



Investigation of Triage Knowledge of Nurses

Hemşirelerin Triyaj Bilgisinin İncelenmesi

Öznur Kavaklı¹, Dilek Konukbay², Hande Sabandüzen³

¹Department of Fundamentals of Nursing, University of Health Sciences, Gülhane Faculty of Nursing, Ankara, Türkiye

²Department of Pediatric Nursing, University of Health Sciences, Gülhane Faculty of Nursing, Ankara, Türkiye

³Department of Nursing, Bahçeşehir University, Faculty of Health Sciences, İstanbul, Türkiye

Abstract

Introduction: This study explores the triage knowledge of nurses and identifies the factors that affect their knowledge. **Methods:** A descriptive study was carried out between December 2020 and January 2021, with a sample of 104 voluntary nurses working in surgery and internal medicine clinics at a training and research hospital. Data were collected using a descriptive information form and Triage Decision-Making Inventory (TDMI).

Results: The mean age of the participants was 30.03±7.85 years. There was a significant difference between professional experience and the scores attained from the cognitive ability and intuition subscales of the TDMI. We found a significant difference between the level of knowledge and the scores acquired from the TDMI and its subscales of cognitive ability, experience, and critical thinking ($p<0.05$). Nurses working in the surgical unit scored significantly higher on the cognitive ability subscale of the TDMI than those working in the department of internal medicine department ($p<0.05$). Participants who reported feeling comfortable and not challenged during triage decision-making scored statistically significantly higher on the cognitive ability subscale of the TDMI ($p<0.05$).

Discussion and Conclusion: The study found that the average TDMI score of the participants was high and professional experience in surgical units, and knowledge, experience, and comfort with triage decision-making had a positive effect on the level of decisions in terms of triage decision-making. Besides emergency departments, triage decision-making in internal medicine and surgical clinics is thought to be useful in enhancing the quality of patient care and deciding on correct and appropriate nursing approaches.

Keywords: Knowledge; Nurse; Triage; Triage Decision-Making Inventory

The term triage originates from the French verb “trier,” which means to classify or separate. It was initially utilized during the Napoleonic Wars to group patients according to their necessities, irrespective of social class or status.^[1] Triage is a selection procedure that involves critical thinking, the use of cognitive ability, intuition, and

past experience. It serves as a fundamental point in making the most of the available healthcare resources. The skill of patient categorization and care prioritization is a crucial aspect of nursing practice.^[2]

The demand for emergency departments has substantially increased worldwide, which has led to a significant shift in

Cite this article as: Kavaklı Ö, Konukbay D, Sabandüzen H. Investigation of Triage Knowledge of Nurses. Lokman Hekim Health Sci 2024;4(1):35–43.

Correspondence: Öznur Kavaklı, R.N. Sağlık Bilimleri Üniversitesi, Gülhane Hemşirelik Fakültesi, Ankara, Türkiye

E-mail: oznur.kavakli@sbu.edu.tr **Submitted:** 02.12.2023 **Revised:** 27.02.2024 **Accepted:** 01.04.2024

OPEN ACCESS This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>).



emergency care organization and practice. Consequently, triage systems have been implemented to assign clinical priority to patients awaiting assistance, to endorse equal access.^[1] The purpose of these systems is to arrange the requests of patients in need, categorize those with severe urgency, and securely isolate them before a comprehensive diagnostic and therapeutic assessment.^[3] A structured triage process involves a reliable and repeatable system for categorizing patients according to varying levels of urgency, to prioritize care and ensure sufficient physical space, professional staff, and technological resources.^[3,4] Triage systems vary based on the number of emergency categories, as well as the setting and context in which they are deployed. Moreover, activities are structured in terms of personnel, resources, and equipment.^[4,5]

Nurses bear significant responsibilities in the process of triage decision-making. As per the Nursing Regulation of the Turkish Ministry of Health, if the triage team responsible for prioritizing patients, shares common care protocols for specific cases, the nurse may perform triage without awaiting the physician's approval.^[6] Furthermore, the Ministry of Health's 2009 communiqué outlining emergency service practice in inpatient health facilities states that triage may be conducted by a physician, nurse, or emergency medical technician.^[7]

