

Factors Affecting Nurse Response Time in Indonesian Hospital Emergency Installation: A Literature Review

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ABSTRACT

The success of handling cases in the Emergency Department is very dependent on the nurse's response time. However, nurses' response time is greatly influenced by many factors. The purpose of writing this systematic review is to find out in detail the Factors That Affect the Response Time of Emergency Department Nurses in Indonesian Hospitals. The study was identified systematically by searching the database through the keywords "Response time AND nurses AND Factors AND Emergency Department Installation AND Indonesian Hospital" The results consist of several national and international journal data bases conducted research at Indonesian Hospital 16 articles. Eligible articles are selected according to inclusion criteria. This systematic review article is related to factors that affect the response time of nurses or emergency room health workers and is published in English or Indonesian based on the last 5 years of study (2020-2024). The instruments used in each study used a stopwatch, observation sheet and questionnaire to assess response time. The results of a review of this research article about nurse response time in the emergency room of Indonesian hospitals explain that the factors that can affect response time are 1). Age, 2). Priority of the patient or patient's condition, 3). Education, 4). Years of service service, 5). Nurse Skills Training, 6). Knowledge, and 7). Workload. Factors that affect internally are age, patient priorities or patient condition, education, service tenure, nurse skills training and external workload factors. It is hoped that the hospital can provide support and motivation to nurses to improve nurses' response time skills according to existing standards.

Keywords: response time; nurse; emergency services

INTRODUCTION

Quality of service, patient safety, and patient satisfaction are important concepts that are very important to uphold in the field of organizational health (Al-Nusair et al., 2023). Handling emergency cases quickly and precisely is the main key in saving lives that must be done effectively and efficiently (Diamond et al., 2022). The success of handling emergency patients is seen from the speed or response time in providing quality assistance to save lives or prevent disability (Intan et al., 2022). The mortality rate in departmental emergencies is one indicator of the quality of minimum service standards (Gunarto, 2023). Service in an emergency, an important thing that needs to be considered is the speed of nurses in responding or acting to patients who have just entered the emergency room, this is to reduce the risk of death (Gunarto, 2023). Delays in services can lead to increased mortality in patients with high priority categories (Gunarto, 2023). Fast and accurate service is very important in the Emergency Department (ER). Services in the emergency room will be hampered if it is full of patients. If it is not managed properly, the right service cannot be carried out. This in turn will adversely affect the patient (Putro & Sodikin, 2020).

A survey of 118 emergency departments in Jakarta, Indonesia, revealed that there are approximately 2 million emergency room visits per year and >60% of those visits continue to receive inpatient services (Habib & Sudaryo, 2023). Overcrowding decreases ER performance in handling new emergency cases and increases the risk of treatment delays, mortality, morbidity, and patient complaints (Habib & Sudaryo, 2023). According to one study, patients with a response time of ≥ 8 minutes, 7.1% died, compared to 6.4% for patients with a response time of ≤ 7 minutes 59 seconds (Blanchard et al., 2012). Response Time is the speed at which the patient is treated, calculated from the time the patient arrives until

treatment is carried out. The standard response time is stated in the Decree of the Minister of Health of the Republic of Indonesia No. 856 / Menkes / SK / IX / 2009 concerning Hospital Emergency Installation standards which states that emergency patients must be served no later than 5 (five) minutes after arriving at the emergency department, and in Decree number 129 / Menkes / SK / II / 2008 concerning Hospital Minimum Service Standards it is stated that the service response time at the ER is 5 (five) minutes served after the patient arrives. The World Health Organization (WHO) says there are several diseases that are considered emergencies and the largest contributor to death 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 (5.6%), lower respiratory infections 3.1 million (5.5%), and cancer 1.6 million (2.9%), cases of injury or accidents causing a death toll of 1.2 million. From some of them In this case, it is necessary to improve health services according to standards including the level of knowledge and skills of health workers who are within the scope of the Emergency Department (Manurung, Sitorus, and Hutahaean, 2022). The nurse's response time is delayed due to the unavailability of equipment or medicine. This will have an impact on the patient's life expectancy. According to research by Perez (2015), a long response time is associated with an increased risk of death. Research by Blanchard et al. (2012) states that nurses have a response time of 8 minutes and having a response time of <8 minutes will reduce the risk of death by 50%. Increasing response time can improve the quality of treatment, prevent further disability, and reduce the risk of death.

