

## Original Research

## The Relationship of Nurses Response Time to Patient Satisfaction in Emergency Department



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Article Info	Abstract
Article history: Received: May 27, 2023 Accepted: June 29, 2023	<i>Introduction:</i> Emergency department (ED) is one part of the hospital that provides initial services for patients suffering from illnesses and injuries that can threaten their survival. In its role to increase patient satisfaction in ED must be able to provide quality service consistently. The length of time to respond (response time) is very important in the service of emergency patients and certainly affects the quality of life and patient satisfaction. This study aims to determine the Relationship of Nurses Response Time to Patient Satisfaction in ED of Bali Mandara Hospital.
Keywords: patient satisfaction, nurses response time, emergency department	<i>Methods:</i> The research design used in this study is an analytic survey. by using a Cross Sectional Study approach. A sample of 87 respondents will be selected using the accidental sampling method sampling technique. Data collection tools using nurses response time observation sheets and patient satisfaction questionnaires that have been tested valid and reliable. <i>Result:</i> The results showed that the nurses response time in ED was in the fast category ( $\leq 5$ minutes) 68 respondents (78.2%), 66 respondents (75.9%) were satisfied. The results of the chi-square statistical test obtained p-value = 0.007, where $p < \alpha$ ( $\alpha = 0.05$ ) so it was concluded that there was a significant relationship between nurses response time and patient satisfaction in ED. <i>Conclusion:</i> There is a significant relationship between nurses response time and patient satisfaction in ED.

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## INTRODUCTION

Health services are individual and group efforts to maintain and improve their health conditions, as well as prevent and cure diseases and support the recovery of health for individuals, families, groups and communities [1]. The paradigm of health care has changed significantly in recent years. Traditionally, health services provided to individuals focused on disease history, physical examination, vital signs, and supporting examinations. However, today the focus of healthcare has shifted towards improving quality and quality [2].

Healthcare places the patient at the core component of care. This makes patient decisions and opinions a very important component. Inpatient satisfaction is based on the services received by patients in emergency room care [2]. ED is one part of the hospital that provides initial services for patients suffering from illnesses and injuries that can threaten their survival [3].

Health care institutions, in their role to improve patient satisfaction in the emergency room, must be able to provide quality services consistently. In addition, patient feedback and opinions should be key to improvement and can identify the areas that have the most influence on patient satisfaction [4]. The length of time to respond (response time) is very important in the service of emergency patients and certainly affects the quality of life and patient satisfaction [5]. Delays in emergency services directly affect life-threatening emergency conditions, also indirectly affect the perception and satisfaction of patients and their families

which greatly affects the quality indicators of emergency services [6].

ED of Bali Mandara Hospital has been operating since October 28, 2017 and until now continues to develop to improve the quality of its services. To ensure the quality of service is running well, quality assessment is carried out through various data collection methods. Two quality indicators of Bali Mandara Hospital that have been assessed are emergency response time (response time) and patient satisfaction where these two variables have a relationship with each other. So far, the collection of response time reports is carried out by the deputy head of the room, while the measurement of patient satisfaction is carried out by the Public Relations Department but the questions used are general for the entire hospital service, so it is not focused on the quality of the ED of Bali Mandara Hospital. This makes the installation feedback cannot be evaluated in a focused manner.

## METHODS

This research is a survey analytic research using Cross Sectional Study approach. The purpose of the study was to determine the relationship of nurses response time to patient satisfaction in ED of Bali Mandara Hospital. The population in this study were all patients treated in ED of Bali Mandara Hospital. The sample in this study were 87 respondents selected using accidental sampling technique according to the research criteria. Inclusion criteria include patients who were willing to become respondents and patients in a conscious state GCS > 13. While the exclusion criteria include patients who

have communication disorders / barriers and patients who were forcibly discharged from the emergency room. Data was collected in April - May 2023. The research instruments used response time observation sheets and patient satisfaction questionnaires. The patient satisfaction questionnaire consists of 20 questions with a Likert scale adapted from research by [7] which has been tested for validity and reliability with the results of r count on all items having a score of 0.402-0.776. Cronbach's alpha on all items is 0.795. These results are greater than r table 0.334 so that all items are declared valid. The analysis test will use chi-square, with the value of the degree of significance  $p \leq 0.05$  with a confidence level of 95%.