During the initial patient assessment, the nurse carries out a prioritized care evaluation to determine the patient's condition and promptly directs them to the necessary care.^[2] Although triage is commonly associated with emergency services, it is also utilized in outpatient clinics and hospital services. Problems, including reaching the full capacity of beds in intensive care units or experiencing a shortage of nurses, physicians, personnel, and materials, as well as the fair distribution of medical equipment and materials in pediatric, internal, and surgical units, may require triage decisions.^[8,9]

Ensuring patient safety is still a top priority when making triage decisions. Hence, nurses making such decisions should exhibit qualities such as intuition, assertiveness, patience, and critical thinking alongside their professional experience. Moreover, training has been shown to have a positive impact on the decision-making process, as evidenced in studies.^[10–12] Various studies have also noted the importance of triage experience.

Varndell et al.^[13] found that emergency nurses working in Australian hospitals are required to have at least 2 years of emergency nursing experience to be eligible for the triage unit. Triage is the process of selecting and categorizing patients. Selecting and prioritizing patients is a difficult,

stressful, and emotional task for nurses.^[14] Another study on nurses' experience of the triage process in emergency situations found that although nurses generally had a positive experience with triage, there were instances where they experienced tension and uncertainty. The study also highlighted the numerous factors related to triage that nurses encounter in their daily practice.^[15]

The anticipation and immediate identification of potential problems are part of the nursing process. Triage helps to determine patients who should receive priority care and the interventions to be conducted in the next step. Although it is generally assumed that triage only occurs in the emergency department settings, it should actually take place in any clinical or community care center with priority of care. Therefore, even the nurses who have never worked at an emergency unit may experience patient triage, and their previous clinical experience may influence this process. Hence, nurses with diverse clinical experiences and qualifications have a "bank" of experiences that influence triage decision-making. There is a limited number of studies that examine the patient triage decision-making skills of nurses other than the emergency department nurses.^[1,2,15] In the study conducted to determine the level of knowledge of nurses about triage and the factors affecting triage decision making, the importance of ensuring correct prioritisation in determining and ranking the treatment and care needs of patients was emphasised. This approach contributes to the optimisation of the patient's treatment and care processes. In addition, determining the training needs of nurses working in hospital clinics and creating more effective training programmes by drawing attention to the importance of patient triage will ultimately help to increase the quality of health services, efficiency in emergency management and patient satisfaction. Competent nurses working in hospital clinics, trained in correct triage, can quickly and effectively identify the needs of patients in emergency situations and initiate appropriate treatment on time. In this context, this study was conducted to examine the triage knowledge of nurses and to determine the factors affecting their triage decision-making skills.

Materials and Methods

Study Design

This descriptive study was carried out to examine nurses' triage knowledge and determine factors that influence their knowledge level. In this study, artificial intelligence-supported technologies were not utilized.

Population and Sampling

The study population comprised 370 nurses employed in the surgical and internal medicine clinics of a research and training hospital in Ankara, the capital city of Türkiye. No sample size was calculated as all nurses were intended to be reached. The sample consisted of 104 volunteer nurses who were not on annual, retirement, or maternity leave during the study period and who completed the questionnaire form. Responsible nurses were excluded from the study because they were not involved in one-to-one patient care. Nurses participated in this research from surgery (General surgery, neurosurgery, plastic surgery, orthopedics, ophthalmology, pediatric surgery) and internal medicine clinics (internal medicine, neurology, endocrine, oncology, pulmonology, gastroenterology and pediatrics). Emergency room and intensive care nurses were not included in the study.

Measures

A descriptive information form and Triage Decision-Making Inventory were utilized for data collection.

