

A vs. O ($p = 0.0018$) and B vs. O ($p = 0.039$) groups, but not for A vs. B or C vs. O groups. A total of 246 radio calls were qualitatively classified according to contents.

Conclusions: The integration of data enables a combination of qualitative and quantitative data to link treatment and outcomes to patient management. On that basis, it is possible to consider agency-specific evacuation protocols, poor resource utilization, and different education levels among rescue personnel.

Keywords: assessment; disaster drills; explosion; treatment and timing; triage

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Pediatric European Network for Treatment of AIDS (PENTA): Development of a Pediatric Trauma Registry in Flanders, Belgium

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Funded by the Flemish Fund for Scientific Research FWO "Levenslijn Kinderfondsen".

Objective: To collect epidemiological data on trauma and trauma care among children and adolescents in Flanders, Belgium, as available data are fragmentary and out-of-date.

Methods: The Pediatric European Network for Treatment of AIDS (PENTA) network prospectively collected data in a representative sample ($n = 18$) of Flemish emergency departments (ED). All children (age 0–18 years) who presented at the ED in 2005 or died prehospital due to trauma were included. The basic "A" registry consisted of 30 variables, the more exhaustive "B" registry (defined for severe trauma as the length of hospitalization exceeding 48 hours, including all non-survivors) consisted of 291 variables.

Results: The incidence of pediatric victims of trauma presenting at a Flemish ED was approximately 110/1000/year. Additional data were collected in a random sample of 7,875 cases (24% of all patients). The mean age of the cohort was 9.6 ± 5.5 years; 59% were male. The majority of injuries were minor in severity. Hospital admission was needed for 6.6% of patients, mostly for <48 hours. Of all cases, 0.8% were considered severe and included in the "B" registry (median injury severity score = 9, Interquartile range = 13). Of these patients, 10% were discharged eventually with moderate to severe disability, and 6.1% died.

Conclusions: The epidemiological data collected by PENTA on pediatric trauma in Flanders will be used for specific research, will aid prevention initiatives, and guide decision-making. Eventually, they will be used for auditing trauma care.

Keywords: epidemiological data; Flanders; pediatric; registry; trauma

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Research on Increase of Effectiveness of Prehospital Triage in Mass Casualty Incidents with Application of the WASKOs Command Center Support System

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The Polish rescue system is forced to react to an increasing number of Mass-Casualty Incidents (MCIs). In such extreme situations, correct prehospital triage plays a key role in the organization of emergency care both at scene of the event and at the Emergency Departments (EDs). The Polish rescue system uses popular methods of triage based on START, JumpSTART, and Triage SIEVE (sort) systems. The objective of the research was to evaluate the opportunities for using digital technologies currently available in management support systems and telemedicine to increase the effectiveness of prehospital triage.

The research was conducted at the 2nd Polish Winter Championships in Emergency Care that were held in Szczyrk and participated by 40 ALS teams. An MCI was simulated in which 30 people were injured. After the first triage, re-triage effectiveness, transport priorities, and casualties allocation to local EDs were evaluated using the Command Centre Support System (CCSS). A subjective assessment of digital technology implementation opportunities was made based on survey.

Digital technology implementation resulted in the provision of more effective emergency care both from patients triage accuracy, transport priority, ED allocation, and from the point of view of time required to perform triage and emergency care management compared to methods based on traditional procedure and transmission of patients information and particulars.

Implementation of digital technology increases the effectiveness of emergency care in MCIs. A subjective assessment of digital technology skills implementation explicitly correlates with availability of technology in everyday rescue and medical practice.

Keywords: digital technology; mass-casualty event; simulator; triage

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Earthquake Preparedness for Foreign Residents in Sendai

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Introduction: Earthquakes frequently occur in Sendai, Japan. There exists a 99% probability that a strong earthquake will occur in Sendai within the next 10 years.

Objectives: This survey sought to answer several questions about the knowledge of foreign residents regarding earthquake preparedness and their response to the earthquake that occurred on 16 August 2005 in Miyagi. It also addresses the difficulty in accessing relevant information on earthquake preparedness.

Methods: Data were gathered through a questionnaire survey that was distributed to available foreign residents.

