

# Basic Life Support (BLS) Knowledge Level Evaluation Analysis of Non-Medical Employees Post Following BLS Training

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## ABSTRACT

In an effort to increase additional education programs to gain knowledge and skills in carrying out duties and functions, it can improve the performance of employees in the hospital. The phenomenon of the need for medical and non-medical personnel as personnel providing services in the hospital if you find emergency victims, both patients and hospital visitors, must understand the SOP for handling emergency patients. In addition, every medical service provider must have BLS capability. Patients are unconscious and do not see who is helping and where is the place, even patients are often not aware that the helper is not medical (non-medical), so the hospital requires medical and non-medical personnel to be able to do BLS. This type of research is descriptive quantitative. The purpose of this study is to provide an overview of the characteristics of non-medical employees, whether there is a relationship with knowledge based on the training that has been followed. The research sample is that all non-medical employees who have attended BLS training at RSI Surabaya A.Yani are 33 people. Characteristics of respondents at the Surabaya Islamic Hospital with the age category > 45 years 39.4%, the majority are male 51.5%, the latest education is a bachelor's degree 51.5%, the status of permanent employees is 81.8%, the majority is married marital status 82 %, working period 16-25 years 33.3%. The conclusion of this study is that the knowledge of non-medical employees at the Surabaya Islamic Hospital is declared good because by participating in the training, they can gain knowledge and skills in performing first aid actions for victims.

**Keywords:** Training, Knowledge, Basic Life Support, Non-Medical Personnel

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## INTRODUCTION

Training is an additional education to gain knowledge and skills in carrying out tasks and functions that can improve employee performance in the hospital. Human resources are the most important factor that supports the achievement of organizational goals effectively and efficiently,

especially their role in every effort to organize cooperation and organizational responsibility (Notoatmodjo, 2009). Hospitals with quality and superior human resources will produce health services in accordance with the expectations of community needs and satisfaction. Therefore, to improve the quality of human resources, an effective training program is needed so that it can improve performance, improve morale and boost organizational potential (Kaswan, 2011).

Training is something that refers to matters relating to planned efforts carried out to achieve mastery of skills, knowledge and attitudes of employees or members of the organization. A training is said to be effective if the results of the training can achieve organizational goals, increase resource capabilities, satisfy consumers or can improve internal processes (Bramley in Detty, et al, 2009).

Along with the increasing demand for health services and the emergence of more and more hospitals that promise quality services, effective training is needed for the Surabaya Islamic Hospital to improve the quality of human resources so that they are able to provide quality services to the community. In an effort to improve the quality of service, hospitals are required to follow accreditation. Regulation of the Minister of Health of the Republic of Indonesia Number 417 of 2011 concerning Hospital Accreditation Commission states that Hospital Accreditation is the recognition of a hospital given by an independent accreditation agency designated by the Minister, after it has been assessed that the hospital meets the hospital service standards applicable to Improving the quality of hospital services on an ongoing basis. In accordance with Law No.44 of 2009, article 40 paragraph 1, which states that in an effort to improve the quality of hospital services, accreditation must be carried out periodically at least once every 3 (three) years.

Surabaya Islamic Hospital is one of the hospitals that has implemented the 2012 version of the KARS (Hospital Accreditation Commission) accreditation. As an accredited hospital, the Surabaya Islamic Hospital organizes several training programs for employees, both medical and non-medical as one accreditation requirements. The training program in question includes PPI training, APAR training and Basic Life Support (BLS) training. From some of these trainings, the researcher chose Basic Life Support (BLS) training as research material and the respondents studied were non-medical employees of the Surabaya Islamic Hospital. Researchers chose Basic Life Support (BLS) training because according to the American Health Association (AHA 2010) Basic Life Support (BLS) is a first aid action taken to save the life of someone who has serious conditions, including those experiencing heart attacks / cardiac arrest and stopping breathing. Someone who has stopped breathing or cardiac arrest will not necessarily experience death, they can still be helped. Meanwhile, other trainings are not directly related to the patient or the patient's life.

Basic Life Support (BLS) training was held by Surabaya Islamic Hospital in 2019. Basic Life Support (BLS) training is intended for hospital employees, both medical and non-medical, who are in charge of serving patients and hospital visitors directly. Basic Life Support (BLS) training basically aims to improve knowledge, skills and work attitudes of employees so that they are able to provide first aid in emergency situations to patients in need. Through the implementation of the Basic Life Support (BLS) training program at the Islamic Hospital, it is hoped that employees will be able to improve their knowledge, skills and work attitudes in providing emergency services to patients through the learning process. The following is the number of non-medical employees who attended Basic Life Support (BLS) training.

