

Relationship of Knowledge, Attitude and Training with Nursing Readiness in Handling Emergency Patients in Maros District Health Center

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ABSTRACT

This study aims to (1) assess the relationship of knowledge with nurses' readiness in handling emergency patients in Maros District Health Center, (2) assess the relationship of nurses' attitudes to nurses' readiness in handling emergency patients in Maros District Health Center, (3) assess training relationships with nurses' readiness in handling emergency patients at Maros District Health Center.

This research was conducted in all Maros District Health Centers. This type of research is quantitative with Cross-Sectional design Analytical Survey research method. The samples in this study were nurses in charge of the Emergency Room Installation (IGD) in 14 Maros District Health Centers, as many as 74 people.

The results of the study found that knowledge (p value $0,020 < \alpha 0,05$), attitude (p value $0,015 < \alpha 0,05$), and Training (p value $0,046 < \alpha 0,05$). The conclusion in this study is that there is a significant relationship between knowledge, attitudes and training with nurse readiness in handling emergency patients in Maros District Health Center. With good knowledge, attitudes and training, they can make a nurse always ready to face and handle emergency patients.

Key words: Nurses' Knowledge, Attitudes, Training and Nurses Readiness.

INTRODUCTION

Emergency is a problem that cannot be separated from human life and life. In Indonesia not only natural disasters have been experienced, man-made disasters also occur frequently, which is the impact of significant economic growth. Transportation

accidents are one of the most common man-made disasters.^[1]

The number of emergency cases in the emergency department have increased visitation each year. This increase occurs around 30% in all world hospital emergency rooms.^[2] In 2007 patient visits to ED data throughout Indonesia reached 4,402,205 (13.3% of the total visits at the General Hospital) with 12% of visits from the ED visit. Of this significant amount, it requires considerable attention to the care of emergency patients thus the minister of health in 2009 established a reference to hospitals or health centers in developing emergency services, especially in emergency departments where one of the general principles of handling emergency patients must be handled no more than five minutes after the patient arrives at the emergency department which is called response time.^[3]

Based on the Decree of the Minister of Health of the Republic of Indonesia (2009) that the speed and accuracy of collections given to patients arriving at the emergency department requires a standard according to the fast response time and appropriate handling. This can be achieved by improving the facilities, infrastructure, human resources and management of the Emergency Health Center in accordance with existing standards.^[4] Many studies have shown that nurses' emergency readiness is low.^[1] Nurses are also required to always maintain their skills to deal with emergencies.^[5] Because skills are very

important to the challenges that exist in the ED^[6]

The number of nurses working in the Indonesian Health Service (at the Puskesmas) are 237,181 people.^[7] Whereas in South Sulawesi Province the number of nurses working and registered in the Health Service in South Sulawesi are 9,289 people.^[8] While in Maros District the number of nurses working and registered at Maros District Health Office (in the Puskesmas) are 147 people, with details of the number of nurses per Puskesmas, namely; Mandai Public Health Center 12 people; Moncongloe Health Center 9 people; Maros Health Center is only 9 people; Lau Health Center 17 people; Marusu Health Center 4 people; Turikale Health Center 14 people; Bontoa Health Center 12 people; Bantimurung Health Center 17 people; Simbang Health Center 8 people; 12 people Tanralili Health Center; Tompobulu Health Center 13 people; Cenrana Health Center 4 people; Camba Health Center 9 people and Mallawa Health Center 7 people.^[9]

RESEARCH METHOD

This type of research is quantitative with Cross-Sectional design Analytical Survey research method. Analytic Survey is research that tries to explore and why health phenomena occur then analyze on correlation dynamics phenomena or between risk factors and effect factors.^[10] While cross sectional is a type of research

that emphasizes the time of measurement / observation of independent and dependent variable data assessed simultaneously at one time, so there is no follow-up. Certainly not all research subjects must be observed on the same day or time, but both the independent variable and the dependent variable are assessed only once.^[11]

The samples in this study were nurses in charge of the Emergency Room Installation (IGD) in 14 Maros District Health Centers, as many as 74 people.

RESEARCH RESULTS

Relationship between Knowledge and Nurses' Readiness in Handling Emergency Patients in Maros District Health Centers

Based on Table 4.6, it can be seen that out of 69 respondents (93.2%), 67 respondents (90.5%) were quite knowledgeable, and 2 respondents were fairly prepared. (2.7%). Whereas a total of 5 respondents (6.8%) obtained knowledge with the category of less prepared as many as 3 respondents (4.1%), and knowledge with less prepared category as many as 2 respondents (2.7%).

After analyzing Descriptive Statistics Crosstabs using the Chi Square Test, then based on Pearson Chi Square Correction the value of p value was 0.020, which means p value $0.020 < \alpha 0.05$. Thus, H_a in this study which stated that there is a relationship between knowledge and nurses' readiness is declared acceptable and H_0 is rejected.

