ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Assessment of Nurses Knowledge and Practice Regarding Triage System Working Competency

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Abstract

Background*:* The term "triage" means sorting out. Medically, it's a process used to prioritize who needs emergency medical attention first, whether injured or sick people or disaster survivors. Patients are triaged or prioritized according to their need for emergency care. Resource availability is also taken into account during this process. **Aim:** The study aimed to assess the knowledge and practice of nurses regarding Triage System working competency. **Design*:*** A descriptive correlational research design was used in this study. **Setting**: The study was conducted at emergency departments at Ain-Shams Specialized Hospital. **Subject**: convenience sample (50) of emergency nurses. **Data collection**: three tools were used in this study as 1st tool: Self-administered Questionnaire that consisted of two parts, part 1: Nurses' demographic data, part 2: Self administrated sheet for nurses' knowledge about triage system. 2nd tool: Nurse's Observational checklist.3rd tool: Nurse's communication and interpersonal relationships Observation Checklist **Results:** The majority of them had poor level of knowledge regarding triage system, gained unsatisfactory level of performance regarding triage system, and gained unsatisfactory level of communication regarding triage system. **Conclusion*:*** there was a significant statistical positive correlation between total level of knowledge and total level of practice among the studied nurses**.** Also, there was a significant statistical positive correlation between total level of knowledge and total level of communication practice among the studied nurses. **Recommendations**: This study recommended conduct in service training to increase nursing personnel awareness about triage system.

Keywords: Triage system, practice, Nurses, Knowledge.

I. Introduction

Emergency medicine in Egypt began in 1966. Egyptian law was issued to establish ambulance emergency service for patient transportation and initiation of urgent first aid. By 1999, a presidential declaration of instigation of Air Ambulance service has ensued. This decree was followed by the establishment of the Egyptian Ambulance Organization in 2009. The roles and responsibilities of emergency staff are clarified. It embroiled the situation and incident location through observation and

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
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witness statements; assess the patient and the situation; diagnose the complaint or injury; offer first aid, and transfer the patient to necessary health service safely and quickly **(Japan International Cooperation Agency, (JICA) 2020).**

The emergency department (ED) is a highly stressful and tense environment owing to the pressures faced by ED nurses from the urgency and acuity of the presenting patients and their families. Without organization and efficient processes, the ED can be easily overwhelmed by vulnerable and sick patients, especially during pandemics, disasters, and accidents. Triage plays an important role in ensuring that patients are prioritized according to the urgency of the need for treatment, that flow across the ED is unhampered with patients being discharged to appropriate areas within short waiting times and that resources are allocated judiciously based on patients' needs. Since ED nurses often take on the triage role, their knowledge and practice of triage concepts need to be in an acceptable level in order to be able to effectively perform their roles. **(AlShatarat, et.al, 2022).**

Nursing is an active and interpersonal problem-solving process. The nursing process is a systematic, rational method of planning, problem-solving approach, and decision-making **(Almeida, et.al, 2019)** It helps to assess patients' health status and needs to determine actual or potential health problems and give specific nursing interventions to meet those needs. The patient may be an individual, a family, a community, or a group **(American Nurses Association, 2020).**

The nursing process is a standardized applicable characteristic used as a framework for nursing care plans in all healthcare settings with patients of all age groups **(Goncalves, et.al., 2020).** Standards of nursing practice include six phases of the nursing process: assessment, diagnosis, outcome identification, planning, implementation, and evaluation **(American Nurses Association, 2020)**. The assessment-based nursing intervention improves the life quality of patients **(Zhang, et.al., 2018)** by the organization, validation, and documentation of data. It depends on the accurate and complete collection of data through all phases of the nursing process to evaluate outcomes achievement **(Lorini C., 2018).**

II. Significance of the Study

The study on the effect of educational training programs for nurses regarding triage system working competency holds significant importance for various aspects of healthcare, particularly in emergency and critical care settings. this study is crucial for Improvement in Nurses' Competency by enhancing nurses' ability to accurately assess and categorize patients based on the severity of their conditions, Increasing decision-making skills, reducing errors in triage assessments, and Improving confidence and efficiency in handling emergency cases **(Linda, et.al., 2023).**

On the other hand, the educational system for preparing emergency nurses is still insufficient compared with the growing demand for emergency services. Previous studies revealed that triage was not implemented at the emergency room due to insufficient knowledge, insufficient nurses, and a lack of motivation in inpatient care. In upper Egypt, particularly in the study settings, there was no statistical report about the incidence of the implementation of triage services. Based on our observation, there are 63 nurses distributed to work on the three shifts. About 20-25 emergency nurses offer services to 50-80 patients per shift. The ratio of emergency nurses in a triage room to patients each shift is 1:35–40, approximately. This study aimed to support our local community in university hospital with the appropriate training in emergencies and evaluate the effect of triage training on nurses' performance in those departments after implementation of the training. Program. **(Mostafa, et.al., 2023).**

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

III. Aim of the study

Aim of the study:

The study aimed to assess nurse's knowledge and practice regarding Triage System working competency.

