

# Relationship Between Response Time and Patient Satisfaction In Emergency Department

Junita Krista. S<sup>1</sup>, Siska Natalia<sup>2</sup>, Rizky Sari Utami<sup>3</sup>  
Junitakristas@gmail.com, siska.nats@gmail.com,  
sariutami0784@gmail.com  
STIKes Awal Bros Batam<sup>1,2,3</sup>

**Abstract.** Hospitals, in particular ER Emergency, has the objective to be achieved ministry of health which is optimal to the patient as quickly precise and integrated into the handling of the level of emergency so able to prevent the risk of disability and death with responsive for 5 minutes. Response Time is the speed in handling patients' patients  $\leq 5$  minutes upon arrival patients in the health care unit. Satisfaction is a condition that consumers feel after they experience a performance (or result) that has met their various expectations. This study aims to determine the relationship of response time with the level of patient satisfaction in the emergency department of RS X Pekanbaru City. This research was conducted on 86 respondents using the Slovin method. The research method is quantitative koresional.. The validity test of the questionnaire was 0.451 - 0.770 (r table: 0.468) and the reliability test was (0.663). The results of this study indicate that the majority of patients' decision level 48 respondents (55.8%) were very satisfied and dissatisfied as many as eight respondents (9.3%). Based on the test chi-square obtained p-value is 0,000 less than  $\alpha$  (0.05), thus  $H_a$  accepted which means there is a significant relationship between the response time to the satisfaction level of patients who seek treatment in emergency hospital X city of Pekanbaru.

**Keywords:** Response Time, Satisfaction Level, IGD

## 1 Introduction

The emergency department (IGD) is one of the service units in the hospital that provides first aid and is the main route for entry of patients with emergency conditions. An emergency is a clinical condition in which patients need prompt medical assistance to save lives and further disability (Depkes RI, 2012). One of the indicators of the success of mitigating medical patients with acute emergency is the speed of giving aid that is adequate to people with emergency well on everyday routine circumstances and when disaster.

Based on the decision of the Minister of Health of Indonesia number 129 / Menkes / SK / II / 2008 concerning the standard of service of at least homesick, stated response time is one indicator of the quality of hospital services, especially in the ER. In 2009, the Minister of health stipulated the general principle of handling patients (response time) in an emergency department that must be handled no later than five minutes after arriving at the emergency room.

The response time's success depends on the speed that is available and the quality of the relief to save lives or prevent disabilities since in place of events in the journey to help homesick, the first pain and phases of homesickness. The two components are equally important in emergency relief efforts (Muwardi, 2015).

Emergency services are less quick or response times which, according to the patient felt a long time can lead to dissatisfaction of patients to the emergency services. Patient satisfaction is determined by services, one of which is a fast response time and proper handling. The lack of fast response time or the response time that the patient thinks is long can lead to patient dissatisfaction with emergency services. Patient satisfaction is determined by services, one of which is a fast response time and proper handling.

Satisfaction is a condition that consumers feel after they experience a performance (or result) that has met their various expectations, according to Oliver (the Princess et al. 2014).

As a health service provider, the hospital operates 24 hours a day. Services are performed by workers health that exists in the hospital. Nursing personnel are one of the health workers who also take part in handling patients. The speed and accuracy of the help given to patients Emergency Installation must be following the competence and service standards. The handling of which is given by the fast response time and action that quickly. Punctuality in emergency services is an important concern in countries around the world. A study from the National Health Service in Britain, Australia, America, Canada shows that nursing services affect patient satisfaction (Widodo, 2015).

Many patients complain and feel they do not get service even though they have come first from other patients; the various types of diseases and conditions of the patients and the number of visits that come together to the ER cause the density of patients in the ER. Fast and precise the expected patient can be hampered if the conditions IGD very crowded, it can lead to errors and delays in the provision of therapy, lost control on the staff on duty, time of patient care over a long, long waiting times moved to hospitalization becomes longer the all of which will affect patient satisfaction (singer at al, 2011).

Research conducted in California, United States, by Benjamin Rewnce Robert et al. (2013) states that 995,379 patients in the ER have a 5% risk of dying during a busy ER. From this research, it can be concluded that the response time has decreased when the emergency room is crowded. When the state of patients crowded of the facility where the bed, chair wheel also be used by patients who other things this will affect the patient's responsiveness will receive at room patient triage, the patient will be a long wait to get service health by officers.