After attending the training, it is hoped that the material provided can be understood. Comprehension is the second level of the six levels of knowledge (Bloom, Hastings & Madaus, 1956). Understanding can be interpreted as an ability to explain correctly. People who already understand the object or material must be able to explain, mention examples, conclude, predict, and so on about the object being studied (Notoatmodjo, 2007).

Increased knowledge is the expected impact of training. In the scope of quality and safety, training is one of the means to increase the need for new knowledge and to improve individual performance and system performance. The staff development program through training is an effective program to increase staff productivity. Adequate support in the form of professional training and knowledge development is an effort to create a positive work environment for non-medical workers so that safe services can be provided (Najib, 2015). For this reason, non-medical officers who work in hospitals are required to have the ability compared to nurses who serve patients in other units, because the hospital is a health service institution for the community.

Based on the background that has been previously described, researchers see it is very important to improve the quality of human resources in hospitals including non-medical employees. So that researchers want to conduct research that discusses "Evaluation of Basic Life Support (BLS) Knowledge for Non-Medical Officers after attending the BLS Training at the Surabaya Islamic Hospital in 2019". The purpose of this research is to see the knowledge and abilities of non-medical employees who have attended BLS training in carrying out BLS actions. This type of research is descriptive quantitative.

## MATERIALS AND METHOD

This research is quantitative descriptive. In this study, researchers used a cross-sectional study design, which is a study to study the dynamics of the correlation between risk factors and effects, by approaching, observing, or collecting data through a questionnaire at once. The time of this research was conducted from June to July 2019 at RS Islam Surabaya A. Yani. The population in this study were all non-medical officers at the Surabaya Islamic Hospital in 2018 in the management section, namely the Administration and Human Resources (Human Resources), the Finance and the General Affairs who had attended Basic Life Support (BLS) training in 2017, with a total of 74 people. Non-medical personnel in the hospital were the population in this study because they were related to the research activities that were being carried out.

Based on calculations using the Lemeshow sample formula, the number of samples needed in this study was 33 non-medical personnel. The sample consisted of 2 people from the HR work unit and career development, 1 person from the education and training work unit, 2 people from the secretariat, 2 people from the household or logistics, 4 people from the facility maintenance work unit, 2 people from health environment, 3 people from the working vehicle nit, 5 people from security and order and 12 people from the finance work unit.

The total sample size is grouped again based on the sample work unit. This technique is called proportionate stratified random sampling. With this technique, researchers classify samples according to the sample work unit. This is done because the sample is heterogeneous and stratified proportionally to get a representative sample. Data were collected using a questionnaire distributed to non-medical employees of the Islamic Hospital A. Yani Surabaya and interviews to strengthen the information, after which data processing was carried out and used the SPSS program which was later described in narrative form.

Data analysis is presented in the form of frequency tables and cross tabulations (crosstabs) between variables.

No	Question	Average True	Correct Number
1	Question 1	97%	32
2	Question 2	94%	31
3	Question 3	82%	27
4	Question 4	42%	14
5	Question 5	36%	12
6	Question 6	85%	28
7	Question 7	88%	29
8	Question 8	100%	33
9	Question 9	67%	22
10	Question 10	82%	27
			<b>255</b>

## RESULTS

From the results of research that has been carried out for 1 month from 25 June to 25 July 2019 at the Surabaya Islamic Hospital using a questionnaire, the following results were determined :

Results of Identifying Characteristics of Respondents based on Knowledge:

Table 1 Distribution of Cross Tabulations between Age and Knowledge of Non-Medical Officers

No	Age	Knowledge Of BLS								Score
		Less		Enough		Well		Total		
		N	%	N	%	N	%	N	%	
1	≤ 25 Years	0	0	2	6.1	3	9.1	5	15.2	2,6
2	26 - 35 Years	3	9.1	1	3	5	15.2	9	27.2	1,9
3	36 - 45 Years	2	6.1	2	5.1	2	6.1	6	18.2	3,0
4	> 45 Years	0	0	4	12.1	9	27.3	13	39.4	2,0
Total		5	15.2	9	26.3	19	57.7	33	100	

Based on table 1 above, from the cross tabulation between age and knowledge, it can be seen that respondents who have sufficient knowledge with the greatest frequency of age categories > 45 years are 4 respondents with a percentage of 12.1%, while respondents who have less knowledge with the largest frequency category aged 26-35 years were 3 respondents with a percentage of 9.1%, then respondents who had good knowledge with the greatest frequency in the age category > 45 years were 9 respondents with a percentage of 27.3%. Based on these results most of the respondents with the age category > 45 years have good knowledge with a percentage of 27.3% about Basic Life Support (BLS).

