### 017.

# Trauma Teams Performance during the 1994 "Sun-Health Summer Campaign"

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**Objectives:** The performance of nine trauma teams during the 1994 "Sun-Health Summer Campaign" is analyzed. This campaign is carried out by the Emergency Direction Department of the Health Ministry of the Province of Buenos Aires every summer to provide an adequate response to the increased number of trauma patients coming from tourism movement accidents.

**Methods:** Five hundred twenty-one patients were assisted by the nine trauma teams in different hospitals of the Province. These teams were formed with one advanced trauma life support-trained surgeon, one specialist in traumatology, and one in anesthesiology. Nine of these groups have acted in rural hospitals during summer as a regionalization in trauma experience

Results: Considering three worst injuries in AIS 85, 110 patients suffered severe, 185 moderate, and 226 minor trauma. Head trauma with alteration of level of consciousness was most frequently found in the first group, followed by thorax and extremity injuries. A total of 46 patients suffering severe head trauma were transferred to higher complexity-level centers since none of the none hospitals has a CAT scanner and only four of them had critical care units. Twenty-six patients from the first group needed surgical interventions. Extremity trauma was the most frequent in the second group, and only 20 patients were transferred.

**Conclusions:** Trauma team performance decreased mortality rate during first 24 hours. Besides, the number of patients transferred patients diminished, thus optimizing cost and quality of the assistance provided in rural hospitals.

## 044. Civil Military Cooperation in Disaster Preparedness and Management

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In the preparedness for disasters, it often is a problem for countries as to how many facilities should be available. To cope with this problem in The Netherlands, a central facility was created as an emergency hospital that immediately can be used for the admittance of a large number of victims in case of an accident with exposure to chemical, biological, or physical agents (including mechanical trauma). This facility could be established by the close cooperation of four institutes and with the support of the Ministries of Defense and of Health, Welfare, and Sport. The four institutes are: The Utrecht University Hospital, The Armed Forces Hospital Organization, The National Institute of Public Health and Environmental Protection, and the Utrecht University. Several times, departments of

this hospital have been used and the disaster preparedness plan could be evaluated. These situations concerned all civil accidents. To be prepared for disasters, education and exercises are organized by a military/civil team together with the prehospital relief workers (fire brigade; ambulance personnel). For out-of-area peace-keeping operations, the military/civil team also organizes the medical training and education of military personnel.

A video presentation of the work of this organization demonstrates the total relief chain in a combined chemical/mechanical accident with about 100 victims.

#### 094.

## Trauma Center: Conception, Management, and Relation to Disaster Medicine

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The ensuring of trauma care, particularly the care for the polytraumatized patients, is solved by the so called, "trauma centers." The means the establishment of a network of institutions, adequately equipped both materially and with appropriate personnel to provide complete, up-to-date treatment of victims of polytrauma. According to our experience, it is necessary to calculate the capacity of this center for a region of 1.0–1.5 million inhabitants. This corresponds with about 150–200 beds in a relatively autonomous institution that is connected to a large general hospital.

The are two major experiences associated with the long-term operation of these centers particularly from Austria, Germany, and the Czech Republic. The trauma center in Brno has been operational for 30 years.

We believe that the optimal configuration of a traumatological hospital should: 1) have 200 beds; 2) 50 beds for over-standard care; 3) an AR department; 4) Intensive care unit; 5) intermediate care units; and 6) a spinal care unit (25% of the intensive care beds.

It is possible through managing measures to accommodate the activities of the center very quickly for the needs demanded by a disaster. The bed capacity should be able to be increased by 50%, six operating rooms should mobilized and available without interruption for 24 hours. Material reserves always should be available. A surgical group, the trauma team, should be readily mobilized.

#### 053.

## Disaster Magnitude Scale "Dimak" and Disaster Scenarios for Analysis of Calamities

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In order to withstand the forthcoming disasters, we must know as much as we can about what may happen in this or that urbanized area due to natural phenomenon or/and man-made