Response time is a golden period for the patient's life which in most cases illustrates that the sooner definitive help the patient receives, the more likely the patient is to recover and continue his life, otherwise the failure of response time can be seen from the high mortality rate or permanent disability experienced by the patient (Wardhana, 2023). In this context, the health response time of workers in providing services is closely related to patient satisfaction Doondori et al., (2019) Response time in urgent care services that are fast and appropriate can increase patient satisfaction. The faster the treatment of the patient increases patient satisfaction and conversely slows down the response time that the nurse gives to the patient will reduce the patient's satisfaction with the nurse's performance (Wardhana, 2023). Emergency Installation as the main gateway for handling emergency cases plays an important role in efforts to save clients' lives (Haryani, 2024). Response Time Assistance provided to patients who come to the Emergency Department The installation requires standards that are in accordance with their competence and ability to ensure emergency treatment quickly and precisely. Nurses in Installation Emergencies must be able to provide nursing care that requires critical adaptability of the situation to Response Times that are not always required in other nursing situations (Haryani, 2024). The speed and accuracy of assistance provided to patients who come to the emergency department requires standards in accordance with competence and ability to guarantee an emergency treatment with a fast response time and appropriate handling. The success of response time depends largely on the speed available and the quality of lifesaving or disability prevention from the scene, on the way to hospital help (Awaluddin, 2020).

Emergency services in the Emergency Department are needed nurse skills in providing nursing care, especially for patients with emergency categories. Nurses in implementing are required to refer to the basic doctrine, namely time saving is life saving or it is said that patient safety in the emergency room is largely determined by the nurse's response time. The success of emergency room nurses in providing nursing care to emergency patients is determined by the nurse's response time in taking action. Emergency room nurses are said to have a good response time if they have a response time of 5 minutes and a definitive time of ≤ 2 hours.

The purpose of writing this systematic review is to find out in detail the Factors That Affect the Response Time of Emergency Department Nurses in Indonesian Hospitals.

METHOD

The literature search process is carried out in the last 5 years of research (2020-2024) in English or Indonesian selected from several electronic databases indexed by national or international journals and writing article search results following appropriate protocols and rules using Preferred Reporting Items for Systematic Review and Meta-analysis (PRISMA) checklist and flow diagrams.

Search Strategy

The literature search will be conducted in May 2024. The strategy used to search for articles is using the PICOS framework. Articles are identified with the keywords "Response time AND nurse AND Factor AND Emergency Department Installation." by restricting in 2020-2024 in English and Indonesian as well as with full-text articles to get relevant articles.

Inclusion/Exclusion Criteria

The inclusion criteria for this article are Emergency Installation and Nurses in Indonesian Hospitals to determine the factors that can affect service response time in emergency installations. The article taken is the last 5 years with a descriptive, correlational, cross-sectional approach. The purpose of this study was to determine in detail the factors that affect the response time of emergency department nurses in Indonesian hospitals so that articles without complete text and do not explain the response time factors that affect nurses in emergency room units are issued, with a study limit of 2020-2024. The search results obtained 16 selected articles from all articles that match the keywords found from the database with predetermined inclusion and inclusion criteria.

Study Selection

Articles are searched in various national and international databases with keywords that have been determined. Then the removal of duplicate articles is carried out for feasibility review. Articles are screened based on title identification. The feasibility test of the full-text article left 16 research articles for review.

Data Extraction

The following information was extracted from the 16 articles: information about the Author, Year, research design, outcome measures, sample size, evaluation instruments used, and year of publication.

RESULTS

General Features and Types of Study

Of all journal articles searched through electronic databases, 16 articles are in accordance with the inclusion and exclusion criteria, with a publication year limit of 2020-2024. Articles in 2020 amounted to 5 (60%); in 2021, there were 5 (40%); in 2022, there were 1 (5%); in 2023, there were 3 (25%); and in 2024 there were 2 (10%). The research design of each study Descriptive-Analytic 5 (20%), Observational Analytic 6 (40%), and Correlational 5 (30%).

Table 1. General Characteristics of the Selected Studies (n=16)

Characteristics	n	%
Year of publishing		
2020	5	30
2021	5	30
2022	1	5
2023	3	25
2024	2	10
Type of study		
Descriptive-Analytic	5	30
Analytical Observational	6	40
Correlational	5	30

After the analysis, all studies explain in detail that the factors that can affect response time are: 1) Age, 2) Validity triage / Priority of the patient or patient's condition, 3) Education, 4) Years of service, 5) Nurse Skills Training, 6) Knowledge, and 7) Workload.