Table 2 Cross Tabulation Distribution between Gender and Knowledge of Non-Medical Officers

No	Gender	Knowledge Of BLS								Score
		Less		Enough		Well		Total		
		N	%	N	%	N	%	N	%	
1	Man	0	0	5	15.2	12	36.4	17	51.5	2,7
2	Woman	5	15.2	4	12.1	7	21.2	16	48.5	2,1
Total		5	15.2	9	27.3	19	57.6	33	100	2,4

Based on the data in table 2 above, from the cross tabulation between sexes and knowledge, it can be seen that respondents with sufficient knowledge with the greatest frequency are male, namely 5 people with a percentage of 15.2%, while respondents with less knowledge frequency are gender Wainta as many as 5 people with a percentage of 15.2%, then respondents with the highest frequency of good knowledge were male as many as 12 people with a percentage of 36.4%. The data is that the majority of respondents are male. Based on these results most of the respondents, both male and female, have good knowledge of Basic Life Support (BLS).

Table 3 Cross Tabulation Distribution between Education Level and Knowledge of Non-Medical Officers

No	Level Of Education	Knowledge Of BLS								Score
		Less		Enough		Well		Total		
		N	%	N	%	N	%	N	%	
1	SMA/SMK	0	0	3	9.1	9	27.3	12	36.4	2,8
2	Diploma	1	3	0	0	3	9.1	4	12.1	2,5

3	S1	4	12.1	6	18.2	7	21.2	17	51.5	2,2
Total		5	15.1	9	27.3	19	57.6	33	100	2,5

Based on table 3 above, cross tabulation between education level and knowledge, it can be seen that the greatest frequency of knowledge is enough for 6 respondents with a percentage of 18.2% with an undergraduate level, 1 respondent with the lowest knowledge level with a percentage of 3% with a diploma level. Furthermore, respondents with the largest frequency of good knowledge were 9 respondents with a percentage of 27.3%. Based on these results, some respondents with undergraduate and high school / vocational levels have good knowledge of Basic Life Support (BLS).

Table 4 Cross-Tabulation Distribution between Employment Status and Knowledge of Non-Medical Officers

No	Employment Status	Knowledge Of BLS						Total		Score
		Less		Enough		Well		N	%	
		n	%	N	%	N	%			
1	Permanent Employee	4	12.1	7	21.2	16	48.5	27	81.8	2,4
2	Contract Employess	1	3	2	6.1	3	9.1	6	18.2	2,3
Total		5	15.1	9	27.3	19	57.6	33	100	2,4

Based on the data in table 4 above, from the cross tabulation between employee status and knowledge, it can be seen that the greatest frequency of good knowledge is 16 respondents with a percentage of 48.5% with permanent employee status, then less knowledge with the smallest frequency is 1 respondent with a percentage of 3% with status contract employees. Based on these results, most respondents with permanent employee status have sufficient and good knowledge of Basic Life Support (BLS) training.

Table 5 Cross Tabulation Distribution between Marital Status and Knowledge of Non-Medical Officers

No	Marital Status	Knowledge Of BLS						Total		Score
		Less		Enough		Well		n	%	
		N	%	N	%	N	%			
1	Married	5	15.2	7	21.2	15	45.5	27	81.8	2,4
2	Single	0	0	2	6.1	4	12.1	6	18.2	2,7
Total		5	15.2	9	27.3	19	57.6	33	100	2,5

Based on the data 5 above, from the cross tabulation between marital status and knowledge, it can be seen that the largest frequency of knowledge of respondents with good categories is 15 respondents with a percentage of 45.5% with married marital status, then the largest frequency of respondent knowledge with sufficient categories is 7 respondents with a percentage 21.2% with a married status, while the frequency of knowledge of respondents with a less category was 5 respondents with a percentage of 15.2% with a married status.

Table 6 Cross Tabulation Distribution between Working Period and Knowledge of Non-Medical Officers

No	Years of Service	Knowledge Of BLS						Total		Score
		Less		Enough		Well		n	%	
		n	%	n	%	n	%	n	%	
1	≤ 5 Years	2	6.1	3	9.1	6	18.2	11	33.3	2,4
2	6 - 15 Years	3	9.1	0	0	4	12.1	7	21.2	2,1
3	16 - 25 Years	0	0	5	15.2	5	15.2	10	30.3	2,5
4	> 25 Years	0	0	1	3	4	12.1	5	15.2	2,8
Total		5	15.2	9	27.3	19	57.6	33	100	2,5

Based on table 6 above, from the cross tabulation between years of work and knowledge, it can be seen that the greatest frequency of good knowledge is 6 respondents with a percentage of 18.2% with a working period of ≤ 5 years, then the smallest frequency of knowledge is enough as much as 1 respondent with a percentage of 3% with a service life of > 25 years. Based on these results, most of the respondents with a service life of ≤ 5 years have good knowledge of Basic Life Support (BLS) training.