Patient visits to the emergency department continue to increase every year. The increase occurred around 30% in all emergency room hospitals globally (Bashkin et al., 2015). Data on admission visits to the Indonesian emergency room were 4,402,205 patients. The service department of emergency in the province of Riau experienced an increase in the years 2015-2016 of 98.80% into 100% with various complaints of patients who visit (Widyawati, 2016). In January- September 2020, patient visits to hospital emergency X per month ranges from 600-1300 patients/months, where the number of late patient assistance ranges from 35-100 per month. While the number of patients in the ER service satisfaction RS X per month ranges from 90-95% of the total visits, it means that there are approximately 5- 10% of patients who visit to IGD RS X was not satisfied with the service IGD RS X. Based on interviews conducted by the researchers to 5 patients who went to the ER in November found that 2 out of 5 people patient was not satisfied because it feels less get optimal service, the patient complained when he came to the emergency room is not welcomed by the clerk so that the patient should move itself from the vehicle to the wheelchair, not the clerk IGD triage so that families of patients must call the first officer into the room, and the lack of facilities such as chairs wheel or bed in the ER when IGD crowded so officers must seek to become that which will prolong the time patients get treatment by officers and miscommunication between patient and clerk of the service that obtained and that will be done to the patient. By because the researchers are interested in

examining whether there is “Response time Relationship With Patient Satisfaction Levels In Space Installation Intensive Care Emergency in Hospital X”.

## 2 Methods

This research is quantitative. Sample as many as 86 people who come for treatment to a hospital emergency department X Pekanbaru city. The method of implementing this research is using a survey using a questionnaire tool.

## 3 Results

The research results can be seen in the table below.

**Table 1.** Distribution of Respondents by Age, Gender, Education level, Occupation, Health Insurance and ESI in IGD RS X Pekanbaru City in 2021

No	Characteristics	Frequency	Percentage
1	<b>Age</b>		
	Youth	4	4.7%
	Adult	72	83.7%
	Elderly	10	11.6%%
	Total	86	100%
2	<b>type sex</b>		
	Man	32	37.2%
	Women	54	62.8%
	Total	86	100%
3	<b>Level of education</b>		
	SD	1	1.2%
	Junior High	12	14.0%
	High school	36	41.9%
	DIPLOMA III	9	10.5%
	Bachelor	28	32.6%
	Total	86	100%
4	<b>Profession</b>		
	Does not work	4	4.7%
	Entrepreneur	15	17.4%
	Private employees	25	29.1%
	Civil servants	5	5.8%
	College student	2	2.3%
	IRT	32	37.2%
	Student	3	3.5%
	Total	86	100%
5	<b>Health insurance</b>		
	BPJS	69	80.2%
	GENERAL	14	16.3%

	BANK RIAU KEPRI	2	2.3%
	MANDIRI INHEALTH	1	1.2%
	Total	86	100%
6	ESI		
	ESI 3	38	44.2%
	ESI 4	29	33.7%
	ESI 5	19	22.1%
	Total	86	100%

Source: Primary Data Analysis, 2021

Based on table 1 shows that the age of most respondents is adult, with a total of 72 respondents (83.7%), and the minimum age of respondents in four respondents (4.7%) age data is grouped according to WHO 2020. Most of the respondents were female, with 54 respondents (62.8%) and men amounted to 32 respondents (3.2%). Education respondents are a high school with the highest number of 36 respondents (41.9%), and education of the lowest- Adala 000 000 000 h SD is one respondent (1.2%). Most of the respondents' occupation was IRT with 32 respondents (37.2%), and the least occupation was students, namely two respondents (2.3%). The most widely used health insurance is BPJS Kesehatan, namely 69 respondents (80.2%) at least one respondent (1.2%) independent in health. ESI levels most are ESI 3 as much as 38 respondents (44.2%) least bit that ESI 5 as many as 22 respondents (22.1%).