Table 2. Summary of Selected Studies

Author	Design/Sampling Technique/Data Analysis	Sample	Measuring Instrument	Variables	Results
(Ra'uf 2021)	Desain Cross Sectional Design Total Sampling	77 Nurses	Tools that will be used are respond time observation sheet, stopwatch/wristwatch to count respondent's respond time, and questionnaire about characteristic, motivation, and nurse's working	Characteristic, Motivation, Working Design, Respond Time	Nurses in the emergency unit. Based on the logistic regression analysis, it can be concluded that 1 variable has the greatest influence on general response time based on age.
(Annisa et al. 2020)	Observational Analytic with Cross Sectional. Accidental Sampling: Spearman rank test	18 Nurses	A Questionnaire and Direct Observations on Nurses	Triage, Validity, Response Time, Emergency Room	The results of this study to indicate there is a relationship between the validity Triage and Response Time Hospital emergency room nurse in Sheikh Yusuf Gowa Hospital
(Tartila, Wahyudi, and Qona'ah 2020)	Descriptive-Analytic Study with A Cross-Sectional: Multiple Regression Logistic test	101 Nurses	A Questionnaire and Direct Observations on Nurses	Gender; Motivation; Response Time; Reward; Skill	The results of this study were that gender and reward factors were related to response time. To improve patient handling procedures, hospitals must provide nursing support, such as promotions or salaries.
(Saktiawati, Silvah, and Ilham 2021)	A Cross-Sectional Study: Total sampling: Data analysis (SPSS) program version 20	60 Nurses	A Questionnaire and Direct Observations on Nurses	Response Time; Nurse; Emergency Patient	The results of the research show that there is a relationship between education, years of service, and training with the response time of hospital nurses. It is hoped that the hospital will continue to encourage staff/employees, in this case nurses, to continue their work with ongoing education and training to support the professionalism of all nurses. The slow response time of nurses to patients is caused by the lack of good cooperation with the patient's family.
(Putri et al. 2020)	Cross Sectional Design, nonprobability sampling total sampling technique, Data analysis (SPSS) program version 20 Univariate and Bivariate Analysis	30 Nurses	A Questionnaire and Direct Observations on Nurses	Emergency departments ; Traffic accident ; Response Time	The results of this study prove that there is a relationship between knowledge factors, patient priorities and workload, and nurse response time in traffic accident cases in the emergency room at Bakti Timah Hospital Pangkalpinang in 2022.
(Sumbara, Fadli, and Safruddin 2021)	A Cross Sectional Method, Nonprobability Sampling Total Sampling Technique, Data Analysis Was Used The Pearson Correlation Test	20 Nurses	A Questionnaire	Length Of Work; Knowledge; Education, Response Time; Age	The research results show that there is a relationship between age, education, work experience and knowledge with response time. It can be concluded that the strongest determinants of response time are length of work and level of knowledge. This research concludes that improving nurse education and training related to handling emergency patients must be prioritized.

