

# THE CORRELATION BETWEEN KNOWLEDGE LEVEL AND ATTITUDES TOWARDS HEART-LUNG EMERGENCY MANAGEMENT IN EMERGENCY NURSING TEAM MEMBERS OF UNIVERSITAS RESPATI YOGYAKARTA

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## Abstract

Emergencies are life-threatening situations which need rapid first treatment, such as in victims of cardiac arrest and respiration stoppage. Handling of emergencies demand sufficient knowledge, and good attitude also plays an important role in handling emergencies. The aim of this study was to determine the correlation between the knowledge level and attitudes towards heart-lung emergency management in emergency nursing team members of UniversitasRespati Yogyakarta. This is an observational quantitative research with a cross sectional. The population of this research are active members of emergency nursing team of UniversitasRespati Yogyakarta. Samples are selected using a total sampling technique, with 31 respondents involved. Data analysis is performed using Somers' D test. The majority of respondents are in semester 8 (67.7%); aged 21 years old (41.9%), females (64.5%), and have more than 21 training experiences (71.0%). The level of knowledge of the emergency nursing team members mostly belong to sufficient category (61.3%). The attitudes of emergency nursing team members belong to good category (48.4%). Results of bivariate analysis using Somers' D test show a p-value of  $0.01 < 0.05$ . There is a correlation between the knowledge level of emergency nursing team of UniversitasRespati Yogyakarta and attitudes towards heart-lung emergency handling.

**Keywords:** heart-lung emergency, management, knowledge, attitude

## 1. INTRODUCTION

Emergency is a life-threatening condition that require initial treatment. Emergency conditions can occur in hospitals or outside the hospital, and in the areas that are difficult to reach by health workers. So that community involvement is needed in emergency conditions especially for the initial treatment of victims before health workers arrive at the scene, for example of respiratory arrest and cardiac arrest victims [1]. The World Health Organization (WHO), (2010) explains about cardiovascular disease that estimated at around 17 million people where every 5 seconds 1 person dies from coronary heart disease. According to research in several European countries, cardiac arrest causes around 700,000 death every year [2]. Coronary Heart Disease (CHD) in Indonesia is increasing. CHD has become the number one killer, which occupies the highest prevalence in the province of East Nusa Tenggara (4.4%), then followed by Central Sulawesi (3.8%), South Sulawesi (2.9%), West Sulawesi (2.6 %) and Aceh (2.3). Whereas Yogyakarta already ranks 16th with cases of CHD with prevalence 1.3% [3].

An illustration of the pattern of causes of death in hospitals, for example heart disease, in the past ten years has always been included in the 10 highest mortality diseases. The last three-year analysis of data in all hospitals in Yogyakarta shows cardiovascular diseases ranks the highest cause of death [4].

In the case of cardiac arrest, the appropriate initial treatment are Basic Life Support (BLS), also called Cardio Pulmonary Resuscitation (CPR) or Lung Cardiac Resuscitation. When victims who experience a heart attack outside the hospital, the helper must immediately provide CPR and use AED as soon as possible [5]. The technique for administering CPR must be fast and proper. The success of treatment depending on the action taken, so CPR should be done as accurately as possible to prevent brain death<sup>6</sup>.

Based on the results of interviews, there were 31 active members of the Emergency Nursing Team of Universitas Respati Yogyakarta, 4 respondents said they had seen patients with cardiac arrest at the hospital, and 1 respondent had seen victims of cardiac arrest outside the hospital. There were 5 respondents who answered that they knew about the management of pulmonary emergency, but did not carry out management in the real case due to fear and hesitation by reason of not having a registration letter (STR), not yet confident, not having experience, and have never done direct management of cases real cardiac arrest. The researcher also gave a question about the management of cardiac arrest with five questions according to the management of the American Heart Association emergency 2015 showing the results of interviews 2 people answered correctly and correctly, while 3 people answered incorrectly so the authors were interested in doing this research.