Table 7 Distribution of Respondents' Knowledge Results

No	Knowledge	Frequency		Score	Average Value
		Total (n)	Percentage (%)		
1	Skor 0-2,50 = Bad	0	0	0	0
2	Skor 2,51-5 = Less	5	15.2	10	0,5
3	Skor 5,01-7,5 = Enough	9	27.2	27	0,75
4	Skor 7,51-10 = Well	19	57.6	76	1
Total		33	100	113	2,25

Based on the data in table 7 above, it can be seen that the identification results of the knowledge of respondents of non-medical officers at the Surabaya Islamic Hospital A. Yani who attended Basic Life Support (BLS) training, namely 19 respondents had good knowledge with a percentage of 57.6%, 9 respondents sufficient knowledge level with a percentage of 27.2%, and less knowledge as much as 5 respondents with a percentage of 15.2%. This shows that the largest frequency with good knowledge is 19 respondents with a percentage of 57.6%.

## DISCUSSION

### 1. Age Characteristics of Respondents based on Knowledge

The results of cross tabulation to see between age and knowledge show that the age group of respondents aged > 45 years has a greater percentage, namely, 39.4% with good knowledge category. This condition indicates that the age group in the group > 45 years is the productive age and the elderly.

Age is a factor that affects a person's knowledge. A person's knowledge is influenced by several factors, one of which is the age factor. Increasing a person's age will increase one's policies and abilities to make decisions and think rationally (Hikmawati, 2012). With increasing age a person will experience changes in physical and psychological (mental) aspects. In the psychological or mental aspect, the level of thinking of a person becomes more mature and mature (Mubarok, 2011). The higher the age of a person, the more knowledge or knowledge they have (Notoatmodjo, 2012).

Researchers assume that the more mature an employee is, the higher the level of experience. The longer the working period, the experience in carrying out tasks in the professional field will increase.

### **1. Characteristics of the Gender of Respondents based on Knowledge**

The results of cross tabulation to see between gender and knowledge, showed that the male gender had a large percentage of 51.5% with good knowledge category. This situation shows that more non-medical officers who participated in the BLS training at the Islamic Hospital in Surabaya were male than female.

For the needs of medical personnel, it is very necessary for male personnel because working in emergency and critical units requires a lot of energy, especially if at one time there are patients who need cardiopulmonary resuscitation (CPR) (Fathoni, 2014). Men are also very much needed because CPR has a strong force.

### **2. Characteristics of Respondents Education Level based on Knowledge**

The results of cross tabulation to see between the level of education and knowledge show that the S1 education level has a greater percentage, namely 51.5% with the good knowledge category. This situation shows that the non-medical staff at the Surabaya Islamic Hospital who attended the BLS training were mostly with an undergraduate level compared to SMA / SMK and Diploma.

Knowledge is closely related to education, with higher education, the individual will have broader knowledge. (Notoatmodjo, 2012). Education means the guidance someone gives to others in order to understand something. The higher a person's education, the easier it is to receive information, the more knowledge they will have. Low education will hinder the development of information (Mubarok, 2011).

### **3. Characteristics of Respondent Employee Status based on Knowledge**

The results of cross tabulation to see between employment status and knowledge show that the percentage of permanent employees has a greater percentage, namely, 82% with the good knowledge category. In a person there is a standard of individual excellence that is influenced by physical condition, intelligence, personality, interests, experience of success, level of education, community environment and commitment to the organization.

### **4. Characteristics of the Respondents' Marital Status based on Knowledge**

The results of cross tabulation to see between marital status and knowledge showed that the married marital status had a greater percentage, namely 81.8% with good knowledge category. The specific relationship between knowledge and marital status directly from various literatures has never been found. However, it is related that marital status is one of the factors in an individual's life outside of work that can influence individual reactions or behavior related to work. Siagian (2006) states that marital status affects employee behavior in organizational life, both positively and negatively. The results of a study conducted by Bagiyono (2011) found that there were two relationships between marriage and knowledge of non-medical officers after attending BLS training.

This means that if the relationship is related to the aspect of one's responsibility towards work, in this study it is necessary to prove the relationship between marital status and the understanding of non-medical officers about something related to their work.

### **5. Characteristics of Working Period based on Knowledge**

The cross-tabulation results to see between the length of work and knowledge, shows that the working period of 16-25 years is greater, that is, 30.3% with good knowledge category. This situation shows that the amount of experience that can be obtained during work and a higher level of dexterity due to habits or accustomed to doing the job. Employee tenure also affects the knowledge and skills possessed. The learning process can provide skills, if these skills are practiced, the higher the level of skills regarding BLS measures, this is influenced by the tenure of someone who works in an agency / agency. The longer a person works, the more skills and experience increases (Robbins & Judge, 2008).

## **CONCLUSION**

From this study, it was found that all non-medical employees who were evaluated related to BLS had a fairly good score. However, evaluation must be carried out continuously and evaluated.

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