Author	Design/Sampling Technique/Data Analysis	Sample	Measuring Instrument	Variables	Results
(Intan et al. 2022)	Correlation With Approach Cross Sectional, Nonprobability Sampling Total Sampling Technique, Data Analysis Was Used The Pearson Correlation Test	21 Nurses	The instrument for measuring fatigue is the Fatigue Severity Scale Indonesian version and to measure response time is an observation sheet and a stopwatch	Fatigue, Response Time, Emergency Unit, Australasian Triage Scale	The results show that the response time for handling emergency patients is in accordance with the Australasian Triage Scale (ATS) category and the response time of respondents is less than 57 seconds. reflexes and quality of movement which results in a decrease in response time. There is a need to handle fatigue by managing stress, setting working hours, and managing adequate rest time.
(Haryani 2024)	Research with cross-sectional approach, Sample selection with purposive sampling, Data analysis technique chi square tes	26 Nurses	A Questionnaire	Response Time; Training; Length of Work. Rewards and Motivation	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.
(Maratur Silitomgo and Anugrahwati 2021)	Descriptive Research Design With Cross-Sectional Approach, Total Sampling Technique	30 Nurses	A Questionnaire	Covid-19, Cross-Sectional, Emergency Room, Service Time	There is a relationship between nurse skills and nurse response time for suspected Covid 19 patients in the Emergency Room at Hermina Jatinegara Hospital. There is a relationship between workload and nurse response time for Suspect Covid 19 patients in the Emergency Room. There is a relationship between the level of emergency and the response time of nurses for suspected Covid 19 patients at the Emergency Room at Hermina Jatinegara Hospital.
(Karakoro et al. 2020)	Descriptive Research Design With Cross-Sectional Approach, Total Sampling Technique, Used The Chi-Square Test	30 Nurses	Using Questionnaire and Observation Sheets	Response Time, IGD Patient, Nurse	The results of the research showed a correlation between nurse workload and patient response time in the ER and nurses' work experience with patient response time in the ER.
(Prahmawati, Rahmawati, and Kholina 2021)	Method Observational Analytical with Cross Sectional Approach, accidental sampling technique, analyzed using the chi-square test	60 Nurses	Observation Sheet for Response Time and Questionnaire to Measure Emergency Services	Emergency Services, Response Time	The results of the analysis show a relationship between nurse response time and emergency services in the Emergency Unit of Demang Se Island Raya Regional Hospital, Central Lampung. It is recommended that nurses/doctors increase their speed in responding to incoming patients as an effort to improve quality services

Author	Design/Sampling Technique/Data Analysis	Sample	Measuring Instrument	Variables	Results
(Fitrah Ramadani et al. 2020)	The design used is analytical observation with a cross sectional approach. Data collection technique using total sampling	30 Nurses	Using Questionnaires and Sheets Observation	Response time, ER patient, Nurse	Results of research on nurse workload with patient response time in the ER and nurses' work period with patient response time in the ER. From the research results, it can be concluded that there is a relationship between time and workload and patient response time in the ER
(Aziqin et al. 2023)	Quantitative with a cross sectional design, Data collection technique using total sampling, Univariate and multivariate data analysis.	27 Nurses	Using Questionnaires and Documentation	Australian Triage Scale; Nursing Knowledge; Skills Training; Years of service	The results of the skills training research indicate that there is a significant relationship between skills training and the ATS response time of emergency room nurses. Meanwhile, length of service was found to indicate a significant relationship between length of service and ATS response time for emergency room nurses.
(Gryttha Tondang 2023)	Descriptive research The sampling technique used in This research used consecutive sampling	18 Nurses	Data collection carried out by researchers is by make observations or direct observations on nurse in the ER	Response Time, Service Nurse.	Based on the research results, the author obtained results based on the age of the emergency room nurses at Santa Elisabeth Hospital, Medan in 2023. a total of 18 nurses with the highest age percentage (33.3%). Based on the gender table, 14 respondents (77.8%) were female. Based on the table of D3 Nursing level education with a total of 12 respondents (66.7%). Based on the table, the work period for nurses is 6 years with 5 respondents (27.8%). Response Time for emergency room nurses at Santa Elisabeth Hospital, Medan in 2023. Based on the table, the time difference is <5 minutes with the majority being 10 respondents (55.6%). It is also hoped that nurses will further improve nurse response time in responding to patients who visit the ER for treatment.
(Azzahrah 2024)	The research method used is descriptive analytical with Cross Sectional design Using Fisher's exact test	32 Nurses	PSQI questionnaire to assess sleep quality and time observation using a stopwatch to assess response time	Response time, sleep quality, nursing staff, Emergency Department	The results of statistical analysis using Fisher's test in this study stated that there was no influence of sleep quality on the response time of nursing staff in the emergency room at RSU Cut Meutia, North Aceh.
(Norhidayat, Hamzah, and Solikin 2023)	This research method uses a cross sectional method. Using Totals Sampling chi square test	33 Nurses	Using questionnaires and observation sheets	Patient Condition, Length of Work, Training, Nurse Response Time	The research results showed that training factors, length of work factors and patient condition). In conclusion, there is a relationship between training, length of work and patient condition with the response time of nurses in the emergency department.

Data Collection Tools/ Instrument Evaluation

In the article, it is explained to evaluate response time using data collection carried out by researchers by making observations or direct observations on nurses in the emergency room. Time observation uses a *stopwatch* to assess response time and observation sheets. The instrument in this study used a checklist of observation sheets with the measurement data used, namely the Guttman scale.

