Factors Related to The Response Time of Handling Emergency Cases in The Eranger Installation Room

Farida Haryani

Student of Applied Nursing Study Program, Politeknik Kesehatan Kementerian Kesehatan Kalimantan Timur, Indonesia
faridaharyani1982@gmail.com

Abstract

*Introduction: Response time depends on the speed available and the quality of providing assistance to save lives/prevent disability. **Objective:** The purpose of the study was to determine the factors related to the Response Time of nurses in handling emergency patients at the ER Harapan Insan Hospital Sendawar West Kutai Regency. **Method:** Research with cross sectional approach. sample selection with purposive sampling of 26 respondents. Data analysis technique chi square test at a significance level of 95% (a 0.05). **Results and Discussion:** The research found that most of the nurses had Response Time < 5 minutes as many as 22 (86.4%). Statistical tests showed that there was a relationship between training (ρ 0.001) and compensation (ρ 0.028) with the response time for handling emergency cases at Harapan Insan Sendawar Hospital. **Conclusion:** The nurse's response time in handling emergency cases at the Emergency Installation Harapan Insan Sendawar General Hospital is on average <5 minutes. Training and rewards are related to nurse response time, while length of work and motivation have nothing to do with nurse response time in handling emergency patients in the Emergency Installation HIS Hospital.*

Keywords: Response Time; Training; Length of Work; Rewards and Motivation;

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Introduction

Emergency Installation as the main gate for handling emergency cases plays an important role in efforts to save clients' lives (Awaluddin, 2020). The response time mechanism, in addition to determining the extent of damage to internal organs, can also reduce the burden of financing (Abdul et al., 2016)

Respon Time The assistance provided to patients who come to the Emergency Installation requires standards in accordance with their competence and ability so as to guarantee an emergency treatment quickly and precisely (Marlisa, 2017). This can be achieved by improving facilities, infrastructure, human resources and Emergency Installation management according to standards (Kepmenkes, no. 856 Th 2009) at (Wiyadi & Rahman, 2020).

Emergency Installation is a work team with special abilities and equipment, which provides services to emergency patients (Sumarno et al., 2017). Nurses in Emergency Installation must be able to provide nursing care that requires the ability to adapt critical situations to *Respon Time* that is not always needed in other nursing situations (Plasay &; Wijaya, 2022)

Response time is the distance between the patient's arrival time and the first time a medical assessment and examination is carried out (Rahil, 2012). The Minister of Health in 2009 has established one of its general principles regarding the handling of emergency patients that must be handled no later than 5 (five) minutes after arriving at the Emergency Installation (Kepmenkes, no 856 Th 2009) at (Dareda et al., 2021).

Some factors related to handling emergency cases are education, skills, age/length of work, facilities and standards of service, rewards and motivation (Setiawan et al., 2023). Based on the results of initial observations made at the Emergency Department of HIS Hospital in November 2021, a total of 25 nurses were obtained with a classification of DIII Nursing education as many as 10 people with a working period of more than 5 years and 15 people with a Bachelor of Nursing education with a working period of more than 5 years, 2 personnel who are still in the orientation period with a working period of less than 1 year, There were 11 male nurses and 14 female nurses. In each guard shift consists of 7 - 8 nurses.

Based on data until November 2021, the average visit of Emergency Installation patients is 15-30 people every day. From the data obtained at Harapan Insan Sendawar Hospital, not all nurses in the Emergency Installation have received emergency management training, the incomplete provision of facilities, and the unavailability of complete Emergency Installation standard tools and drugs so that patients have to wait a long time in handling.

Based on the description above, the author wishes to identify factors related to *response time* in handling emergency cases in the Emergency Room of HIS Hospital, West Kutai Regency

Method

This research is a quantitative research. The design of this study uses an approach cross sectional, where researchers only make observations and measurements of variables at certain times (Sugiyono, 2017). This method is used to determine the handling of emergency cases by nurses in the Emergency Installation.

The population of this study was all nurses at Harapan Insan Sendawar Hospital who worked in the Emergency Installation room with a total of 26 people. The sample is part of the population to be studied (Priyanto, 2008). This study used total sampling, namely all nurses on duty in the Emergency Installation room of Harapan Insan Sendawar Hospital, West Kutai regency.

