropriate and prompt care to patients. The purpose of the research was to find out the effect of BTCLS training on emergency management knowledge for akper dharma husada kediri nursing alumni. Research design with pre-experimental method with one group pre-post test design approach. The research population is alumni of Akper Dharma Husada Kediri students. Research samples as many as 50 people with simple random sampling techniques. Data collection of research using questionnaires and data analysis using t-test. The results of the study with a paired sample test t-test knowledge before and after training obtained a calculated value of 23.25 and a significance value of 0.000. Concluded the influence of BTCLS training on the knowledge of emergency management for graduates. Advice on the need for BTCLS training is done by every nurse in improving the competence of knowledge and emergency skills.

Keywords: Training, Basic Trauma Cardiac Live Support, Knowledge

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BACKGROUND

Indonesia as a developing country continuously conducts physical development in all fields. This will cause work accidents ranging from near accident, fatal accident to death from cardiac arrest. The increasing number of vehicles and the growing number of transportation facilities have increased the number of emergency incidents due to traffic accidents. In connection with these problems, every nurse should be able to do assistance quickly and appropriately to emergency patients. The success of handling emergency victims depends on several conditions, namely the speed found, the speed of response of health workers, the ability and quality of health workers and the speed of memita tolong (Smart, 2019:13). An emergency is a clinical condition in which the patient/sufferer needs prompt medical action to save lives and further disability. Nurses should always be ready to provide assistance both outside and inside the hospital. According to Sirait (2015) work accidents almost happen every day resulting in fatal deaths of about 6,000 cases. Cases of trauma or injury from traffic accidents were approximately 151.87%, with the proportion of injuries 44.8% coming from homes and the environment, 31.8% on the road, 9% at work and 7.4% in schools and the environment (Riskedas,2018). According to data in the Kediri City Police traffic accident in 2019 amounted to 584 with the details of 85 deaths, 3 serious injuries and 759 minor injuries. While in Indonesia, the prevalence or data for cardiac arrest sufferers every year is not clear, but it is estimated that Indonesians who experience cardiac arrest around 10,000 (Riskedas, 2013). In other studies in the UK there were 28,000 cases of Out of Hospital Cardiac Arrest OHCA (in 2014 (Hawkes et al., 2017).

In accordance with the curriculum and vision of Akper Dharma Husada Kediri, students excel in emergency management is very important to provide supplies with Basic Trauma Cardiac Life Support (BTCLS) training for alumni to increase knowledge and skills. BTCLS training is all efforts made by nurses to be able to handle patients with trauma and cardiovascular cases so as to reduce and reduce the level of disability and death. Training according to Widodo (2015 : 82) is a series of individual activities in systematically improving skills and knowledge so as to be able to have professional performance in their fields. BTCLS training is actually a continuation of the skills and knowledge of BLS (Basic Cardiac Support) training. Skills are the result of the output of a training. It is expected that one's skills will improve after training in the form of BTCLS simulation. Skill or skill is an ability to pour knowledge into practice so that the desired results are achieved. This training technique uses simulation methods in emergency management. The advantage of the simulation method is that participants will pay more attention and try to practice directly the educational process that has been given so that they can carefully practice the knowledge gained. Based on the description, researchers are interested in conducting research to find out the influence of BTCLS training on emergency management knowledge for graduate nurses Akper Dharma Husada Kediri.

METHODS

This type of research is quantitative research. Pre-experimental design with one group pre-post test design approach. Sampling technique with simple random sampling with a sample number of 50 people. Analyze the data using paired sample t-test.

RESULTS

Characteristic of respondents

Table 1 : Distribution of frequency of knowledge

Knowledge	N : 50	Pre		Post	
		f	%	f	%
Very Good		-	-	6	12
Good		-	-	44	88
Enough		10	20	-	-
Less		40	80	-	-

Based on table 1 can be seen the increase in respondents' knowledge mostly increased to a good score of 88 %.