DISCUSSION

The results of the article review found that factors that can affect response time are 1). Age, 2). Priority of the patient or patient's condition, 3). Education, 4). Years of service service, 5). Nurse Skills Training, 6). Knowledge, and 7). Workload. The nurse's response time is the accuracy and speed of the nurse in providing service as soon as possible to the patient, starting from the patient entering the emergency room door to getting service. The implementation of triage greatly affects the response time; if triage is not done properly, it will slow down the response time that will be received by the patient so that it will increase the risk of organ damage or disability and even the death of the patient. In addition, it will also affect the quality of hospital health services and will increase the cost of patient care (Rumampuk and Katuuk, 2019). Researchers argue that the speed of nurses in providing response time is influenced by several factors, namely internal and external factors, internal factors found in a nurse or other medical officers, such as nurses who are proficient in carrying out nursing actions and speed in responding to patients, and external factors where nurses are more concerned with emergency patients so that patients who are not emergency are not prioritized. In addition, the nurse's response time, if not supported by good service, will not have any benefit, and vice versa. If good service is supported by service between nurses and medical officers to patients, patients will feel satisfied because of what they expect to be achieved. Researchers assume the level of emergency room service response time to patients who come will greatly affect patient satisfaction, knowledge and competence of an emergency room officer will form a good emergency room management.

Age

The results of this article review found that age is one of the factors that can affect the response time of nurses in the emergency room. According to Rahil's research (2012), the male gender has a fast response time compared to women because men have physical advantages and age factors are related to nurse response time where nurses aged 40-60 years have a faster response time than nurses aged 20-40 years because the older they are, the more mature they are (Rumampuk and Katuuk, 2019). One study mentions another influencing factor is the age of respondents, in the age of respondents according to the Ministry of Health (2009) in this study there are 9.5% with late adolescence (17-25 years) who have a fairly responsive response time while in late adulthood (36-45 years) as many as 14.3% who all have a very responsive response time or (<5 minutes) (Said et al., 2018). Notoatmojo's theory, (2005) says that age affects a person's comprehension and mindset, the older you get, the more your grasp and mindset will develop so that the knowledge obtained is better. Individual maturity can be seen directly objectively with the age period, so that various processes of cultivation, knowledge, skills, independence are related as individuals get older, older age will tend to have more experience in dealing with problems (Said et al., 2018). The level of maturity in thinking and behaving is influenced by daily life experiences, this shows that the longer the working period, the higher the level of maturity of a person in thinking so as to further increase the knowledge he has (Said et al. 2018).

Triage Validity / Priority of the patient or the patient's condition

The results of this study are supported by Mahyawati (2015) about the relationship between emergency response time and nurse patients in the emergency room of PKU Muhammadiyah Hospital Yogyakarta concluded that there is a relationship between emergency response time where the higher the severity of the patient, the higher the severity of the patient. Faster response time (Annisa et al., 2020). The background of the importance of being regulated by emergency installation standards because patients who enter the hospital emergency installation certainly need fast and precise help for that there needs to be standards in providing emergency services in accordance with their competence and ability so as to guarantee an emergency treatment with a fast response time and appropriate handling (Sari, 2020). Nurses prioritize the condition of injured patients who are not life-threatening can affect the slow response time. The patient's condition can of course affect response time because if the condition of a patient with severe red triage injuries is life-threatening it must be treated quickly and appropriately (Santoso, 2016). If within a few minutes the patient is not treated immediately, it can cause disability even to death. The patient's condition can worsen and can even lead to complications and death, if the patient is not treated immediately. Prioritizing patient emergencies is very important in accordance with the triage process because it will make it easier to carry out further actions according to patient needs. Patients who enter the emergency

room certainly need fast and precise help. Therefore, in the emergency room, patient identification is carried out based on the severity of the disease, then priority is given to treatment. This is one of the principles and methods of emergency care which prioritizes services for patients who are life-threatening or at risk of disability. In carrying out the handling process, patients have their own priority time. The condition of patients with red triage requires 0 minutes of treatment, the condition of patients with yellow triage requires <30 minutes, and the condition of patients with green triage requires <60 minutes. It can be concluded that the patient's condition greatly affects response time.

