eral non-governmental organizations, plays a vital role in the management of disasters in Nigeria. These roles vary from the prevention of disasters to the rehabilitation of victims of disasters. Investigations show that some of these disasters are the result of human inadequacies or poor management of government-owned facilities (e.g., refineries in the case of fire or illegal issuance of certificates of occupancy and approvals to builders who build to block drainages, in the case of flood-related disasters).

Some of the disasters resulted from poverty, such as pipeline vandalization. Pipelines are vandalized most frequently in the Niger Delta area in Nigeria, and, on several occasions, resulted in fires, which killed several people and destroyed properties worth millions of naira. This research analyzes the cost implications of some of these documented disasters in Nigeria during the pre-disaster, disaster, and post-disaster stages. The results reveal that during the pre-disaster phase, the cost is negligible, while the burden of the acute phase and the post-disaster phase is astronomically high.

In conclusion, if adequate funding is provided during the pre-disaster phase, perhaps the disaster can be completely avoided and the associated morbidity and mortality prevented. Keywords: cost analysis; disaster; management; Nigeria; pre-disaster; post-disaster; poverty; prevention

Prehosp Disast Med 2005;20(2):s80-s81

Injury Severity and Outcome Evaluation of Injured Patients of the Bam Earthquake

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Introduction: The Bam Earthquake occurred on 26 December 2003 in Iran, and the number of injured patients overwhelmed the nearby facilities in a short period of time. Patients were transferred to hospitals in other provinces the day after the disaster. Rasool-Akram Hospital, a Level-1 equivalent Trauma Center, located in the capital city of Tehran, accepted a large number of cases during the disaster. Objective: To evaluate the severity of trauma and outcome of earthquake victims in this referral hospital.

Methods: In this cohort study, all patients admitted to the hospital were examined during the course of hospitalization. The primary end point was either hospital discharge or patient death. The causes of mortality and the length of stay (LOS) were recorded. The revised trauma score (RTS), injury severity score (ISS), and trauma and injury severity score (TRISS) also were determined.

Results: Between 26 December 2003 and 03 January 2004, 180 patients injured in the earthquake were transferred to Rasool-Akram Hospital. Most cases (96.7%) had a RTS score of 7.84. According to the ISS, 42 cases (23.3%) had major trauma with an ISS of 16, the average TRISS in the patients was 5.2 ±1.4, and five patients (2.9%) died during the course of stay. The expected mortality according to TRISS methodology was 2.65 (among 180 cases). The average LOS was 13.1 ±1.4 days for survivors and average time to death in deceased cases was 10.0 ±6.2 days.

Conclusion: Most transferred cases had minor injuries and the intra-hospital mortality was low, but the average length of stay was relatively high. In addition to trauma severity indexes, length of stay for patients injured by the earthquake may also be affected by medical complications, especially acute renal failure.

Keywords: Bam; earthquake; injury severity score (ISS); revised trauma score (RTS); trauma and injury severity score (TRISS)

Prebosp Disast Med 2005;20(2):s81

Study of Respiratory Symptoms Related to Smoke Inhalation During the Sydney 2001–2002 Bushfire Event

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Introduction: On 25 December 2001, Sydney was shrouded in a thick cloud of black smoke fueled by up to 60 bushfires in and around the city caused by a combination of drought, hot weather, high winds, and arson. The smoke persisted for 13 days.

Objective: To obtain information about the health risks of bushfire smoke to enable the provision of appropriate public health advice, and to assist in bushfire smoke pollution management.

Methods: In early January 2002, a convenience sample was taken of 230 patients attending two Sydney emergency departments for any reason. These patients had all been exposed to bushfire smoke for nine days or more, and completed questionnaires regarding respiratory symptoms and exacerbation of pre-existing asthma or lung disease. The symptoms investigated were cough, shortness of breath, chest tightness, and wheezing. The same questionnaire was administered to a similar control group in January 2005. Seasonal variation in asthma and viral illnesses necessitated that the control group be obtained at the same time of year to reduce confounding variables. The original design was to obtain the control group in January 2003, however the study population experienced further bushfire smoke exposure, so the survey was postponed.

Results: A total of 51% percent of those surveyed during the bushfires reported one or more of the respiratory symptoms investigated.

Conclusions: A large proportion of the persons exposed to smoke have respiratory symptoms the persist well-beyond the period of exposure.

Keywords: asthma; bushfires; health risks; public health; respiratory symptoms; smoke inhalation; Sydney

Prehosp Disast Med 2005;20(2):s81

Psychosocial Care at Mass-Gathering Events: Integration into Emergency Medical Services during the EURO 2004 in Portugal

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Background: The integration of psychologists with emergency medical services at mass-gathering events has not been well-described.

