

## **The Influence of External Factors on Variations in the Length of Nurses' Actions in Clarifying Patient Emergencies in Hospital Emergency Rooms**

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### *Abstract*

*This study aims to analyze the influence of external factors, namely the availability of facilities, training, and consultation/guidance on the variation in the length of time for nurses' actions in clarifying patient emergencies in the Emergency Department (IGD) of a Hospital. This study uses a quantitative design with a cross-sectional approach and Chi Square statistical analysis to test the relationship between these external factors and the variation in the length of time for nurses' actions. Data were collected through questionnaires filled out by respondents, which measured their perceptions of the availability of facilities, training, and consultation/guidance available, as well as the time needed to clarify emergencies. The results of the study showed a significant influence between the availability of facilities, training, and consultation/guidance on the variation in the length of time for nurses' actions in clarifying patient emergencies ( $p < 0.05$ ). This study concludes that these external factors affect the efficiency of nurses' actions in the ER, which has implications for improving the quality of emergency services. Therefore, hospitals need to pay attention to the availability of facilities, training, and consultation/guidance in order to improve nurse performance in handling patient emergencies.*

**Keywords:** *availability of facilities, training, consultation, emergency classification.*

### **Introduction**

Emergency patient care requires fast and careful handling to prevent the risk of death and disability. The element of time is very important in emergency services, where the concept of “time saving is life saving” becomes the main guideline. Response time serves as an indicator of the quality of emergency services, showing the efficiency of the process in an effort to save the patient (1)

Research in hospital emergency departments by Tutuko revealed variations in the time taken by nurses to treat patients based on the level of emergency. The data showed an average time of 86.31 minutes for emergency cases, 71.28 minutes for non-emergencies, 53.22 minutes for non-emergencies, and 33.09 minutes for non-emergencies (2). However, official standards related to this classification have

not been regulated in detail by the Indonesian Ministry of Health, other than the provision of response time that should not exceed 5 minutes (3)

Nurses have a strategic role in the success of health services in hospitals, with a proportion reaching 50-60% of the total health workers. The quality of nursing services is very important, but in Indonesia there is still a gap compared to other countries. The development of technology and increasing public expectations have not been fully balanced by an increase in the quality of optimal nursing services (4).

External factors such as hospital management and occupational safety (K3) management affect the effectiveness of nurses' actions. Unfortunately, K3 aspects are often less considered by management who are reluctant to allocate additional costs. As a result, nurses often do not get adequate safety equipment, even though they are directly involved in work risks (5).

Nurses' understanding that humans are bio-psycho-socio-spiritual beings influences patients' responses to treatment (6). Nurse professionalism is a determining factor in clarifying patient emergencies in the ER (7). Management support, policies, and a good work environment are external factors that influence the effectiveness of nurses' professionalism in treating patients.

Several other factors that can influence the performance of nurses in clarifying patient emergencies in the ER include the availability of supporting facilities, adequate training, and consultation and guidance received by nurses (8–11). The availability of complete and modern facilities can help nurses in conducting triage and clarification quickly and accurately. Continuous training is also important to improve the knowledge and skills of nurses in handling emergency patients (12,13). In addition, consultation and guidance from senior doctors or nurses can help junior nurses make the right decisions when facing critical cases (14)

However, research on how these external factors specifically affect the variation in the length of time nurses take to clarify patient emergencies in the ED is still limited. Most previous studies have focused on analyzing internal factors, such as workload, stress, and nurse motivation (15,16). Therefore, this study aims

to analyze the influence of external factors (availability of facilities, training, and consultation/guidance) on the variation in the length of time for nurses' actions in clarifying patient emergencies in the hospital's ER. The results of this study are expected to provide insight for hospital management in efforts to improve the performance of ER nurses and the quality of emergency services.

## **Method**

This study used a quantitative research design with a cross-sectional approach. The purpose of this study was to determine the effect of external factors (availability of facilities, training, and consultation/guidance) on the variation in the length of time of nurses' actions in clarifying patient emergencies in the hospital's ER. The population in this study were all nurses on duty in the hospital's ER. The research sample consisted of 26 nurses at Raden Mattaher Jambi Hospital who were selected using the total sampling technique. Data collection was carried out through a questionnaire to measure external factors (availability of facilities, training, and consultation/guidance) and observation to measure the variation in the length of time of nurses' actions in clarifying patient emergencies. Then, data analysis used the chi-square test to determine the effect of external factors on the variation in the length of time of nurses' actions in clarifying patient emergencies in the hospital's ER.