## RESULTS

### *Characteristics of Respondents*

Based on the results of the study, most of the respondents were female 63 respondents (72.4%), aged 26-35 years (34.5%) and triage level 3 category 51 respondents (58.6%).

**Table 1**

Characteristics of Respondents

Characteristic	Frequency (f)	Percentage (%)
<b>Gender</b>		
Man	24	27,6
Woman	63	72,4
<b>Age (year)</b>		
17-25	10	11,5
26-35	30	34,5
36-45	25	28,7
46-55	12	13,8
56-65	10	11,5
<b>Triage Level (ATS)</b>		
Level 1	9	10,3
Level 2	24	27,6
Level 3	51	58,6
Level 4	3	3,4

### *Nurses Response Time*

Based on the results of the study, it was found that most of the nurses response time in ED was in the fast category ( $\leq 5$  minutes) 68 respondents (78.2%).

### *Patient satisfaction*

Based on the results of the study, most respondents were satisfied 66 respondents (75.9%).

### *Relationship between Nurses*

#### *Response Time and Patient*

#### *Satisfaction*

Based on the results of the study, it was found that most of the nurses response time was in the fast category and 56 respondents (84.5%) were satisfied. The results of the chi-square statistical test obtained  $p\text{-value} = 0.007$ , where  $p < \alpha$  ( $\alpha = 0.05$ ) so it was concluded that there was a significant relationship between nurses response time and patient satisfaction.

**Table 2**

Nurses Response Time

<b>Nurses Respons Time</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Fast ( $\leq 5$ minutes)	68	78,2
Slow ( $> 5$ minutes)	19	21,8
<b>Total</b>	<b>87</b>	<b>100,0</b>

**Table 3**

Patient satisfaction

<b>Patient satisfaction</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
Satisfied	66	75,9
Dissatisfied	21	24,1
<b>Total</b>	<b>87</b>	<b>100,0</b>

**Table 4**

Relationship between Nurses Response Time and Patient Satisfaction

Nurses Response Time	Patient Satisfaction				Total		p-value
	Satisfied		Dissatisfied				
	n	%	n	%	n	%	
Fast	56	84,8	12	57,1	68	78,2	0,007
Slow	10	15,2	9	42,9	19	21,8	
Total	66	100,0	21	100,0	87	100,0	

## DISCUSSION

### *Nurses Response Time in ED*

Based on the results of the study, it was found that most of the nurses response time in the emergency room was in the fast category ( $\leq 5$  minutes) 68 respondents (78.2%). According to [8] response time was the speed in handling patients, calculated from the time the patient arrives until there was a response from the nurse. A good response time for patients is  $\leq 5$  minutes.

These results are in line with research [9] showing that response time in the good category was as many as 20 respondents (50.0%) and 20 respondents (50.0%) in the unfavorable category. Another study by [10] found that the response time or response of nurses when patients came to the emergency room with the right time was  $\leq 5$  minutes as

many as 72 people (82.8%), and the inappropriate time was  $> 5$  minutes as many as 15 people (17.2%).

According to [7] response time is influenced by several factors, namely internal factors and external factors. Internal factors are contained in a nurse or other officer such as nurses who are proficient in performing nursing actions and triage, and speed in responding to patients. External factors are where nurses are more concerned with emergency patients so that non-emergency patients are not prioritized, or lack of health workers, nurses who have to take patients to other rooms because they do not have special officers for patient mobilization.

Bali Mandara Hospital has Minimum Service Standards (MSS) in the emergency room in the form of response time  $\leq 5$  minutes. In achieving these MSS, a program was carried

out, namely by fulfilling the manpower in the emergency room, fulfilling facilities and infrastructure. So, from the results of research conducted by researchers and based on existing theories, the placement of nurses in triage when new patients arrive greatly guarantees the accuracy and speed of nurse response time in terms of patient handling.

Researchers assume that the level of responsiveness of emergency room services to patients who come will greatly affect patient satisfaction, knowledge and competence of an emergency room officer will form an emergency room management to serve patients who will come to the emergency room more and more.

#### ***Patient satisfaction in ED***

Based on the results of the study, most respondents were satisfied 66 respondents (75.9%). According to [11] satisfaction is the perception of a product or service that has met expectations. There are several factors that influence patient satisfaction, namely, the quality of the product or service where the patient was satisfied if the service obtained was of high quality, emotional where the patient feels confident and admires a health care institution, performance where the patient can enjoy the performance of a fast and comfortable nurse, aesthetics are the attractiveness of an institution, product characteristics include building appearance, cleanliness, officer friendliness service, location, health facilities both facilities and infrastructure (waiting room, parking lot), communication, a calm and comfortable atmosphere.

