Journal of Biology, Agriculture and Healthcare
ISSN 2224-3208 (Paper) ISSN 2225-093X (Online)
Vol.4, No.16, 2014

The Expected Role of Triage Nurse in Emergency Reception of a University Hospital, in Egypt

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Abstract
Triage is a system used by medical or emergency personnel to give care when the number of casualties needing care exceeds the resources available to perform care. It is designed to help those who can most benefit from the available care. The current study aimed to identify the expected role of the triage nurse at EL-Manial University Emergency Reception. A descriptive exploratory design used to achieve the aim of the present study. The study was carried out at EL-Manial University Emergency Reception. Convenient samples of (96) doctors and (34) staff nurses working at EL-Manial University Emergency Reception were included in the study. For the purpose of this study, the investigator developed an expected role of triage nurse questionnaire consisted of two parts as follow: The first part concerned with socio-demographic data and the second part concerned with expected role of triage nurse. Result of this study, the current study showed that there was significant difference between expected role of triage nurse and years of experience. The results concluded that there was a consensus about most activities of the expected role of triage nurse between nurses and medical groups. The study recommended that consider, revise and approve the proposed job description of triage nurse at Emergency department in El-Manial University Hospital: a) dissemination of the triage nurse job description and b) developed the proposed flyer containing information about triage nurse role, triage, and system and disseminated among emergency nurses.
Keywords: Triage, Role expectation and Emergency Reception

1.Introduction

Each individual within the organization has a role; the term role as sets of expectations about behavior ascribed to a specific position in society, which serves to make behavior predictable. Role expectation is the habits which the role set anticipate of the focal person (Hein and Nicholson, 2002, Linberg, 2003 and Kathleen, 2011).
Emergency Departments are routinely unpredictable settings. The finite resources of that department emphasizes the need for timely and accurate triage decisions that ultimately underpin optimal health service delivery, therefore, The role of the triage nurse is central to the effective and efficient operations of the ED (Australasian Collage for Emergency Medicine, 2007).
Triage is putting the patient in the right place at the right time to receive the right level of care … the allocation of appropriate resources to meet the patient's medical needs' (Almes, Davis, Elder and Littlepage, 2004). Triage aims to ensure that patients are treated in the order of their clinical urgency and that their treatment is appropriately timely. It also allows for allocation of the patient to the most appropriate assessment and treatment area, and contributes information that helps to describe the departmental case mix (Australian College of Emergency Medicine, 2004).
Triage process has been described as one requiring time critical, complex clinical decisions to be made under conditions of stress and uncertainty, and with little margin for error .With pressure to assess a growing queue of incoming patients, the nurses will use their expertise to process data obtained from the presenting problem, physiological observations, general appearance and all important gut feelings to arrive at this score (Gottschalk, 2010).
There are two stages to the nurse triage process: first, the triage assessment which leads to allocation of a triage category and the subsequent processing of the patient; and secondly, the initiation of nursing interventions to facilitate emergency care with a possible reduction in the patient's discomfort. These triage decisions are linked with three types of outcome: "correct" or "expected" triage, "over-triage" and "under-triage". Correct triage by a nurse is associated with a positive health outcome because the patient is evaluated by a doctor within a suitable timeframe. Over-triage and under-triage indicate that triage nurse allocated a triage category of a higher or lower acuity than required respectively (Gerdtz and Bucknall, 2006 and Horacio , 2010).

2. Aim of the study

This study was aiming to: Identify the expected role of the triage nurse at EL-Manial University Emergency Reception.