Education

One other factor is education. Health workers who have professional education have high experience, and have a more mature mindset so that they can distinguish between good and bad. A person's level of education can also determine a person's position, the higher the position that will be occupied by that person (Sesrianty, 2018). According to Notoatmodjo (2012), a person's level of education will affect his knowledge. If the higher the education, the more information will be received. Education can also influence a person's behavior about his lifestyle, especially in increasing motivation to participate in dealing with patients (Ahmil, 2018). Nurses who are more highly educated will better understand their roles and responsibilities as nurses so that they will always prioritize caring for patients in providing nursing care. The higher the nurse's level of education, the higher the emotional intelligence the nurse has. In addition, motivation is also needed in nurses so that they can handle patients quickly. The education of nurses and doctors of the profession will reflect a person's ability to be able to complete a job well. Based on the results of the study obtained educational data, most of them are already working both nurses and doctors, it can be concluded that the higher the level of education of health workers will affect the speed of handling patients in the emergency room.

Period of Service

There is a relationship between working period and response time because most respondents, namely 28 people (82.4%) have a long working period. So that from this period of work, respondents already have experience and are accustomed to carrying out emergency services at the emergency room of RSU Bahteramas and understand how to respond time to patients who come to the emergency room (Bobi, Dharmawati, and Romantika, 2020). This research is in line with Karokaro's research (2020) which shows that there is a relationship between working period and patient response time, this is because the working period of nurses on duty is closely related to the length of work and experience they have when working in previous installations, while fresh graduate nurses still need guidance and basic emergency training who enter / seek treatment to the emergency room (Karokaro et al., 2020). The results of this study are supported by the theory put forward by Siswanto (2022) in his book on Indonesian labor management that the longer a person works, the more cases he handles, so the more experience increases; on the contrary, the shorter the person works, the fewer cases he handles. According to Ranupandoyo and Husnan, (2019), the longer a person works in an organization, the more experienced the person will be so that his work skills are better. The period of work that has been undertaken by nurses will form work experience so that they will be able to increase knowledge and competence in carrying out their duties. The longer the work period of a nurse, the more experience she will gain so that she will be able to carry out her duties well. Based on this, according to researchers, the length of work can renew an individual's experience of various things, especially in skills, the experience can be obtained from the environment a person lives in with life in the process of development, for example participating in educational activities. This can expand the range of experience because the longer the nurse's tenure the more knowledge, competition and experience the nurse gets.

Nurse Skills Training

One of the factors that affect nurse response time is nurse skill training. Training can be defined as a way used to provide or improve the skills needed to carry out the job now, while education is more future-oriented and emphasizes more on improving one's ability to understand and interpret knowledge (Yulia, 2022). Based on the above, researchers assume that training is an activity to improve the ability and improve employee performance in carrying out their duties. and nurses in the emergency room have at least PPGD, BTCLS, and BHD training to improve specific skills, knowledge, skills, attitudes and behaviors to handle emergency cases in the emergency room. The results of this study are supported by the theory put forward According to Siswanto (2002) the higher the quantity of labor, the problems that arise will be more complex, one way that must be taken is to provide training to these workers is also intended to obtain added value added labor transportation, especially those related to the increase and development of knowledge, attitude, and skills of the workforce. Training held for emergency room health workers has an influence on increasing knowledge and performance in providing services to patients in hospitals. According to Simamora (2004), job training is organized and directed to equip, improve and develop work competencies to improve ability, productivity and welfare. According to

(Rustiawati et al., 2021), training can increase knowledge and work ability with a stimulus in a person can increase understanding and attitude change which can be measured by increasing work. If someone has obtained the material, then someone will be able to gain knowledge by the process of knowing, understanding and being able to apply the material to solve the problem faced until they are able to justify or evaluate.

Actually, there is an expectation from the management that all officers on duty receive emergency training, but the implementation of this training certainly also considers time, cost, and opportunity. This means that not all officers can attend training at once but must be gradual. A good emergency room response time in handling patients is shown by the patient's importance is the main one. The speed and accuracy of assistance given to patients who come to the emergency room is given in accordance with standards with the competence and ability of health workers so as to guarantee an emergency treatment with a fast response time with proper treatment. So that response time can be achieved by improving infrastructure facilities, and skills of health workers.

