

Impacts of Triage Protocol on Nurses Knowledge, Performance and Subjective Record of Resuscitation Room

Manal Tharwat Abozeed

PHD, Medical, Surgical Nursing, Faculty of Applied Medical Science, Hafer El Batin University

Abstract: ***Objective:** To decide the impacts of triage training dependent on Emergency Seriousness Record (ESR) on advancing the knowledge and performance of nurses and Subjective Record of Resuscitation Room. **Methods:** This study was a quasi -Experimental study being performed in emergency Hospital at Mansoura university 2018. For this purpose, 100 members from Nurses and professionals of Emergency prescription in the Emergency department with the incorporation criteria for support were chosen. **Data collection** instruments incorporated a survey comprising of two sections, (personal characteristics, and knowledge) and the performance assessment checklist was prepared. Content validity was used to determine validity. The test-retest method, 20 were applied to determine the reliability of the questionnaire. Inter observer reliability and the correlation between the two observers and imaging modalities were measured to determine the reliability of the performance checklist. The questionnaires and checklist were completed by the participants before, 2 days and 12 weeks after completion of the training. Workshop in two 9-hour sessions was provided which consisted of lectures, questions, and answers. **Results:** The triage scores were 21.4 ± 6.2 , 35.6 ± 3.2 and 32.2 ± 4.6 before, 2 days and 12 weeks after training, respectively. Triage performance score increased from 49.8 ± 9.9 before training to 59.8 ± 7.6 , two days after training and to 59.7 ± 8.1 twelve weeks later ($p=0.001$). In addition to triage training of the nurses the emergency department, Subjective Record of Resuscitation Room were impressively upgraded. Other results showed that there was no significant correlation between individual characteristics and personal knowledge of triage score 12-week after training ($r=0.018$, $p=0.126$). **Conclusion:** The results of the present study showed that triage education influences the practice and knowledge of nurses and improves the Subjective Record of Resuscitation Room. Therefore, it is recommended to include theoretical and practical training of triage for nurses in hospitals.*

Keywords: Knowledge; Performance; Triage education; Subjective Record of Resuscitation Room

1. Introduction

The emergency departments are the vital focuses of clinics that concede almost 30 million patients crosswise over Egyptian every year **American School of Crisis Doctors (2016)**. In ongoing decades, medical clinics have been faced with an incredible number of patients because of different factors, for example, populace development expanded deliberate and accidental wounds, medicate misuse, and so on. **Barthel and et al (2014)** In the interim, the quantity of Resuscitation Room has not been expanded generously as of late **Baumann and, Strout (2017)**. The essential mission of the Resuscitation Room is giving the most ideal consideration in the briefest time **Bernstein and et al (2017)** Yet most Resuscitation Room don't have the vital and proper department for referrals of Institute of Medicine of the National Academies (2016.). At times patients hold up over an hour and this is particularly significant when care is postponed, prompting patients' disappointment **Chi and, Huang (2016)**. The essential technique to determine this issue is use of a triage system or prioritizing patients dependent on their clinical status **Duran and et al (2017)** The triage in the emergency department alludes to setting time or allotting assets required by patients, looking for approaches to give care to patients in progressively critical need, and keeping the patients with less serious ailment sitting tight for **Eichel and et al (2013)** Currently, five-dimensions of emergency seriousness record (ESR) triage framework is utilized because of the straightforwardness, simplicity of preparing, and a for reaching applied and operational methodology of the emer-

gency department in many medical clinics on the planet. In this framework, patients are ordered into five needs dependent on the seriousness extending from prompt to delay.

Also, as to the seriousness of the sickness, ESR likewise considers the department and assets of the patient in the triage territory **Elshove-Bolk and et al (2017)** Nurses are the principle stays of triage in medical clinics. The primary job of the triage medical attendant is deciding the need for cautious clinical consideration of patients. Triage medical attendant must have proper preparing and involvement in emergency nursing triage, basic management, and emergency nursing cares.

Even though there are a couple of studies concerning this subject, in **Taheri et al (2015)** pronounced that the triage Nurses information and execution were low in College of Therapeutic Sciences **Emergency Nurses Association (2016)**. The information of triage nurture in clinics was not productive. A study completed in Australia, detailed that 42% of Nurses did not get triage preparing and 14% said they were not yet adequately arranged to take up this task regardless of going to the triage classes **Fernandes and et al (2015)**. By and large, these examinations have appeared, lamentably, there are as yet genuine worries over-triage nurses' information since triage is performed by Nurses in emergency clinics who have not gained related adequate knowledge.

