

posed of factual knowledge questions about triage ( $n = 15$ ) and triage decision-making questions ( $n = 10$ ). Seventy nurses working in hospitals in Sistan-va-Balouchestan state participated. The questionnaire reliability was 0.60 using the test-re-test method. Content validity was considered based on Canadian Triage and Acuity Scale.

**Results:** The response rate was 68% (70/102). Nurses proved to be unfamiliar with triage. Only 28% of their responses were correct. Only three emergency departments have specified special nurses to perform triage. Inter-rater agreement between nurses for all was  $r = 0.56$  and for each nurse was  $r = 0.12$ .

**Conclusions:** Emergency departments were not committed to a valid, reliable triage scale. Specialized education about hospital triage with a new approach is recommended. Further research on emergency department triage scales, standards, and guidelines is recommended.

**Keywords:** assessment; competency; education; emergency department; Iran; knowledge; nurse; training; triage

*Prehosp Disast Med 2009;24(2):s141-s142*

#### (K110) Effects of Triage on Waiting Time for Health Services and Patient Satisfaction in an Iranian Emergency Department

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Establishing a triage process can improve the patient flow, and thus, patient satisfaction in the emergency department. This study was carried out to determine effect of triage on waiting time and patient satisfaction.

A sample ( $n = 600$ ) was utilized for this quasi-experimental design, and 300 subjects were selected for each group (intervention and control groups) through random allocation.

Data were collected using a time measuring form and a patient satisfaction scale.

The mean waiting time before and after triage was 10.7  $\pm$  3.77, 8.5  $\pm$  3.77 minutes, respectively ( $p = 0.000$ ). Mean patient satisfaction score in the two groups (before and after) was 29.6  $\pm$  5.07 and 37.7  $\pm$  5.86 ( $p = 0.000$ ).

A reduction in waiting time and increased patient satisfaction with the triage process indicate a reorganization of emergency department layout and staffing can improve the patient flow and quality of care.

**Keywords:** emergency department; emergency health; satisfaction; triage; waiting time

*Prehosp Disast Med 2009;24(2):s142*

#### (K111) A Review of On-Scene Disaster Triage Schemes and Proposal for a Standardized Triage System

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**Introduction:** Mass-casualty triage is a critical skill. There are any systems exist to guide providers in making triage decisions, however, there is little scientific literature to validate current systems. There are no internationally agreed

upon categories or color. The lack of standardization in triage can lead to confusion.

**Methods:** An expert panel reviewed existing triage systems. Each member was assigned a triage system and asked to conduct an exhaustive literature review and Internet search and to develop a report to the panel. Each system had two or more members assigned to conduct a review.

**Results:** The committee identified nine existing mass casualty triage systems, including two pediatric-specific systems. The systems were noted to be similar in naming and color representations, but differed on the inclusion of an expectant category. Studies that compared the various mass casualty triage systems and found that the ability to obey commands and systolic blood pressure were the best predictors were identified.

**Conclusions:** The committee concluded that no one system could be embraced as a validated system. The committee decided to use the best available scientific information and consensus opinion to develop a system that could serve as a proposed national guideline. The group discussed each component until consensus was reached. The guideline incorporates pieces of most existing triage systems; it was given the name SALT Triage (sort, assess, lifesaving interventions, and treatment and/or transport). This guideline is intended for use on-scene in all-hazards events for both adults and children.

**Keywords:** disaster; emergency medical services; mass casualty; SALT; standardization; triage

*Prehosp Disast Med 2009;24(2):s142*

#### (K112) Use of SALT Triage during a Simulated Mass-Casualty Incident

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**Objectives:** To determine the accuracy of SALT Triage during a simulated mass casualty incident and the average time to make triage designations.

**Methods:** Thirty trainees (11 medical doctors (MDs), six registered nurses (RNs), eight emergency medical technicians (EMTs), one RN/EMT, four other) were taught to use SALT (sort, assess, life-saving interventions, treatment and/or transport) Triage during a 30 minute lecture. The following day, all trainees participated in 1 of 4 simulated mass-casualty incidents. For each incident, trainees were told to assess and prioritize all victims. Each scenario was comprised of 29 victims, including 11 moulaged mannequins and 18 moulaged actors. Each victim had a card that stated the victim's respiratory effort, pulse quality, and ability to follow commands. Initial and final assigned triage categories were recorded and compared to the intended category. Ten of the victims were equipped with stop-watches to measure the triage time interval. Timing began when the trainee approached the victim and ended when they verbalized their triage designation. The times were averaged and standard deviations calculated.

**Results:** Of the 30 participants, 20 reported having prior drill experience, and 11 had prior mass-casualty incident