

# The Israeli Experience with Hospital Preparedness to Terrorism

S Schreiber, N Yoeli

---

## Citation

S Schreiber, N Yoeli. *The Israeli Experience with Hospital Preparedness to Terrorism*. The Internet Journal of Rescue and Disaster Medicine. 2004 Volume 4 Number 2.

## Abstract

The civilian population in Israel has known several waves of terror, the most recent one beginning in September 2000. The current wave of suicide bombing in Israel is different from previous waves (Hanoch et al., 1996) in that the bombs are carried by suicide bombers and are packed with nails, iron pellets and screws (Mintz et al., 2002) in an attempt to maximize injury and to cause complex trauma thus elevating the number of casualties. Between September 2000 and November 2004, a total of 694 civilians have been killed and 4771 civilians have been injured in this wave of terrorism (IDF, 2004). Standing protocols for coping with casualties of such events have been developed (Almogly et al., 2004; Kluger et al., 2004; Peleg et al., 2004; Riba & Reches, 2000; Shamir et al., 2004), and the general population seems to be coping adequately (Bleich et al., 2003). But the turn of events imposes that beyond coping with "conventional terrorism", hospitals must be ready to cope with a much more complex possible threat, that of chemical or biological terror. Chemical or biological terror may cause mass casualties, but a major damage of such a threat is related mainly to psychological terror, both among the potential casualties and the hospital staff treating them. While the issue of contingency programs and preparedness training of the clinical- and nonclinical-responders of hospitals has been addressed extensively both in Israel and elsewhere (Drory et al., 1999; Shemer et al., 1991; Sweeney et al., 2004; Thorne et al., 2004), it focused mainly on technical, medical and logistic aspects. Relatively very little attention has been paid to how responders and the public will react to biological or chemical terrorism and how emotional and behavioral responses might complicate an otherwise (technical-logistical) adequate response.

Toward the upcoming war in Iraq, and the potential threat of non-conventional attacks, the Tel Aviv Sourasky Medical

Center (TASMC) incorporated human-behavior concepts into its preparedness training program. An inner communication network stressed problem solving and collaboration rather than hierarchy. Issues of responders and family safety were addressed, team leadership training included leadership skills, stress management and coping skills in order to enhance resilience. This process intensified the trust between hospital staff and management, and staff involvement in the process, it also improved the quality and content of information processed.

Only very recently these themes have been touched upon (Schreiber et al., 2004; Stein et al., 2004), stressing the need to incorporate multi- and interdisciplinary disaster management research (including the psychological and behavioral aspects and consequences of the way the mass-media convey the events) and prioritize a systematic research in that direction.

## References

- r-0. Almogly, G., Belzberg, H., Mintz, Y., Pikarsky, A.K., Zamir, G., Rivkind, A.I. Suicide bombing attacks: update and modifications to the protocol. *Ann Surg*, 2004; 239: 295-303.
- r-1. Bleich, A., Gelkopf, M., Solomon, Z. Exposure to terrorism, stress related mental health symptoms, and coping behaviours among a nationally representative sample in Israel. *JAMA*, 2003; 290: 612-620.
- r-2. Bleich, A., Kutz, I. Chemical and biological terrorism: psychological aspects, and guidelines for psychiatric preparedness. *Harefuah*, 2002; 141 (Spec No): 111-117, 118.
- r-3. Drory, M., Posen, J., Vilner, D., Ginzburg, K., Lederman, B. An Israeli model of a hospital emergency information center. *Prehospital Disaster Med*, 1999; 14: 13-16.
- r-4. Hanoch, J., Feigin, E., Pikarsky, A., Kugel, C., Rivkind, A. Stab wounds associated with terrorist activities in Israel. *JAMA*, 1996; 276: 388-390.
- r-5. I.D.F.  
[http://www.idf.il/english/news/jump\\_2\\_eng\\_300900.stm](http://www.idf.il/english/news/jump_2_eng_300900.stm)  
Accessed November 13, 2004.

- r-6. Kluger, Y., Kashuk, J., Mayo, A. Terror bombing-mechanisms, consequences and implications. *Scand J Surg*, 2004; 93: 11-14.
- r-7. Mintz, Y., Shapira, S. C., Pikarsky, A., Goitein, D., Gertcenchtein, I., Mor-Yosef, S., Rivkind, A. The experience of one institution dealing with terror: the El Aqsa intifada riots. *IMAJ*, 2002; 4: 554-556.
- r-8. Peleg K, Aharonson-Daniel L, Stein M, Michaelson M, Kluger Y, Simon D, Noji EK; Israeli Trauma Group (ITG). Gunshot and explosion injuries: characteristics, outcomes, and implications for care of terror-related injuries in Israel. *Ann Surg*, 2004; 239: 311-318.
- r-9. Riba, S., Reches, H. When terror is routine: how Israeli nurses cope with multi-casualty terror. *Online Journal of Issues in Nursing*, 2000; 7: 6.
- r-10. Shemer, J., Heller, O., Danon, Y.L. Civilian-military health services contingency program for a mass casualty situation and wartime in Israel. *Isr J Med Sci*, 1991; 27: 613-615.
- r-11. Thorne, C.D., Oliver, M., Al-Ibrahim, M., Gucer, P.W., McDiarmid, M.A. Terrorism-preparedness training for non-clinical hospital workers: tailoring content and presentation to meet workers' needs. *J Occup Environ Med*. 2004 Jul;46(7):668-76.
- r-12. Schreiber, S., Yoeli, N., Paz, G., Barbash, G.I., Varssano, D., Fertel, N., Hassner, A., Drory M, Halperin P, Hospital preparedness for possible non-conventional casualties: Beyond procedures and protocols. *Gen Hosp Psychiatry*, 2004; 26: 359-366.
- r-13. Shamir, M.Y., Weiss, Y.G., Willner, D., Mintz, Y., Bloom, A.I., Weiss, Y., Sprung, C.L., Weissman, C. Multiple casualty terror events: the anesthesiologist's perspective. *Anesth Analg*, 2004; 98: 1746-1752.
- r-14. Stein, B.D., Tanielian, T.L., Eisenman, D.P., Keyser, D.J., Burnam, M.A., Pincus, H.A. Emotional and Behavioral Consequences of Bioterrorism: Planning a Public Health Response. *The Milbank Quarterly*, 2004; 82: 413-455.
- r-15. Sweeney, B., Jasper, E., Gates, E. Large-scale urban disaster drill involving an explosion: Lessons learned by an academic medical center. *Disaster Management & Response*, 2004; 2: 87-90.

**Author Information**

**Shaul Schreiber, M.D.**

Tel Aviv Sourasky Medical Center, Tel Aviv University Sackler School of Medicine

**Naomi Yoeli, MA, M.Ed**

Tel Aviv Sourasky Medical Center, Tel Aviv University Sackler School of Medicine