In our nation, triage preparing is imperative to emergency workload during and after their training in light of the new

triage framework set up in medicinal focuses across the country and the absence of college culture required for this training **Gilboa and et al (2017)**. In this specific circumstance, mishap related injuries are exceptionally normal and, in this manner, the triage time for the injury is of specific significance. Along these lines, utilizing experienced and gifted medical nurses for the triage in the Resuscitation Room, and showing them how to appropriately perform triage can anticipate numerous passing, inabilities, and extra expenses of treatment **Grossman and et al (2011)**. Verifiable information likewise demonstrates that the triage and emergency medical nurses assume the most significant job in research and court cases and thus they are presented to more danger of assault and misuse. In this way, formal preparing in triage improves the viability of triage medical Nurses and with improved certainty, they will be set up to perform more

proficiently Establishment of Medication of the **National Institutes (2016, June)**. As indicated by the investigation of **the Centers for Disease Control and Prevention (2018)**, Nurses ought to be prepared in the field of triage, particularly emergency training in triage and it is accepted that a decent emergency Nurses ought to be capable in triage. Since triage is the beginning of the primary clinical patient consideration, exactness, precision, time of triage, basic management and dissecting the outcomes mirror the exhibition of every medical clinic's emergency department. For assessing the exhibition of the emergency department in medical clinics, we can look at the aftereffects of execution markers in this area. Five lists, for example, "normal time to triage patients at each dimension", "level of brief patient's release with individual fulfillment", "level of cases took care of in under 6 hours", "level of fruitful cardiopulmonary Resuscitation (CPR), and "level of patients leaving the Resuscitation room inside 12 hours" are considered as subjective lists of Resuscitation Room **Haas and et al (2018)**. Numerous variables impact the advancement of the files and without a doubt one of them is the information and execution of medical attendants in triage. The point of this examination was to decide the impacts of triage training dependent on the emergency seriousness Record (ESR) on advancing the information and execution of Nurses and subjective files of the emergency department.

2. Materials and methods

2.1 Subject

This exploration was a quasi -Experimental study directed in Emergency Hospital in Mansoura University Hospital involved 100 individuals from Nurses in the Resuscitation Room including Nurses and emergency therapeutic experts. The incorporation criteria were consented to partake in research, working in the emergency department and having any involvement in the Resuscitation Room for in any event one year.

2.2 Tools

Data was gathered through a survey including both the mindfulness and profile, along with a presentation assessment structure. Content legitimacy of the poll was affirmed by various specialists in the Resuscitation Room and scholastics having some expertise in emergency triage medical caretaker and acquainted with the issues concerned.

The pilot study was connected to decide the unwavering quality of the poll. The relationship coefficient between the absolute scores of 10% of all sample. For deciding the dependability of the estimation method of the structure and the imaging modalities, the outcomes were at the same time evaluated by free onlookers. The poll comprised of the accompanying three sections:

1. **Demographic characteristics** included age, sex, kind of degree, marital status, nursing knowledge, working in the Resuscitation Room, a normal week by week move in the emergency department and revolutions in movements which were finished by the members before going to the workshop. Estimating the learning of triage was completed by-polls which comprised of 20 various decision inquiries regarding medical Nurses information, for example, triage and organizing patients, comprehension of basic cardiovascular arrhythmias and their treatment, aviation route the executives, and fundamental and progressed Cardiopulmonary Resuscitation. Each inquiry contained just one answer. The right answer was given score 1, and the off-base answer doled out as zero and there was no negative point for any inquiry. Subjects demonstrated a base score of zero and a most extreme score of 20. As indicated by the appropriate responses given, the dimension of medical nurses' learning was classified into 3 unmistakable dimensions. Scores somewhere in the range of 0 and 7 were considered as poor somewhere in the range of 8 and 14 as moderate and from 15 to 20 as great learning.

2. **Performance evaluation sheet.** This was a standard structure containing 20 questions. The things were as per the triage medical nurses set of working responsibilities endorsed by the Service of Wellbeing and Emergency clinic. They were sent to the medical clinics the nation over for propelling the triage framework in the Jun of 2018. The 20 inquiries in the structure were scored as flawless (3), great (2 points), moderate (1), and poor (0 points).