3. Methodology

3.1Research Design:
The present study is a descriptive exploratory design
3.2 Setting
The study was carried out at Cairo University Hospital in General and Orthopedic Emergency Reception.
3.3 Subject
Convenient sample of physicians (n=96) and all nurses (n=34) at EL-Manial University Emergency Reception were recruited data procedure.
3.4Tool used for data collection
The study questionnaire was designed by the investigator in a framework consisting of two parts as follows:
The first part: socio-demographic data sheet: It was used to gather data related to educational qualification, department, specialty and years of experience.
The second part: consisted of items related to the expected role of triage nurse: It was developed to collect data about the expected role of triage nurse. This part, consisting of five dimensions: emergency patient assessment 9 items, clinical decision making 3 items, triage intervention 20 items, leadership and management activities 14 items, and triage nurses prepared qualifications which includes 2 items. Respondents' answers for each item were rated on a three- points scale ranging from "agree (3), neither agree nor disagree (2) to disagree (1).
3.5 Pilot study: A pilot study was carried out on 10% of the sample (9 of physicians and 6 of nurses) at El-Manial University Emergency Reception. To test the clarity, feasibility, and reliability of the items, based on the pilot study analysis, minor modifications were made in the tool.
3.6 Content validity: It was established by revision of a five experts to the instrument's clarity, relevance, comprehensive, understanding, applicability and easiness.
3.7 Reliability of the tool: The instrument was tested and demonstrate good internal reliability with cronbach's alpha = 92.2 %.
3.8 Ethical consideration: An official permission to conduct the proposed study was obtained from the Vice Dean of post graduate studies and research at the Nursing Faculty – Cairo University, approval of the ethical committee was obtained to carry out the study. Also, an official permission obtained from the General Medical Director and General Nursing Director of Kaser El-Aini hospital. Participation in the study was voluntary and the ethical issues considerations include explaining the purpose and nature of the study, stating the possibility to withdraw at any time, confidentiality of the information where it is not be accessed by any other part without taking permission of the participants and participation is with no risk.
3.9 Procedure: the actual field work was carried out at the first week of February to end of April 2013, five days weekly for a period of three- months. At the beginning, the investigator prepared a list of the recruited groups of doctors and nurses who formed the study group. Then the questionnaire sheets were handed to the participant's nurses and doctors individually at their area of working during their break time. The time spent to fill the questionnaire ranging from 10 to 20 minutes, the investigators waited until the participants complete filling the sheet and collected them.
3.10 Statistical Analysis: The data collected from the participants were coded and entered into the Statistical Package for the Social Sciences (SPSS).Version 20.0 for analysis. Data were presented using descriptive statistic in the form of a frequency distribution, percentages, mean and standard deviation. Pearson's correlation coefficient was also used to test relation between experience years'and expected role of triage nurse and T-test used to test difference between nurses group and medical group perception regarding to expected role of triage nurse.

4. Results

The current study clarified that the majority of nurses group had diploma degree and the majority of them worked as staff nurse in emergency reception. Regarding years of experience, it was noticed that the highest percent of nurses group had experience ranged from one to 12 years, As regard medical group, the highest percent of them worked in general surgery, had bachelor degree while all of medical group had level of experience ranged from one to12 years.
4.1Table1shows that 94.1% of nurses group was expected from the triage nurses to perform brief visual assessment. While only 14.7% of them not expected from the triage nurses to secure the safety of patients. Regarding medical group, (85.4%) of them expected from the triage nurses to keep patient privacy during triage process, while25.0% of them not expected from the triage nurses to accurately collect data on medical history. Moreover, table 1 indicates that there was a significant difference between nurses group and medical group perception related to performance of brief visual assessment (X2= 9.08, p= 0.01) and accurately collect data about received medications (X2=7.62, p=0.02).
4.2Table 2 indicates that the nurses group agreed to determine which patients are in need for critical care based on critical thinking (88.2%). As for medical group (85.3%) of them agreed to be initiative in dealing with mass

casualties during the triage process. In addition, this table displays that there was insignificant difference between nurses and medical group perception related to clinical decision making dimension.

4.3Table 3 Shows that nearly all nurses group ((97.1%) agreed to implement first aid measures. While 26.5% of nurses group not expected from the triage nurses to perform and interpret ECG. Regarding medical group, (86.5%) agreed to assess and evaluate the patient's vital signs. While 35.4% of them not expected from the triage nurses to perform and interpret ECG. Also, there were significant differences between nurses and medical group perception in relation to perform primary physical examination according to patient's condition (X2=6.19, p=0.04), implementation of first aid measures(X2=13.5, p=0.01) and finally related to reassess waiting patients as necessary (X2=6.08, p=0.04).

4.4Table 4 Indicates that all nurses group agreed to be aware of the various care line services, appropriate referrals to other different specialties resources within the emergency reception (100%), While 8.8% of them disagreed to check and complete of the emergency equipment and supplies inventory and remain calm and organized under work pressure. In addition, 91.7% of medical group agreed to be aware of the various care line services, appropriate referrals to other different specialties resources within the emergency reception, While 11.5% of them disagreed to check and complete of the emergency equipment and supplies inventory. In addition, there was significant difference between nurses and medical group perception related to awareness of all emergency hospital policies, procedures and protocols (X2=11.88, p=0.03).