Through:

- Assess nurses' level of knowledge regarding Triage System working competency.
- Assess nurses' practice level regarding Triage System working competency.

Research Question

what are the level of nurse's knowledge & practice regarding triage system working competency?

IV. Subjects and Method

Research design

A descriptive correlational design was utilized to conduct this study**.**

Study Setting

The study was conducted at Ain-Shams Specialized Hospital affiliated to Ain-Shams University and localized in the region of A'basia, Cairo, Egypt. Furthermore, the hospital provides different services as (Nursing office; In- patient; Out-patient, Intensive care unit for adults and pediatric and neonate, Dialysis, and Emergency). Also, the study conducted in the emergency department, which has 3 rooms in emergency department, room 1 (ER room) had 7 beds, room 2 observation room had 4 beds, room 3 triage room had 2 beds.

Study Subjects

The study subject included all the available nursing personnel (n= 50) in Ain-Shams Specialized Hospital who was presented at the time of data collection

Type of sampling

Convenience sample was used to select the study subject.

Tools of data collection

Two tools were used to collect necessary data: Three tools were used to collect necessary data:

1st tool: **Knowledge assessment questionnaire:**

Part 1: Personal Characteristics Sheet:

This part includes personal characteristics as (gender, age, qualification in nursing education, years of work experience, attending training program about triage, working hours per week).

Part 2: Knowledge assessment questionnaire components:

This Questionnaire adopted from Veenema (2013). This tool was used to assess nurses knowledge about triage process in the ED.

This tool included 35 multiple- choice questions divided into triage safety (3 questions), triage process (6 questions), across the room assessment (2 questions), primary assessment (14 questions), secondary and focused assessment (10 questions). Concerning Triage safety questions, it consists of assessment of the environmental hazard at the ED, and maintaining patients and families' safety. Triage process questions: concerning with triage process for emergency patients and triage category according

ISSN 2786-0183
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Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

to the urgency of the patient's condition (immediately life threatening, imminently life threatening, potentially life threatening, potentially serious and less urgent categories). Across the room assessment questions: concerning with identifying obvious life threatening conditions and it include a critical look of the patient's general appearance and assessment of the patient's airway, circulation and work of breathing. Primary assessment questions: it includes assessment of the patient's airway, breathing, circulation, neurological disability and expose all areas of the body to identifying life threatening injuries. Finally, Secondary and focused assessment questions include a detailed assessment (head to toe examination).

Responses were measured on 2-points (0 = incorrect) and (1= correct).

Scoring system of knowledge assessment questionnaire:

each question had a group of answer points, each correct answer had (one grade), while, no or wrong answer had (zero). Total score for all questions was 35 scores. The total score was classified into three categories as follow: poor knowledge 20.9 (<60%), good knowledge 21-26.21 (60%-74.9%), and very good knowledge 26.25-35 (75%-100%).

2nd tool: Nurse's Practice observational checklist:

This tool was developed by the researcher based on the reviewing of the literature Vankipuram *(2012)*, It was used to assess the competency level of nurse's performance in triage process.

Total competencies for the checklist was (70). It was distributed as the following: triage safety (10), triage process (7), across the room assessment (1), primary assessment (21), secondary and focused assessment (31). The checklist covering the following: Concerning Triage safety competencies, it consists of assessment of nurse's competencies in performing triage safety. It includes (infection control measure, emergency equipment, environmental hazard, safety measure of the staff members). Triage process competencies concerning with assessment of nurse's competencies in performing triage process and triage category according to the urgency of the patient's condition (immediately life threatening, imminently life threatening, potentially life threatening, potentially serious and less urgent categories). Across the room assessment competencies consisting of assessment of nurse's competencies in identifying obvious life threatening conditions through observation of the patient's (general appearance, assessment of breathing and circulation).

Also, primary assessment competencies concerning with assessment of nurse's competencies in performing primary assessment. It includes assessment of the patient's airway patency and maintain cervical spine stability, assess breathing, circulation, assess the patient's disability by using AVPU scale (Alert, Verbal stimuli, Painful stimuli, Unresponsive). and expose all areas of the body to identity life threatening injuries. Secondary and focused assessment competencies concerning with assessment of nurse's competencies in performing a detailed assessment (head to toe examination).

Scoring system of Nurse's Practice observational checklist:

each item of nurse's performance scored on the bases of "Not done": (zero) or "Done" Competent (done complete and correct): (2 point)}. The total competencies for the observation checklist was (70), it was scored out of 140 (100%). It was classified into two categories: incompetent <126 (<90%), and scores ≥126 (≥ 90%) competent**.**

ISSN 2786-0183
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3rd tool: "Nurse's Communication and interpersonal relationships Observational checklist"

This tool adopted from **Petruniak (2013).** This tool was used to assess studied nurse interpersonal and communication skills when performing triage process.

Scoring system: each item of nurse's performance scored on the bases of "Not done": (zero) and Done" {Incompetent (incomplete and incorrect): (1 point) and Competent (complete and correct): (2 point)}. The total competencies for the observation checklist was (20), it was scored out of 40 was classified into the two categories: It was classified into the following categories: incompetent <36 (<90%), and scores ≥36 (≥90%) a competent.

Validity of the tools:

Validity of the tools was done namely face validity and content validity. Tool was translated into Arabic and tested by a group of five experts specialized in nursing administration from Helwan University 5 professors through an opinionative sheet to measure validity of the tools and the necessary modifications were done accordingly.

Reliability of the tools

Reliability for the utilized tools was tested to determine the extent to which the items of the tools are inter-correlated to each other. The Cronbach's alpha model is one of the most popular reliability statistics in use today and considered as a model of internal consistency that used to estimate of reliability of test scores. Reliability of knowledge questionnaire regarding triage system by Cronbach's alpha was (0.820). While Reliability of Retrospective audit checklist of patient's records by Cronbach's alpha test was (0.981). and Reliability of Nurse's Communication and interpersonal relationships Observational checklist by Cronbach's alpha test was (0.850).

V. Ethical considerations

The research approval was obtained from Faculty of Nursing ethical committee of Helwan University before starting the study, an approval was obtained from the director of Ain shams specialized Hospital. Participants in the study (nursing personnel) were informed about the purpose and process of the study and that the study is harmless and their participation is voluntary and they have the right to withdrawal from the study at any time without reason. They also were assured that, anonymity and confidentiality will be guaranteed, as well as gathered data will be used for the research purpose only. Ethics, values, culture and believes was respected.

VI. Pilot study

The pilot study was carried out on (10%) of the total sample size (5 nursing personnel) to test applicability and clarity of tools and time needed to complete it. Total time needed to complete both tools was ranged between (50:85) minutes. No modifications were done so participants in the pilot study were included in the study sample.

VII. Field Work

The purpose of the study was simply explained to the participants who agree to participate in the study prior to any data collection. Field work started actually at the beginning of November 2023 to the end of April 2024 lasted for nine months. After securing the official approval from the hospital for conducting the study, the researcher met the nursing director of the hospital to determine the suitable time for data collection.

ISSN 2786-0183
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The researcher attended the hospital two days per week, collected data by researcher through interviewing nursing personnel and was presented at all time during fulfilling the questionnaire forms to answer any questions. Also the researcher checked the completeness of each filled sheet to ensure the absence of any missing data. Assessment of nurses started from beginning of November 2023 to end of December 2023 (2 months).

VIII. Statistical design

Data entry and analysis were performed using the SPSS statistical package version 25. Categorical variables were expressed as numbers and percentages, while continuous variables were expressed as (mean ±SD). The Chi-Square (χ^2) test was used to assess the association between the row and column variables of qualitative data**.** Pearson correlation was done to measure correlation between quantitative variables for all tests, p-value ≤ 0.05 was considered statistically significant P-value ≤ 0.01 was considered highly statistically significant. While p-value > 0.05 was considered not significant.

IX. Results

Table (1): Distribution of the studied nurses according to their demographic data (n=50).

Demographic data	N	%
Age (in years)		
20-30 years.	30	60.0
>30- 40 years	12	24.0
40-50 years	8	16.0
Mean ±SD	**30.8±5.06**	
Gender		
Male	9	18.0
Female	41	82.0
Marital status		
Single	28	56.0
Married	18	36.0
Divorce	2	4.0
Widow	2	4.0
Educational level		
Diploma of nursing	7	14.0
Technical nursing institute	31	62.0
Bachelor in Nursing	12	24.0
Years of working experience in emergency:		
1 - <5 years	28	56.0

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

5- 10 years	15	30.0
>10 years	7	14.0
Working hours per week		
35 - < 40 hours	33	66.0
40 - < 45	17	34.0
45 hours and <	0	0.0
Previous triage training in emergency:		
Previous education	16	32.0
Practiced triage in an ED setting	34	68.0

Table (1) shows that, 60.0% of the studied nurses were in age group 20-30 years with mean age 30.8±5.06, 82.0% of them were females and 56.0% of the studied nurses were single. Also, 62.0% of them had technical nursing institute and 56.0% of them had 1-5 years of experience.

Table (2): Distribution of studied patients according to their total level of knowledge about triage in the emergency department pre, immediately post and after two month of guidelines implementation (n=50).

Total level of knowledge	Studied nurses		MH Test (1) & P-value	MH Test (2) & P-value
	N	%		
Poor	34	68.0	23.745& **0.000***	19.239& **0.000***
Average	11	22.0		
Good	5	10.0		

Table (2) explains that, more than two thirds (68.0%) of the studied nurses had poor level of knowledge.

Table (3): Distribution of studied nurses according to their total level of practice pre, immediately post and after two month of educational training program (n=50).

Total level of practice	Pre program		MH Test (1) & P-value
	N	%	
Competent	18	36.0	15.697& **0.001***
Incompetent	32	64.0	

Table (3) demonstrates that more than three-fifths (64.0%) of the studied nurses had an unsatisfactory level of practice regarding triage system.

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Table (4): Distribution of studied nurses according to their total level of interpersonal and communication skills pre and post educational training program (n=50).

Total level of interpersonal and communication skills	Studied nurses		MH Test (1) & P-value
	N	%	
Competent	21	42.0	23.047& **0.000***
Incompetent	29	58.0	

Table (4) shows that, more than three fifths (58.0%) of the studied nurses had unsatisfactory level of communication skills practice regarding triage system.

Table (5): Relationship between demographic data of the studied nurses and their total level of knowledge regarding triage system(n=50).

Demographic data		Total level of knowledge pre						X2 & p-value
		Poor		Average		Good		
		N	%	N	%	N	%	
Age (in years)	20-30 years.	22	44.0	6	12.0	2	4.0	4.576 & 0.466
	>30- 40 years	7	14.0	4	8.0	1	2.0	
	40-50 years	5	10.0	1	2.0	2	4.0	
Gender	Male	5	10.0	2	4.0	2	4.0	1.890 & 0.389
	Female	29	58.0	9	18.0	3	6.0	
Educational level	Diploma of nursing	3	6.0	2	4.0	2	4.0	3.952 & **0.013***
	Technical nursing institute	23	46.0	6	12.0	2	4.0	
	Bachelor in Nursing	8	16.0	3	6.0	1	2.0	
Years of experience in ER	1 - <4 years	22	44.0	4	8.0	2	4.0	5.156 & **0.027***
	4- < 5 years	7	14.0	6	12.0	2	4.0	
	5 years and <	5	10.0	1	2.0	1	2.0	
Previous triage training in ER	Previous education	10	20.0	3	6.0	3	6.0	2.019 & 0.364
	Practiced triage in an ED Setting	24	48.0	8	16.0	2	4.0	

X^2 test= Chi-Square test **P-value > 0.05= Non-significant (NS)** ***P-value ≤ 0.05= Significant**

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Table (5) shows that, there was a significant statistical relation between educational level of the studied nurses and their total level of knowledge at P-value= 0.013 respectively. Also, there was a significant statistical relation between years of experience of the studied nurses and their total level of knowledge at P-value= 0.027 respectively.

Table (6): Relationship between demographic data of the studied nurses and their total level of practice regarding triage system (n=50).

Demographic data		Total level of practice pre				X2 & p-value
		Competent		Incompetent		
		N	%	N	%	
Age (in years)	20-30 years.	11	22.0	19	38.0	0.051 & 0.975
	>30- 40 years	4	8.0	8	16.0	
	40-50 years	3	6.0	5	10.0	
Gender	Male	2	4.0	7	14.0	0.904 & 0.342
	Female	16	32.0	25	50.0	
Educational level	Diploma of nursing	3	6.0	4	8.0	1.817 & **0.040***
	Technical nursing institute	9	18.0	22	44.0	
	Bachelor in Nursing	6	12.0	6	12.0	
Marital status	Single	9	18.0	19	38.0	0.586 & 0.746
	Married	7	14.0	11	22.0	
	Divorced/ widow	2	4.0	2	4.0	
Years of experience in ER	1 - <4 years	11	22.0	17	34.0	0.841 & 0.657
	4- < 5 years	4	8.0	11	22.0	
	5 years and <	3	6.0	4	8.0	
Working hours	35 - < 40 hours	10	20.0	23	46.0	1.367 & **0.042***
	40 - < 45	8	16.0	9	18.0	
	45 hours and <	0	0.0	0	0.0	
Previous triage training in ER	Previous education	6	12.0	10	20.0	0.023 & 0.880
	Practiced triage in an ER	12	24.0	22	44.0	

X^2 test= Chi-Square test P-value > 0.05= Non-significant (NS)*P-value ≤ 0.05= Significant (S)

Table (6) shows that, there was a significant statistical relation between educational level of the studied nurses and their total level of practice at P-value=0.040 respectively. Also, there was a significant statistical relation between working hours of the studied nurses and their total level of practice at P- value= 0.042 respectively

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Table (7): Relationship between demographic data of the studied nurses and their total level of communication practice (n=50).

Demographic data		Total level of communication practice pre				X2 & p-value
		Competent		Incompetent		
		N	%	N	%	
Age (in years)	20-30 years.	14	28.0	16	32.0	0.705 & **0. 037***
	>30- 40 years	4	8.0	8	16.0	
	40-50 years	3	6.0	5	10.0	
Gender	Male	3	6.0	6	12.0	0.338 & 0.561
	Female	18	36.0	23	46.0	
Educational level	Diploma of nursing	2	4.0	5	10.0	0.834 & **0.059***
	Technical nursing institute	13	26.0	18	36.0	
	Bachelor in Nursing	6	12.0	6	12.0	
Marital status	Single	13	26.0	15	30.0	0.886 & 0.642
	Married	6	12.0	12	24.0	
	Divorced/ widow	2	4.0	2	4.0	
Years of experience in ER	1 - <4 years	13	26.0	15	30.0	2.332 & 0.312
	4- < 5 years	4	8.0	11	22.0	
	5 years and <	4	8.0	3	6.0	
Working hours per week	35 - < 40 hours	11	22.0	22	44.0	2.993 & 0.084
	40 - < 45	10	20.0	7	14.0	
	45 hours and <	0	0.0	0	0.0	
Previous triage training in ER	Previous education	6	12.0	10	20.0	0.196 & **0.058***
	Practiced triage in an ER	15	30.0	19	38.0	

***P-value ≤ 0.05= Significant (SP-value > 0.05= Non-significant (NS) X^2 test= Chi-Square test**

Table (7) shows that, there was a significant statistical relation between age of the studied nurses and their total level of communication practice pre, and two month post educational training program implementation at P-value= 0.037 and 0.041 respectively. Also, there was a significant statistical relation between educational level of the studied nurses and their total level

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

of communication practice pre, and two month post educational training program implementation at P-value= 0.059 and 0.013 respectively. Additionally, there was a significant statistical relation between previous triage training of the studied nurses and their total level of communication practice pre, and two month post educational training program implementation at P-value= 0.058 and 0.015 respectively.

Table (8): Correlation between total level of knowledge, practice and communication skills (n=50).

Variables		Total level of knowledge	Total level of practice
		Pre	Pre
Total level of knowledge	**R**		
	P-value		
Total level of practice	**R**	0.278	
	P-value	**0.051***	
Total level of communication practice	**R**	0.050	0.122
	P-value	**0.031***	0.400

r= Spearman correlation coefficient **P-value > 0.05=** Non-significant (NS) ***P-value ≤ 0.05=** Significant (S)

Table (8) shows that, there was a significant statistical positive correlation between total level of knowledge and total level of practice among the studied nurses at P-value= 0.051 respectively. Also, there was a significant statistical positive correlation between total level of knowledge and total level of communication practice among the studied nurses at P-value= 0.031 respectively. While, there was no significant statistical correlation between total level of practice and total level of communication practice among the studied nurses at P-value= 0.400 respectively.