## 2. METHODS

This study is quantitative observational analytics with cross sectional design. The aim of this research is to determine the relationship between the independent variables and the dependent variable that identified in one time unit. The type of this study was observational analytic, the researchers observed that there was a correlation between the level of knowledge and the attitude of emergency management of pulmonary heart disease in the members of the emergency nursing team at Universitas Respati Yogyakarta. The population in this study amounted to 31 respondents, with total sampling technique including all members of the population. The sample in this study were members of the emergency nursing team Universitas Respati Yogyakarta who were still active as Student of Nursing Sciences Department, Faculty of Health Sciences, Universitas Respati Yogyakarta.

## 3. RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Knowledge about Heart-lung Emergency Management in Emergency Nursing Team Members of Universitas Respati Yogyakarta

Knowledge	Frequency (f)	Percentage (%)
Low	5	16.1
Adequate	19	61.3
High	7	22.6
Total	31	100.0

Table 2. Frequency Distribution of Attitude about Heart-lung Emergency Management in Emergency Nursing Team Members of Universitas Respati Yogyakarta

Attitude	Frequency (f)	Percentage (%)
Bad	9	29.0
Moderate	7	22.6
Good	15	48.4
Total	31	100.0

Table 3. Correlation between Knowledge and Attitude about Heart-lung Emergency Management in Emergency Nursing Team Members of Universitas Respati Yogyakarta

Knowledge	Attitude								p-value
	Bad		Moderate		Good		Total		
	f	%	f	%	f	%	F	%	
Low	4	12.9	1	3.2	0	0.0	5	16.1	0.01
Adequate	4	12.9	6	19.4	9	29.0	19	61.3	
High	1	3.2	0	0.0	6	19.4	7	22.6	
Total	9	29.0	7	22.6	15	48.4	31	100.0	

Based on the results of the study, most ENT members from Universitas Respati Yogyakarta had sufficient knowledge, as many as 19 people with a percentage (61.3%). The results of this study are in line with Erfitamala's (2016) study, that the level of knowledge of nurses in the adequate category was 22 people (73.3%) 9, and Hasanah's research (2015) also stated the level of nurses' knowledge about basic life assistance in Kabupaten Karanganyar Hospital partly large is in the sufficient category, namely 23 nurses with a percentage (76.6%) 10. It shows that ENT members have sufficient knowledge and understanding in answering questions for the emergency cardiac emergency management questionnaire by providing basic life support or cardiac pulmonary resuscitation (CPR) in accordance with established SOP procedures and the 2015 American Heart Association theory. ENT members are still studying and studying, students can easily receive information so that ENT members' knowledge falls into the sufficient category. This research is not in line with the research conducted by Putri (2017) which states that the knowledge of nursing students at the undergraduate level to basic life support is mostly in the less category, namely as many as 44 people with a percentage (47.3) 11. Sufficient knowledge for ENT members of Respati University in Yogyakarta is very important for them in handling the emergency condition of the pulmonary heart, so that they already know and understand it, then what are their attitudes and responses in dealing with the emergency condition of the pulmonary heart. Knowledge is the result of "knowing" and this happens after the object of the person holds sensation on a particular object

The results of this study also showed the majority of female ENT members as many as 20 people with a percentage (64.5). The results of this study are in line with Erfitamala's research (2016), the majority of respondents were female, as many as 18 people with a percentage (60%). The study also said that currently female sex still dominates over men.9 The results of the study of the characteristics of the respondents were that the majority of the age of ENT members were 21 years old (early adult) as many as 13 people with a percentage (41.9%). This research is in line with Ambarwati's (2015) research, most of the respondents were at the age of 20-40 (early adulthood) 13. The more the age, the level of maturity and strength of a person will be more mature in thinking. Based on the results of the study, most of the attitudes of Yogyakarta Respati University ENT members fall into the good category of 15 people with a percentage (48.8%). The results of this study are in line with Erfitamala's research (2016), nurses' attitudes are in the good category, as many as 21 people with a percentage (70%) .9 So that members of the ENT Universitas Respati Yogyakarta will respond to emergency pulmonary heart disease by providing basic life assistance in accordance with applicable procedures and theories that they have obtained in emergency learning.

