Study/Objective: The aim was to, 1) study the relation between disaster outcomes after earthquakes, expressed as number of dead and injured, and the performance of five pre-identified severity, and risk-scoring indexes, 2) to inform a model that in an initial phase of a disaster can be used to predict severity and levels of need, and thereby guide toward the appropriate levels of response.

Background: A disaster is as an event that overwhelms local capacity, necessitating national or international assistance. Disasters can be categorized, based on the type of hazard causing them. An earthquake is a hazard that can lead to a disaster. The disaster-severity depends on the magnitude of the hazard, underlying vulnerability, the level of exposure, coping capacity and the disaster response. While assistance should be based on needs, determined by the severity of a situation, there is no recognized way to compare severity between disaster contexts. Several initiatives have been developed to provide information on global severity and risks in disaster situations. In this study we compare five indexes and their ability to define severity: GDACs, GEO, KT's 7-need, INFORM and ECHO’s Crisis index.

Methods: We did a mapping of the existing indexes and indicators used. Index-scores were standardized and then compared with the number of dead and injured as an absolute outcome, in earthquakes with magnitude equal to or higher than 6.5 that occurred in populated areas, between year 2001 and November 2016.

Results: The five indexes evaluated were all indicating the severity after the examined earthquakes. There was not one single index that gave an absolute correlation. Indexes built on higher numbers of indicators had several indicators that gave identical information.

Conclusion: It is possible to predict the severity of a disaster through proxy indicators. The number of indicators used is not automatically increasing the preciseness or validity of the outcome.

Comparison of UAV Technology vs No UAV Technology in Identification of Hazards at a MCI Scenario in Primary Care Paramedic Students

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Study/Objective: The aim of this study was to compare Unmanned Aerial Vehicles (UAVs) to Non UAV technology in hazard identification, using paramedic students during a simulated Mass Casualty Incident (MCI). It was hypothesized that there is no difference in hazard identification order, and time to hazard identification.

Background: The proliferation of Unmanned Aerial Vehicles (UAV) technology has the potential to fundamentally change the situational awareness of incident commanders, allowing greater safety to first responders. Most studies of this technology have been descriptive in nature.

Methods: A randomized, controlled study was conducted with twenty-one students in their first year of a Primary Care
Developing the Chemical Information System Requiring Emergency Medical Information in Disaster

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Study/Objective: The study objective is to make the basis of a chemical emergency medical information system.

Background: There are many database sets and websites which provide chemical databases in chemical accidents, but they don’t have adequate roles for emergency medical support in Korea.

Methods: We reviewed the database sets and websites, which provide chemical database and emergency medical records in prehospital transport to hospitals. After an analysis was done, an adequate database set was proposed, and the algorithm for elicitation of chemicals suitable for emergency medical support, accident cases.

Results: By four steps of elicitation of chemicals, the number of chemicals of more than 100,000 was decreased to less than 1,000. The standard steps were accident preparedness, toxicity, and circulating amounts. We made an algorithm for the elicitation of chemicals.

Conclusion: When mass exposure by toxic chemical occurs, chemical emergency medical information systems will be helpful for acute identification of chemical and emergency medical response.

Being Aware of the Situation: Situational Awareness in the Emergency Department

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Study/Objective: To outline the application and benefits of Situational Awareness in the Emergency department. To show the basic aspects of Situational Awareness that can be applied in Emergency care.