

(H62) Evaluation of Emergency Medical Services in Saudi Hospitals: Healthcare Providers' Perspectives*Saad Alghanim*

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Objectives: This study was conducted to evaluate the current emergency medical services in Saudi hospitals according to the perspective of healthcare providers.

Methods: Data from healthcare providers who work in Riyadh hospitals were collected. In addition to characteristics of the respondents, data on a number of issues and relevant variables were collected. Five hundred questionnaires were distributed randomly to healthcare providers, of which, 482 (96.4%) questionnaires were returned, and 411 (82.2%) were valid for analysis. The data were presented and analyzed in a descriptive fashion.

Results: The majority of respondents indicated that their hospitals were prepared to cope with emergencies. However, respondents indicated some deficiencies that must be corrected or modified. In particular, respondents indicated that coordination and integration among public and private hospitals during emergencies is lacking, and that the current information system among hospitals is ineffective.

Conclusions: There are some deficiencies in the current emergency medical services among Saudi hospitals. The findings suggest that decision makers and administrators should work together in order to increase the emergency preparedness of Saudi hospitals. Special attention should be paid to the coordination among hospitals and the establishment of an effective health information system.

Keywords: evaluation; health care; preparedness; Saudi Arabia;

survey

Prehosp Disast Med 2009;24(2):s100**(H63) Technological Challenges to Medical Practice in the 21st Century***Joseph McIsaac*

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Modern medical practice is critically dependent on computer technology and electrical power. The emergence of cyber warfare over the Internet puts power, communications, and financial infrastructures at risk. Recent cyber attacks in Estonia, Georgia, and the US highlight this vulnerability. Keeping firewalls and anti-malware up-to-date can harden information systems. Maintaining off-line back-up hardware, data storage, and alternative operating systems will allow recovery after an attack.

Stable electrical power is taken for granted in developed countries—modern medical care cannot occur without it. The high-altitude detonation of a single nuclear weapon releases an electromagnetic pulse that has the ability to damage electronics throughout the US or Europe while simultaneously collapsing the power grid. There is no plan for restarting the grid on such a massive scale. Experts estimate the time of restoration as lasting from months to years. Although critical medical electronics can be protected through shielding, filtering, and grounding, most are vulnerable due to ignorance of the problem. While protec-

tion of the power grid is beyond the scope of the medical community, alternative power sources allowing small-scale resumption of essential care do exist at moderate cost. Vulnerability can be reduced and recovery hastened by preparation at the local level.

Keywords: computers; disaster health management; electricity; power; technology

Prehosp Disast Med 2009;24(2):s101**(H64) Hospital Reinforcement Team Preparedness for a Mass-Casualty Incident***Odeda Benin-Goren; Ayala Lior; Pinchas Halpern;**Ronen Libster; Ofer LeHAVI; Tina Shamis*

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A mass-casualty incident (MCI) involves, by definition, at least a temporary imbalance of resources. Staff involved in patient care may have little experience. The most experienced caregivers may be absent or must devote their attention to the logistics of the event.

In order to save many lives as possible during a MCI, medical personnel should follow predetermined and clear orders, and have the ability to be as flexible as needed.

All this should be done by the regular emergency department team with reinforcement of a designated team that does not always care for trauma patients on a daily basis. The reinforcing team is trained in the emergency department in a special training program developed by the emergency department management and the Emergency Division Management of the medical center.

This paper will present the training program, the accumulated experience while operating the training program during a real event, and the evaluation of the team satisfaction following the training used during a real event.

Keywords: emergency department; hospital staff; mass-casualty incident; preparedness; training

Prehosp Disast Med 2009;24(2):s101**(H65) Bagh Regrows—Earthquake Survivors as Catalysts of Community and Personal Reconstruction***Tanzeel Ansari; R.J. Orner*

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Objective: The objective of this study was to analyze the responses of survivors of the 2005 Kashmir Earthquake responses for themes that assisted in their individual and societal adjustment soon after the disaster.

Methods: A qualitative study based on field interviews using Grounded Theory was performed in Bagh, Pakistan and administered in Kashmir in December 2005.

Methods: Twenty-one volunteers at the Qatar Red Crescent Society's Psychological Support Program were interviewed about coping, adjustment, and their roles during and after the earthquake. The interviews were recorded in Urdu before being translated into English and transcribed for coding and qualitative analysis.

