How Academic Emergency Medicine Managed a Real Disaster—An Experience from the Bam Earthquake

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Introduction: Earthquakes are one of the most devastating disasters Iranians encounter, and the Bam earthquake was the worst during the past 100 years. Rasoul Akram Hospital, a general university hospital and trauma referral center, received the largest number of Bam earthquake victims of all capital university hospitals.
Methods: A checklist was prepared and data were gathered by direct contact with victims, medical staff, and managers, or indirectly by reviewing patients' charts. The data was processed and presented in a descriptive manner.
Results: The emergency department was evacuated as soon as the event was announced. Elective patients were discharged from other wards, emergency department physicians were doubled, and proper nursing and other staff were assigned to the emergency department.

Nearly four hours after preparation, the first group of victims arrived. A total of 259 patients were admitted. All patients were triaged twice by predetermined teams, received emergency department cocktail, and had samples taken. Based on triage, patients were classified into three groups. Those who had urgent life/limb threatening conditions were transferred immediately to the operating room, critical patients without operable problems were kept in monitored beds in the emergency department. And the third group consisted of non-urgent patients who, after primary stabilization, were transferred to regular floors. On the second day, the largest burden of patients arrived (150 patients <10 hours), so 2,600 square meters of unused space was prepared as a disaster area, and victims from all parts of the hospital gathered in this area, except for those needing special considerations. Emergency physicians visited all of these patients at least twice daily. Other specialties were summoned based on clinical needs. Overall, there were 42 severely injured patients and five mortalities, two of which were dead on arrival. In the first week, 96 major operations were performed.

In the recovery phase, the emergency department had to act as a shelter for many victims, which accounts for the increased average length of stay (13.1 days).
Conclusion: Although there was no pre-existing disaster plan, emergency physicians played a great role in providing better care, resulting in higher patient and other medical staff satisfaction, according to national comprehensive studies.
Keywords: Bam; emergency; emergency department; Iran; physicians; preparedness; response
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Free Papers Theme 18: Education-1 Miscellaneous

Survey of Student Attitudes Towards and Knowledge of Disaster Preparedness

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A total of 418 senior nursing, medical, and dental students were invited to participate in a survey concerning their knowledge of and attitudes toward disaster preparedness topics. There were 136 (33%) completed questionnaires. Two-thirds of the respondents were female, and 81% were <30 years of age. Factor analysis identified three major components underlying the non-didactic questions. Alphas for these factors averaged approximately 0.83 indicating a reliable assessment of the underlying factors. The factors appeared to map domains of classroom experience, confidence, and attitude. Thirty-seven percent had received instruction in bioterrorism preparedness, 24% in chemical preparedness, and 16% in nuclear preparedness. Nineteen percent received classroom training in all-hazard emergency planning. Few (9%) felt their educational experience prepared them to function during a disaster. While a high proportion (41%) of the respondents felt confident in their ability to work with other healthcare providers in providing disaster-related care, fewer (24%) felt comfortable working with their public health colleagues. Eighty percent of respondents felt that participating in a terrorism response either was extremely or slightly rewarding, but the majority (85%) was concerned about the risks involved.

The respondents did well on the knowledge-based questions. The majority of students could identify basic incident command structures, knew where to find polices on hazardous materials, and knew how to perform gross decontamination. They performed particularly well in the questions concerning biological agents, anthrax transmission (not by person-to-person contact), Category-A biological agents, and the indications and contraindications for smallpox vaccine. The results have implications for graduate-level disaster curriculum development.
Keywords: attitudes; biological agents; disaster response; education; knowledge; students; training
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Development of a Concept of Prehospital Command and Control Training Using Performance Indicators as a Quality Measurement Tool

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Introduction: There are several concepts of training of medical first responders in command and control at the scene of a major incident. None of these have postulated measurable performance indicators which could be used as a template in training and examinations. If a standard set of such performance indicators could be agreed upon, this could serve as a template for developing a standard for training as well as performance of command and control.
Methods: A set of performance indicators relating to command and control at the scene of an incident was postulated.