Table 1.1 Relationship between Knowledge and Nurses' Readiness in Maros District Health Center

Knowledge	Nurses' Readiness				Total		P
	Ready		Not Ready		n	%	
	n	%	n	%			
Fair	67	90,5	2	2,7	69	93,2	0,020
insufficient	3	4,1	2	2,7	5	6,8	
Total	70	94,6	4	5,4	74	100,0	

Source: Primary Data Year 2019

Relationship between Attitudes and Nurses' Readiness in Maros District Health Center

Based on Table 4.7, it can be known that out of 61 respondents (82.4%) there were 60

positive respondents (81.1%) and attitudes with positive category who were not prepared as many as 1 respondent. (1.4%). While a total of 13 respondents (17.6%) obtained attitudes with negative category

that were prepared as many as 10 respondents (13.5%), and attitudes with negative category that were not prepared were as many as 3 respondents (4.1%). After conducting *Descriptive Statistics Crosstabs* using *Chi Square Test*, then based

on *Correction Pearson Chi Square* obtained *p value* of 0,015, which means *p value* $0,015 < \alpha 0,05$. Thus H_a in this study which states that there is a relationship between attitudes and nurses' readiness is acceptable and H_0 is rejected.

Table 1.2 Relationship between Attitudes and Nurses' Readiness in Puskesmas Maros District

Attitude	Nurses' Readiness				Total		P
	Ready		Not Ready				
	n	%	n	%	n	%	
Positive	60	81,1	1	1,4	61	82,4	0,015
Negative	10	13,5	3	4,1	13	17,6	
Total	70	94,6	4	5,4	74	100,0	

Source: Primary Data Year 2019

Relationship of Training with Nurses' Readiness in Maros District Health Center

Based on Table 4.8, it can be seen that out of 39 respondents (52.7%) there were 39 trained respondents (57.7%), and no respondents with trained category emergency training who were not ready. Whereas a total of 35 respondents (47.3%) obtained emergency training in the category of untrained and ready as many as 31 respondents (41.9%), and emergency

training in the category of untrained who were not prepared as many as 4 respondents (5.4%).

After analyzing *Descriptive Statistics Crosstabs* using the *Chi Square Test*, then based on *Pearson Chi Square Correction* the value of *p value* was 0.046, which means *p value* $0.046 < \alpha 0.05$. Thus H_a in this study which states that there is a relationship between training and nurses' readiness is acceptable and H_0 is rejected.

Table 1.3 Relationship between Nurses' Readiness and Training in Maros District Health Center

Training	Nurses' Readiness				Total		P
	Ready		Not Ready				
	N	%	n	%	n	%	
Trained	39	57,7	0	0,0	39	52,7	0,046
Untrained	31	41,9	4	5,4	35	47,3	
Total	70	94,6	4	5,4	74	100,0	

Source: Primary Data Year 2019

DISCUSSION

Relationship between Knowledge and Nurses' Readiness in Maros District Health Center

Based on the results of research with *Descriptive Statistics Crosstabs* analysis using *Chi Square Test*, then based on *Pearson Chi Square Correction* *p value* is 0.020, which means *p value* $0.020 < \alpha 0.05$. Thus it can be concluded that there is a significant relationship between knowledge with nurses' readiness in Working Area Health Center of Maros District Health Office.

Knowledge or cognitive is a domain that is very important for the formation of one's actions (over behavior).^[10] In line with research conducted in Australian hospitals, it was revealed that the majority of emergency nurses and medical staff had high knowledge in handling emergencies in the identification of SIRS and Sepsis, and less than a third of respondents were found to have low knowledge. Respondents with high knowledge were influenced by high education, namely diploma and bachelor, as well as experience in the field of emergency.^[12] A study was conducted on

disaster readiness education through online social networks which turned out to influence the knowledge of emergency nurses.^[13] With adequate practice knowledge, and a positive attitude towards disaster management, it is certain that a person will be better prepared to deal with emergency conditions.^[14] The same research was also conducted at the emergency room at RSU Dr. Zainoel Abidin stated that knowledge of nurses with high category was 34 respondents (100%).^[15] The same research was also carried out among students and the results showed that the majority of students feel better equipped with sufficient knowledge to care for emergency patients.^[16] In research conducted in Saudi Arabia related to knowledge, attitudes, practices and familiarity of emergency nurses regarding disaster readiness in Saudi Arabia, the results showed that knowledge has a significant relationship to disaster readiness, so programs for emergency readiness education are needed in disaster-prone school institutions.^[17]

Based on the results of these studies, the researcher assumes that action is a manifestation of knowledge. With sufficient knowledge, a nurse can take good care of emergency patients therefore this can make a nurse always ready to deal with emergency patients.

Relationship between Attitudes and Nurses' Readiness in Maros District Health Center

Attitude is the tendency to behave in a certain way, all health workers know about aseptic method and have the skills to teach them, but when they work alone, they may be tempted to choose shortcuts and be very careful. The attitude learned during training is the most important part of the training.^[18]

Based on the results of research with Descriptive Statistics Crosstabs analysis using Chi Square Test, then based on Pearson Chi Square Correction p value is

0.015, which means p value $0.015 < \alpha 0.05$. Thus it can be concluded that there is a significant relationship between attitudes and nurse readiness in the Working Area Health Center of Maros District Health Office.