Descriptive Information Form

The form was prepared by the researchers in line with the literature and comprised 17 questions covering age, gender, marital status, education level, professional history, and clinic, prior training, and experience in triage decision-making.^[2,15]

Triage Decision-Making Inventory (TDMI)

The TDMI was developed by Cone^[16] and adapted into Turkish by Küçük Alemdar et al.^[17] The Turkish version of the TDMI comprised 37 items and four subscales: cognitive ability, experience, intuition, and critical thinking. From the scale, the maximum score that can be obtained is 222. Cronbach's alpha of the TDMI was 0.95, and the subscale alphas ranged from 0.84 to 0.89.^[17]

Data Collection

Data were collected from December 2020 to January 2021 via face-to-face interviews. Following ethical and institutional approval, participants were informed about the study's purpose, and their written informed consent was obtained. Interviews were carried out in a suitable environment in the clinic, and data collection took approximately 15 min.

Data Analysis

SPSS version 25.0 was employed to analyze the data. To display the findings, descriptive statistics such as number, percentage, mean, standard deviation, median, and range were utilized. To check for data normality, the

Kolmogorov–Smirnov test was administered. To compare the data with the normal distribution, the independent sample t-test was employed, whereas to compare the data that did not match the normal distribution, the Mann–Whitney U test was utilized. The Kruskal–Wallis test and ANOVA were utilized for the comparison of non-normally distributed data across three or more groups' statistical significance, which was set at $p < 0.05$.

Statistical Analysis Process

The statistical analysis process was performed using SPSS Statistics for Windows, Version 25.0 (IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp). Data entry and statistics analyses were carried out by the researchers.

Ethical Considerations

Ethical approval and institutional permission were obtained from the Non-invasive Research Ethics Committee of the Health Sciences University (dated 25.06.2019 and numbered 19/244). The procedures accepted in this study are in accordance with the principles stated in the Declaration of Helsinki.

Limitations

The study was conducted in a single center with the participation of only the volunteer nurses.

Results

General Characteristics of Participants

The mean age of the participants was 30.03 ± 7.85 years, 95.2% were female, and 72.1% had undergraduate degrees. Almost half of the nurses (48.1%) worked for 1–5 years, whereas the majority (64.4%) held positions in surgical wards, and almost half (41.3%) had rotating shifts. The majority of nurses (85.6%) possessed knowledge of triage, with 55.8% reporting feeling competent in the subject matter, 55.8% having received formal training, and 40.4% citing university as the location of their training. Finally, 84.6% of the participants believe that patient triage should not be limited to the emergency department alone (Table 1).

Distribution of the TDMI Scores

The mean TDMI score was 171.21 ± 16.51 (min.: 131, max.: 213), indicating a higher level of knowledge in terms of triage decision-making. The cognitive, experiential, intuitive, and critical thinking subscales yielded mean scores of 32.85 ± 4.16 , 54.77 ± 5.99 , 31.78 ± 3.70 , and 51.78 ± 7.49 , respectively, as shown in Table 2.

Table 1. Descriptive characteristics (n=104)

Variables	Mean±SD	n	%
Age	30.03±7.85		
Gender		99	95.2
Female		5	4.8
Male			
Marital status			
Married		48	46.2
Single		56	53.8
Education			
High school or below		17	16.3
Undergraduate		75	72.1
Graduate		12	11.5
Ward			
Surgical		67	64.4
Internal medicine		37	35.6
Years of profession			
1–5 years		50	48.1
6–10 years		21	20.2
11 years and above		33	31.7
Work shift			
Day shift		28	26.9
Night shift		33	31.7
Rotating shift		43	41.3
Possesses knowledge of triage			
Yes		89	85.6
No		15	14.4
Perceived competence in triage decision-making			
Yes		58	55.8
No		46	44.2
Received training on triage decision-making			
Yes		58	55.8
No		46	44.2
Received training on triage decision-making at (n=58)			
University		42	40.4
In-service training		16	15.4
Do you think that triage decision-making takes place only in emergency departments?			
Yes		16	15.4
No		88	84.6

SD: Standard deviation.