4.5Table 5 indicates that (88.2%) of nurses group agreed to attain a specialized certificate in emergency nursing and critical care and engaged in ongoing educational opportunities. Regarding medical group,(88.5- 75.0 %) of them agreed to attain a specialized certificate in emergency nursing and critical care and engaged in ongoing educational opportunities. Also, there was insignificant difference between nurses and medical group perception regarding triage nurse prepared qualifications dimension.

4.6 Table 6 shows that the highest mean score of nurses group perception was related to Triage intervention (55.94±7.35). While the lowest mean score of nurses' perception was related to Triage nurse prepared qualification (5.67±0.80). Also, it shows that the highest mean score of medical group perception was related to Triage intervention (54.0±6.34). While the lowest mean score of medical group perception was related to triage nurse prepared qualification (5.55±0.79).In addition, indicates that there was significant difference between nurses and medical group perception related to emergency patient assessment (t=-2.18, p=0.03). Also there was significant difference between total nurse group perception and total medical group perception related to the expected role of triage nurse (t=-1.19, p= 0.05).

4.7 Table 7 indicates that the years of experience from (26-36) had got the highest mean scores regarding to expected role of nurses. Also, it shows that there was insignificant relationship between clinical decision making (F=1.37, P=0.25), triage nurse preparation qualifications (F=1.44, P=0.24) and years of experience.

Table (1) Difference between nurses group and medical group regarding to their perception of emergency patient assessment (N=130).

Emergency patient assessment items.	Nurses (34)						Doctors (n=96)						X^2	P
	Disagree		Neither agree or disagree		Agree		Disagree		Neither agree or disagree		Agree			
	N	%	N	%	N	%	N	%	N	%	N	%		
1-Perform brief visual assessment	2	5.9	0	0	32	94.1	3	3.1	21	21.9	72	75.0	9.08	0.01
2-Determine clinical urgency	1	2.9	6	17.6	27	79.4	6	6.2	22	22.9	68	70.8	1.08	0.58
3-Assess the chief complain of patients on arrival.	4	11.8	9	26.5	21	61.8	7	7.3	31	32.3	58	60.4	0.87	0.64
4-Accurately collects data about the received medications.	1	2.9	10	29.4	23	67.6	16	16.7	39	40.6	41	42.7	7.62	0.02
5-Accurately collects data on medical history.	4	11.8	5	14.7	25	73.5	24	25.0	32	33.3	40	41.7	10.2	0.06
6-Perform triage assessment within two to five minutes.	3	8.8	6	17.6	25	73.5	8	8.3	21	21.9	67	69.8	0.27	0.87
7-Secure the safety of patients.	5	14.7	7	20.6	22	64.7	18	18.8	24	25.0	54	56.2	0.74	0.68
8-Keep patient privacy during triage process.	0	0	4	11.8	30	88.2	3	3.1	11	11.5	82	85.4	1.08	0.58
9-Assess the psychological status of patients.	3	8.8	7	20.6	24	70.6	14	14.6	35	36.5	47	49.0	4.74	0.09

Table (2) Difference between nurses group and medical group regarding to their perception of clinical decision making (N=130).

Clinical decision making items.	Nurses (n=34)						Doctors (n=96)						X^2	P
	Disagree		Neither agree or disagree		Agree		Disagree		Neither agree or disagree		Agree			
	N	%	N	%	N	%	N	%	N	%	N	%		
1-Determine which patients are in need for critical care based on critical thinking.	3	8.8	1	2.9	30	88.2	4	4.2	27	28.1	65	67.7	9,85	0.07
2-Make proper clinical decisions based on situation analysis.	1	2.9	6	17.6	27	79.4	7	7.3	21	21.9	68	70.8	1.24	0.53
3-Be initiative in dealing with mass casualties during the triage process.	1	2.9	5	14.7	28	82.4	2	2.1	12	12.6	81	85.3	0.18	0.91

Table (3) Difference between nurses group and medical group regarding to their perception of triage intervention (N=130).

