# 35

# The Relationship of Nurses Response Time With Family Anxiety of Ed Patients Based on Triage at RSU Muslimat Ponorogo

## Rahmania Ambarika<sup>1\*</sup>, Putri Mayasari<sup>2</sup>, Novita Ana Anggraini<sup>3</sup>

Institut Ilmu Kesehatan STRADA Indonesia \*Corresponding author: rahmania.ambar@gmail.com

ARTICLE INFO

### ABSTRACT

Article history: Received: 6<sup>th</sup> June 2024 Revised: 24<sup>th</sup> June 2024 Accepted: 26<sup>th</sup> June 2024

Keywords: Anxiety, Nurse Family, Response Time, Triage

The patient's response time is required  $\leq 5$  minutes to get help appropriate to the emergency to increase safety. Opportunities can be increased with prompt handling. The tendency for patients treated in the ER to expect quick treatment. Perceptions of delays in treatment can cause patient anxiety. The aim of this research is to analyze the relationship between nurse response time and emergency room patient family anxiety based on triage at RSU Muslimat Ponorogo. This research design is cross sectional with a sample size of 123 respondents. The sampling technique uses purposive sampling. Research questionnaires use questionnaires to test clinical profile correlations. Slow response time will be perceived by the patient's family as having no acceptance or rejection of him and is a factor in increasing anxiety. This will cause an increase in sympathetic nerves which will cause symptoms such as dizziness, shaking, headaches, sweating, and increased pulse rate. From this research data, it shows that the nurse's response time is slow, and the patient's family experiences severe anxiety. Based on the results of the Spearment correlation test, P value = 0.024 (<0.05), which means that H0 is rejected and H1 is accepted, which means there is a relationship between nurse response time and patient family anxiety in the emergency room at RSU Muslimat Ponorogo. In each triage, there are differences in the level of anxiety felt by the patient's family. in the green triage most experienced mild anxiety, in the yellow triage most experienced moderate anxiety, in the red triage most experienced severe anxiety and in the black triage the majority experienced very severe anxiety.

### I. Introduction

The Emergency Department (IGD) is a unit or section of hospital services that provides emergency patient care activities according to the level of emergency. The emergency department also plays an important role in efforts to save patients with emergency cases in hospitals (Ministry of Health of the Republic of Indonesia, 2009). Emergency management has a philosophy, namely Time Saving, it's Live Saving, which means that all treatment during an emergency must be effective and efficient, because patients can lose their lives in a matter of minutes (Anggraini & Febrianti, 2020). Emergency Response Time is a principle for handling patients in emergency situations in a hospital emergency room. Treatment in this case is the implementation of actions or examinations by doctors and nurses within ≤5 minutes from the patient's first arrival at the ER. Patients who are taken to the ER are generally emergency patients who require fast and appropriate action. Emergency is a life-threatening situation, while emergency is the need to receive immediate treatment or action to eliminate the threat to life (Musliha, 2010). Emergency conditions will cause

Website: https://jgrph.org/ Email: journal.grph@gmail.com ISSN: 2528-066X (Print) ISSN: 2599-2880 (Online) Vol. 9, No 1, June 2024, pp. 35-43

anxiety experienced by patients who are in the Emergency Room (IGD). Fear and anxiety are emotions felt by patients when entering a health service facility. Treatment in the Emergency Room makes patients afraid and anxious when receiving treatment (Dadang, 2020). Feelings of anxiety arise when someone is faced with a life-threatening situation. Excessive worry will cause anxiety disorders. The anxiety response is generally characterized by symptoms of shortness of breath, increased pulse and blood pressure, wrinkled face, looking restless and difficulty sleeping (Hawari, 2013). The condition of patients being treated in the ER can also cause anxiety for their families. Family anxiety is characterized by frequent questions, restlessness, pacing and thinking that bad premonitions will happen (Barbara, 2010). Nurses' actions in carrying out patient care must act quickly and sort patients according to priority (Igede, 2012).