Comparison of the Descriptive Characteristics and the TDMI Scores

The TDMI score distribution, as shown in Table 3, exhibits a significant variation between the length of nurses'

Table 2. TDMI total scores and distribution of sub-dimension mean scores

TDMI	Mean±SD	Min–Max
Cognitive ability	32.85±4.16	19.00–40.00
Experience	54.77±5.99	36.00–66.00
Intuition	31.78±3.70	22.00–42.00
Critical thinking	51.78±7.49	29.00–69.00
Total	171.21±16.51	131.00–213.00

SD: Standard deviation; Min: Minimum; Max: Maximum.

professional experience and the cognitive ability and intuition subscales of the TDMI (χ^2 : 6.45, $p < 0.05$; χ^2 : 7.49, $p < 0.05$). Specifically, nurses with over 6 years of experience received statistically significantly higher scores on the cognitive ability and intuition subscales of the TDMI when compared with those with 1–5 years of experience. Participants with higher knowledge of triage decision-making exhibited statistically significant differences in cognitive ability, experience, critical thinking, and total TDMI scores ($p < 0.05$), in comparison to those without such knowledge. Furthermore, we found significant differences between TDMI scores, knowledge level, and perceived competency in triage decision-making ($p < 0.05$). Nurses working in the surgery department received significantly higher scores on the cognitive ability subscale of the TDMI when compared to those in the internal medicine department ($p < 0.05$). Moreover, participants who disagreed with the notion that triage decision-making only occurs in emergency settings achieved higher scores on the experience subscale ($p < 0.05$). There was a significant difference between the scores obtained from the TDMI and its critical thinking subscale and the experience of triage decision-making during professional life ($p < 0.05$). Additionally, the participants who reported feeling at ease and not encountering challenges during triage decision-making obtained a statistically significant higher score on the cognitive ability subscale of the TDMI ($p < 0.05$). Finally, the participants who indicated that the lack of personnel had an impact on their triage decision-making achieved notably higher scores on the cognitive ability subscales of the TDMI ($p < 0.05$).

Correlation Between Age and the TDMI Scores

A positive and weak correlation was found between participants' age and scores on the cognitive ability and intuition subscales of the TDMI, as analyzed using Spearman's correlation coefficient ($p < 0.05$; $r = 0.25$, $p < 0.05$; $r = 0.22$, respectively).

Table 3 (cont). Comparison of the TDMI scores according to descriptive characteristics