**Table 2.** Respondents Frequency Distribution Based on Response Time in IGD RS X Pekanbaru City in 2021

No.	Response time	Frequency	Percentage
1	Good	79	91.9%
2	Not good	7	8.1%
<b>Total</b>		<b>86</b>	<b>100%</b>

Source: Primary Data Analysis, 2021.

Based on table 2 time response either there are 79 respondents (91.9%) while time response is less well there are seven respondents (8.1%).

**Table 3.** Characteristics of Patient Satisfaction based on Answers to Patient Questionnaires at IGD Hospital X Pekanbaru City in 2021

No	Aspect	Ratio		Information
		A	E	
<b>1</b>	<b>Reliability</b>			
	1. The officer readily welcomes every patient who comes for treatment	3.6	3.4	Very Satisfied
	2. The officer explains the patient's condition	3.6	3.3	
	3. Officers provide fast and precise service. The service procedures provided are straightforward and easy to understand	3.6	3.4	
	<b>Average aspect</b>	<b>3.6</b>	<b>3.4</b>	

<b>2</b>	<b>Guarantee</b>			
	4. The officer explains each action	3.6	3.4	
	5. The officer is responsible for his actions	3.5	3.4	Very satisfied
	6. The clerk showed friendliness and courtesy	3.5	3.4	
<b>Average Aspect</b>		<b>3.5</b>	<b>3.4</b>	
<b>3</b>	<b>Physical Evidence</b>			
	7. Officer demonstrates mastery in action	3.5	3.3	Very Satisfied
	8. Officers demonstrate self-integrity	3.5	3.3	
	<b>Average Aspect</b>	<b>3.5</b>	<b>3.3</b>	
<b>4</b>	<b>Empathy</b>			
	9. Pay special attention	3.4	3.4	
	10. Officers show concern	3.5	3.4	Very satisfied
	11. Officers provide services without discrimination	3.5	3.4	
<b>Average Aspect</b>		<b>3.5</b>	<b>3.4</b>	
<b>5</b>	<b>Reliability</b>			
	12. provide services quickly and precisely	3.6	3.4	
	13. prompt and appropriate action on inspection	3.6	3.4	Very satisfied
	14. receipt of examination results promptly and accurately	3.6	3.4	
<b>Average Aspect</b>		<b>3.6</b>	<b>3.4</b>	

Based on table 3, the aspects of patient satisfaction in the five aspects are very satisfied, on the reliability aspect the average respondent's expectation is 3, 4 the average reality is 3.6. In the aspect of guarantee, the average expectation of the respondents is an average of 3.4, while the reality is 3.5. In the aspect of physical evidence, the average respondent's expectation is 3.3 and the reality received by the respondent is 3.4. In the aspect of empathy, the average expectation of respondents is 3.4 and the average reality is 3.4. and in the aspect of reliability, the average expectation of the respondents is 3.4 and the average reality is 3.6.

**Table 4.** Respondents Frequency Distribution Based on Satisfaction Levels in IGD RS X Pekanbaru City in 2021

No.	Satisfaction	Frequency	Percentage
1.	Not satisfied	8	9.3%
2.	Satisfied	30	34.9%
3.	Very satisfied	48	55.8%
<b>Total</b>		<b>86</b>	<b>100%</b>

Based on table 4, respondents were very satisfied with 48 respondents (55.8%) of respondents who were satisfied, there were 30 respondents (34.9%), and eight respondents (9.3%) were dissatisfied.

**Table 5.** Distribution of Respondents Based Response Time Relationship with Level of Patient Satisfaction are Treated in IGD RS X Kota Pekanbaru Year 2021

Response time	Satisfaction Level						Total	P value
	Not satisfied		Satisfied		Very satisfied			
	F	P	F	P	F	P		
<b>Good</b>	1	1.3%	30	38.0%	48	60.8%	<b>79 (100.0%)</b>	
<b>Not good</b>	7	100%	0	0.0%	0	100.0%	<b>7 (100.0%)</b>	<b>0,000</b>
<b>amount</b>	<b>8</b>	<b>9.3%</b>	<b>30</b>	<b>34.9%</b>	<b>48</b>	<b>100.0%</b>	<b>86 (100.0%)</b>	

From the results of the research by using the test statistic chi-square obtained p-value is 0,000 less than  $\alpha$  (0, 05), there is a significant relationship between the response time to the level of satisfaction of patients who seek treatment in emergency hospital X city of Pekanbaru.

