500 surgeries, 3,000 minor surgical interventions, and 15,000 check-ups by specialists were performed annually. Patients requiring more advanced care are transferred to a hospital in Kosovska Mitrovica, located 40 kilometers north.

Ethnical intolerance and a lack trust between the Albanian and Serb populations have necessitated the development of parallel medical institutions in a relatively small area.

Keywords: ethical distrust; ethnical intolerance; hospitals; Kosovo; medical staff
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(97) Triage Decisions of Prehospital and Hospital Emergency Healthcare Providers, Using a Multiple Casualty Scenario in Kocaeli, Turkey

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Objective: This study was planned to examine the accuracy of triage decision-making among emergency physicians and to determine whether triage training was necessary.
Methods: A self-administered questionnaire, including a multiple-casualty scenario that required each casualty to be prioritized for treatment, was administered to 110 emergency physicians working for prehospital and hospital emergency services in Kocaeli, where an earthquake occurred in 1999. The scenario has been adapted to START from another study using the SIEVE algorithm (with permission). Seventeen case scenarios found to be appropriate for START algorithm were studied. The differences between personal/professional characteristics and triage decisions were analyzed using a Chi-Square Test.
Results: Accurate triage decision rates of the emergency physicians were between 83.6 and 90.0% for four immediate casualties, 26.4 and 78.2% for seven urgent casualties, 70.9 and 91.8% for four delayed casualties, and 82.7 and 97.3% for two dead cases. The triage rates with the highest accuracy and inaccuracy were obtained for dead and urgent cases, respectively. Personal and professional characteristics (age, professional, pre-hospital, and hospital emergency experience) were found to be related statistically for five cases ($p < 0.05$).
Conclusions: Emergency physicians tend to "under triage" patients. The discrepancy of the accuracy rates in urgent casualties indicates the necessity of improving decision-making in training programs. This improvement will be helpful in reducing violations of important duties of "justice" and of "do not harm" among the emergency physicians. Consequently, triage training programs should be periodically updated.

Keywords: physicians; prehospital; training; triage; Turkey
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Oral Presentations—Theme 5: Hot Topics

Session 1

Chairs: TBA

Informatics Solutions for Emergency Planning and Response

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Early informatics contributions to the emergency planning and response agenda have focused largely on surveillance and detection of threats. A broader assessment of possible informatics contributions reveals that informatics also can contribute to increasing efficiency during a disaster response, as well as provide a tele-presence for remote medical caregivers. This presentation will explore current and future roles of informatics in emergency preparedness and response.

Data management has long been the focus of informatics, but never with the special challenges brought about during disaster situations. Tracking of victims, electronic health records, and supply inventory are only a few of the contributions that informatics can provide during disasters. Modeling of response resources can provide the parameters for more effective decision-making. Public reporting can be provided more accurately if the information is received in a timely fashion. Databases provide the infrastructure for the reporting of data that can later be mined to determine the effectiveness of planning and response efforts.

Some disaster situations require medical expertise that is not readily available in the field. Having a telemedicine infrastructure would link the needed expertise to those in the field who require referral advice. Being able to link to the patient's medication history and records would further extend the provision of better health care.

Informatics also can play a strong role in the design of databases for volunteers. Having volunteers registered and credentialed prior to an emergency event would allow for expedient care. The intersection of informatics and emergency response provides the most effective available response.

Keywords: data reporting; databases; emergency planning and response; informatics; tracking
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Emergency Telecommunications for European Citizens

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Emergency Telecommunications cover communications from citizens to authorities, between authorities, from authorities to citizens and between affected citizens in cases of emergencies or disasters.

The presentation covers the existing situation in all these areas from a citizen's perspective. More specifically, it covers the situation concerning the single European emergency call number (112), the ongoing projects in the field of communications between authorities and the future of early warning and alarm for citizens in distress.