Descriptive characteristics	n	Cognitive ability		Experience		Intuition		Critical thinking		Total	
		Median	Test, p	Mean±SD	Test, p	Median	Test, p	Mean±SD	Test, p	Mean±SD	Test, p
place only in emergency departments?											
Yes	16	47.50	Z: -7.724	52.00±3.16	t: -2.048	57.56	Z: -0.733	49.06±7.51	t: -1.592	165.56±14.21	t: -1.497
No	88	53.41	0.469	55.28±6.25	0.043*	51.58	0.463	52.28±7.43	0.114	172.23±16.76	0.138
Is triage important in your clinic?											
Yes	79	53.46	Z: -0.581	55.44±6.39	t: 2.041	55.18	Z: -1.621	52.27±7.11	t: 1.187	172.88±16.27	t: 1.860
No	25	49.46	0.561	52.68±5.42	0.044*	44.02	0.105	50.24±8.57	0.238	165.92±16.46	0.066
Have you encountered triage in professional life?											
Yes	67	56.13	Z: -1.661	55.58±5.78	t: 1.862	53.71	Z: -0.553	52.92±6.55	t: 2.115	173.82±14.92	t: 2.209
No	37	45.92	0.097	53.32±8.67	0.065	50.31	0.580	49.72±8.67	0.037*	166.48±18.32	0.029*
In which unit did you encounter triage? (n=67)											
Emergency department	40	34.65	χ^2 : 0.799	55.78±5.76	F: 0.131	31.90	χ^2 : 1.180	55.87±5.76	F: 0.923	172.97±13.45	F: 0.239
Surgical ward	12	29.58	0.671	55.00±5.09	0.878	36.63	0.554	53.25±5.22	0.402	173.75±13.61	0.788
Internal medicine	15	35.80		55.26±6.62		37.50		55.26±6.62		176.13±19.82	
Felt tense during triage											
Yes	6	54.67	Z: -1.182	57.83±8.01	t: 1.291	52.92	Z: -0.035	52.50±6.83	t: 0.238	176.33±16.99	t: 0.781
No	98	52.37	0.856	54.59±5.84	0.200	52.47	0.972	51.74±7.56	0.812	170.89±16.52	0.436
Felt anxious during triage											
Yes	8	48.00	Z: -0.441	57.25±5.67	t: 1.217	83.19	Z: -3.010	53.00±4.95	t: 0.474	178.37±15.04	t: 1.281
No	96	52.88	0.659	54.57±5.99	0.226	49.94	0.003*	51.68±7.68	0.637	170.61±16.56	0.203
Felt panic during triage											
Yes	9	45.39	Z: -0.743	52.00±6.98	t: -1.464	51.89	Z: -0.064	53.33±6.67	t: 0.645	168.00±13.81	t: -0.609
No	95	53.17	0.457	55.04±5.86	0.146	52.56	0.949	51.64±7.58	0.521	171.51±16.77	0.544
Felt stressed during triage											
Yes	22	47.89	Z: -0.812	55.00±4.54	t: 0.194	49.23	Z: -0.576	52.59±5.50	t: 0.563	171.81±13.14	t: 0.193
No	82	53.74	0.417	54.71±6.34	0.846	53.38	0.565	51.57±7.96	0.574	171.04±17.37	0.847
Felt comfortable during triage											
Yes	25	69.50	Z: -3.248	56.68±6.22	t: 1.842	51.32	Z: -0.226	51.96±7.56	t: 0.989	175.32±16.87	t: 1.435
No	79	47.12	0.001*	54.17±5.82	0.068	52.87	0.822	51.73±7.52	0.896	169.91±16.28	0.154
Experienced difficulties in triage											
Yes	23	26.43	Z: -2.312	55.26±6.45	t: -0.497	28.50	Z: -1.680	51.47±6.56	t: -1.359	169.86±17.21	t: -1.688

Table 3 (cont). Comparison of the TDMI scores according to descriptive characteristics

Descriptive characteristics	n	Cognitive ability		Experience		Intuition		Critical thinking		Total	
		Median	Test, p	Mean±SD	Test, p	Median	Test, p	Mean±SD	Test, p	Mean±SD	Test, p
No	44	37.95	0.021*	56.02±5.67	0.621	36.88	0.093	53.79±6.56	0.179	176.56±14.38	0.096
Triage decision-making was influenced by the number of patients in the clinic											
Yes	25	55.02	Z: -0.481	54.88±6.25	t: 0.961	54.50	Z: -0.382	53.60±7.53	t: 1.392	173.52±18.54	t: 0.801
No	79	51.70	0.630	54.74±5.94	0.923	51.87	0.702	51.21±7.44	0.167	170.48±15.87	0.425
Triage decision-making was influenced by the lack of personnel											
Yes	37	63.93	Z: -2.885	56.02±5.89	t: 1.591	49.19	Z: -0.836	51.08±6.18	t: -0.713	173.08±14.88	t: 0.857
No	67	46.19	0.004*	54.08±5.97	0.115	54.33	0.403	52.17±8.15	0.477	170.17±17.36	0.393
Triage decision-making was influenced by a lack of knowledge											
Yes	12	43.29	Z: -1.129	55.00±4.59	t: 0.135	46.54	Z: -0.731	52.41±6.81	t: 0.307	170.25±13.78	t: -0.213
No	92	53.70	0.259	54.75±6.16	0.893	53.28	0.465	51.70±7.61	0.759	171.33±16.89	0.831

TDMI: Triage decision-making inventory, t: T-test, F=one-way ANOVA; Z=Mann-Whitney U test; χ^2 =Kruskal-Wallis test; *: P<0.05.