A good attitude will be a predisposing factor for the formation of good behavior in the handling of emergency pulmonary heart. A good attitude is also called a positive attitude which tends to approach, like, and expect certain objects<sup>12</sup>. Non-birth attendance is formed or studied throughout development in individual relationships and the surrounding environment. Factors that can influence attitudes, namely personal experience, the influence of others that are considered important and the mass media. The ENT member whose attitude is good can not be separated from the factors that influence it. Based on the results of the characteristic analysis, it was found that 22 respondents mostly had training experience with a percentage (71.0%). So that training experience can form a good attitude, attitudes can also be formed, studied or changed always regarding an object<sup>12</sup>. The results of this study are in line with research conducted by Bala et al. (2014) that respondents who did basic life assistance found that the main cause of implementing basic life assistance was good because respondents had attended basic life assistance training. Based on the results of table 4. Analysis using the somersd test was obtained p-value 0.01 at the level of error (alpha) 0.05 and 95% confidence interval. Obtained a p-value of 0.01 less than 0.05, so  $H_a$  is accepted, so here it shows a significant relationship between the level of knowledge with the attitude of emergency management of the pulmonary heart. This research is in line with Ambarwati's research (2015) there is a relationship between the level of knowledge and attitudes of traffic police regarding basic life assistance in the laka unit and the Surakarta Police Satlantas patrol.

Knowledge is the result of knowing someone who conducts sensing on an object, sufficient knowledge greatly influences a person's attitude, the more knowledge is sufficient or broad, the person's attitude can provide good and positive aspects. Knowledge is a very important domain for the formation of one's actions, knowledge that has enough levels that is (know) means someone is able to remember the material that has been studied, (understand) an ability to explain material that has been studied correctly, (application) material capabilities in situations real, (analysis) the ability to declare material into components, (synthesis) the ability to compile a new formulation, (evaluation) the ability to justify or evaluate a material.<sup>12</sup> Most ENT members from Universitas Respati Yogyakarta had sufficient knowledge, as many as 19 people with a percentage (61.3%). The results of this study are in line with Erfitamala's (2016) study, that the level of knowledge of nurses in the adequate category was 22 people (73.3%). It shows that ENT members have sufficient knowledge and understanding.<sup>9</sup> The level of knowledge in the form of attitudes can be obtained from one's personal experience by repeating experiences that have been obtained in solving problems faced by the past. Most of the attitudes of ENT members including the good category of 15 people with a percentage (48.4%). The results of this study are in line with Erfitamala's study (2016), nurses' attitudes were in the good category, as many as 21 people with percentages (70%). So that the members of ENT will respond well if there is a heart lung emergency. <sup>9</sup> Attitudes are based on knowledge, the more knowledge of ENT members is sufficient and good it will lead to a positive attitude where this positive attitude tends to approach, like, expect certain objects. The formation of a person's attitude occurs through the levels that pay attention to the simulation given, namely: accepting that the object wants and provides a simulation, responds to give answers or be asked, respect that invites, works or discusses with other people, and is responsible for choosing risks. Attitudes do not stand alone and are not born but are formed or studied as long as development and attitudes can also change. Purwanto.

<sup>12</sup> Attitudes can also be influenced by several factors such as personal experience, other people's influences that are considered important, cultural influences, mass media, institutions education, religious institutions, and emotional factors

Attitude is a predisposition to do or not do a behavior, so that attitudes are not only internal psychological conditions that are purely from individuals, but attitudes are a process of consciousness that is individual in nature. Attitudes can also change because attitudes can be learned and can change in circumstances and certain conditions that facilitate attitudes in that person, positive and negative attitudes, where positive attitudes tend to act, approach, like, expect certain objects while for negative attitudes tend to stay away from, avoid, hate, and dislike certain objects.

#### 4. CONCLUSION

Majority of respondents in the 8th semester ENT are 21 years old (early adulthood), female and most of the training experience is more than 20 times. The knowledge level of the ENT members regarding the management of heart-lung emergencies is mostly in the adequate category. The description of the cardiac emergency management attitude is mostly in the good category. There is a relationship between the level of knowledge and the attitude of emergency management of pulmonary heart members of ENT Universitas Respati Yogyakarta,

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