According to the World Health Organization (WHO, 2018), there are several diseases that are considered emergencies and contribute to the largest number of deaths in the world, including ischemic heart disease, 7.4 million (13.2%); stroke 76.7 million (11.9%); chronic obstructive pulmonary disease 3.1 million people (5.6%); lower respiratory infections, 3.1 million (5.5%); and cancer 1.6 million (2.9%). The emergency situation of this disease is a problem throughout the world, including in ASEAN countries. Indonesia is one of the countries in ASEAN with a high accumulation of patient visits to emergency rooms. Data shows that the number of patients visiting the Emergency Room reached 4,402,205 patients in 2017 (Indonesian Ministry of Health, 2019). This figure is an accumulation of 12% of emergency department visits originating from RSU referrals, namely 1,033 units and 1,319 other hospital units. Then, in 2018, in East Java there were 1,999,103 patient visits to hospitals. At RSU Muslimat itself, data on patient visits to the ER is always increasing every year, in 2021 visits to the ER were 8,601 patients, in 2022 visits to the ER were 8,843 patients. For visit data in May 2023 in the emergency room (IGD), there were 345 patients in the green triage. yellow triage 258 patients, red triage 54 patients, black triage 3 patients. This significant number then requires considerable attention to emergency patient services (Decree of the Minister of Health, 2019).

At the Muslimat Ponorogo General Hospital the triage method used is based on color and the Australian Triage Scale (ATS) which consists of Red Triage or P1 (emergency), Yellow Triage or P2 (non-emergency/non-urgent emergency), Color Triage Green or P3 (not serious and not emergency), Black Triage or P0 Death on Arrival (coming to the emergency room with no signs of life/death). Based on the results of a preliminary study at the Muslimat Ponorogo General Hospital, anxiety is often felt by the patient's family. The results of interviews with several families of patients in the emergency room stated that the service provided by nurses was not fast or took > 5 minutes. Apart from that, the results of observations in the ER showed that the patient's family seemed anxious about the condition of their sick child/relative. These are signs of anxiety symptoms. Factors that cause the response time of nurses in the emergency installation at RSU Muslimat to be > 5 minutes, namely because there is a limited number of nurses and limited hospital facilities and infrastructure which are inadequate compared to the number of patients entering, as well as several patients arriving at the same time at the installation, emergency so nurses must prioritize the most urgent problems. In the emergency room at Muslimat Hospital itself, triage has been implemented correctly, emergency patients are prioritized first, but most of the patients themselves still feel anxious about their condition, because the nurses take too long to provide treatment.

As a health worker, the role of a nurse is very important, apart from patient survival, nurses also play a role in determining the level of anxiety experienced by patients through services that easily experience anxiety compared to someone with a high level of education

ISSN: 2528-066X (Print) Vol. 9, No 1, June 2024, pp. 35-43 ISSN: 2599-2880 (Online)

(Putri et al, 2017). Nurses as the spearhead in emergency installations, their role is very decisive in reducing the anxiety level of patients in the ER through fast and appropriate service and carrying out nursing care, especially nursing care for patients who experience anxiety. The quality of service in the ER also needs to be improved through improvement efforts regarding human resources, facilities, procedures, services and other technical aspects.

Based on the description above, it is necessary to conduct research on the relationship between nurse response time and family anxiety of emergency room patients based on triage at the Muslimat Ponorogo General Hospital.

#### II. Methods

The type of research used in this research is quantitative research with a descriptive approach. Quantitative research methods are a type of research whose specifications are systematic, planned and clearly structured from the start until the creation of the research design. According to Sugiyono (2013), quantitative research methods can be interpreted as research methods that are based on the philosophy of positivism, used to research certain populations or samples, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative/statistical. with the aim of testing the established hypothesis.