## **Results**

The results of the study showed that the availability of facilities and infrastructure plays an important role in accelerating nurses' actions. In the emergency category, 15 respondents stated that the availability of facilities was in the good category, while 11 stated that it was lacking. Similar findings were seen in other categories, with a consistent comparison of results between the good and lacking categories. The availability of adequate facilities helps nurses respond more quickly to patient emergency situations.

Training was also found to have a significant impact on the time it took nurses to treat patients. In the emergency category, 23 of 26 respondents reported

that adequate training improved the speed and efficiency of the action, while 3 respondents stated that lack of training hindered performance. In the non-urgent emergency category, 18 nurses felt their training was adequate, while 8 others felt it was inadequate. Standardized training allows nurses to understand optimal action protocols, thereby enabling them to provide faster and more effective services in the ED.

Consultation and guidance factors also showed a significant influence on the speed of nurses' actions. In the emergency action category, 24 nurses stated that adequate guidance helped in making quick decisions, while 2 others considered inadequate guidance to slow down the process. The chi-square statistical test showed a significant relationship between these external variables and the practice of long action times, with a p value  $<0.05$ . Specifically, the availability of facilities (non-emergency p = 0.0001; non-emergency p = 0.04717), training (non-emergency p = 0.02969), and consultation/guidance (non-emergency p = 0.01984) were proven to play a role in increasing the effectiveness of services in the ED.

## **Discussion**

### **Availability of Facilities**

The availability of facilities that can support the practice of nurses' actions in the Emergency Room of Raden Mattaher Jambi Regional Hospital is an external factor that influences the variation in the length of time for nurses' actions in clarifying patient emergencies. Based on the results of the study, respondents chose the answer "yes" with the highest percentage in the statement of the emergency service guideline book (100%), followed by the emergency room nurse work guideline book at the hospital (92.31%), and the professional nursing practice book (61.54%). This is in accordance with the guidelines from the Indonesian Ministry of Health and hospital service standards.

Meanwhile, in terms of facilities to improve nurses' knowledge and skills, respondents chose the answer "yes" with the highest percentage in nursing journals and television (96.15%), followed by newspapers (92.31%), and textbooks, the internet, and magazines (84.61%). The availability of these facilities is in

accordance with the theory that to realize attitudes into real actions, supporting factors or enabling conditions are needed, one of which is facilities. The availability of adequate facilities is very helpful in improving knowledge, practical skills, and providing optimal nursing services by implementing nurses in the hospital's ER (17)

### ***Training***

The results of the study showed that the majority of respondents had received PPGD training (88.46%) and BTLS/BCLS (80.77%), while ATLS/ACLS training was only received by 1 person (3.85%). This finding is in line with the objectives of the Ministry of Health of the Republic of Indonesia to improve the skills of human resources in health services, especially in hospitals. In addition, these results also meet hospital accreditation standards that require training to improve staff competency. According to Barr et al. (2005), training is needed for the continuous and comprehensive development of nurses' knowledge and skills, in order to meet the demands of hospital accreditation standards (18). With these results, it can be concluded that training is very much needed for the continuous and comprehensive development of nurses' knowledge and skills, in order to meet the demands of hospital accreditation standards.

### ***Consultation and Guidance***

The results of this study indicate that most respondents provide support for variables related to collaboration and consultation in the ER environment. As evidenced by the data, as many as 26 respondents (100%) answered "yes" regarding the importance of external factors in influencing the length of time for nurses to clarify patient emergencies. This finding is in line with the guidelines set by the Ministry of Health of the Republic of Indonesia regarding the description of nursing staff duties in hospitals and nurse work guidelines in the ER (1,19).

Consultation and guidance have proven to be essential in the practice of care in the ED, given that nurses work in an environment that requires collaboration between health disciplines. This collaboration allows for faster and more effective handling of emergency cases. Support and direction from related parties, such as

KSM (Medical Staff Group), ED doctors, ward heads, and nursing service teams, are very important in increasing the responsiveness of nurses (20).

In the statement point related to the availability of direction and willingness to consult from KSM, ER doctors, nursing services, ward heads, and team leaders, the results showed that the majority of respondents supported the importance of these factors. As many as 24 people (92.31%) also agreed that hospital leaders play an important role in providing space for consultation regarding emergencies in the ER. These data underline the need for a collaborative approach and structural support from the institution, which is in accordance with the work guidelines for nurses in the ER as stated in the guidelines from the Indonesian Ministry of Health.

This interdisciplinary collaboration strengthens team coordination in handling critical cases and increases the efficiency of handling time. With interprofessional guidance and support, it is hoped that nurses' actions in clarifying patient emergencies can be more optimal, in accordance with the established service standards (21).