## 4 Discussion

Based on the research results conducted at the IGD RS X Pekanbaru City in 2020 in table 4.2, 79 respondents (91.9%) responded well, while seven respondents (8.1%) had poor response time.

Based on research conducted by Wayan et al. (2018) in ER Hospital Pasuruan largely categorized Bangil response time faster, namely: as many as 91 respondents (72, 2%), while 35 respondents (27.8%). Results research by Pisu (2015) with the results of as many as 37 respondents (61%) feel the fast response times and as much as 23 respondents (38.3%) felt satisfied with the service that is provided, there is a relationship of response time to patient satisfaction. Research findings other by Sam (2017) showed that the good respondent category as many as 39 respondents (61, 9%) and 24 respondents (38.1%) in the category of good.

Researchers assume that the better and faster the response time to handle the patient, the more satisfied the patient is. Conversely, the slower the response time of the officer, the more dissatisfied the patient is. On the 7th of respondents with a response time of less either because the number of human resources are lacking when on duty, when patients come IGD experienced crowded, so patients have to wait up first to get health care.

Based on the research results in table 4.3, the patient satisfaction aspect in the five aspects is very satisfactory. In the reliability aspect, the average respondent's expectation is 3, 4 the average reality is 3.6. In the aspect of guarantee, the average expectation of the respondents is an average of 3.4, while the reality is 3.5. In the aspect of physical evidence, the average respondent's expectation is 3.3, and the reality received by the respondent is 3.4. In the aspect of empathy, the average expectation of respondents is 3.4, and the average reality is 3.4. and in the aspect of reliability, the average expectation of the respondents is 3.4, and the average reality is 3.6.

Based on table 4.3, patient satisfaction obtained from the questionnaire is very satisfied on the five aspects, namely the aspects of direct evidence, assurance, physical evidence, empathy and reliability. Based on research conducted by Gusman Virgo (2018) in hospitals Bangkinang there showed that the majority of the response time nurse IGD is slow (> 5 minutes) that is 51 people (63, 8%), most large patients are not satisfied with the service IGD namely 47 (58.8%), which stated that there was a relationship between the Response Time for Emergency Installation Services (IGD) with the Patient Satisfaction Level at Bangkinang Hospital in 2018 with a p value of 0.002 based on the results of statistical tests.

Results Wayan et al. (2018) in the ER Hospital Bangil Pasuruan half of respondents categorized satisfied sebanyak 65 respondents (51, 6%) and half are very satisfied as much as 61 respondents (48.4%). The results of the research other by Sam (2017) showed that ten respondents feel satisfied (15, 9%), 29 respondents (46%) feel very satisfied, and the respondents (38.1%) were dissatisfied. Researchers assume that patient satisfaction will be achieved if the health services obtained are good or very good or even exceed the patient's expectations before coming to the ER.

Based on research results using the statistical test of chi-square obtained p-value is 0,000 less than  $\alpha$  (0,05), with said  $H_a$  accepted, which means that there is a relationship that significant between the response time to the level of satisfaction of patients seeking treatment in the ERRS X city of Pekanbaru.

The analysis results in this study are following Zulfa et al. (2010). Respondents with a good response time stated that they were very satisfied by 58.6%, while 17.6% of respondents said they were satisfied with emergency services at the hospital. For respondents who stated that they were not satisfied, it was 23, 8%. It is influenced by several aspects by the IGD saki home on emergency response personnel responsiveness homesick when serving patients who come.

According to Parasunaman in Anang (2017), in providing health services, we must pay attention to aspects of the quality of service provided, including responsiveness, assurance, physical evidence, empathy, and reliability. Assumptions of researchers of this study are when the response time and is done with a quick right then, the patients' satisfaction also increased. So that the quality of service increases. The research found that the response time was done well, so that 60 patients were satisfied.

## 5 Conclusion

Based on the results of the study using the chi-square statistical test, it was found that the p-value was 0.000 smaller than  $\alpha$  (0,05). Thus  $H_0$  was rejected, which means a significant relationship between the response time and the level of patient satisfaction seeking treatment at the IGD Hospital X Pekanbaru City.

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