### **III. Results and Discussion**

From the results of data collection on 123 respondents, the following data was obtained:

Table 4.1. Distribution of Respondent Characteristics by Gender

Characteristic		,	%	Amount %		
	Green	Yellow	Red	Black		
Man	26	14	30	2	72	123
	(21%)	(11%)	(24%)	(2%)	(58%)	(100%)
Woman	14	26	10	1	51	
	(11%)	(21%)	(8%)	(1%)	(42%)	

(Source: Research questionnaire data December 2023-January 2024)

The table above explains the characteristics of respondents based on gender, most of them were male with 72 respondents (58%). Smith's theory (1968:51) states that men are more easily influenced by environmental pressures than women. Men are more anxious, less patient, and get angry easily (ellias et al, 2013).

Table 4.2 Distribution of Respondent Characteristics by Age

Characteristic		- -	Гriage	%	Amount %	
	Green	Yellow	Red	Black		
18-25 years	5	15	4	2	26	123
	(4%)	(12%)	(3%)	(2%)	(21%)	(100%)
26-35 years	5	6	5	0	16	
	(4%)	(5%)	(4%)	(0%)	(13%)	
36-45 years	15	6	4	0	25	
	(12%)	(3%)	(5%)	(0%)	(20%)	
46-55 years	10	10	15	1	36	
	(8%)	(8%)	(12%)	(1%)	(29%)	
56-65 years	5	5	10	0	20	
	(4%)	(4%)	(8%)	(0%)	(16%)	

(Source: Research questionnaire data December 2023-January 2024)

The table above explains the characteristics of respondents based on age, most of them were 46-55 years old with 36 respondents (29%). In terms of public trust, someone who is more mature will trust more than someone who is not yet mature enough. This is a result of experience and mental maturity (Hurlock, 2017).

ISSN: 2528-066X (Print) ISSN: 2599-2880 (Online)

Table 4.3 Distribution of Respondent Characteristics by Occupation

Characteristic		-	Гriage		%		
	Green	Yellow	Red	Black			
Civil	18	10	12	1	41	123	
	(15%)	(8%)	(10%)	(1%)	(34%)	(100%)	
Private employee	6	5	10	1	22		
	(5%)	(4%)	(8%)	(1%)	(18%)		
Labor	4	12	8	1	25		
	(3%)	(10%)	(7%)	(1%)	(21%)		
No work	6	3	5	0	14		
	(5%)	(2%)	(4%)	(0%)	(11%)		
Others	6	10	5	0	21		
	(5%)	(8%)	(4%)	(0%)	(17%)		

(Source: Research questionnaire data December 2023-January 2024)

The table above explains the characteristics of respondents based on their jobs, the majority of jobs are civil servants with 41 respondents (34%). Work is a relationship that involves two parties between the company and its workers. The higher a person's job, it affects the way that person thinks.

Table 4.4 Distribution of Respondent Characteristics based on Education

Characteristic		,	%	Amount %		
	Green	Yellow	Red	Black		
Elementery school	5	4	3	0	12	123
	(4%)	(3%)	(2%)	(0%)	(9%)	(100%)
Junior High School	5	10	9	0	24	
-	(4%)	(8%)	(7%)	(0%)	(19%)	
Senior High School	12	10	16	2	40	
-	(10%)	(8%)	(13%)	(2%)	(33%)	
Bachelor	18	16	12	1	47	
	(15%)	(13%)	(10%)	(1%)	(39%)	

(Source: Research questionnaire data December 2023-January 2024)

The table above explains the characteristics of respondents based on education, most of them had tertiary education with 47 respondents (39%). According to Yusuf, 2010 in Elias 2013, the higher a person's education, it is hoped that they will be able to think rationally and control their emotions well. Education is needed to obtain information or things that support health, so that it can improve the quality of life. A person's education factor greatly determines their readiness to provide services, people with higher education will be better able to overcome problems and play a better, more effective and constructive role than those with low education.

