

Review

The World Trade Center Attack

Lessons for all aspects of health care

Pritpal S Tamber and Jean-Louis Vincent

Critical Care, London, UK

Correspondence: Pritpal S Tamber, editorial@ccforum.com

Published online: 6 November 2001
Critical Care 2001, **5**:299-300
© 2001 BioMed Central Ltd (Print ISSN 1364-8535; Online ISSN 1466-609X)

Abstract

The attack on the World Trade Center had the potential to overwhelm New York's health services. Sadly, however, the predicted thousands of treatable patients failed to materialize. Horror and sadness has now been replaced by anger, fear, and the determination to be better prepared next time. This determination not only exists in politics but also in health care, and as with all attempts to enforce change there needs to be a period of collecting opinions and data. This article introduces nine reviews in *Critical Care* offering varied health care perspectives of the events of 11 September 2001 from people who were there and from experts in disaster management.

Keywords disaster planning, terrorism

The attack on the World Trade Center had the potential to overwhelm New York's health services. