

scores of different groups were similar, implying that CBRN medical training is an equator of attitude toward a chemical event. This equality of scores might reflect a similar level of preparedness toward managing a chemical warfare casualty indicates the importance of such education and training.

Conclusions: Training such as the described CBRN course has a significant positive impact on attitude of physicians toward treating a chemical victim, mainly on knowledge and self sense of capabilities. Medical experience is a contributor for positive attitude, however, after the CBRN course, attitude scores were similar for all groups.

References

1. Okumura T, Suzuki K, Fukuda A, Kohama A, Takasu N, Ishimatsu S, *et al*: The Tokyo subway sarin attack: disaster management, Part 1: Community emergency response. *Acad Emerg Med* 1998;5(6):613–617.
2. Krivoy A, Layish I, Rotman E, Goldberg A, Yehezkeili Y: OP or not OP: the medical challenge at the chemical terrorism scene. *Prehosp Disaster Med* 2005;20(3):155–158.
3. Flowers LK, Mothershead JL, Blackwell TH: Bioterrorism preparedness. II: The community and emergency medical services systems. *Emerg Med Clin North Am* 2002;20(2):457–476.
4. Chen FM, Hickner J, Fink KS, Galliher JM, Burstin H: On the front lines: family physicians' preparedness for bioterrorism. *J Fam Pract* 2002;51(9):745–750.
5. Alexander GC, Wynia MK: Ready and willing? Physicians' sense of preparedness for bioterrorism. *Health Aff (Millwood)* 2003;22(5):189–197.
6. Chung S, Mandl KD, Shannon M, Fleisher GR: Efficacy of an educational Web site for educating physicians about bioterrorism. *Acad Emerg Med* 2004;11(2):143–148.
7. Gershon RR, Gemson DH, Qureshi K, McCollum MC: Terrorism preparedness training for occupational health professionals. *J Occup Environ Med* 2004;46(12):1204–1209.

Keywords: attitude; casualty management; chemical warfare; experience; physician

Prehosp Disaster Med

Terror and Conflicts

Preparing for the Predictable Surprise of a Terrorist Bombing

R. Hunt; I. Ashkenazi; S. Deitchman; B. Dorn; J. Enders; H. Falk; L. Garbarino; V. Kapil; J. Madden; L. Marcus; K. Sarmiento; S. Sasser

Centers for Disease Control and Prevention, and the National Preparedness Leadership Initiative: A Joint Program of the Harvard School of Public Health and Harvard's Kennedy School of Government

Introduction: The US Institute of Medicine reports that, "Explosions are by far the most common cause of casualties associated with terrorism." However, there have been no successful terrorist attacks in the US resulting in mass injuries and deaths since 11 September 2001. While a terrorist bombing is a predictable surprise, medical preparedness for events that have not occurred for eight years pose challenges to motivation and prioritization. This work describes the Centers for Disease Control and Prevention (CDC's) planning strategies to meet those challenges, and programs to disseminate this information.

Methods: These initiatives are designed to acquire, disseminate, and utilize knowledge about clinical and health system challenges in responding to terrorist bombings. This work was accomplished by collaborating with a wide range of partners including: key health system leaders who

responded to bombings internationally, non-governmental health organizations, and federal agencies.

Results: Joint meetings of US and international medical responders from New York City, Boston, Washington DC, Chicago, San Francisco, Los Angeles, Delhi, Israel, London, Madrid, Mumbai, and Pakistan were convened to learn about the medical response to terrorist bombings. Terrorist bombing challenges common around the world were identified, including triage, casualty distribution, standards of care, and healthcare system resilience. A course on clinical care of bombing victims, guidance on surge capacity for terrorist bombings, and a bomb injury surveillance tool was developed and disseminated.

Conclusions: The CDC, in cooperation with a wide range of partners, developed and disseminated new knowledge about challenges, and proposed solutions for the medical response to terrorist bombings. This work has applicability in the US and internationally, and to all mass-casualty events. The next steps include developing a health systems terrorist bombing preparedness course, implementing surge capacity guidance, utilizing the bomb injury surveillance tool, and building on successful international collaborations.

Keywords: collaboration; international; preparedness; surveillance; terrorism

Prehosp Disaster Med

Program for Psychological First Aid for the Treatment of Acute Stress Reactions in a General Hospital during Rocket Attacks

Eva Farberoff, MA; Jolanda Kaddar, PsyD; Bella Kreinin, MD; Gila Hyams, RN, MA
Rambam Health Care Campus, Haifa, Israel

Introduction: During the Second Lebanon War, Haifa and Rambam Hospital were under constant rocket attacks. The hospital had to cope with the wounded soldiers and civilians, suffering from physical and/or mental injuries. Simultaneously, the staff was in personal danger and exposed to Secondary Traumatic Stress (STS). The Trauma Unit of Rambam Hospital and the Mental Health Service of the Ministry of Defense requested increased psychological assistance for the wounded. The emergency program was designed to lower stress and to prevent post-traumatic stress symptoms by early psychological intervention.

Methods: The program was developed and directed by the psychological service, coordinated and collaborated with the trauma unit, psychiatric unit, administrative and medical staff of the hospital. Twenty psychologists from the psychiatric department received special training to give bedside psychological first aid (PFA) to physically wounded patients suffering from acute stress reactions (ASR). Training was immediate, ongoing, on location, included weekly lectures, daily group supervision and written manuals. Individual and group sessions were designed for helping staff suffering from STS.

Results: From the 284 hospitalized soldiers and civilians, 112 received PFA in 14 different wards. Psychological evaluation upon release showed lowered stress levels. Few cases were referred to further treatment after release. Staff reported that they felt supported, contained, and helped by the psychological interventions.