X. Discussion

Triage is an important component of emergency department care. It is designed to help identify and prioritize undifferentiated patients based on severity and risk into categories from emergent to non-urgent. The triage nurse in the emergency department is the first person who encounters emergency patients, thus it is an essential factor that the emergency nurse has the knowledge and experience. Moreover, triage begins upon entry to the emergency department and needs to be reevaluated as the patient waits or moves through the system, to ensure the appropriate speed and level of care is being provided reliably and safely **(Bahlibi, et.al., 2022)**.

As regarding demographic characteristics of the studied subjects the present study showed that, two third of the studied nurses were in age group 20-30 years with mean age (30.8±5.06), more than three quarters of them were females this finding corresponds with a previous study

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

(Tunk, et.al., 2021) which about Gender and career: female and male nursing students' perceptions of male nursing role in turkey, which reported that, more than half of the study female students and more than half of the students' ages ranged between 20–22 years. and more than half of the studied nurses were single. Also, more than two-thirds of them had a technical nursing institute, and more than half of them had (1-5) years of experience. This finding agreed with previous studies by **Tuomikoski et.al (2020),** whose paper is about Nurses' experiences of their competence in mentoring nursing students during clinical practice: A systematic review of qualitative studies at the university hospital or central hospitals in Northern Finland. Who mentioned that: Nurses with less than ten years of experience had the most positive perceptions.

The current study demonstrated that more than two thirds of the studied nurses had poor level of knowledge. this finding agree with a previous study **Al-qbelat, et.al, (2022)** their research was about Effect of Educational Program on Knowledge, Skills, and Personal Preparedness for Disasters Among Emergency Nurses, which supported the study hypothesis, in which nurses had higher knowledge, skills, and personal preparedness for disasters after attending an educational program as an intervention.

Effective communication is essential in enhancing the effectiveness and accuracy of the triage process. It was observed that more than three fifths of the studied nurses had unsatisfactory level of communication skills practice.

This result is supported by **El gazzar , (2021)** whose thesis was about Knowledge of triage and its correlated factors among Emergency Department Nurses in Egypt,, who found that the lower level of triage knowledge and practice of study group regarding communication skills in the preprogram implementation. While increase in the total competency score of the study group following program implementation. This may be due to lack of communication skills between health care provider. The researcher found that the majority of the study nurses in ED were incompetent in performing communication process.

The current study demonstrated that, there was a significant statistical relation between educational level of the studied nurses and their total level of knowledge P-value= 0.013 respectively. In my opinion education level of the nurse affect directly their knowledge, for this reason they need continuous educational programs to rich their knowledge and improve triage practice.

According to correlation between total level of knowledge and total level of practice among the studied nurses, there was a significant statistical positive correlation between total level of knowledge and total level of practice among the studied nurses at P-value= 0.051 respectively. this result is in agreement with **Kerie, Tilahun, and Mandesh (2020)** whose paper was about "Triage skill and associated factors among emergency nurses in Addis Ababa" who found that there were a strong positive relationship was found between nurses' level of triage knowledge and skill.

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Also, there was a significant statistical positive correlation between total level of knowledge and total level of communication practice among the studied nurses at P-value= 0.031 respectively. Which may be related to the nurses with competent knowledge can be easily apply good communication practice during triage.

The current study provided that, there was no significant statistical correlation between total level of practice and total level of communication practice among the studied nurses at P-value= 0.400 respectively.

This finding disagree with **El gazzar , (2021)** who found that Correlation between practice score and communication score in study and control groups. This table shows strong positive correlation between practice score and communication score in study group. Increase in NGNs practice is associated with increase in their communication. No correlation between practice score and communication score in control group.

XI. Conclusion

Based on the results of the present study, the following can be Concluded:

Knowledge assessment revealed that more than two thirds of the studied nurses had poor level of knowledge regarding triage system. Also more than three fifths of the studied nurses had an unsatisfactory level of practice regarding triage system. According to communication skills, more than three fifths of the studied nurses had unsatisfactory level of communication skills practice regarding triage system. there was a significant statistical positive correlation between total level of knowledge and total level of practice among the studied nurses**.** Also, there was a significant statistical positive correlation between total level of knowledge and total level of communication practice among the studied nurses.

XII. Recommendations

Based on the findings of this study, the following recommendations were suggested:

- Designing an educational handout about triage process must be provided to nurses to be used as a reference guide in their practice.
- Establishment of an accurate and available documentation system
- The ED should have a standard for facilities, equipment, and care.
- Classifying the emergency rooms according to triage categories and urgency of the patient’s condition.
- Creating a triage algorithm to be applied in clinical practice**.**

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

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