

Kilner suggests the educational intervention and triage sieve questionnaire are suitable for training non-medical emergency services. **Conclusion:** This pilot study supports the hypothesis that the provision of training and an aide-memoir to volunteer nonmedical fire service personnel in South Australia will enable them to perform a triage sieve as effectively as volunteer emergency ambulance service personnel. While it has identified methodological changes to the parent study, it also suggests that this approach has the clear potential to improve casualty outcomes at a MCI.

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### Knowledge of the START Triage Method by Physicians and Nurses in a Tertiary Care Teaching Hospital

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**Study/Objective:** To evaluate knowledge of the START triage method by physicians and nurses in a tertiary care teaching hospital.

**Background:** The Centre Hospitalier de l'Université de Montréal is a large tertiary care teaching environment without the designation of “trauma center.” A recent online survey (PHARE project) conducted among the CHUM community, revealed that physicians are insufficiently trained in both basic and specific emergency measures.

**Methods:** In order to evaluate hospital disaster readiness, an online study was conducted among the entire CHUM community. Within this survey, we evaluated knowledge of the Simple Triage and Rapid Treatment (START) method, (11 questions) among physicians (ER and ICU) and nurses (ER) at our institution. The online survey was conducted on a volunteer basis between September 13 and October 2, 2016. Completed questionnaires were included in the analysis.

**Results:** Overall, 65% of ER physicians, 80% of ICU physicians and 29% of ER nurses participated in the study. The START method of triage was known by 30% of physicians and 47% of ER nurses; among them 50% of physicians compared to 89% of nurses received training to use this triage method. Among participants, 32% of ER physicians, 44% of ICU physicians and 46% of ER nurses received specific training in massive patient arrival (code orange), while 16% of ER physicians, 38% of ICU physicians and 14% of ER nurses had participated in a disaster simulation exercise. Overall, the level of knowledge (68% of correct answers on average) of the START triage method was not aligned with perception of knowledge among physicians and nurses.

**Conclusion:** The PHARE project revealed that ER physicians, ICU physicians and ER nurses at the CHUM are insufficiently trained to adequately use the START triage method in disaster situations. Efforts in the future will be directed toward developing disaster triage exercises for key personnel at our institution.

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### Comparison of the Application Value of Three Evaluation Systems for Triage in Burned Patients

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**Study/Objective:** To investigate the application value of Simple Triage and Rapid Treatment (START), Modified Baux Score (MBS) and Ryan model for triage in patients with burn injuries.

**Background:** Burn injury is common around the world. Simple and accurate triage methods or scores are certainly important for victims after a disaster, which also can be utilized to predict the mortality of patients with burn injuries.

**Methods:** Case notes of all patients with burn injuries admitted to emergency department of West China Hospital from March 2012 to July 2014 were retrospectively reviewed. START, MBS and Ryan models were computed for classification of the severity degree with related indexes (gender, age, length of stay, GCS score, blood pressure, heart rate, respiratory frequency, hemoglobin concentration, potassium concentration, burn surface area and inhalational injury, etc). The Receiver Operating Curves (ROC) were made for each evaluation system and analyzed for correlation with mortality, and Z-Test was utilized to distinct the area under curve (AUC) made respectively with START, MBS and Ryan model.

**Results:** There were 352 patients (median age 22.07 years, 66.19% males, 33.81% females ) was included. There were 14 patients who died in hospital while 338 survived to discharge. The AUC of START, MBS and Ryan model were 0.557, 0.923 and 0.856 respectively. AUCs of MBS and Ryan model have significant differences with that of START ( $P < 0.05$ ), while there was no significant differences between MBS and Ryan model ( $P = 0.152$ ).

**Conclusion:** MBS and Ryan model performed better than START on burn injury triage. However, MBS might be used more widely because of its simpleness.

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### Identifying Vulnerable Persons in the Community using Standard Clinical Assessment Data

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**Study/Objective:** Development of decision support algorithms to identify highly vulnerable home care clients during emergencies and disasters by using the Resident Assessment Instrument for Home Care (RAI-HC).

**Background:** Several studies have shown the increased vulnerability and disproportionate mortality rate among frail, community-dwelling, older adults as a result of disasters. Parallel to an escalating number of disasters, Canada is faced with an aging demographic and a policy shift emphasizing aging at home. This results in a greater vulnerability of this group of high-needs, community-dwelling individuals to the effects of events that lead to interruption of home health care services and/or displacement.