Discussion

Although triage is a concept commonly linked with emergency services, it is applicable in all stages of patient treatment and care within hospital outpatient clinics and wards. This study aimed to examine nurses' triage knowledge and determine factors that influence their knowledge level.

The results of the study showed that the participating nurses demonstrated adequate triage decision-making skills, as evidenced by their mean TDMI scores of 171.21±16.51. The investigation carried out by Aktaş and Alemdar^[18] in terms of the triage decision-making levels of healthcare professionals who work in emergency departments discovered that the mean TDMI score exceeded the average value (177.08±17.83).

The study revealed that married nurses scored higher in the intuition subscale of the TDMI compared to their single counterparts. Conversely, Kartal's^[19] investigation on problem-solving skills and triage decisions of emergency department nurses exhibited that single nurses scored higher in the intuition subscale of the TDMI. This variation might be attributed to the differences in sample characteristics.

Nurses working in the department of surgery scored higher on the cognitive ability subscale of the TDMI when compared to those working in the department of internal medicine. Surgical nurses, conversely, experience a higher number of patient rotations, so having higher cognitive ability is crucial.

Compared to those with 1–5 and 11+ years of professional experience, participants with 6–10 years of professional experience scored higher on the cognitive ability and intuition subscales of the TDMI. In parallel with our findings, Afaya et al.^[20] reported a positive correlation between the level of knowledge and the length of professional experience. Professional experience allows nurses to see and assess more patient cases. Additionally, critical thinking and intuition skills may develop in parallel with professional experience. Finally, nurses may have the opportunity to update their knowledge through continuing education.

Participants of our study with higher levels of knowledge on triage decision-making obtained higher scores from the TDMI and its subscales other than the intuition subscale. Tam et al.^[21] reported that triage training increased the accuracy and reliability of triage decisions.^[8] A systematic review investigating the role of triage nurses in reducing patient density in emergency departments between 1971 and 2011 found that after nurses received triage training, patient waiting time in the ED was significantly reduced (37 min on average).^[22] In this sense, it is natural to

Table 4. Correlation between age and the TDMI scores

	Age	Cognitive ability ^a	Experience ^b	Intuition ^a	Critical thinking ^b	Total ^b
Age	–	0.25* (0.008)	0.15 (0.110)	0.22* (0.025)	-0.03 (0.737)	0.13 (0.168)

TKVE: Triage decision-making inventory; a: Spearman's correlation analysis; b: Pearson's correlation analysis.

obtain higher TDMI scores for nurses with higher levels of knowledge regarding triage decision-making.

The TDMI scores of participants who perceived themselves as competent in triage decision-making were significantly higher than those who did not perceive themselves as competent. Bal and Gürkan^[8] found that nurses, who received adequate triage training and had more professional experience, made accurate and quick decisions on triage. Çetinkaya^[23] reported that 70.3% of nurses had adequate knowledge about triage decision-making. Therefore, nurses with adequate knowledge can be assumed to be more likely to make correct triage decisions.

Scores on the experience subscale of the TDMI were significantly higher for participants who believed that triage could be carried out in settings other than emergency departments and that triage decision-making was an important part of their departments. Analysis of the literature shows that the accuracy of triage decisions parallels clinical experience with triage and experience in emergency departments.^[24,25]

Critical thinking and total TDMI scores were higher for participants who had experienced triage decision-making in their professional lives. Chung^[15] stated that it is advantageous for nurses to experience information regarding specific cases individually, thanks to their previous clinical experiences. In this sense, an increase in critical thinking skills in nurses with triage experience can be expected, which is consistent with the literature.

Participants who felt comfortable and had no difficulty making triage decisions scored higher on the cognitive ability subscale of the TDMI. Smith and Cone^[2] found that nurses with experience in different departments felt comfortable making triage decisions, even if they had never worked in emergency departments. Hence, work experience can be expected to be associated with comfortable triage decisions.

