Chronbach's alpha was 88% about awareness questions and was 83% about performance questions. Also Pearson correlation coefficient in retest exam was 0.8.12 In the second section of the questionnaire, the questions 1-3 were related to the significance and necessity of triage, questions 4 and 5 were related to the preliminary measures taken by the triage technician when confronted with patients, questions 8 and 9 dealt with the major goals of the triage while questions 12-15 were associated with familiarity and application of colors in grouping of patients during triage. In the third part of the questionnaire, the questions were divided according to triage class. The Questions 2, 6, 8, 10, 13, 14, 17, and 19 were related to the immediate class, while Questions 9 and 18 were associated with the dead-dying class.¹⁶ The score of every correct answer was 1.

Based on our study design, all 205 participants in 5 groups (in 5 auxiliary cities) were categorized. First, the age, gender, level of education, and years of work experience of participants were recorded, then pretest was conducted. This was followed by running an educational class regarding the principles of triage during disasters along with management of airway¹⁶ for the studied participants. Training model was based on lecture model and based on the scenarios designed for disaster together with group discussions. The class was handled by one of the faculty member of the university for all participants and the duration of the class was two hours. Eventually, following 2 hours after completion of the class, post-test was done with the same questions considered in the pretest. Awareness and practice of participants was evaluated with questionnaire results.

Considering the evaluation of jaw trust maneuver, a simulated patient was employed following the acquisition of informed consent. Two faculty members of the university, as an evaluator and referee, assessed the airway maneuver procedure, where the scoring was based on the degree of accomplishment of the procedure as good or weak. If the opinion of the referees was the same, it was recorded;

otherwise, the opinion of a third person (a faculty member) was used. First, before the training, the procedure of the maneuver was evaluated, followed by offering the training of the method of the maneuver to the participants in the form of lecture, using the available slides and practical model. Then the participants were reevaluated.

The data were analyzed by SPSS 13. To describe the data, descriptive statistics consisted of frequency; percentage and mean (standard deviation) were used. To test the normality of the distribution of the data, Kolmogorov-Smirnov test was used. To compare the qualitative variables, Chi-square statistical test was used, while for comparing the quantitative variables between pre and post test results, paired t-test was used. A p-value lower than 0.05 was considered significant.

Results

In this study, 205 participants were included. The mean age of the participants was 34.97 ± 6.42 years (the range was 23 to 50 years old). The mean background of work experience was 9.44 (5.85) years (range=2-26 years). A total of 197 participants (96.1%) were the technician of the medical emergency, and 6 (2.9%) were operators, and 2 (1%) were drivers. As many as 179 cases (87.3%) were married while 26 of(12.7%) were single.

The mean score of all questions in the pretest and post-test was 22.02 (4.49) and 28.54 (3.47), respectively. The mean scores related to awareness of the necessity of triage in pre and post-test was 11.47 (2.15) and 13.63 (1.38), respectively. In the performance section, these scores were 10.73 (3.57) and 14.93 (2.78), respectively. In order to compare the obtained results and evaluate the role of education in the areas of awareness and performance, in addition to comparing the total scores and individual pre- and post-test, the questions were also evaluated in specified classes. Table 1 presents the comparison of the findings of the two exams regarding the second section of the questionnaire (awareness of the necessity of triage). Table 2 provides the pre- and posttest scores related to the second part of the

questionnaire (measurement of individuals' performance in triage).

Table 1. Comparison of the results of pre- and posttest regarding awareness of the necessity of triage

| Variables | Pre-Test | Post-Test | P-value* |
|--|------------|------------|----------|
| | N (%) | N (%) | |
| Necessity of triage | | | |
| Question 1 | 196 (95.6) | 205 (100) | 0.004 |
| Question 2 | 149 (72.7) | 199 (97.1) | < 0.001 |
| Question 3 | 186 (90.7) | 188 (91.7) | 0.72 |
| Primary measurements | | | |
| Question 4 | 85 (41.5) | 150 (73.2) | < 0.001 |
| Question 5 | 142 (69.3) | 192 (93.7) | < 0.001 |
| Main goal of triage | | | |
| Question 8 | 182 (88.8) | 179 (87.3) | 0.64 |
| Question 9 | 160 (78) | 187 (91.2) | < 0.001 |
| Understanding and application of triage colors | | | |
| Question 12 | 157 (76.6) | 202 (98.5) | < 0.001 |
| Question 13 | 120 (58.5) | 192 (93.7) | < 0.001 |
| Question 14 | 169 (82.4) | 198 (96.6) | < 0.001 |
| Question 15 | 171 (83.4) | 194 (94.6) | < 0.001 |

N (%): Number of correct answer, *Chi-square test

Table 2. Comparison of the scores of pre- and posttest related to measurement of performance of individuals in triage

| Variables | Pre-Test | Post-Test | P-value* |
|---------------------|------------|------------|----------|
| | N (%) | N (%) | |
| Delayed category | | | |
| Question 2 | 90 (43.9) | 125 (61) | 0.004 |
| Question 6 | 60 (29.3) | 127 (62) | < 0.001 |
| Question 8 | 108 (52.7) | 172 (83.9) | < 0.001 |
| Question 10 | 111 (54.1) | 158 (77.1) | < 0.001 |
| Question 13 | 92 (44.9) | 127 (62) | 0.001 |
| Question 14 | 74 (36.1) | 145 (70.7) | < 0.001 |
| Question 17 | 80 (39) | 11 (57.6) | < 0.001 |
| Question 19 | 36 (17.6) | 163 (79.5) | < 0.001 |
| Immediate category | | | |
| Question 1 | 167 (81.5) | 194 (94.6) | < 0.001 |
| Question 3 | 163 (79.5) | 171 (83.4) | < 0.001 |
| Question 4 | 108 (52.7) | 161 (78.5) | < 0.001 |
| Question 5 | 91 (44.4) | 165 (80.5) | < 0.001 |
| Question 7 | 167 (81.5) | 187 (91.2) | 0.004 |
| Question 11 | 173 (84.4) | 191 (93.2) | 0.005 |
| Question 12 | 159 (59.6) | 175 (85.4) | 0.04 |
| Question 15 | 160 (78) | 167 (81.5) | 0.39 |
| Question 16 | 100 (48.8) | 160 (78) | < 0.001 |
| Dead/dying category | | | |
| Question 9 | 123 (60) | 186 (90.7) | < 0.001 |
| Question 18 | 118 (57.6) | 184 (89.8) | < 0.001 |

N (%): Number of correct answer,*Chi-square test