Results: Of the respondents, 26% can not communicate in Japanese, while 90% can communicate in English. Two women could not communicate in either Japanese or English. Most of the respondents did not take safe action during the Miyagi earthquake: 55% of respondents who were in a building at the time of the earthquake did not respond safely, and 75% of those who were driving did not respond safely. Among respondents, 84% did not have an emergency kit prepared, 70% did not have their furniture fixed on the walls, 57% did not know their evacuation area, and 51% did not know how to provide first aid to injured people.

Conclusions: Foreign residents in Sendai are vulnerable to disasters; they require better access to information in English in order to be better prepared and to minimize risk during and following up-coming earthquakes.

Keywords: earthquakes; foreign residents; Japan; preparedness; risk
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Community Preparedness: A Disaster Management-Trigger Mechanism as a Model in Disaster Preparedness

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The regular occurrence of disasters in coastal Andhra Pradesh, India, has had a series of repercussions on the country's economy and development policies, and on the daily lives of millions of Indians. Disaster prevention and preparedness is a neglected aspect of disaster management in this area.

Coastal Area Disaster Mitigation (CADME) has initiated a program that induces early warnings and preparedness in 350 most vulnerable villages on the coast.

The effort made by CADME has been successful and is considered a "best practice" to mitigate the effects of events.

Keywords: emergency; integration; mitigation; preparedness; taskforce; vulnerability

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Poster Presentations—Theme 15: Research and Health Surveillance

(241) The Management of Healthcare Services at the Time of Natural Disasters: A Qualitative Study

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Iran is one of the world's most predisposed and liable countries to disasters. Studies have shown no coordination in providing health services to Iran at the time of disasters. Thus, studying the management of health services is important. This study makes an attempt to bring the experiences of health service providers who were in disasters and to suggest effective factors in the management of health services.

This study is based on the grounded theory. Participants consisted of a group of 17 individuals (15 males and two females) comprised of six nurses, two psychiatrists, an epidemiologist, a social worker, a psychologist, a PhD in health, a master of health, a nurse aide, two Bam residents, and a physician. The average of the ages of the participants was 37 years. All had at least one disaster-related experience. Data were obtained by semi-structured interviews, which were recorded, transcribed, and analyzed using the Strauss and Corbin method.

The participants emphasized management during disasters, and issues such as planning, organization, coordination, and participation of other countries were brought up as well. The lack of planning and discipline in providing health services, the division of labor, duties and responsibilities, lack of coordination, and the inability of the United Nations in coordinating international participations are considered main obstacles in providing required health services for survivors at the time of disasters. These issues can be dealt with by appropriate management.

Since the participants emphasized management and its important role in coordinating continuous, accessible health services, preparedness, attention to the importance of international, provincial, and local planning, human resources, division of labor, resources, and equipment. Proper management can help to provide adequate health services in disasters.

Keywords: coordination; disaster; disaster management; Iran; health services
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(242) Pre-Crash Phase Development of Blood Screening in a Southern Nigeria City: A Case Study with the Save Accident Victims Association of Nigeria (SAVAN)

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The use of auto-bikes as commercial transportation became popular in Nigeria in the mid-1980s. This is due to the failures of mass transportation infrastructures in the country. The sudden rise in auto-bike transportation with no safety or regulatory measures and a lack of trained personnel led to a rise in the number of crashes involving auto-bike drivers, their passengers, and pedestrians.

One factor related to the "golden hour" usually is massive loss of blood. This puts pressure on the blood bank for blood type screening, and the delay in obtaining needed blood for transfusion may lead to increased mortality. The delay in accessing blood for the victims led to establishing pre-crash blood data as an incentive for all auto-bike riders that participated in a Save Accident Victims Association of Nigeria (SAVAN) training program.

A total of 1,250 bike riders were screened for their blood type. Volunteers for the screening included nurses, scientists, and doctors. The results of the screening revealed that 54.3% of the volunteers had a blood type of O positive, 20.3% were A positive, 18.8% were B positive, 3.7% were O negative, 1.3% were AB positive, 1.1% were B negative, and 0.5% were A negative. None of the volunteers had a blood type of AB