Scores on the cognitive ability subscale of the TDMI were higher for participants who reported that triage decisions were influenced by staff shortages. Reblora et al.^[11] revealed that overburdened nurses experienced difficulties due to the high number of patients and the inadequacy of personnel and materials, so they had to make more efforts

to maintain the effectiveness and continuity of care. These findings help us conclude that nurses experience more stress and seek remedies even when they use their cognitive abilities to prioritize patient care and make correct triage decisions in cases of staff/equipment shortage.

Correlation analysis showed a weak positive relationship between age and the cognitive ability and intuition subscales of the TDMI. With age, cognitive flexibility and learning ability may seem to decline, but knowledge and experience in the specialized field increases. The fact that nurses see a large number of cases allows nurses to find solutions more quickly and effectively in similar situations. This acquired experience can increase their intuitive abilities.

Conclusion

The study found that the TDMI scores of the participants were high and their triage decision-making was influenced by years of profession, experience in surgical units, prior knowledge of triage decision-making, feeling comfortable about the decisions, and experience with triage decision-making. Triage decision-making is not only performed by emergency nurses; triage decision-making in internal medicine and surgical clinics will also be useful in improving the quality of patient care and deciding on correct and appropriate nursing approaches.

Acknowledgements: We thank all the nurses who participated in the study for their contribution to the scientific process.

Ethics Committee Approval: The University of Health Sciences Non-Interventional Clinical Research Ethics Committee granted approval for this study (date: 22.10.2019, number: 2019/15.18/244.46418926).

Authorship Contributions: Concept: ÖK, DK; Design: ÖK, DK; Supervision: ÖK, DK; Fundings: ÖK, DK, HS; Materials: ÖK, DK, HS; Data Collection or Processing: ÖK, DK, HS; Analysis or Interpretation: HS; Literature Search: ÖK, DK, HS; Writing: ÖK, DK, HS; Critical Review: ÖK, DK, HS.

Conflict of Interest: None declared.

Use of AI for Writing Assistance: None declared.

Financial Disclosure: The authors declared that this study received no financial support.

Peer-review: Externally peer-reviewed.