2.3 Scoring

The subjects of the study were assessed by the researcher during morning and evening day by day work shifts and the scores were determined. Scores from 20 to 30 were considered as poor, 30 to 50 normal, 50 to 60 great, and 60 as superior. The survey and execution assessment structure was finished previously, quick post, and twelve weeks in the wake of preparing by the members and analysts. The members were partitioned into four groups of 25 to go to the workshop, 18-hour addresses and a workshop on the utilization of instructive guides held for each group.

Statistical analysis

The information was breaking down utilizing expressive and inferential factual tests, ANOVA, t-free also, rehashed measure ANOVA tests utilizing SPSS programming adaptation 23. The information on the emergency department subjective files for 3 months prior and 3 months after the workshop given by the medical clinic were examined alongside their comparing changes.

3. Results

The statistical data of the patients are outlined in **Table 1**. This table demonstrated that half percent to male and female (half), and identified with an age range from more than 25 and have (58%). as indicated by instruction the greater part has four-year college education .and identified with nursing background the greater part have experience over 3 years.

Tables 2 demonstrated that as indicated by learning score before preparing the normal triage score of the members in the investigation expanded from 21.4±6.2 before preparing to 35.6±3.2, two days in the wake of preparing and 32.2±4.6, 12 weeks in the wake of preparing (p=0.001). Then again, before preparing,

Tables 3 demonstrated that 14% of the representatives had poor learning of triage, about 72% normal and about 14% were in the great range. The information in 89% of the workers were considered as great and 7% as moderate two days after the preparation. In 72% of the representatives, the information was great and in 23% it was moderate following twelve weeks of preparing. Strikingly, two days and twelve weeks after preparing, the information was not evaluated as awful in any of the representatives. Before preparing, the triage execution score fundamentally improved from 49.8 ± 9.9 to 59.8 ± 7.6 two days in the wake of preparing and to 59.7 ± 8.1 twelve weeks in the wake of preparing (p=0.001). As far as the presentation of emergency staff was great, be that as it may, moderate two days after preparing. Twelve weeks in the wake of preparing, half of the showing workforce in the Resuscitation Room, triage indicated great and the other half showed moderate execution (**Tables 4 and 5**). Demonstrated that Strikingly, the presentation in none of

the workers was appraised as awful two days and twelve weeks in the wake of preparing. In any case, the discoveries in **Tables 2 and 4** uncovers that information scores diminished from 35.6 to 32.2 and execution scores from 59.7 to 71 in twelve weeks after contrasted and two days in the wake of preparing. The mean scores of learning and execution were lower after some time and the distinction between the mean of the two elements was huge (p=0.001). In the time of 3 months before to 3 months after the mediation, the interim of triage patients at level 2 decreased. Patients' triage at level 1 was equivalent to 1 minute and stayed unaltered learning of triage score twelve weeks in the wake of preparing. Be that as it may, there was a noteworthy relationship in the territory of execution between the sort of employment, work understanding and nursing knowledge in emergency department triage scores a month and a half in the wake of preparing

Table 1: Demographic information of the 100 participants of the study

Grouping	Category	Number	Percent
Sex	Male	50	50 %
	female	50	50 %
Age (years)	≤25	42	42 %
	>25	58	58 %
Worked in the emergency department (years)	≤ 5	48	48 %
	>10	52	52 %
Education	Bachelor degree	30	30 %
	secondary degree	70	70 %
Marital Status	Married	40	40 %
	Single	60	60 %
Nursing Experience (years)	≤ 5	64	64 %
	> 5	36	36 %
Employment Type	Official	34	34 %
	Contract	30	36 %
	Planning	36	30 %
Experience in specific wards	Encompass	50	50%
	Do not encompass	50	50 %
Weekly average shift (hour)	40-48	52	52 %
	48- 72	48	48 %

Table 2: Comparison of knowledge scores before training, immediate after training and 12 weeks after training of triage

Knowledge score of participants in the plan Mean Standard	unsatisfied knowledge	Satisfied knowledge	Mean	Standard division	p-value 0.001
Knowledge score before protocol training	30	30	21.4	6.2	
Knowledge score after protocol training	12	40	35.6	3.2	
Knowledge score after 12 weeks of protocol training	20	40	32.2	4.6	