Triage intervention items.	Nurses (n=34)						Doctors (n=96)						X^2	P
	Disagree		Neither agree or disagree		Agree		Disagree		Neither agree or disagree		Agree			
	N	%	N	%	N	%	N	%	N	%	N	%		
1-Prioritize patient's care according to severity and urgency of needs.	2	5.9	7	20.6	25	73.5	10	10.4	16	16.7	70	72.9	0.77	0.67
2-Assess and evaluate the patient's vital signs.	5	14.7	2	5.9	27	79.4	2	2.1	11	11.5	83	86.5	8.35	0.11
3-Determine triage level.	1	2.9	9	26.5	24	70.6	2	2.1	26	27.1	68	70.8	0.08	0.09
4-Perform primary physical examination according to patient's condition.	5	14.7	4	11.8	25	73.5	19	19.8	29	30.2	48	50.0	6.19	0.04
5-Identify and prioritize patient's symptoms.	5	14.7	6	17.6	23	67.6	19	19.8	19	19.8	58	60.4	0.62	0.73
6-Implement first aid measures.	0	0	1	2.9	33	97.1	9	9.4	25	26.0	62	64.6	13.5	0.01
7-Perform basic life support procedures.	3	8.8	5	14.7	26	76.5	9	9.4	35	36.5	52	54.2	5.95	0.07
8-Perform and interpret ECG.	9	26.5	10	29.4	15	44.1	34	35.4	35	36.5	27	28.1	2.95	0.22
9-Apply infection control measures before, during and after triage process.	0	0	4	11.8	30	88.2	5	5.2	18	18.8	73	76.0	2.96	0.22
10-Perform brief investigations hospital policy.	3	8.8	10	29.4	21	61.8	14	14.6	25	26.0	57	59.4	0.76	0.68
11-Calm and inform patients and families causes of delay of care.	5	14.7	7	20.6	22	64.7	7	7.3	29	30.2	60	62.5	2.35	0.30
12-Re triage patients if any changes happened in their condition.	4	11.8	5	14.7	25	73.5	11	11.5	20	20.8	65	67.7	0.61	0.73
13-Reassess waiting patients as necessary.	5	14.7	3	8.8	26	76.5	4	4.2	20	20.8	72	75.0	6.08	0.04
14-Determine referral priority of patients to the emergency department nurse / physician.	2	5.9	6	17.6	26	76.5	5	5.2	24	25.0	67	69.8	0.76	0.68
15-Help in transferring patients to treatment area when necessary.	2	5.9	3	8.8	29	85.3	5	5.2	15	15.6	76	79.2	0.97	0.61
16-Document and deliver the patient's condition report to the emergency department nurse and physician.	0	0	4	11.6	30	88.2	5	5.3	18	18.9	72	75.8	3.03	0.21
17-Provide patient education throughout triage process.	4	11.8	8	23.5	22	64.7	16	16.7	25	26.0	55	57.3	0.68	0.70
18-Conduct a brief, focused interview with patients during triage process.	2	5.9	4	11.8	28	82.4	3	3.1	19	19.8	74	77.1	1.50	0.47
19-Appropriately delegate some responsibilities.	2	5.9	4	11.8	28	82.4	4	4.2	23	24.0	69	71.9	2.32	0.31
20-Demonstrate understanding of cultural diversity for patients.	4	11.8	7	20.6	23	67.6	5	5.2	23	24.0	68	70.8	1.71	0.42

Table (4) Difference between nurses group and medical group regarding to their perception of leadership and management activities (N=130).

Leadership and management activities items.	Nurses (n=34)						Doctors (n=96)						X^2	P
	Disagree		Neither agree or disagree		Agree		Disagree		Neither agree or disagree		Agree			
	N	%	N	%	N	%	N	%	N	%	N	%		
1-Be aware of the various care line services, appropriate referrals to other different specialties.	0	0	0	0	34	100	0	0	8	8.3	88	91.7	3.01	0.08
2-Be aware of all emergency reception team members schedule during the shift.	0	0	5	14.7	29	85.3	1	1.0	20	20.8	75	78.1	1.06	0.60
3-Be oriented with available ways of communication with emergency team.	1	2.9	3	8.8	30	88.2	1	1.0	10	10.4	85	88.5	0.65	0.72
4-Communicate well with patient and family during triage.	2	5.9	9	26.5	23	67.6	3	3.1	26	27.1	67	69.8	0.51	0.77
5-Collaborates channels through communication with different emergency departments.	0	0	7	20.6	27	79.4	4	4.2	22	22.9	70	72.9	1.62	0.44
6-Be aware of all emergency hospital policies, procedures and protocols.	1	2.9	1	2.9	32	94.1	6	6.2	29	30.2	61	63.5	11.8	0.03
7-Provide effectively leadership and expertise.	2	5.9	6	17.6	26	76.5	10	10.4	23	24.0	63	65.6	1.43	0.48
8-Manage her\ his time effectively.	1	2.9	4	11.8	29	85.3	3	3.1	22	22.9	71	74.0	1.98	0.37
9-Check and complete of the emergency equipment and supplies inventory.	3	8.8	3	8.8	28	82.4	11	11.5	19	19.8	66	68.8	2.58	0.27
10-Consistently check first aid equipment.	2	5.9	0	0	32	94.1	9	9.4	11	11.5	76	79.2	4.93	0.08
11-Utilize and manage resources appropriately and economically.	0	0	7	20.6	27	79.4	5	5.2	20	20.8	71	74.0	1.87	0.39
12-Remain calm and organized under work pressure.	3	8.8	6	17.6	25	73.5	4	4.2	11	11.5	81	84.4	2.10	0.34
13-Manage a large number of mass casualties of patients during triage process	0	0	5	14.7	29	85.3	2	2.1	15	15.6	79	82.3	0.74	0.68
14-Act effectively and cooperatively as a member of emergency reception health team.	0	0	2	5.9	32	94.1	3	3.1	6	6.2	87	90.6	1.10	0.58