Knowledge

Another factor that can influence is the nurse's knowledge according to what has been done research by (Aziqin et al. 2023). The results of this study are in line with research conducted by (Gurning et al., 2014) which showed that respondents who have a moderate level of knowledge are at risk 6,500 times for not complying with procedures in carrying out triage actions based on priority compared to respondents who have a high level of knowledge. Based on statistical tests, Chi-square shows $P \text{ value} < \alpha$ ($0.036 < 0.05$) (Husen and Rahman 2020). Knowledge of response time possessed by emergency room health workers will greatly assist officers in recognizing emergency cases and besides being useful for quality of service can also prevent death and further disability. The higher a person's level of knowledge, the faster he responds (response time) to the situation or condition of patients who come to the Emergency Department (IGD) (Husen and Rahman 2020). The knowledge gained is understood through trainings carried out so that it can increase the knowledge of nurses or health workers. There are several factors that can support nurses' knowledge about response time, which can be obtained from trainings related to response time, can also be obtained through work experience gained while working in the emergency room.

The response time standard is contained in the Decree of the Minister of Health of the Republic of Indonesia No 856 / Menkes / SK / IX / 2009 concerning Hospital Emergency Installation standards which states that emergency patients must be served no later than 5 (five) minutes after arriving at the emergency department, as well as in the Decree of the Minister of Health No 129 / Menkes / SK / II / 2008 concerning Hospital Minimum Service Standards it is stated that the service response time in the ER is = 5 (five) minutes served after the patient's arrival. Nurses play an important role in response time in emergency management in the triage room, because one of the nurses' roles is as a nursing care provider. Response time according to emergency priority. Mentioning that the response time according to emergency priorities, namely emergencies of less than 5 minutes, is urgent that there is more tolerance and as much as possible must be handled immediately.

Workload

One of the results of this research article review found that workload can affect the response time of nurses in the emergency room. Patria Asda (2021), revealed that workload is everything that includes various variables that reflect the amount or difficulty of a person's work. In providing health services, the role of nurses in hospitals is very important. The quality of nurse performance is increasingly demanded in improving the quality of health services. Research by Cahyanti et al., (2020) also states that in general there is a relationship between nurse workload and response time (M. Bahriadi, Garming, and Firdaus, 2023). In this case, nurses in providing immediate assistance to patients who experience emergencies need to determine their workload and competence so that response time can be maintained (Ningsih, Wahid, and Setiawan, 2019). This phenomenon can be assumed that when the nurse's workload increases which includes the level of emergency, the number of patients faced with the complexity of procedures and so on can increase the nurse's response time in providing services to patients. For example, in the research phenomenon when nurses are faced with patients with red triage status, the action in providing response time is more responsive and faster because it takes into account the risk of negative impacts that can occur if the action is carried out within a period of time that exceeds the target. Cahyono et al. (2020) also revealed that psychological factors (motivation) are one of the factors that affect workload. High motivation, alertness, and hard work of nurses in carrying out their responsibilities make nurses' performance good, even though they have a moderate to heavy workload. Maulana et al. (2020) revealed that the workload given to workers, especially nurses, needs to be considered and adjusted to the psychological and physical abilities of nurses who are in contact. Travel conditions, travel time from residence to the hospital are minimal, and as safe as possible affect general occupational health conditions and work fatigue, especially if the number of patients increases with weather

changes and disease epidemiology, so that it will further increase the workload of nurses which will later cause work fatigue which affects fast response time and Be alert to patients (Binuko and Fauziyah, 2022).

Nurses must observe clients strictly during working hours; besides that, the majority of nurses are required to achieve certain targets in every work done in the room to increase the workload that must be done by nurses. Service response time can be calculated in minutes. The response time is said to be on time or not late if the required time is at most the standard average time set. The success of response time depends largely on the speed available and the quality of lifesaving or disability prevention from the scene en route to hospital help.

Limitations

The present study included limitations that should be considered when interpreting the results; (1) The sample size of the included studies is small, and (2) Articles that fit the inclusion and inclusion criteria are limited.

CONCLUSION

Based on the results of the review in this article, many factors can affect nurses' response time. Some of these components are 1) Age, 2) Validity triage / Priority of the patient or patient's condition, 3) Education, 4) Years of service, 5) Nurse Skills Training, 6) Knowledge, and 7) Workload. The author recommends that it be carried out in general for further research, especially research locations in international hospitals, to distinguish the characteristics of Indonesian Hospital IGD nurses and overseas emergency room nurses. Researchers hope this study will be a reference for future researchers to conduct research directly in the hospital to increase the insight of those who read it.

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CONFLICT OF INTEREST

No conflicts of interest have been declared.

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