The inclusion criteria in this study are: Nurses who work in the Harapan Insan Sendawar Hospital Emergency Room in West Kutai Regency. While the exclusion criteria in this study are, nurses who refuse to be respondents and nurses who are on leave

The research is planned to be carried out on March 1 – 7, 2022 in the Emergency Installation room of Harapan Insan Sendawar Hospital, West Kutai Regency

Results and Discussion

Age

The distribution of respondents by Age can be seen in Table 1 below:

Table 1

Distribution of Respondents Based on Age in Emergency Installation Harapan Insan Sendawar

Age	Total	Porsentase
21-45 Year	25	96,2
> 45 Year	1	3,8
Total	26	100

Sumber: Data Primer 2022

Table 1 shows that 25 people (96.2%) were over 45 years old and those over 45 years old 1 person (3%).

Education

The distribution of respondents by Education Level can be seen in Table 2 below:

Table 2

Distribution of Respondents Based on Education Level in Emergency Installation Harapan Insan Sendawar

Education Level	Frequency	Percentage (%)
Associate's degree	24	92,3
Bachelor	2	7,7

Sumber: Data Primer

Table 2 shows that most respondents have Diploma III education as many as 24 people (92.3) and and S1 education as many as 2 people (7.7)

Length of Work

Furthermore, the distribution of respondents based on length of work can be seen in Table 3 below:

Table 3

Distribution of Respondents Based on Length of Work in the Emergency Installation Hope of Sendawar People

Long Work (year)	Frequency	Percentage (%)
<5	9	34,6
>5	17	65,4
Total	26	100

Sumber: Data Primer 2022

Based on Table 3, it can be seen that respondents worked under 5 years, namely 9 people (34.6%) and 17 people (65.4%) who worked more than 5 years.

Nurse Training

Furthermore, the distribution of respondents based on length of work can be seen in Table 4 below:

Table 4

Distribution of Respondents Based on Length of Work in Emergency Installation Harapan Insan Sendawar.

Training	Frequency	Percentage (%)
Basis	6	23,1
Advanced	20	76,9
Total	26	100

Sumber: Data Primer 2022

Based on Table 4, it can be seen that respondents generally have had BTCLS training as many as 20 people (76.9%) and only 6 people (23.1%) do not have BTCLS training.

Rewards

The distribution of respondents based on Rewards can be seen in Table 5 below:

Table 5

Distribution of Respondents Based on Rewards in Emergency Installation Harapan Insan Senda

Rewards	Frequency	Percentage (%)
Satisfied	16	61,5
Not Satisfied	10	38,5
Total	26	100

Sumber: Data Primer

Table 5 shows that respondents are generally satisfied with the rewards they receive, as many as 16 people (61.5%) and 10 people (38.5%) who are dissatisfied with the rewards they receive.

Motivation

The distribution of respondents based on Work Motivation can be seen in Table 6 below:

Table 6

Distribution of Respondents Based on Work Mortivation in Emergency Installation Harapan Insan Sendawar

Work Motivation	Frequency	Percentage (%)
Tall	18	69,2
Low	8	30,8
Total	26	100

Sumber: Data Primer

Table 6 shows that respondents generally have high work motivation, as many as 18 people (69.2%) and 8 people (30.8%) who have low work motivation.

Response time for handling emergency cases

The distribution of respondents based on the response time of emergency case handling can be seen in Table 7 below:

Table 7

Distribution of Respondents Based on Response Time for Emergency Cases at Emergency Installation Harapan Insan Sendawar Hospital.

Respon time	Frequency	Percentage (%)
< 5 minutes	22	84,6
> 5 minutes	4	15,4
Total	26	100

Sumber: Data Primer

Table 7 shows that as many as 22 respondents (84.6%) response time for handling emergency cases was less than 5 minutes at the Emergency Installation Harapan Insan Sendawar and only 4 respondents (15.4%) response time for handling emergency cases was more than 5 minutes.

Analisa Bivariat

After univariate analysis, bivariate analysis will be carried out using the Chi Square test to determine whether there is a relationship between independent variables, namely training, length of service, rewards, motivation with dependent variables, namely response time for handling emergency cases in the Harapan Insan Sendawar Hospital Emergency Installation Room.