Results: Becoming a survivor-helper in this group is associated with actively fostering social cohesion and developing a coherent narrative that accounts for the disaster and its effects over time.

Conclusions: Survivors emphasized immediate emergency response that address primary needs. Communities showed resilience that can be bolstered by working through local structures. Early adjustment of key survivor-helpers can facilitate societal recovery. The role of organizations (school) and faith in adjustment should be recognized.

Keywords: cohesion; earthquake; qualitative; resilience; spirituality; survivor

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(H66) Capacity Building in Emergency Medicine—An Initiative following the Tsunami in Sri Lanka

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The 2004 tsunami devastated 15 districts in Sri Lanka. Nearly 50,000 lives were lost and about 10,000 are missing. More than two million people were displaced. Many survivors of the tsunami suffered serious mental and physical damages, and lost their hope for the future.

In this context, the Institute of Human Development and Training (IHDT) started a pilot project called the Public Health Education and Emergency Preparedness Initiative in Kahawa. Kahawa is below sea level, and the major source of income for the community was coral mining. The project covers all the stakeholders in the community including the local authority, schools, beach hotels, community-based organizations (CBOs), etc. A lecture series was held to educate the community on how to cope with disasters and manage the responses. Workshops on disaster management and first aid also were held for community leaders. Participants were trained on how to use emergency medical facilities during a disaster. The community is better prepared in emergency health care to face future disasters.

This paper analyzes the post-tsunami scenario in southern Sri Lanka and the initiative taken to prepare vulnerable communities. It describes the challenges of extending this project to a national level and provides conclusions and recommendations based on the experience.

Keywords: capacity building; community; disaster; education; preparedness; response

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(H67) Emergency Response Plan for a Teaching Hospital in Sri Lanka

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Introduction: From a medical point of view, *disasters* can be defined as incidents that generate a large number of casualties that exceeds the medical response capacity. Emergency response planning is a key element in disaster preparedness and mitigation.

The teaching hospital (Anuradhapura) manages a large number of external emergencies. It is one of the hospitals in Sri Lanka that receives the highest number of patients per unit time. From December 2006 to November 2007, there were 16 occasions during which clusters of >15 patients

were admitted to the emergency surgical unit. The Working Emergency Response Plan (WERP) of the hospital was initiated in early 2006.

Objective: The objective of this project was to evaluate the existing plan and design a more efficient and flexible working plan by analyzing the responses of emergency team members and studying other emergency plans currently in practice.

Methods: A total of 45 members using the current emergency plan were asked to complete a questionnaire, and two other emergency response plans currently in place were reviewed.

Results: The existing WERP is not adequate to maintain communication and coordination or to use human resources and infrastructure optimally during the management of a mass-casualty incident.

Conclusions: Considering the weaknesses of the existing plan and using the essentials from the other plans reviewed, a new, flexible, revisable plan was designed. The new plan is in the process of implementation. A second study is needed once the new WERP is established to assess its effectiveness.

Keywords: emergency plan; emergency response; hospital; plan; preparedness

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(H68) “We Don’t Have a Backup Plan”: An Exploration of Family Emergency Preparedness Plans following Stroke

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Introduction: Family preparedness planning is one strategy to mitigate the negative impact of disasters. High-risk populations, such as families coping with debilitating illness, require special consideration depending on the functional limitations imposed by the illness.

Methods: In a qualitative study of family caregiving experiences following a stroke, family caregivers were recruited through rehabilitation centers at the point of patient discharge. Within the first month after the stroke survivor was discharged from hospital/rehabilitation center, family caregivers were asked about their “back-up plan”, should they become unable to provide care for the family member who is ill, or in the event of a natural disaster.

Results: Using grounded theory, with the family as the unit of analysis, the findings from these semi-structured interviews with family caregivers (n = 12) showed that the majority of these families did not have a back-up plan in the event the primary caregiver was unable to provide care. Most families would have to rely on the city’s emergency respite care programs, because there is no one else to provide the care, or other family members are unable to provide respite. For natural disasters, rural families reported having more supplies, such as generators, extra water, and food.

Conclusions: Families providing daily care for a family member recovering from stroke are at high-risk of being caught off-guard