Table (5) Difference between nurses group and medical group regarding to their perception of triage nurse prepared qualifications subscale (N=130).

Triage nurse prepared qualifications items.	Nurses (n=34)						Doctors (n=96)						X^2	P
	Disagree		Neither agree or disagree		Agree		Disagree		Neither agree or disagree		Agree			
	N	%	N	%	N	%	N	%	N	%	N	%		
Engaged in ongoing educational opportunities.	1	2.9	3	8.8	30	88.2	6	6.2	18	18.8	72	75.0	2.6	0.27
Attain a specialized certificate in emergency nursing and critical care.	2	5.9	2	5.9	30	88.2	2	2.1	9	9.4	85	88.5	1.54	0.46

Table (6) Comparison between nurses group and medical group perception regarding to expected role of triage nurse (N= 130).

Triage nurse items.	Nurses	Doctors	T	p-value
	Mean± SD (n= 34)	Mean± SD (n= 96)		
1- Emergency patient assessment.	24.05±3.32	22.47±3.72	- 2.18	0.03
2- Clinical decision making.	8.35±1.39	8.07±1.34	- 1.03	0.30
3- Triage intervention.	55.94±7.35	54.0±6.34	- 1.46	0.14
4- Leader ship and management activities.	33.61±2.77	32.51±3.61	- 1.62	0.10
5- Triage nurse prepared qualification.	5.67±0.80	5.55±0.79	-0 .78	0.43
Total	130.58±13.90	125.60±12.76	- 1.912	0.05

Table (7) Relationship between expected role of triage nurse and years of experience of nurses and medical group (N=130).

Variable	Years of experience			F	P
	1-12 years	13-25 years	26-36 years		
	M±SD	M±SD	M±SD		
Emergency patient assessment.	22.49±3.7	25.25±1.6	25.40±2.6	4.53	0.01
Clinical decision making.	8.06±1.4	8.66±0.6	8.6±0.5	1.37	0.25
Triage intervention.	53.84±6.6	58±5.9	59.20±4.1	3.601	0.03
Leadership and management activities.	32.49±3.5	34.5±1.2	35±0.7	3.03	0.05
Triage nurse preparation qualifications.	5.53±0.8	5.91±0.3	5.8±0.4	1.44	0.24
Total	125.41±13.3	135.33±7.3	136.8±7.7	4.86	0.00

5. Discussion

Triage is an autonomous nursing role and essential to patient safety and the efficient delivery of emergency care. The triage nurse must demonstrate the capacity for critical thinking in environments where available data is limited and incomplete or ambiguous (Australasian Collage for Emergency Medicine 2007).

Regarding emergency patient assessment dimension, the finding of the study revealed a consensus between nurses and medical groups about the expected role of triage nurse in patient assessment in the form of performing brief visual assessment and accurately collects data about the received medications. This result might be due to the natural accessibility and feasibility of visual assessment in a minimum time. Also, medical group might consider this skill in assessment. Provide appropriate and quick feedback about the patient. Nurses' assessment and report might facilitate medical' role in diagnosis and intervention. Moreover, a consensus between nurses and medical group about determining clinical urgency because nurses might be more sensitive to patients' suffering and needs. Also, there was consensus between nurses and medical group about keeping patient's privacy during triage process. This might be due to adoption of nursing and medical ethics and advocacy to patients' rights.

Emergency patient assessment results were congruent with the findings presented in the study of "Emergency department triage revisited" done by Fitzgerald, Jelinek, scott and Gerdtz (2009). It revealed that triage assessment identify patients according to their clinical urgency. In this context, Derlet (2006). declared that allocate emergency patient to the most appropriate assessment and treatment area and to gather information that facilitates the description of the departmental case mix, might ensure effective and timely treatment.