The presentation also contains proposals for action in view of ensuring further developments in this field.
Keywords: citizens; disaster; emergency; Europe; telecommunications
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Evidence-Based Triage—Increasing Survivability without Playing God

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Session Description: This presentation will take an in-depth look at disaster and multiple casualty triage systems. Historical models have subquent failures failure to heed poor resource allocation and ignoring the Prime Directive of emergency medical services (EMS): Do no hard! New research has demonstrated simple methods to overcome these and other challenges which will reduce the chaos, maximize the number of survivors, and minimize or prevent wasted resources.
Learning Objectives: The objectives of this study: (1) contrast current triage methodology against current practice; (2) define the immediate, intermediate, and long term goals of triage; (3) establish the correlation between triage response and public health concerns; (4) describe an evidence-based triage system; and (5) explain the benefits of this model versus other models; and (6) discuss the benefits to the EMS system, including increased numbers of lives saved.
Keywords: evidence; evidence-based; survivability
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Rationing Resources: Ethical Issues in Disaster and Epidemic Situations

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In an epidemic situation or large scale disaster, medical and human resources may be stretched to the point of exhaustion. The current concern over a pandemic influenza crisis has every country in the world reviewing plans of action that would minimize public health morbidity and mortality as well as maximize the appropriate use of medical and human healthcare resources.

A major medical resource concern is the limited number of mechanical ventilators believed to be needed, should a pandemic influenza occur. Recent reported cases of avian influenza suggest that mechanical ventilation will be required for successful recovery of individuals ill with this strain of virus. However, should the need for ventilators exceed the available machines, how will care providers make the difficult, ethical decisions as to who should be placed, or remain, on these machines as more influenza patients arrive in need of help? Is there an ethical decision-making model that can assist providers in making the difficult choices they will most surely be called upon to make as limited resources must be used in ways that will be most beneficial?

We will present a decision-making model for clinicians that is based upon the bioethical principles of beneficence and justice. Our model begins with the basic assumptions of triage and progresses into a useful algorithm based upon utilitarian principles. Without such a model to guide clinicians, allocation of scarce recourses may not be done in a just manner.
Keywords: epidemic; morbidity;mortality; resource; ventilators
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A Roadmap for Protection of Participants Mental Health during Disaster Research after the 2001 World Trade Center Event

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Post-disaster research has the potential to re-victimize survivors. A roadmap was developed and tested to assure the protection of participants during the qualitative phase of a multi-phase study of World Trade Center (WTC) evacuees on 11 September 2001.

To develop the model, the basic tenets of ethical human research conduct (autonomy, beneficence, non-malfeasance, and distributive justice) were used as a foundation to assure the protection of study participants. Then, expanded areas of human subject protection were identified in the literature and mapped to these tenets. Finally, specific procedures and strategies were identified to address each of the tenets and expanded areas. Strategies included: (1) the use of legal counsel and the IRB to develop consent procedures including information about psychological risk; (2) interagency coordination for WTC research to assure a worthwhile study and eliminate over-recruitment of participants; (3) use of a Data Safety Monitoring Board; (4) strict delimitations to exclude the psychologically fragile; (5) the inclusion of mental health clinicians on the study team; (6) rigorous study team training; (7) pre-establishment of mental health support for participants including an on-call psychiatrist and psychiatric emergency department referral agreement; (8) pre/post study participation post-traumatic stress screening (PTSS); (9) researcher debriefing; and (10) a Community Advisory Board for the study.

To test the model, pre/post study PTSS screening scores were compared (possible range of 1–5) . The mean pre-PTSS score was 2.05 (SD = 0.84). It was 1.97 (SD = 0.82) directly following participation, and 1.80 (SD = 0.79) two weeks after participation. A paired samples t-test indicates significantly lower PTSS scores after participation ($t(46) = -2.82, p < 0.01$).
Keywords: human research; post-traumatic stress; psychology; research model; World Trade Center
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