## **Conclusion**

This study revealed that external factors, such as the availability of facilities, training, and consultation/guidance, have a significant influence on the variation in the length of time for nurses' actions in clarifying patient emergencies in the hospital's ER. The results of the study indicate that adequate support from these aspects can accelerate nurses' responses in handling emergency patients, increasing work effectiveness and efficiency.

The availability of adequate facilities contributes to the smooth running of the nurses' work process, thereby reducing obstacles in the implementation of actions. Continuous training helps improve the skills and readiness of nurses to respond to emergency situations more quickly and appropriately. In addition, good consultation and guidance create a collaborative work environment, allowing nurses to work with support from various parties, such as doctors and other medical teams. Overall, this study confirms that optimizing these external factors is important in improving the performance of nurses in the ED. By strengthening

facilities, training, and consultation/mentoring support, hospitals can improve the quality of emergency services, which ultimately contributes to patient safety and satisfaction.

### Reference

1. Depkes RI. Pedoman Kerja Perawat Instalasi Gawat Darurat di Rumah Sakit. Jakarta: Depkes RI; 2004.
2. Musni R. Menghitung Kebutuhan Tenaga Perawat di rumah Sakit: Telaah Penelitian Optimalisasi Pendokumentasian Keperawatan di rumah Sakit Dharmais Jakarta. Jurnal Keperawatan Indonesia . 2001;5(1).
3. Depkes RI. Perdoman Pelayanan Gawat Darurat. Jakarta: Depkes RI; 2004.
4. Depkes RI. Standar Pelayanan Rumah Sakit. Jakarta: Depkes RI; 2004.
5. Joedatmodjo S. Pembinaan K3 Terhadap Pekerja Informal Dalam Satu Abad K3. Jakarta: Dewan Keselamatan Kesehatan Kerja Nasional; 2000.
6. Alexander E. Standards of emergency nursing practice. US: Mosby; 1991.
7. Gillis DA. Manajemen Keperawatan: Suatu Pendekatan Sistem . Collingwood: Saunders Book Company; 1989.
8. Aiken LH, Sloane D, Griffiths P, Rafferty AM, Bruyneel L, McHugh M, et al. Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. *BMJ Qual Saf.* 2017 Jul;26(7):559–68.
9. Buchan J, Calman L. Skill-Mix and Policy Change in the Health Workforce. 2005 Feb.
10. LaSala CA, Connors PM, Pedro JT, Phipps M. The Role of the Clinical Nurse Specialist in Promoting Evidence-Based Practice and Effecting Positive Patient Outcomes. *The Journal of Continuing Education in Nursing.* 2007 Nov;38(6):262–70.
11. Considine J, Botti M, Thomas S. Do Knowledge and Experience Have Specific Roles in Triage Decision-making? *Academic Emergency Medicine.* 2007 Aug 28;14(8):722–6.

12. Oermann MH, Gaberson KB, De Gagne JC. Evaluation and testing in nursing education. Springer Publishing Company; 2024.
13. Wheeler DS, Geis G, Mack EH, LeMaster T, Patterson MD. High-reliability emergency response teams in the hospital: improving quality and safety using in situ simulation training. *BMJ Qual Saf.* 2013 Jun;22(6):507–14.
14. Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *The Lancet.* 2014 May;383(9931):1824–30.
15. Lu H, Zhao Y, While A. Job satisfaction among hospital nurses: A literature review. *Int J Nurs Stud.* 2019 Jun;94:21–31.
16. Adriaenssens J, De Gucht V, Maes S. Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. *Int J Nurs Stud.* 2015 Feb;52(2):649–61.
17. Marquis BL, Huston CJ. Leadership Roles and Management Functions in Nursing: Theory and Application. Philadelphia: Lippincott Williams & Wilkins; 2015.
18. Barr H, Koppel I, Reeves S, Hammick M, Freeth DS. Effective interprofessional education: argument, assumption and evidence (promoting partnership for health). John Wiley & Sons; 2008.
19. Depkes RI. Pedoman Uraian Tugas Tenaga Keperawatan di Rumah Sakit. Jakarta: Depkes RI; 2004.
20. MANSER T. Teamwork and patient safety in dynamic domains of healthcare: a review of the literature. *Acta Anaesthesiol Scand.* 2009 Feb 19;53(2):143–51.
21. Körner M, Bütof S, Müller C, Zimmermann L, Becker S, Bengel J. Interprofessional teamwork and team interventions in chronic care: A systematic review. *J Interprof Care.* 2016 Jan 2;30(1):15–28.