In addition, a study of "Patient satisfaction with triage nursing in a rural hospital emergency department", done by Almes, Davis, Elder, and Littlepage (2004) revealed findings congruent with the present study that the most important core competencies of the triage nurse were primary assessments and maintaining good interpersonal relations with patients and relatives to reduce anxiety and enhance patients' levels of satisfaction with the care rendered.

The findings of the present study revealed that the highest percent of medical group were not expected from triage nurses to collect data on medical history. This result might be due to unacceptability of the medical group that the nurse might have skills and knowledge to collect data about medical history accurately. Also, they could consider it as a medical role in Manial University Hospital especially with the fact that nurses' qualification in emergency reception was technical nurses' diploma.

Regarding clinical decision making dimension, the finding of the study revealed a consensus between nurses and medical groups about role of triage nurse to be initiative in dealing with mass casualties during the triage process and make proper clinical decisions based on situation analysis. This result might be due to nurses group exposed to high flow rate of patients in emergency reception, so, should be initiative to deal with emergent situations and with available resources. The finding of the present study is congruent with study of triage nurse experience done by Dello Stritto (2005). That, reported that the triage nurses should have ability to take appropriate decision regarding to the volume of patients waiting to be triaged, fear of missing a serious condition, and having a “gut feeling” about a patient’s condition.

Also, the current study showed that the majority of nurses and medical group expected from triage nurses to determine which patients are in need for critical care based on critical thinking. This result was congruent with the findings presented in the study of "Triage nurses validly and reliably estimate Emergency department patient complexity" done by Vance and Sprivulis (2005) who asserted that triage nurse should have the necessary skills to make appropriate triage decisions and provide a highly effective service to emergency department patients in health care setting. In addition, Emergency nurses association (2004) confirmed that the triage nurse should have the ability to work under pressure and to deal with emergency situations and/or difficult clients and stressful situations professionally.

This findings was incongruent with study of "identify doctors' and nurses' perceptions about the implementation

of the Cape Triage Score" done by De-varies, Gottschalk, Wallis and Wood (2005) which found that triage is more appropriate in guiding decisions about treatment and predicting mortality in groups of patients after mass accidents, rather than for individual patients in an emergency unit. Triaging of patients could be biased towards medical patients, whose vital signs might deteriorate rapidly, at the expense of trauma patients whose vital signs might remain within normal ranges for limited periods of time even after major traumatic injuries.

Regarding triage intervention, the finding of the study revealed a consensus between nurses and medical groups about all the intervention items. The current study revealed that the majority of nurses and medical group expected from triage nurses to help in transferring patients to the treatment area. This result might be due to the fact that nurses should accompany patients for diagnostic or referral activities because they have the ability to observe and manage any complications that might be happened during patient's transfer and able to endorse patient accurately. Moreover, the majority of nurses and medical group agreed about the expectation of triage nurse to prioritize patient's care according to severity and urgency. This result might be due to the triage nurse should be able to make ranking to patients according to severity and to put patients in the right place at the right time and to avoid overcrowding in the emergency.

In agreement with the present study findings, a Augustyn, Ehlers, and Hattinghs (2009) who declared that prioritizing patients according to their level of acuity to determine which individuals need specialized care for either actual or potential injuries or complications. If this is done successfully each patient can be directed to the most appropriate facility, specialist or unit with the least possible delay. Also, according to Almes, Davis, Elder, and Littlepage (2004) findings that the most important roles of the nurse during triage were reportedly the prioritization of patients and the institution of first aid measures, followed by communication with patients and relatives as well as conducting minor investigations. Also, Welch and Davidson (2010) conducted a study for exploring new intake models for the emergency department; this result was congruent with the present study results which revealed that the priority for the ED intake process is moving the patient to an area where evaluation and care may proceed. Moving patients quickly to treatment demonstrates respect for patient time and increase patient satisfactions.

The current study showed that the majority of nurses expected from triage nurses to implement first aid measures. This finding might be due to the nature of emergency work, the triage nurse should be able to provide first aid for patients who usually in need for it to save their lives and as a basic care in first contact with emergency patients. This result was congruent with the finding of a study titled " Nurses' and doctors perceptions regarding the implementation of a triage system in an emergency unit in South Africa" done by Augustyn, Ehlers, and Hattinghs (2009) , who found that the majority of the nurses and doctors agreed to implement first aid measures

The current study showed that the majority of nurses group expected from triage nurses to apply infection control measures. This might be related to her exposure to patients in critical situations and of multi injuries that necessitate to provide care for more than one patient at the same time so, it is very important to follow infection control measures to avoid transmission of infection among patients and their families and protect herself. This result was congruent with the findings of Augustyn, Ehlers, and Hattinghs (2009) who found that the highest percent of nurses and doctors agreed to follow infection control measures.

