Level of Nurses' Knowledge About Basic Life Support (BLS) at the North Lombok Regency Regional General Hospital

Himmatul Izzati[1], Anton Eka Fajar Maulana[2], Suhartiningsih[3], I Gusti Ayu Mirah Adhi[4]

Sekolah Tinggi Ilmu Kesehatan Mataram (STIKES) Mataram

Article Info	Abstract
	Cardiac arrest is a condition where there is a sudden cessation of normal blood circulation due to a failure of the heart to contract effectively. Emergencies do not only occur in the emergency room and ICU, but also in inpatient rooms such as surgical or internal medicine wards. Knowledge of BLS is considered basic for nurses because it teaches basic techniquesto save victims from various accidents or everyday disasters. Nurses are required to have knowledge and skills to handle these cases. One of them is basic life support (BLS) skills. The purpose of this study was to describe nurses' levels of knowledge of basic life support inNorth Lombok Hospital. The research used a descriptive method. The population was all nurses in the inpatient and emergency rooms, a total of 108 people. The sampling technique used was purposive sampling, and the number of samples was 85. Data was collected using aquestionnaire and analyzed using univariate. The results showed that 38 nurses (44.7%) were categorized as good and 47 nurses (55.3%) were categorized as poor. It can be concluded thatnurses' level of knowledge of BLS is poor, so they have to enhance their knowledge by studying, either by attending training or by seeking the latest

Corresponding Author:
Himmatul Izzati
Sekolah Tinggi Ilmu Kesehatan Mataram
Email: himmatulizzati9@gmail.com

1. INTRODUCTION

Emergency nursing is a comprehensive nursing service provided to patients with life-threatening injuries or illnesses. Emergency nursing emergency must have knowledge to handle patient responses to resuscitation, shock, trauma, poisoning, and other life-threatening emergencies. Cardiac arrest and respiratory arrest are cases that often occur in emergency patients. Cardiac arrest is a condition where there is a sudden cessation of normal circulation blood due to failure of the heart to contract effectively (Hardisman, 2016).

BLS is one of the efforts that must be carried out immediately by nurses if they find a victim who needs it. The purpose of BLS is for effective emergency oxygenation of vital organs, such as the brain and heart, through artificial ventilation and artificial circulation, until the lungs and heart can provide oxygen with power. yourself normally. The patient's chance of survival is more likely when the patient immediately receives BLS, therefore contacting the Emergency Call is the first step that must be taken by the rescuer, then the rescuer immediately provides Cardiopulmonary Resuscitations (CPR) to help the patient stay alive.

As providers of 24-hour assistance services in Emergency Installations, nurses are

required to provide fast, precise and careful service with the aim of obtaining healing without disability. Therefore, nurses need to equip themselves with knowledge related to emergency cases, especially Basic Life Support (BLS) (Maryuani. 2016).

Knowledge of BLS is considered basic for nurses. BLS is important because it teaches basic techniques for rescuing victims from various everyday accidents or disasters that are commonly encountered (Hasanah et al. 2016).

A preliminary study conducted in the emergency room of the North Lombok Regency Hospital, found that the number of nurses on duty in the emergency room of the North Lombok Regency Hospital was 20 people. From the results of interviews with implementing nurses, the last BTCLS training was held in 2018, and that was only a portion of the nurses who took part in the training. The nurse in the room only knows that BLS is doing chest compressions with 30 compressions and 2 breaths, and using the ABC sequence. Nurse 2 said the compression speed is 100 times/minute, when giving chest compressions the patient is given a breath using a bag valve mask and the location of the giving chest compressions above the middle abdomen. The results of observations of the nurse's implementation of CPR revealed that the nurse's hands were not kept straight when performing chest compressions.

For this reason, researchers are interested in conducting research on the description of the level of knowledge of nurses regarding BLS at the North Lombok District General Hospital in 2022.

2. RESEARCH METHOD

This research is descriptive, namely research that describes the level of knowledge of nurses at the North Lombok Regency Regional General Hospital. The population in this study were all nurses who served in the North Lombok Regency Regional Hospital, 108 people. The sampling technique used purposive sampling, namely 85 respondents. The research time was 23 – 30 January 2022.

The research variable is nurses' knowledge about Basic Life Support. Data analysis uses univariate analysis, namely to describe the frequency distribution, both respondent characteristics, research variables, measures of central tendency or graphs.