ISSN: 2528-066X (Print) Vol. 9, No 1, June 2024, pp. 35-43 ISSN: 2599-2880 (Online)

Response Time a. Table 4.5 Response Time Questionnaire Results

Respone Time	Green	Yellow	Red	Black	%	Amount %
Fast	15 (12%)	16 (13%)	28 (23%)	1 (1%)	60 (49%)	123 (100%)
Slow	25 (20%)	24 (20%)	12 (10%)	2 (2%)	63 (51%)	(10070)

The table above explains that Nurse Response Time is slow with a percentage of 51%. The results of interviews with several families of patients in the emergency room stated that the service provided by nurses was not fast or took > 5 minutes. Factors that cause the response time of nurses in the emergency installation at RSU Muslimat to be > 5 minutes, namely because there is a limited number of nurses and limited hospital facilities and infrastructure which are inadequate compared to the number of patients entering, as well as several patients arriving at the same time at the installation. emergency so nurses must prioritize the most urgent problems. According to Muwardi (2010), anxiety occurs because of the response time of health workers. 67.5% of nurses are less responsive to their duties in the emergency sector and feel the burden is heavier than officers in other work units. 80.0% of nurses are less responsive to their duties because of the facilities and equipment is not up to standard, 77.5% of nurses are less responsive to emergencies because standard service procedures are of poor quality.

Anxiety Table 4.6 Anxiety Results

Anxiety	Green	Yellow	Red	Black	%	Amount %
Light	10	8	7	0	25	123
-	(8%)	(7%)	(6%)	(0%)	(21%)	(100%)
Medium	10	8	10	1	29	
	(8%)	(7%)	(8%)	(1%)	(24%)	
Heavy	15	20	15	2	52	
•	(12%)	(16%)	(12%)	(2%)	(42%)	
Very heavy	5	4	8	0	17	
•	(4%)	(3%)	(7%)	(0%)	(14%)	

From the table above it can be concluded that the patient's family experiences severe anxiety with a percentage of 42%. The results of observations in the emergency room showed that the patient's family seemed anxious about the condition of their sick child/family. These are signs of anxiety symptoms. The condition of patients being treated in the ER can also cause anxiety for their families. Family anxiety is characterized by frequent questions, restlessness, pacing and thinking that bad premonitions will happen (Barbara, 2010). Nurses' actions in carrying out patient care must act quickly and sort patients according to priority (Igede, 2012).

ISSN: 2528-066X (Print) ISSN: 2599-2880 (Online)

N: 2599-2880 (Online) Vol. 9, No 1, June 2024, pp. 35-43

Bivariate Analysis

Table 4.7 Relationship between response time and patient family anxiety

Respone Time	anxiety			•	%	P Value
	Light	Medium	Heavy	Very heavy		
Fast	12	15	20	13	60	0,024
	(10%)	(12%)	(16%)	(11%)	(49%)	
Slow	13	14	32	4	63	
	(11%)	(11%)	(26%)	(3%)	(51%)	
Total	25	29	52	17	123	
	(21%)	(23%)	(42%)	(14%)	(100%)	

Based on the table above, it shows the relationship between response time and the anxiety level of the patient's family. The results of the Spearment correlation showed that P value = 0.024 (<0.05), which means that H0 was rejected and H1 was accepted, which means there is a relationship between nurse response time and patient family anxiety in the emergency room at RSU Muslimat Ponorogo.