Objective: To describe the integration of psychologists with emergency medical teams at football games in Portugal during the European Football Championship (EURO 2004). Methods: The integration of psychologists into 31 emergency medical teams comprised of physicians, nurses, and emergency medical technicians at 31 football games at 10 stadiums in nine Portuguese cities during the European Football Championship (EURO 2004) in June–July 2004 were analyzed.

Results: Up to four psychologists were integrated into each team. Medical assistance was provided to 2,003 patients, of which 190 received psychosocial care. Patients who received psychosocial care suffered from panic attacks, agoraphobia, general anxiety, or anxiety related to a medical condition. Psychosocial assistance included: (1) emotional stabilization of patients and occasionally their families; (2) psycho-educational information and techniques regarding managing their condition; (3) assistance with problemsolving; (4) information about referral services; and (5) telephone follow-up regarding outcomes at a later stage. Conclusion: Psychologists may be successfully integrated into emergency medical services at mass-gathering events.

The provision of prehospital, psychosocial care at mass-gathering events may reduce the number of people with psychological emergencies who require hospital-based, psychosocial care.

Keywords: care; emergency medical technician; mass-gathering

Keywords: care; emergency medical technician; mass-gathering event; Portugal; prehospital; psychosocial

Prebosp Disast Med 2005;20(2):s81-s82

Vulnerabilities of the Public to Disasters in China X.Y. Xu

How to prevent and manage public health emergencies and disasters has become an important challenge for the Chinese government and the Chinese people. There are serious vulnerabilities with the realities and strategies in coping with disasters (such as the SARS crisis) among the people of China. The public tends to panic when facing disasters, has a weak ability to distinguish between true and false information, a lack of self-discipline, a lack of knowledge on disasters, and a weak social support system. The causes of these vulnerabilities in regards to disasters in China are analyzed. Some policy suggestions are provided to overcome the weaknesses of the public in China.

Keywords: assessment; China; coping strategies; disasters; vulnerabilities Prebosp Disast Med 2005;20(2):s82

Integration of a Psychologist into Prehospital Emergency Medical Teams for Early Psychological Intervention: Two Case Reports

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Background: Prehospital emergency medical care workers involved at the scene of a traumatic event are susceptible to a variety of stress-related psychological and emotional sequelae, especially when the victims are children. Although

early psychological intervention, including diagnosis and treatment, may improve long-term psychological outcomes, psychologists have yet to be integrated into prehospital emergency medical care teams on an everyday basis.

Objective: To examine the feasibility of integrating a psychologist into prehospital medical emergency teams for early psychological intervention.

Methods: Two case reports of house fires that produced on-scene deaths of children, in which a psychologist was integrated into the prehospital medical emergency care team, were analyzed. In the first case, the victims included a two year old who died on-scene and a five year old with smoke inhalation. In the second case, the victims included a seven-month-old infant who died on-scene, and five other victims with smoke inhalation (ages one, two, three, five, and 67 years old).

Results: In both cases, a psychologist provided early psychological interventions for the survivors and their families, families of the children who died, and the prehospital emergency medical care workers. Psychological interventions for prehospital emergency medical care workers were aimed at ameliorating symptoms of acute stress reaction, maximizing functionality, providing emotional stabilization, and preventing overload and "burnout".

Conclusion: The integration of a psychologist into the prehospital emergency medical care team in order to provide early psychological intervention is feasible. It also may improve the immediate and long-term well being of the prehospital emergency medical care team and the community. Keywords: children; emergency medical care team; interventions; prehospital; psychological; stress; traumatic events Prehosp Disast Med 2005;20(2):s82

Role of the Press in the Psychosocial Impact

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Argentina has encountered a number of emblematic events, including two terrorist events, floods, and a plane crash. In each case, journalists became improvised sorceresses, doing a bad job, in some cases, looking for "the impact of the news". Reporters forgot their primary function: to inform the public precisely about what was going on, establishing a link between the authorities that manage the risk and the most urgent necessities of the community. The Reporter Emergency News Agency (RENA) is the only Latin-American agency specialized in reporting emergencies and catastrophes.

The RENA sends information in electronic format to >1,000 users each week. In a two-year period, 580 reports of investigation relating to the possible prevention of human-made or natural disasters were researched. The RENA reviewed 3,800 articles on 1,710 topics, and journalists conducted research before the occurrence of catastrophes, traveled to damaged areas, and identified experts to obtain relevant information. Journalists sought humanitarian assistance and maintained contact with specialists in