Table 3: Distribution of subjects according to scores of knowledge of triage, before training, Immediate Posttest of protocol training and 12 weeks after training of triage

Emergency Staff knowledge	Pretest before protocol training		Immediate Posttest of protocol training		12 weeks after protocol training	
	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage
Good (15-20)	14	28%	89	89%	72	72%
Moderate (8-14)	72	56%	7	7%	23	23%
Poor (0-7)	14	28%	4	4 %	5	5 %
Total	100	100%	100	100%	100	100%

Table 4: Comparison of performance scores pretest, Immediate test and 12 weeks after training

Performance score of participants in the plan	Mean	Standard division	Maximum score	Minimum score	p-value
Performance score before training (pretest)	49.8	9.9	78	48	0.001
Performance score after 2 days of training (Immediate test)	59.8	7.6	75	46	
Performance score after 12 weeks of training (Post-test)	59.7	8.1	71	34	

Table 5: Distribution of nurses according to scores of the triage Pretest, Post Immediate and 12 weeks after training (posttest)

Emergency Staff knowledge	Pretest before training		Post Immediate		12 weeks after training	
	Abundance	Percentage	Abundance	Percentage	Abundance	Percentage
Good 80	20	40%	90	90%	79	79%
Moderate (60-80)	66	46%	7	7%	20	20%
Poor (20-40)	14	14%	3	3%	11	11%
Total	100	100%	100	100%	100	100%

4. Discussion

As indicated by the outcomes acquired in this study, the level of knowledge and practice in triage after the mediation was higher than before preparing. The pre-training knowledge of nurses was moderate yet was great after the preparation and none of them showed poor information. The exhibition of most members when preparing was moderate and great separately and none of the members demonstrated terrible showing after the preparation, a finding predictable with that of **Handler and et al (2014)**. The comparison shows that demonstrates that the mean information scores and execution scores diminished after some time so a huge contrast was seen in two territories. Several studies have examined the issues of stability of knowledge and skills over time, as reported by **McHugh, and Tanabe (2011, June)**. contemplate. Even though preparation improved the performance of new nurses, concerning the consideration of malignant patients, the performance declined following 3 months Along these lines, the effect of preparing is decreased after some time and there is a requirement for proceeded with training. Around here, **the National Place for Damage Avoidance and Control (2018)**. expressed that proceeded with instruction for medical attendants is required because the vast majority of them had overlooked or given less consideration to the functional parts of what they have officially realized.

Different discoveries of this study demonstrated that the workshops hung on the advancement of "rate of fruitful CPR", demonstrated powerful as to the normal time to triage patients at level 1 to 3, furthermore, three different lists, level of patients' care followed in under 6 hours, rate of the briefly hospitalized patient leaving with moral duty, level of the present moment hospitalized patients leaving the Resuscitation room inside 12 hours. The decrease in the record of rate identifying with incidentally hospitalized patients leaving the Resuscitation Room inside 12 hours, and an expansion in the file of the level of briefly hospitalized patients leaving with moral obligation 3 months before preparing contrasted and relating values 3 months after intercession can be credited to the higher number of patients conceded during this period. **Worsted and et al (2014)**.

Notwithstanding the learning and execution of emergency Nurses, other significant variables influencing patient's con-

dition to incorporate the emergency benefits, the number of medical clinic affirmations and unique and formal procedures, instructive emergency clinics and even protection for evaluating these parameters, particularly in the last third markers **Niska, Bhuiya and, Xu (2015)**. Likewise, our examination did not demonstrate any critical connection between individual qualities and individual information of triage score a month and a half after preparing. Besides, the discoveries of this examination were steady with those of, **Welch and, Davidson (2016)**. study. They reported that triage performance scores six weeks after training were higher in personnel with experience of more than two years compared with those with less than two years' experience, and the difference between them was statistically significant. Taheri and colleagues concluded that there was a relationship between work experience and performance in emergency department triage score **Pedraza and, Schelling (2016)**. contemplate. They revealed that triage execution scores a month and a half in the wake of preparing were higher in the workload with the involvement of over two years contrasted and those with under two years' understanding, and the distinction between them was factually critical. **Taheri and partners** inferred that there was a connection between work involvement and execution in Resuscitation Room triage score **Pedraza and, Schelling (2016)**. communicated that working background in the emergency department was related to more accomplishment in triage.