The relationship between response time and family anxiety of emergency room patients based on triage

Response time is the speed of patient treatment which is calculated from the time the patient arrives at the emergency room door until treatment is carried out. Based on the Quality Management Plan (RMM) in the IGD RSU Muslimat Ponorogo, the standard triage response time required is a maximum of 3 (three) minutes. The speed and accuracy of assistance provided to patients who come to the Emergency Room require standards in accordance with their competence and abilities so that they can guarantee emergency treatment with a fast response time and appropriate treatment. This can be achieved by improving facilities, infrastructure, human resources and management of hospital Emergency Installations according to standards (Decree of the Minister of Health, 2016). From the data above it is clear that Nurse Response Time is slow with a percentage of 51%. The results of interviews with several families of patients in the emergency room stated that the service provided by nurses was not fast or took > 5 minutes. Factors that cause the response time of nurses in the emergency installation at RSU Muslimat to be > 5 minutes, namely because there is a limited number of nurses and limited hospital facilities and infrastructure which are inadequate compared to the number of patients entering, as well as several patients arriving at the same time at the installation, emergency so nurses must prioritize the most urgent problems. According to Muwardi (2010), anxiety occurs because of the response time of health workers. 67.5% of nurses are less responsive to their duties in the emergency sector and feel the burden is heavier than officers in other work units. 80.0% of nurses are less responsive to their duties because of the facilities and equipment is not up to standard, 77.5% of nurses are less responsive to emergencies because standard service procedures are of poor quality.

Anxiety is a reaction to disease because it is felt as a threat, discomfort due to pain, fatigue, changes in diet, frustration and even confusion, so it can be concluded that if the patient does not immediately undergo medical treatment, a feeling of anxiety will arise because it is considered a threat to his or her health. At times like this, feelings of emotion and anxiety will arise about medical actions that were not carried out during triage. (Dadang, 2020). From the data above, it can be concluded that the patient's family experiences severe anxiety with a percentage of 42%. The results of observations in the emergency room showed that the patient's family seemed anxious about the condition of their sick child/family. These are signs of anxiety symptoms. The condition of patients being treated in the ER can also cause anxiety for their families. Family anxiety is characterized by frequent questions,

ISSN: 2528-066X (Print) Vol. 9, No 1, June 2024, pp. 35-43 ISSN: 2599-2880 (Online)

restlessness, pacing and thinking that bad premonitions will happen (Barbara, 2010). Nurses' actions in carrying out patient care must act quickly and sort patients according to priority (Igede, 2012).

Based on the data above, it shows the relationship between response time and the anxiety level of the patient's family. The results of the Spearment correlation showed that P value = 0.024 (<0.05), which means that H0 was rejected and H1 was accepted, which means there is a relationship between nurse response time and patient family anxiety in the emergency room at RSU Muslimat Ponorogo.

#### IV. Conclusion

Response time required by patients is  $\leq 5$  minutes to get help appropriate to the emergency to increase their safety. Opportunities can be increased with fast treatment, the tendency is for patients treated in the ER to expect fast treatment. The results of the data above show that the response time of nurses is slow with a percentage of 51%. Factors that cause the response time of nurses in the emergency department at RSU Muslimat to be > 5 minutes, namely because there is a limited number of nurses and limited hospital facilities and infrastructure that are inadequate compared to the number of patients in attendance. admissions, as well as several patients arriving at the same time at the emergency department so that nurses must prioritize the most urgent problems.

Emergency conditions will cause anxiety experienced by patients who are in the Emergency Room (IGD). Fear and anxiety are emotions felt by patients when entering a health service facility. Treatment in the Emergency Room makes patients afraid and anxious when receiving treatment. The condition of patients being treated in the ER can also cause anxiety for their families. The data above shows that the patient's family experiences severe anxiety with a percentage of 42%. The results of observations in the ER showed that the patient's family seemed anxious about the condition of their sick child/family. These are signs of anxiety symptoms.

Slow response time will be perceived by the patient's family as having no acceptance or rejection of him and is a factor in increasing anxiety. This will cause an increase in sympathetic nerves which will cause symptoms such as dizziness, shaking, headaches, sweating, and increased pulse rate. From the data above, it shows that the nurse's response time is slow, and the patient's family experiences severe anxiety. Based on the results of the Spearment correlation Spearment correlation test, Pvalue = 0.024 (<0.05), which means that H0 is rejected and H1 is accepted, which means there is a relationship between nurse response time and patient family anxiety in the emergency room at RSU Muslimat Ponorogo.