These results are in line with research [12] which states that patient satisfaction is closely related to the quality of nursing services provided to patients and the accuracy and speed of providing services support the level of patient satisfaction. According to [13] in his research also states that satisfaction was the level of a person's feelings after comparing perceived performance compared to expectations. Not all can feel what is given even though health services have been provided.

Researchers argue that patient satisfaction greatly affects the quality of human resources. This is evidenced by the attitude of the nurse and the ability of the professional attitude of the emergency room staff as well as the condition of the room or facilities in the ED. Researchers assume that patient satisfaction can be influenced by physical evidence in an emergency room such as equipment, facilities in the emergency room, because each patient has an assessment of the facilities and equipment in the emergency room that are used to serve patients. If an equipment in the emergency room is complete or adequate facilities, then the patient does not feel worried. But on the contrary, if the service facilities are inadequate then the patient will feel worried.

#### ***Relationship between Nurse***

##### ***Response Time and Patient***

##### ***Satisfaction in the Emergency Room***

##### ***Installation***

Based on the results of the study, it was found that most of the response time was in the fast category and 56 respondents (84.5%) were

satisfied. The results of the chi-square statistical test obtained  $p\text{-value} = 0.007$ , where  $p < \alpha$  ( $\alpha = 0.05$ ) so it was concluded that there was a significant relationship between nurse response time and patient satisfaction. According to [14], one indicator of the success of medical management of emergency patients is the speed of providing adequate assistance to emergency patients either in routine daily conditions or during disasters. The success of response time or response time is highly dependent on the speed available and the quality of providing assistance to save lives or prevent disability from the scene, on the way to help to the hospital.

These results are in line with research [12] to determine the relationship between nurse response time and patient satisfaction, the research conducted a study involving patients who came to the ED. Nurses who respond quickly and appropriately will get positive marks from patients and increase patient satisfaction levels. Another study by [9] found there was a relationship between response time and patient satisfaction in the ED of Faisal Islamic Hospital Makassar with a  $p\text{-value} = 0.000$ . It is concluded that a good response time will affect patient satisfaction.

Efforts to provide services in order to provide patient satisfaction, especially emergency services, can be assessed from the nurse's ability in terms of responsiveness, reliability (timely service), assurance (attitude in providing services), empathy (care and attention in providing services) and tangible (quality of service) from nurses to patients [15]. Response Time can be influenced by internal factors and external factors. Where internal factors are contained

in a nurse or other officer such as nurses who are not proficient in performing nursing actions, and slowness in handling patients, or patients who have to wait for less facilities. While external factors are where nurses are more concerned with emergency patients, lack of health workers, nurses who have to take patients to other rooms because they do not have special officers for patient mobilization [16].

Although nurses have been quick in handling patients, there are still patients who are still not satisfied due to the limited family waiting room in the hospital and nurses prioritize emergency patients. Patients who were treated slowly ( $>5$  minutes) as many as 19 people (21.8%) were patients who did not need immediate help or patients who were not serious and not emergency, such as patients who did not need special treatment in ED but should go to general poly. According to [12] the service in ED in providing response time is considered fast but there are still respondents who admit that the nurse's response time is still slow. Due to the fact that there are still nurses who respond to patients slowly, the quality of service provided by nurses to patients is still felt to be lacking by patients, as well as the limitations of hospital facilities and infrastructure that are less adequate than the number of patients who arrive at the same time in ED so that nurses prioritize the most emergency problems, so that the services received by other patients are slow because they have to wait to get treatment, this condition which according to the perception of patients in ED feels uncomfortable, thus causing patient dissatisfaction.

Researchers assume that the skills of officers in providing services greatly affect patient satisfaction, a patient will feel very satisfied and dissatisfied when a fact that he expects is not done properly to meet existing service standards, a health worker must have knowledge, expertise in the actions to be taken, if the officer takes action properly and correctly then the patient will feel satisfied and not complain about the service in ED

## CONCLUSION

There is a significant relationship between nurses response time and patient satisfaction in ED.

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## CONFLICT OF INTEREST

In this study, there was no conflict of interest from the parties involved in this panel.