References

1. Dong SL, Bullard M. Emergency department triage. Rowe B, Lang E, Brown M, editors. Evidence-Based Emergency Medicine. Oxford: Wiley-Blackwell;2009.p.58–65. [CrossRef]
2. Smith A, Cone KJ. Triage decision-making skills: a necessity for all nurses. *J Nurses Staff Dev* 2010;26(1):E14–9. [CrossRef]
3. Jiménez JG. Clasificación de pacientes em los servicios de urgencias y emergencias: hacia um modelo de triaje estructurado de urgencias y emergencias. *Emergencias* 2003;15:165–74.
4. Diogo CS. Impacto da relação cidadão – Sistema de Triagem de Manchester na requalificação das urgências do SNS [Dissertation]. Lisbon: Instituto Superior das Ciências do Trabalho e da Empresa; 2007.
5. Acosta AM, Duro CL, Lima MA. Activities of the nurse involved in triage/risk classification assessment in emergency services: an integrative review. *Rev Gaucha Enferm* 2012;33(4):181–90. Portuguese. [CrossRef]
6. T.C. Sağlık Bakanlığı. Hemşirelik Yönetmeliği-Hemşirelik Girişimleri EK-3 (2016). Available at: <https://www.saglik.gov.tr/TR,10533/hemsirelik-yonetmeliği.html> Accessed Sept 15, 2023.
7. T.C. Resmi Gazete. Yataklı Sağlık Tesislerinde Acil Servis Hizmetlerinin Uygulama Usul ve Esasları Hakkında Tebliğ. Available at: <https://www.resmigazete.gov.tr/eskiler/2009/10/20091016-16.html> Accessed Sept 10, 2023.
8. Bal S, Gürkan A. Bir Üniversite Hastanesinde Çalışan Hemşirelerin Triyaj Bilgilerinin ve Etkileyen Faktörlerin Değerlendirilmesi. *Gazi Sağlık Bilimleri Dergisi* 2018;3(1):1–12.
9. Akpınar A, Ersoy N. Yaşamı destekleyen tedaviler: Ne zaman esirgenmeli? Ne zaman sonlandırılmalı? *Türk Onkoloji Dergisi* 2012;27(1):37–45.
10. Hardy A, Calleja P. Triage education in rural remote settings: A scoping review. *Int Emerg Nurs* 2019;43:119–25. [CrossRef]
11. Reblora JM, Lopez V, Goh YS. Experiences of nurses working in a triage area: An integrative review. *Aust Crit Care* 2020;33(6):567–75. [CrossRef]
12. Considine J, Botti M, Thomas S. Do knowledge and experience have specific roles in triage decision-making? *Academic Emergency Medicine* 2007;14(8):722–6. [CrossRef]
13. Varndell W, Hodge A, Fry M. Triage in Australian emergency departments: Results of a New South Wales survey. *Australas Emerg Care* 2019;22(2):81–6. [CrossRef]
14. AFAD, E-Kütüphane, Açıklamalı Afet Yönetimi Terimleri Sözlüğü. Available at: <https://www.afad.gov.tr/aciklamali-afet-yonetimi-terimleri-sozlugu> Accessed August 16, 2023.
15. Chung JY. An exploration of accident and emergency nurse experiences of triage decision making in Hong Kong. *Accid Emerg Nurs* 2005;13(4):206–13. [CrossRef]
16. Cone KJ. The development and testing of an instrument to measure decision making in emergency department triage nurses. ProQuest Dissertations & Theses Global. (230759761). Available at: <https://www.proquest.com/dissertations-theses/development-testing-instrument-measure-decision/docview/230759761/se-2> Accessed Apr 18, 2024.
17. Küçük Alemdar D, Kardaş Özdemir F, Gündücü Tüfekci F. Triyaj Karar Verme Envanteri'nin Türkçe'ye Uyarlanması: Geçerlik ve Güvenirlik Çalışması. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi* 2004;4(4):547–62.
18. Yaman Aktaş Y, Küçük Alemdar D. Triage Decision-Making Levels of Healthcare Professionals Working in Emergency Departments. *Eurasian J Emerg Med* 2017;16:92–6. [CrossRef]
19. Kartal Y. The Effect of Problem Solving Skills of Nurses Working in the Emergency Department on Triage Decision [Master's Thesis]. Ondokuz Mayıs University;2020.
20. Afaya A, Azongo TB, Yakong VN. Perceptions and knowledge on triage of nurses working in emergency departments of hospitals in the Tamale Metropolis, Ghana. *IOSR-JNHS* 2017;6(3):59–65. [CrossRef]
21. Tam HL, Chung SF, Lou C. A review of triage accuracy and future direction. *BMC Emerg Med* 2018;18(1):1–7. [CrossRef]
22. Moon SH, Cho IY. The Effect of Competency-Based Triage Education Application on Emergency Nurses' Triage Competency and Performance. *Healthcare (Basel)* 2022;10(4):596. [CrossRef]
23. Çetinkaya, T. Acil Serviste Çalışan Hemşirelerin Triyaj Karar Verme Becerilerinin ve Eğitim Gereksinimlerinin Belirlenmesi [Master's thesis]. İstanbul Üniversitesi Cerrahpaşa Lisansüstü Eğitim Enstitüsü, Hemşirelikte Eğitim Anabilim Dalı; 2022. İstanbul.
24. Chen SS, Chen JC, Ng CJ, Chen PL, Lee PH, Chang WY. Factors that influence the accuracy of triage nurses' judgement in emergency departments. *Emerg Med J* 2010;27(6):451–5.
25. Jordi K, Grossmann F, Gaddis GM, Cignacco E, Denhaerynck K, Schwendimann R, Nickel CH. Nurses' accuracy and self-perceived ability using the Emergency Severity Index triage tool: a cross-sectional study in four Swiss hospitals. *Scand J Trauma Resusc Emerg Med* 2015;23:62. [CrossRef]