ISSN: 2599-2880 (Online)

#### V. References

- RI Minister of Health Regulation, 2009 RI Minister of Health Regulation No. 44 concerning hospitals
- RI Minister of Health Regulation, 2009 RI Minister of Health Regulation No. 129 concerning hospitals
- RI Minister of Health Regulation, 2018 RI Minister of Health Regulation No. 47 concerning emergency services
- Septiani Ani, 2015. The Relationship between Nurse Response Time and Patient Anxiety Levels in the Emergency Room at Kalooran Amurang Hospital
- RI Minister of Health Regulation, (2009). Republic of Indonesia Minister of Health Regulation No. 856 concerning Hospital Emergency Installation Standards
- Henny, (2017). The Relationship between Waiting Time and Patient Anxiety in the Manado **Emergency Room**
- Amiman et al, 2019 Image of patient anxiety levels in the emergency department: nursing journal Vol 7, No 2.
- Musliha, 2019, Emergency Nursing, Yogyakarta: Nuha Medika
- Hawari, 2020, Nursing Care Management, Jakarta: Faculty of Medicine, University of Indonesia.
- Jordiawan, (2018). The relationship between response time and patient anxiety levels in the Emergency Department. Journal of Nursing. Vol. 02, No.1, June 2018
- Mardalena, 2019, Emergency Nursing Care, Yogyakarta: Pustaka Baru Press
- Kusandi, 2017, Mental Nursing, Jakarta: Nuha Medika
- Paula et al, 2019, Emergency Nursing Care, Jakarta: CV. TransInfo Media
- Belinda, 2018, Emergency and Disaster Nursing, Singapore: Elsevier
- Savitri, 2018, Health Solution Anxiety, New Delhi: Sterling
- Nola, (2016). Relationship Response Time Handling Stroke Patients With Anxiety of Patients Family in Emergency Room. Journal of nursing practice, Vol. 03. No. 1, October 2019.
- Maitul, (2014). Factors related to nurse response time in the emergency room at D.Kandou Hospital, Manad. Journal of Nursing, Vol. 05, No.7, July 2014.
- Fakhrizal et al (2020). Waiting Time Analysis of Patient Anxiety in the Emergency Department of the Government Mother and Child Hospital. Aceh Medika Journal, Vol,04 No, 2 October 2020
- Craven et al. (2013). Anxiety and fear patient's with short waiting times before coronary artery bypass surgery. Journal of Clinical Nursing, 2013.

- ISSN: 2528-066X (Print) ISSN: 2599-2880 (Online)
- Naomi, (2021). Depression, Anxiety, and Emergency Department use for asthma. Journal of Clinical Nursing, January 2021.
- Republic of Indonesia Ministry of Health, 2017. National Health System. Jakarta.
- Haryatun, Nunuk and Sudaryanto. (2015). Differences in Response Time for Patient Nursing Actions in the Emergency Room at Dr. RSUD. Moewardi. Journal of Nursing Science News
- Hawari, D. 2010. Management of Stress, Anxiety and Depression. Jakarta: FKUI
- Kartikawati. (2013).Textbook on the Basics of Emergency Nursing.Jakarta: Salemba Medika
- Kilner, T. (2016). Triage decisions of prehospital emergency health care providers, using a multiple casualty scenario paper
- Leading Practices in Emergency Department Patient Experience (2010). Ontario Hospital Association.
- Ludwig. G. (2004). EMS Response Time Standards.
- Ramsi, IF et al, 2018. Basic Life Support, 13th edition, Jakarta: EGC
- Tirtojiwo. (2015). Anxiety (Anxiety). Downloaded from: http://tirtojiwo.org/wp-content/uploads/2012/06/kuliah-anxiety.pdf November 15 2014.