3. RESEARCH RESULT

From the data collected, the characteristics of the respondents were obtained in the form of age, education, length of service, CPR experience and BTCLS training and various levels of knowledge about BLS.
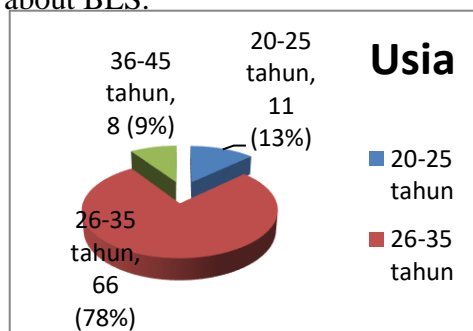

Diagram 1. Frequency Distribution of Respondents Based on Age

Diagram 3. Frequency Distribution of Respondents Based on Education

Diagram 4. Frequency Distribution of Respondents Based on Years of Work

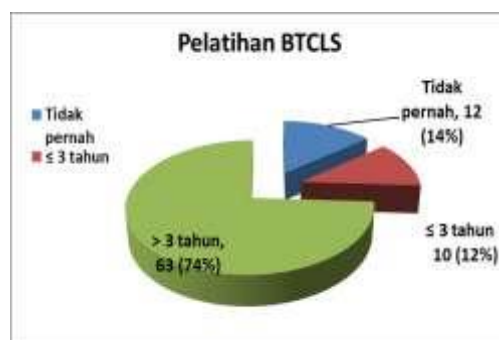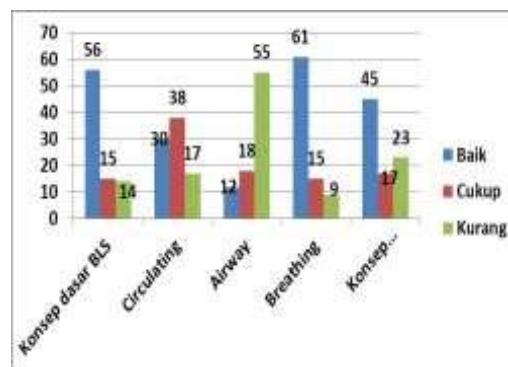Diagram 5. Frequency Distribution of Respondents Based on CPR Experience

Diagram 6. Frequency Distribution of Respondents Based on BTCLS Training

Graph 1. Frequency Distribution of Respondents

Based on the level of knowledge of Basic Life Support in North Lombok District Hospital. From graph 1 above it can be seen that the level of knowledge of nurses about Basic Life Support is mostly in the good category, 38 respondents (44.7%), moderate, 29 respondents (34.1%) and most slightly less category as many as 18 respondents (21.2%).

Graph 2. Frequency Distribution of Respondents

Based on the level of knowledge of each BLS indicator at the North Lombok District Hospital

Information:

1 : Basic concepts of BLS
2 : BLS Procedure: Circulating
3 : BLS Procedure : Airway
4 : BLS Procedure: Breathing
5 :BLS Success Concept

From graph 2 above, it shows the level of knowledge of respondents about the basic concepts of BLS, some of them are in the good category, 56 respondents (65.9%), Circulating, most of them are in the sufficient category, 38 respondents (44.7%), Airway, most of them are in the poor category, 55 respondents (64.7%), breathing was mostly in the good category as many as 61 respondents (71.8%) and the concept of BLS success was mostly in the good category as many as 45 respondents (52.9%). Table 1. Nurse Knowledge Level based on Age, Years of Service, Education, PR Experience and Last BTCLS Training

Knowledge Level								
	Characteristics							
	Good		**Fair**		**Poor**		**Total**	
Respondent	**F**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
Age								
20-25 years	6	7.1%	2	2.4%	3	3.5%	**11**	12.9%
26-35 years old	28	32.9%	25	29.4%	13	15.3%	**66**	77.6%
36-45 years old	4	4.7%	2	2.4%	2	2.4%	**8**	9.4%
	38	**44.7%**	**29**	**34.1%**	**18**	**21.2**	**85**	**100%**
Education								
D IIINursing19		22.4%	19	22.4%	14	16.5%	52	61.2%
D IV Kep. Gadar	3	3.5%	0	0	0	0	3	3.5%
S1 Kep + Nurse	16	18.8%	10	11.8%	4	4.7%	30	35.3%
	38	**44.7%**	**29**	**34.1%**	**18**	**21.2**	**85**	**100%**
Years of service	20	23.5%	16	18.8%	11	12.9	47	55.3%
< 5 years								
5-<10 years	16	18.8%	13	15.3%	7	8.2%	36	42.4%
≥10 years	2	2.4%	0	0	0	0	2	2.4%
	38	**44.7%**	**29**	**34.1%**	**18**	**21.2%**	**85**	**100**
CPR experience								
1Kali14		16.5%	1	1.2%	0	0	15	17.6%
2 times	5	5.9%	0	0	0	0	5	5.9%
3 times	2	2.4%	0	0	0	0	2	2.4%
Never	17	20%	28	32.9%	18	21.2%	63	74.1%
	38	**44.7%**	**29**	**34.1%**	**18**	**21.2%**	**85**	**100%**
Training final BTCLS		0	2	2.4%	10	11.8%	12	14.1%
Never	0							
≤ 3 years	7	8.2%	3	3.5%	0	0	10	11.8%
> 3 years	31	36.5%	24	28.2%	8	9.4%	63	74.1%
	38	**44.7%**	**29**	**34.1%**	**18**	**21.2%**	**85**	**100%**

4. DISCUSSION

1. Age

Research shows that respondents in all age ranges from 21-45 years, the majority have a good level of knowledge (32.9%).

