Nurses' knowledge of the medical triage at the emergency unit of an Iraqi teaching hospital

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ABSTRACT

Triage refers to the placement of patients in the appropriate setting at the appropriate time in order for them to receive the appropriate level of care, along with the allocation of resources tailored to their medical needs. A descriptive study was conducted in order to assess nurses' knowledge of medical triage between October 15, 2023, and April 1, 2024. A non-probability convenience sample comprising 50 nurses working in the Emergency Unit of the Al Hillah Teaching Hospital was included. The study utilized a questionnaire developed through a comprehensive review of the relevant literature and modified as necessary. Its content validity was established through evaluation by a panel of five experts. Data were collected using a researcher-developed, self-administered questionnaire in Arabic, employing both interview and self-report formats. Data analysis was performed using the SPSS software, version 24. The general level of nurses' knowledge regarding medical triage, as assessed in this study, was found to be fair to good. It is recommended to appoint qualified registered nurses so as to enhance the quality of care provided in medical triage settings.

1. Introduction

Triage is a method used to prioritize patient treatment. In accident and emergency departments, it involves assessing and categorizing patients – typically by an experienced nurse – in order to determine the order in which care is provided. This process may also be employed at the scene

Table 1. Overall assessment level of the nurses' knowledge of the medical triage in the emergency unit of the Al Hillah Teaching Hospital (N=50).		
Overall assessment	Frequency	Percentage
Poor (40 – 66.6)	13	26%
Fair (66.7 – 93.3)	19	38%
Good (93.4 – 120)	18	36%
Total	50	100%

of major incidents so as to guide immediate medical interventions[1]. As a specialized technique of prioritization, triage aims to ensure timely and appropriate medical care. Within the emergency department (ED), it serves to enhance patient safety by guaranteeing that care is delivered based on clinical urgency. Triage systems also contribute to departmental organization, monitoring, and evaluation, thereby promoting clinical fairness and operational efficiency[2].

The triage area is typically the ED's initial point of contact for patients. Assessment includes a synthesis of the patient's presenting complaint, overall appearance, and relevant physiological indicators. Vital signs should be recorded at triage when required in order to assess urgency or when time permits. Patients classified as Australian Triage Scale (ATS) category 1 or 2 must be promptly transferred to an appropriate care area. The receiving nurse should then conduct a comprehensive nursing evaluation[3]. Several validated triage scales have emerged internationally since the late 1980s, including the Manchester Triage Scale (MTS), the Canadian Triage and Acuity Scale (CTAS), the Emergency Severity Index (ESI), the Australasian Triage Scale (ATS), and the Rapid Emergency Triage and Treatment System (RETTS)[4].

Triage decisions are inherently complex and are often made under uncertainty with limited or ambiguous information. The triage nurse must swiftly identify life-threatening conditions and evaluate the probability of their occurrence. These decisions are critical in initiating emergency care and significantly impact patient outcomes[5]. Triage techniques are adapted for use in both hospital and prehospital settings in order to manage requests for acute medical care. Systems have been designed to rank urgency levels among patients presenting to EDs. Although numerous triage scales are employed, their validation processes vary, especially across European EDs[6].

This study was conducted in order to assess nurses' knowledge of medical triage at the ED of an Iraqi teaching hospital.

2. Methodology

This descriptive study was conducted at the Al Hillah Teaching Hospital (Iraq) between October 15, 2023, and April 1, 2024. It aimed at evaluating the nurses' knowledge of medical triage in the ED of the Al Hillah Teaching Hospital. A non-probability convenience sample of 50 nurses working in the hospital's ED was recruited. The data collection tool was a questionnaire developed after an extensive literature review and modified as needed. It comprised two parts: (i) part I (demographic characteristics, including age, gender, educational level, total nursing experience, and experience in the ED), and (ii) part II (nurses' knowledge of medical triage in the ED). Content validity was reviewed by a panel of five experts, who assessed the questionnaire's form and relevance to the study objectives. Feedback was respectfully considered and incorporated. The instrument was deployed in Arabic *via* a self-administered format. The researcher introduced the study, obtained informed consent, and facilitated participation. Each self-report took approximately 15 to 20 min to complete. Responses were coded and analysed using the SPSS software, version 24. The research was reviewed and approved by the ethics committee of the Al-Mustaqbal University's College of Nursing. Ethical compliance was ensured in accordance with the Declaration of Helsinki. Approval was granted under document 950 on October 11, 2023.

3. Results and Discussion

The majority of the participating nurses exhibited a

fair level of knowledge regarding medical triage in the ED of the Al Hillah Teaching Hospital (Table 1). These findings are consistent with those reported by Duko et al.[7] in Ethiopia, where 51.5% of nurses demonstrated fair knowledge levels. The similarity may be attributed to limited access to comprehensive triage information and training.

In our study, the lowest mean score was 1.64 (items 3 and 37), and the highest was 2.88 (item 12). These findings contrast with those of Firouzkouhi et al.[8], where the overall mean knowledge score was also categorized as fair.

4. Conclusion

The study has found that the nurses working in the ED at the Al Hillah Teaching Hospital generally possess a fair to good level of knowledge regarding the medical triage.

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