This is in line with previous research with the substance of research topics to know the nurse readiness determinant of volcanic disasters (Gamalama) in the Health Center of Ternate City Health Office with the results that there is a significant relationship between attitudes and nurse readiness against volcanic eruptions (Gamalama) in the Health Center of Ternate City Health Office.^[19] Another study conducted with the substance of the research topic to know nurse readiness analysis in providing emergency respiratory system response due to natural disasters in Deli Serdang District Health Office Working Area suggested that nurse readiness based on the attitude in providing emergency respiratory system services is 82.5% with positive attitude and 17.5% with negative attitude.^[20] Research conducted at Regional General Hospital Dr. Zainoel Abidin Banda Aceh with the substance of the research topic to find out nurses readiness facing an outbreak of bird flu in Emergency Department, showed that there is a significant relationship between attitudes with nurses readiness.^[21] the same study with the title of knowledge, attitudes and practices of emergency health workers on emergency readiness and management in two hospitals in Lagos Nigeria, the results showed that emergency health workers in two hospitals have good and acceptable attitudes and very influential on readiness facing an emergency.^[22]

Based on the results of these studies, the researcher assumes that attitude is one indicator of success in handling emergency patients. With a positive nurse attitude it will influence the form of nurses' readiness in maximizing the handling of emergency patients.

Relationship of Training with Nurses' Readiness in Maros District Health Center

Emergency prevention training is training that involves knowledge and skills for the first treatment in the face of emergencies and is aimed at health workers both doctors and nurses and the general public who care and want to learn to deal with and handle emergency cases in harmony with the national health system.^[23]

Based on the results of the research with Descriptive Statistics Crosstabs analysis using Chi Square Test, then based on Pearson Chi Square Correction, p value is 0.046, which means p value is $0.046 < \alpha 0.05$. Thus it can be concluded that there is a relationship between training with nurses' readiness in the Health Center Working Area of Maros District Health Office. This is in line with the results of research conducted in the United States related to Scenarios or emergency simulation training allowing safe and quick services in conducting

Extracorporeal Cardiopulmonary Resuscitation (ECPR) and scenario for simulating cardiac arrest, the results showed that ECPR simulation training allows teams of doctors and emergency nurses to obtain and maintain safe and fast skills.^[24] In research with the titles of factors that influence the basic competence of emergency and disaster nursing, the results showed that emergency nurse competencies in disaster readiness can be improved through education and training programs.^[25] In research conducted in Japan, with the substance of the study "Incorporating resilience competencies in simulation-based education for emergency response" in Japan, stated that resilience training requires high quality for emergency response, thus the competency of resilience training in simulation-based education for emergency response is urgently needed which is adjusted to the characteristics of the emergency response team, such as the intensive care unit (ICU), ambulatory team, and operating room.^[26] In a previous study with the substance of the study "Indonesian

emergency nurses' readiness to respond disasters" found findings that Indonesian emergency nurses has adequate disaster readiness. In addition, it is said that one of the factors that influences the readiness of Indonesian emergency nurses is training or education positively related to disaster readiness.^[1] In a study in China entitled The Evaluation of the effectiveness of an emergency readiness training program for public health staff in China, it was found that emergency training produced positive values for public health staff. Therefore, emergency care training is effective and feasible in increasing emergency readiness.^[27] In line with the related research on Practices of skills training affect the knowledge and attitudes of dental students facing emergency care, the results showed that by entering curriculum training in dental courses it is proven to be able to increase the awareness of dental students about the importance of readiness in dealing with emergency conditions.^[28]

Based on the results of these studies, the researcher assumes that emergency training is the most important part of determining success in carrying out emergency actions. With trained competencies, possess good skills; a nurse will always be prepared to provide emergency handling.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the results and discussion of this study, conclusions can be drawn as follows: There is a significant relationship between knowledge with nurses' preparedness in handling emergency patients in Maros District Health Center. With sufficient knowledge, a nurse can take good care of emergency patients therefore this can make a nurse always ready to deal with emergency patients.

There is a significant relationship between nurses' attitudes and nurses' readiness in handling emergency patients in Maros District Health Center. Attitude is one indicator of success in handling emergency

patients. With a positive nurse attitude it will influence the form of nurses' readiness in maximizing the handling of emergency patients.

There is a significant relationship between training with nurses' readiness in handling emergency patients in Maros District Health Center. With trained competencies, possess good skills, a nurse will always be prepared to provide emergency handling.

Suggestions

Maros District Health Office is expected to be able to hold emergency training for health workers on duty in the Working Area of the Maros District Health Office mainly to health workers on duty in the Emergency Room (IGD).

It is expected that in some Head of Emergency Rooma in each Health Centers to provide strictness to nurses who have never attended Emergency Training to attend emergency training.

For Health Centers that do not have a special nurse in charge of Emergency Room, it is expected that immediate improvements in the management of the Health Cetnter are related to the determination of nurses who are specifically assigned to the Emergency Room (IGD).

It is hoped that the next researcher can add several variables related to the readiness in handling emergency patients such as work experience, length of work and other related matters.

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