The results of this research are in line with research conducted by Dahlan, et al. (2014) which revealed that the majority of respondents were in the 20–40-year age range, 34 respondents (68%). Age will affect a person's ability to understand and think.

2. Education

The results of the study showed that the majority of DIII Kep respondents had a sufficient level of knowledge, 19 respondents (22.4%) and 14 respondents (16.5%) had a sufficient level of knowledge, all of the DIV Gadar Nursing education respondents all had a good level of knowledge (3.5%), while most of the S.Kep, Ners respondents had a good level of knowledge (18.8%).

This is in accordance with Notoadmodjo (2012), knowledge is the result of "knowing" and this occurs after people sense an object. Education is a process of developing personality and abilities inside and outside school. Education will influence the learning process, the higher the education, the easier it is to get information so that knowledge can increase. A high level of education will influence a person's knowledge.

3. **Years of Service and CPR Experience**

Research shows that respondents with a work period of <5 years mostly have a good level of knowledge as many as 20 respondents (23.5%), a work period of 5–10 years mostly have a good level of knowledge as many as 16 respondents (18.8%), while those with work > 10 years all have a good level of knowledge.

Based on CPR experience, respondents who had never had CPR mostly had sufficient and poor knowledge levels, 28 (32.9%) and 18 (21.2%) respectively, those with 1 CPR experience had mostly good knowledge levels, 14 respondents (16.5%) while those with CPR experience > 1 time all had a level of knowledge in the good category.

The work period is closely related to the experience of performing CPR. The longer the nurse's working period, the higher the opportunity to perform CPR. Experience is a source of knowledge obtained from solving problems based on knowledge in the past. Experience at work will increase professional knowledge and skills and develop the ability to make decisions (Erfandi, 2009).

This is in accordance with research by Juliana, et al (2018) that the length of time a nurse works will influence the nurse's own skills. Experience will provide new insights and skills for nurses in solving new cases. Through work experience, it is hoped that there will be an increase in knowledge and behavior which can lead to improvements in providing nursing care

4. **Final BTCLS Training**

The research results showed that respondents who had attended BTCLS training mostly had a good level of knowledge, 38 (44.7%), while those who had attended training for more than 3 years had a poor level of knowledge, 31 respondents (36.5%).), and those who had never attended training mostly had a level of knowledge of less than 10 respondents (11.8%), meaning that the majority of respondents had participated in a learning process so they had experience in performing CPR even in an academic context.

In accordance with the results of research conducted by Lontoh (2013) which revealed that there was an influence of Basic Life Support (BLS) theory training on the level of knowledge.

BTCLS training is an effort to increase the knowledge or skills of nurses in implementing nursing care, especially victims who require Basic Life Support, because BLS must be carried out quickly, responsively, skillfully, thoroughly and with full concentration, remembering that every error cannot be corrected by help. next (Cristian, 2009 in Dede et al., 2014).

5. **Level of Knowledge About BLS**

Research on the level of nurses' knowledge about BLS shows that the majority are in the good category, namely 38 respondents (44.7%).

Basic Life Support (BLS) is an effort made to maintain life when a sufferer experiences a life-threatening condition by clearing the airway, assisting breathing, and maintaining blood circulation without using assistive devices. BLS is the basic knowledge or skills that a nurse must have to support her role as a professional health

provider. The nurse's knowledge will be able to determine the quality of the services to be provided, the higher the knowledge, the higher the quality of the service, and vice versa. (Goiten, 2008; Alkatiri, 2017).

6. Knowledge Level Based on BLS Indicators

The results of the research showed that the level of knowledge of respondents about the basic concepts of BLS was partly in the good category, 56 respondents (65.9%), Circulating, mostly in the sufficient category, 38 respondents (44.7%), Airway, mostly in the poor category, 55 respondents (64, 7%), breathing was mostly in the good category as many as 61 respondents (71.8%) and the concept of BLS success was mostly in the good category as many as 45 respondents (52.9%). This shows that the majority of respondents have sufficient and insufficient levels of knowledge regarding circulation and airway indicators.

Circulation is the first step in the CPR (Cardiopulmonary Resuscitation) process in which compression is carried out, after which the airway is continued. If the rescuer cannot carry out a circulation assessment followed by compression and airway actions correctly, this will result in difficulties in carrying out the next step, namely breathing. This can cause the patient to experience cardiac arrest and respiratory arrest which can be fatal. If this condition is not treated immediately, it can cause brain stem death. For this reason, nurses need a high level of knowledge to be able to provide emergency treatment to patients.

Knowledge should be maintained, because this knowledge is proof that a nurse is competent. In an agency, of course, good competence will support good service, so it is important to start improving and improving knowledge. Nurses' knowledge that falls into the poor category is proven by the nurse's inability to respond to statements regarding parameters indicating termination and management of basic life support, including regarding; giving the first action when meeting the victim somewhere, when and how to stop the action if the victim remains unconscious or recovers, and the sequence of actions that must be given according to standard operational procedures.

5. CONCLUSION

Research result knowledge level Regarding Basic Life Support (BLS), most of them are in the good (44.7%) and poor (55.3%) categories.

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