Moreover, the current study showed that the highest percent of nurses group expected from triage nurses to document and deliver the patient's condition report. This result might be due to the importance of reporting for continuity of patient care. This result was congruent with the findings presented in the studies of "Patient experience of the triage encounter in a Swedish emergency department" done by Goransson and Rosen (2010) and study of "Do knowledge and experience have specific role in triage decision- making?" done by Considine, Botti, and Thmmas (2007) which confirmed that the triage nurse has a responsibility to be familiar with the specific organizational documentations requirements.

In addition, the current study showed that the majority of nurses group expected from triage nurse to delegate some responsibilities. This result might due to recognition of emergency staff nurses to the huge number of emergency patients per day in Cairo University Emergency in departments with overwhelmed responsibilities of triage nurse. This result was supported by the findings presented in the study of " the exploring best practice for triage" done by Funderburke (2008) who revealed that triage nurse should have ability to appropriately delegate responsibility.

Also, the current study explored that the majority of nurses and medical groups expected from triage nurse to assess and evaluate the patient's vital signs. This might be due to the importance of vital signs results for nurses and medical group to conclude a medical and nursing diagnosis. This result was congruent with the findings of Augustyn, Ehlers, and Hattinghs (2009) who found that the majority of the nurses and doctors agreed to assess and evaluate the patient's vital signs.

The current study showed that the majority of nurses and medical group expected from triage nurse to re triage patients if any changes happened in their condition as expected from triage nurse role. This result was congruent with the findings presented in the study of Considine, Botti, and Thmmas (2007) who asserted that the triage nurse has a responsibility to inform all patients triaged to the waiting area to report back to the triage nurse if

they feel unwell.

Also, the current study explored that the highest percent of disagreement of nurses and medical group was related to expectation of triage nurse to perform and interpret ECG. This result might be due to the diploma nurses did not have prerequisite knowledge or training about how to perform ECG or how to make interpretation of ECG results although it is considered an important data for patient diagnosis. This result was congruent with the findings of a Augustyn, Ehlers, and Hattinghs (2009) who reported that the nurses and doctors did not agree to perform and interpret ECG.

Regarding leadership and management activities, the finding of the study revealed a consensus between nurses and medical groups about role of triage nurse in leadership and management activities. The current study showed that about hundred percent of nurses group and medical group agreed that the triage nurse should be aware of various care line services, appropriate referrals to other different specialties. This result might be due to the fact that the triage nurse is often the common link in emergency reception among different specialties to avoid time consumption and complication. This result was congruent with the findings presented in the study titled of "what are the duties of emergency room registered nurses" done by Horacio (2010) who revealed that the triage nurse should be aware of all the emergency room conditions and other different specialties.

Also, the current study showed that the highest percent of nurses group and medical group agreed that the triage nurse expected to be oriented with available ways of communication with emergency team. This result might be related to facilitate her work with emergency team through giving and receiving feedback regarding patient's condition. This result was congruent with the findings presented in the studies of "A guide to improve communication among health care professional" done by Victorian quality council (2010) and study of "Model for development high reliability teams" done by Miller and Cullough (2010). Their findings reported that the triage nurse should be able to communicate effectively with emergency team to share understanding of a situation, prevention of medical errors and to perform their role effectively and appropriately.

In the same line, the current study revealed that the majority of nurses and medical groups agreed that the triage nurse should act effectively and cooperatively as a member of emergency reception health team. This result might due to the importance of cooperation of emergency health team in saving time, provide high quality of care, increase team work cohesiveness and spirit, decrease conflict among emergency heath team and avoid fragmented nursing care for patients. According to Ross and Peter (2004) who revealed the effectiveness of individuals and teamwork is dependent upon leadership, shared understanding of goals, individual roles and effective communication.

Moreover, the current study declared that the majority of nurses group agreed that the triage nurse has to be aware of all emergency hospital policies, procedure and protocols. This result might be due to the fact that compliance to policy, procedure and protocol will facilitate work implementation in a harmony with health team members. This result was congruent with Horacio (2010) who reported that the triage nurse must be aware of all the hospital policies and protocols as well as communicate these policies to other ER team members. In addition, Australasian College for Emergency Medicine (2008) reported that when triage nurse follow policy, procedure and protocols, the waiting time is reduced and increased patient satisfaction.