Table 2 : Effect of BTCLS Training On Emergency Management Knowledge For Dharma Husada Kediri Nursing Academy Graduate

Knowledge	Results of Analysis				<i>P</i>	<i>t</i>
	N	Mean	Std deviation mean	Std error		
Pre test	50	43.74	11.76	1.66	0.000	23.25
Post test	50	81	3.01	.42		

Based on table 2 can be seen test paired sample t- test obtained t count 23.25 and significance value of 0.000 ($p < 0.05$) which means there is a significant influence on knowledge before and after being given BTCLS training. This can also be seen from the mean value before the training by 43 and after the training increased to 81. The results of this statistical test can be concluded that there is an influence of BTCLS training on emergency management knowledge for Dharma Husada Kediri Nursing Academy Graduate

DISCUSSION

This comparative study compared respondents' knowledge of emergency management before and after receiving BTCLS training. Testing is conducted by comparing knowledge scores before and after training. According to table 1, respondents' knowledge improvement mostly increased to a good score of 88%, and in table 2 shows that the average pre test knowledge value is 43.74 and post test is 81. Paired sample t-test results concluded that there is an influence of BTCLS training on the level of knowledge before and after training for alumni respondents Akper Dharma Husada Kota Kediri ($pvalue = 0.000$). According to the research (Vina et al. 2020) there is a significant influence between BHD training with knowledge ($p=0.000$) and skills ($p=0.000$). Endiyono, et al. 2018 there is the Influence of Basic Life Support Training on the Knowledge and Skills of Banyumas Muhammadiyah Disaster Management Team (MDMC) using Wilcoxon test, obtained Z value of -3,326 and significance value of 0.0001 ($p < 0.05$). According to Irawan's research (2019) that there is an influence of health education with simulation method on the first knowledge for employees of health education hotel using simulation method with the result of thitung score of 14.22 and significance value of 0.000. From the above research that the training affects the level of knowledge of the trainees. Training is an educational process in a short time that unites learning in theory and practice, so that training is a factor that can improve one's knowledge (Larasati, 2018).

Training can affect knowledge significantly because it has supporting factors. One of the factors that make training with simulation method can increase knowledge is because participants are guided directly by trainers who already have a provider certificate. In accordance with the research (Sutono et al., 2015) which states training with trainer feedback can directly provide corrections and orders if in performing the procedure is not appropriate. Participants can directly ask and discuss, so that participants will be more understanding and skilled in the training process. Training is a learning process that focuses on skills / psychomotor. Training forms the basis of the implementation of one's skills. Training should be sustainable with the aim of remembering and updating the knowledge and skills. According to Keenan (2009) retraining should be done 6-12 months to maintain basic life support skills. Factors of panic, anxiety, nervousness during demonstrations, lack of confidence, shyness also affect the results of skills. In this case the cooperation factor and the intervention of the coach is indispensable to overcome it. The combination method with more complete guidance and the provision of modules can increase confidence during demonstrations, this is what influences the results where the combination method although statistically no different, but from the average value, the results are slightly better than the training method with instructors and audio visuals (Sutono et al., 2015).

BTCLS training aims to provide information in the form of knowledge to respondents about the right way to provide assistance in trauma and cardiovascular cases. Knowledge is the giving of evidence of a person from the process of reminder or introduction of information and ideas from the knowledge process obtained earlier (Alyyannur, 2018). With the provision of information, it is expected that respondents' knowledge about emergency management of trauma and cardiovascular cases increases for the better. Frame (2010) states that trauma management and basic life support (BHD) can be taught to anyone. Every adult should have these skills, even children can also be taught in accordance with their capacity, especially health workers and not health workers should be taught about handling trauma cases and basic life support in order to provide immediate safety assistance.

CONCLUSION

There is an influence of Basic Trauma Cardiac Life Support (BTCLS) training on emergency knowledge in akper dharma husada kediri nursing alumni with a p value of 0.000 (< 0.05). This suggests training can improve knowledge

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