## REFERENCE

- [1] Pemerintah Indonesia, "Undang-Undang Republik Indonesia No,or 36 tahun 2009 Tentang Kesehatan," Jakarta, 2009.
- [2] C. R. Muntiaha, F. K. Kolibu, and R. Wowor, "Hubungan Mutu Jasa Pelayanan Kesehatan Dengan Tingkat Kepuasan Pasien Ruang Rawat Inap Di Rumah Sakit Budi Mulia Kota
- [3] E. Darma, C. Windiyaningsih, and S. H. Lutfie, "Pengaruh Pengantar Pasien, Kondisi Pasien, Dan Beban Kerja Tenaga Kesehatan IGD Terhadap Waktu Tanggap Di IGD RSIA Bunda Aliyah Jakarta," *J. Manaj. Dan Adm. Rumah Sakit Indones.*, vol. 5, no. 1, pp. 50–61, 2021.
- [4] S. Ariyanti, Rahmat, Surtikanti, and T. Wahyuni, "Mutu Pelayanan Kesehatan Terhadap Kepuasan Pasien di Ruang IGD," *J. Keperawatan Aisyiyah*, vol. 9, no. 2, pp. 155–162, 2022.
- [5] R. I. Kumaladewi, J. Prasetyo, and A. N. Aziz, "Hubungan Response Time Dengan Tingkat Kepuasan Pasien," *J. EDUNursing*, vol. 5, no. 1, pp. 62–76, 2021.
- [6] D. Nurlina, "Faktor-Faktor Yang Mempengaruhi Kepuasan Pasien Instalasi Gawat Darurat Rumah Sakit TNI AD TK Iv 02.07.04 Bandar Lampung," Institut Kesehatan Helvetia, 2018.
- [7] E. Widodo, W. R. Agustin, and W. Safitri, "Hubungan Response Time Perawat Dalam Memberikan Pelayanan Dengan Kepuasan Pelanggan Di IGD RS Panti Waluyo Surakarta," *J. STIKes Kusuma Husada Surakarta*, pp. 1–7, 2015.
- [8] Suhartati, *Standar Pelayanan Keperawatan Gawat Darurat di Rumah Sakit*. Jakarta: Kementerian Kesehatan, 2011.
- [9] Darmawansyah, "Hubungan Respon Time Pelayanan Instalasi Gawat Darurat (IGD) Dengan Tingkat Kepuasan Pasien Di Rumah Sakit Islam Faisal Makassar," Sekolah Tinggi Ilmu Kesehatan Panakkukang, 2019.
- [10] Josephine Christabel Lumbu Sepuh, "Hubungan respon time perawat dengan tingkat kepuasan pasien BPJS (Badan penyelenggara Jaminan Sosial) di Ruangan IGD Rumah Sakit Santa Elizabeth Medan," *J. Keperawatan Univ. Respati Yogjakarta*, 2018.
- [11] Nursalam, *Manajemen Keperawatan: Aplikasi Dalam Praktik Keperawatan Profesional. Edisi ketiga*. Jakarta: Salemba Medika, 2016.

- [12] H. Pisu, S. Rompas, and R. Malara, "Hubungan Respons Time Perawat Dengan Kepuasan Pasien di IGD RSUP Prof. Dr. R. D. Kandou Manado," *e-Jurnal keperawatan (e-kp)*, vol. 3, no. 2, 2015.
- [13] Rimawati and W. K. Putra, "Gambaran Kepuasan Pasien BPJS Terhadap Pelayanan Kesehatan," *J. STIKES*, vol. 9, no. 1, pp. 26–33, 2016.
- [14] V. Maatilu, N. Mulyadi, and R. Malara, "Faktor-Faktor Yang Berhubungan Dengan Response Time Perawat Pada Penanganan Pasien Gawat Darurat Di Igd Rsup Prof. Dr . R. D. Kandou Manado," *J. Keperawatan UNSRAT*, vol. 2, no. 2, p. 112801, 2014.
- [15] Muninjaya, *Manajemen Mutu Pelayanan Kesehatan*. Jakarta: EGC.
- [16] R. W. A. Naser, Mulyadi, and R. Malara, "Hubungan Faktor-Faktor Eksternal Dengan Response Time Perawat Dalam Penanganan Pasien Gawat Darurat Di IGD RSUP Prof. Dr. R. D. Kandou Manado," *ejournal Keperawatan*, vol. 3, no. 2, pp. 12–26, 2015.