The current study illustrated that the majority of nurses group and medical group agreed that triage nurse should check first aid equipment. This might be related to nurses were acquented and had basic knowledge about preparation, uses, checking, keeping equipment and supplies and perceived the need of this equipment continuously in providing care for patients. This result was congruent with Horacio (2010) who revealed that the triage nurse must know the inventory of medical supplies, replace used equipment, clean the equipment and resupply medical supplies.

Regarding triage nurse prepared qualifications, the finding of the study revealed a consensus between nurses and medical groups. The current study showed that the majority of nurses and medical groups agreed that the triage nurse should engage in ongoing educational opportunities. This might be related to the skillful expected role of triage nurse with highly urgent and seriously injured patients. This result was congruent with Funderburke (2008) who revealed that the triage nurse should be engaged in ongoing educational opportunities which lead to enhanced accuracy and competence. Also, according to study of "patient satisfaction with emergency department triage nursing care" done by Raper, Davis and Scott (1999) who reported that educational preparation of the triage nurses was a significant predictor of patient satisfaction with the triage process.

In addition, the current study illustrated that the majority of nurses and medical group agreed that the triage nurse should be attain a specialized certificate in emergency nursing and critical care. This result might be due to the special field of emergency nursing that is more critical, advanced and different. Therefore, it needs highly skillful and experienced nurses. This result was congruent with David, Robert and Harvey (2009) who confirmed that triage nurses must be specialized in emergency nursing and critical care to possess greater knowledge and skills than nurse generalists.

Based upon this study, there was significant difference between total expected role dimensions and years of experience of nurses and medical groups. From the investigator point of view, the more the years of experience

of nurses and medical group have the more the perception of expected role of triage nurse. Nurses and medical groups who have more years of experience becomes more adhered to emergency patient assessment, triage intervention and leadership and management activities they enrolled more than the less expert in the perception of the expected role. As well as the more expert nurses and medical group can easily identify the role of triage nurse. This result might be due to the more experience in the same place of woke help nurse to acquire skills and knowledge. This result was congruent with the findings presented in the study of "the exploration of Accident and Emergency nurse experience of triage decision making" done by Chung (2005). The result showed that the triage assessment is dependent on the experience of the triage nurse.

Moreover, the current study showed that there was insignificant difference between nurses and medical groups' years of experience and their perception about clinical decision making role of triage nurse. This result was congruent with the findings presented in the study of "do knowledge and experience have specific roles in triage decision- making?" done by Considine, Botti and Thomas (2007) which found that there was no significant relationship between experience and triage decision making in triage role. The more experienced and less experienced emergency nurses could have the same ability to perform triage; this might be due to other related factors such as training experience.

This result was incongruent with the findings presented in the study of "factors which nurses consider when making decision". And "relationship between triage knowledge, training working experience and triage skills among emergency nurses" by (Andersson, Omberg and Svedlund, 2006; Fathoni, Sangohan and Songwathana, 2013) the result revealed that the more experienced emergency nurses had more abilities in triage skills than less experienced nurse. Moreover, it was similar to (Hicks, Merritt and Elstain, 2003) who conducted with a pilot study about critical thinking and clinical decision making in critical care nursing, who found that more years of experience increases the decision- making consistency in triage role. Also, the current study declared that there was insignificant difference between nurses and medical groups years of experience and triage nurse prepared qualification. This result might be due to the certificated triage nurse follow standard to provide high quality of care even if she had less experience.

6. Conclusion

The present study concluded that: The study proposed the expected role of triage nurse in El-Manial University Hospital Emergency Reception in which there was a consensus about most activities of the expected role of triage nurse between nurses and medical groups. Nurses and medical groups had highly expectation regarding the expected role of triage nurse. Furthermore, significant difference was found between expected role of triage nurse and years of experience of nurses and medical groups.

7. Recommendations

Based on the findings of the present study, the following recommendations were deduced to the hospital management: There is a need for regular in-service training programs sessions to emergency health team personnel regarding the triage to draw attention to nurse role, qualifications, preparation and triage process. The emergency department should have policies, procedures, protocol, and material resources to facilitate the triage system and triage nurses' role. There is a need for proper infrastructure in the emergency reception to facilitate triage and decreases overcrowding .Further studies need to be conducted to a) design and implement triage system to improve outcomes and enhances patients' satisfaction b) to evaluate the effectiveness of triage system implementation and c) identify patients' satisfaction with the triage system quality.

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