As indicated by these discoveries, it is smarter to utilize experienced medical nurses in the Resuscitation room for the triage of patients. In this investigation, the mean score of triage work in changeless and contract staff was higher than another faculty and the thing that matters was factually noteworthy. This outcome was predictable with those of **Platts-Plants and et al (2017)**. The improvement in the exhibitions of the representatives, contract workers, and contractual workers of the task is required for two reasons. The first is the inadequate clinical experience of jobless medical nurses and an absence of expertise in performing human services techniques. In an enlightening report led on the careful ward's amateur medical nurses in **Van der and et al (2018)**, demonstrated that Nurses can't utilize the information learned in the clinical consideration of the patient due to reasons, for example, stress identified with another as-

signment, stresses over not possessing adequate energy for patient 'alarm, and the measure of work. The subsequent reason is a hierarchical responsibility which alluded to the dimension of the work load's inclusion in the association and their enthusiasm for collaboration. As indicated by **Storm Verselet et al (2018)**, the work and execution status sway hierarchical duty. Official authoritative duty is normally more grounded than every other state of work, in light of making a higher feeling of professional stability. The more sense of job security according to the type of employment, the more organizational commitment and it causes individuals in the organization to function more efficiently.

Tanabe and et al (2014), it was concluded that the efficiency level of the employed nurses in the patients with feeding tube is weaker than the contract nurses and the reason for this was that having a stable employment and a high sense of job security reduced the incentive for nurses to learn and had a direct impact on their skills performed **Travers and et al (2018)**. In conclusion, according to the positive impact of education on knowledge and performance of nurses and improvement in the qualitative index of the emergency department, continued nursing education and practical triage are suggested for all personnel engaged in the emergency departments. Another point to consider is that because of the importance of triage and its impact on clinical outcomes of patients, it is recommended not to use low experienced employees for triage in emergency departments. This study showed that there are numerous areas for research on triage. The effect of education on pediatric triage the knowledge and performance of nurses in the emergency department, assessment of the knowledge and performance of emergency department nurses regarding triage for particular patients, comparison of the quality of patient triage by nurses, physicians and emergency medical technicians in the emergency department are the subjects for further studies

References

- [1] American College of Emergency Physicians (2016). ACEP policy statements: Triage scale standardization. Dallas, TX: American College of Emergency Physicians. Retrieved June 1, 2015, from [http://www.acep.org/Content.aspx?id=29828&terms=triage scale](http://www.acep.org/Content.aspx?id=29828&terms=triage%20scale).
- [2] Barthel EN, Coonan K, Fennel J, Pollock D, Cochrane D (2014). Disparate systems, disparate data: integration, interfaces and standards in emergency medicine information technology. *Accad Emerge Med*. 11(11):1142-1148.
- [3] Baumann MR, Strout TD (2017). Triage of geriatric patients in the emergency department: validity and survival with the Emergency Severity Index. *Ann Emerge Med*. 49:234-240.
- [4] Bernstein SL, Varghese V, Leung W, Lonny AT, Perez I (2017). Development and validation of a new index to measure emergency department crowding. *Accad Emerge Med*. 10(9):938-942.
- [5] Centers for Disease Control and Prevention (2018). *National Hospital Ambulatory Medical Care Survey: 2018* Emergency department summary tables. Retrieved June 6, 2017 from http://www.cdc.gov/nchs/data/ahcd/nhamcs_emergency/nhamcsed2008.pdf.
- [6] Chi CJ, Huang CM (2016). Comparison of the Emergency Severity Index (ESI) and the Taiwan Triage System in predicting resource utilization. *J Formosa Med Assoc*. 105(8):617-625.
- [7] Duran Y, Breeched D, Walmsley D, Attia MW, Loiselle JM (2017). The Emergency Severity Index version 4 reliability in pediatric patients. *Pediatric Emerge Care*. 25(8):504-507.
- [8] Eichel DR, Travers DA, Rosenau A, Gilroy N, Woosers RC (2013). The Emergency Severity Index version 2 is reliable and valid. *Accad Emerge Med*. 10(10):1079-1080.
- [9] Elshove-Bolk J, Mancal F, van Rijswijk BTF, Simons MP, van Vogt AB (2017). Validation of the Emergency Severity Index (ESI) in self-referred patients in a European emergency department. *Emerge Med*. 24:170-174.
- [10] Emergency Nurses Association (2016). Position statements' board approves statement on joint ENA/ACEP five-level triage task force. Des Plaines, IL. Retrieved February 10, 2005, from www.ena.org/about/position.
- [11] Fernandes C, Tanabe P, Gilroy N, Johnson L, McNair R, Rosenau A, Sawchuk P, Thompson DA, Travers DA, Bonomi N, Suter RE (2015). Five level triages: A report from the ACEP/ENA Five Level Triage Task Force. *JEN*. 31(1):39-50.
- [12] Gilboa N, Travers DA, Woosers RC (2017). Reevaluating triage in the new millennium: A comprehensive look at the need for standardization and quality. *JEN*. 25(6):468-473.
- [13] Grossman FF, Nickel CH, Christ M, Schneider K, Sprig Ringsider R (2011). Transporting clinical tools to new settings: Cultural adaptation and validation of the Emergency Severity Index in German. *Ann Emerge Med*. 57(3): 257-264.
- [14] Institute of Medicine of the National Academies (2016). *The Future of Emergency Care in the United States Health System. Consensus Report*, <http://www.iom.edu/Activities/Quality/emergencycare.aspx>. Washington, DC: Institute of Medicine.
- [15] Haas SW, Travers D, Titanfall JE, Pollock D, Waller A, Barthwell E, Burt C, Chapman W, Coonan K, Kamen's D, McClay J (2018). Towards vocabulary control for chief complaint. *Accad Emerge Med*. 15(5):476-482.
- [16] Handler JA, Adams JG, Flid CF, Gillam M, Vixenlike J, Barthwell E, Davidson SJ (2014). Emergency medicine information technology consensus conference: executive summary. *Accad Emerge Med*. 11:1112-1113.
- [17] McHugh M, Tanabe P (2011, June). The Emergency Severity Index is the most commonly used triage system in the U.S. Presented at the Society of Academic Emergency Medicine Annual Meeting, Boston, MA.
- [18] National Center for Injury Prevention and Control (2018). Data elements for emergency department systems. (Release 1.0). Atlanta, GA: Centers for Disease Control and Prevention.