The Relationship between Training and Response Time for Handling Emergency Cases

The results of statistical tests between Training and Response Time for Handling Emergency Cases at the Emergency Installation of Harapan Insan Sendawar Hospital can be seen in Table 8 below:

Table 8

The Relationship between Training and Response Time for Handling Emergency Cases at Emergency Installation Harapan Insan Sendawar Hospital

Training	Respon Time		Total	p-value
	<5 minutes	> 5 minutes		
Ever	2	4	6	0,001
Never	20	0	20	
Total	22	4	26	

Sumber: Data Primer

Based on Table 8, it can be seen that those who have basic training as many as 2 people handle emergency cases at the Emergency Installation of Harapan Insan Sendawar Hospital with a response time of under 5 minutes and 4 people response time for handling emergency cases above 5 minutes, while most of those who have advanced training are 20 people, emergency case handling response time under 5 minutes and 4 people over 5 minutes.

The results of the Statistical test in Appendix 2 show that *the p value* of the Chi-Square test is $0.001 < \alpha$ (0.05) so it can be decided to reject Ho. This means that there is a relationship between training and Emergency Case Handling Response Time at the Emergency Installation of Harapan Insan Sendawar Hospital.

The Relationship between Work Duration and Response Time for Handling Emergency Cases

The results of statistical tests between Length of Work and Response Time for Handling Emergency Cases at the Emergency Installation of Harapan Insan Sendawar Hospital can be seen in Table 9 below:

Table 9
The Relationship between Work Duration and Response Time for Handling Emergency Cases at Emergency Installation Harapan Insan Sendawar Hospital

Long Work (year)	Respon Time		Total	*p* value
	<5 minutes	>5 minutes		
< 5 years	6	3	9	0,203
> 5 years	16	1	17	
Total	22	4	26	

Sumber: Data Primer

Based on Table 9, it can be seen that out of 26 respondents with a working period of less than 5 years, there are 6 people who have an emergency response time of more than 5 minutes. And respondents with a length of work over 5 years, there were 16 people who had a response time for handling emergency cases under 5 minutes as many as 16 and only 1 person who was above 5 minutes

The Relationship between Rewards and Response Time for Handling Emergency Cases

The results of the statistical test between Rewards and Response Time for Handling Emergency Cases at the Emergency Installation of Harapan Insan Sendawar Hospital can be seen in Table 10 below:

Table 10
The Relationship between Rewards and Response Time for Handling Emergency Cases at Emergency Installation Harapan Insan Sendawar Hospital

Rewards	Respon Time		Total	P value
	<5 minutes	<5 minutes		
Satisfied	16	0	16	0,028
Not Satisfied	6	4	20	
Total	22	4	26	

Sumber: Data Primer

Based on Table 10, it can be seen that most of the respondents were 16 people who were satisfied with the rewards they received, and with the response time for handling emergency cases at the Emergency Installation of Harapan Insan Sendawar Hospital under 5 minutes, who were dissatisfied with the rewards they received as many as 6

people, the response time for handling emergency cases was under 5 minutes and 4 people over 5 minutes. The results of the Statistical test in Appendix 2 showed that *the p value* of the Chi Square test was 0.028 <α (0.05) so it was decided to reject Ho. This means that there is a relationship between Rewards and Response Time for Handling Emergency Cases at the Emergency Installation of Harapan Insan Sendawar Hospital.

The Relationship between Motivation and Response Time for Handling Emergency Cases

The results of the statistical test between Motivation and Response Time for Handling Emergency Cases at the Emergency Installation of Harapan Insan Sendawar Hospital can be seen in Table 11 below:

Table 11

The Relationship between Motivation and Response Time for Handling Emergency Cases at the Emergency Installation of Harapan Insan Sendawar Hospital.

Motivation	Respon Time		Total	*p* value
	<5 minutes	> 5 minutes		
Tall	17	1	18	0,135
Low	5	3	8	
Total	22	4	26	

Sumber: Data Primer

Based on Table 11, it can be seen that of the 26 respondents who have high work motivation, there are 17 people whose response time for handling emergency cases at the Harapan Insan Sendawar Hospital Emergency Installation is under 5 minutes and 1 person is above 5 minutes. While 5 people who have low motivation with response time handling emergency cases above 5 minutes and 3 people who have low motivation with response time above 5 minutes.

The research found that most of the nurses had Response Time < 5 minutes as many as 22 (86.4%). Statistical tests showed that there was a relationship between training (ρ 0.001) and compensation (ρ 0.028) with the response time for handling emergency cases at Harapan Insan Sendawar Hospital

Conclusion

The nurse's response time in handling emergency cases at the Emergency Installation Harapan Insan Sendawar General Hospital is on average <5 minutes. Training and rewards are related to nurse response time, while length of work and motivation have nothing to do with nurse response time in handling emergency patients in the Emergency Installation HIS Hospital

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