- [19] Niska R, Bhuiya F, Xu J (2015). *National Hospital Ambulatory Medical Care Survey: 2007 Emergency Department Summary*. (National Health Statistics Reports: no. 26). Hyattsville, MD: National Center for Health Statistics.
- [20] Pedraza EJ, Schelling LP (2016). *Measurement, design and analysis: An integrated approach*. Hillsdale, NJ: Erlbaum.
- [21] Platts-Mills TF, Travers D, Boese K, McCall B, Keizer S, Lamantin M, Busby-Whitehead J, Cairns CB (2017). Accuracy of the Emergency Severity Triage instrument for identifying elder emergency department patients receiving an immediate life-saving intervention. *Accad Emerge Med*. 17:238-243.
- [22] Storm-Verselet MN, Urbino D T, Chin a Choi V, Lutze JSK (2018). Observer agreement of the Manchester Triage System and the Emergency Severity Index: a simulation study. *EMJ*. 26:556-560.
- [23] Taheri and Friedman Singer R, Infant AA, Oppenheimer CC, West CA, Siegel B (2015). The use of and satisfaction with the Emergency Severity Index. *JEN*.
- [24] Tanabe P, Gimbel R, Yarnold PR, Kiriakou DN, Adams JG (2014). Reliability and validity of scores on the emergency severity index version 3. *Accad Emerge Med*. 11(1):59-65.
- [25] Travers DA, Waller AE, Bowling JM, Flowers D, Titanfall J (2018). Five-level triage system more effective than three-level in tertiary emergency department. *JEN*. 28(5):395 -400.
- [26] Van der Wulf I, Schrijver's AJP, van Steel HF (2017). Predicting admission and mortality with the Emergency Severity Index and the Manchester Triage System: A retrospective observational study. *EMJ*. 26:506-509.
- [27] Welch S, Davidson S (2016). Exploring new intake models for the emergency department. *Am J Med Qual*. 25(3):172-180.
- [28] Wordster A, Gilroy N, Fernandes CM, Eichel D, Eva K, Geisler R, Tanabe P (2014). Assessment of inter-observer reliability of two five-level triage and acuity scales: A randomized controlled trial. *Canadian Journal of Emergency Medicine*. 6(4):240-245.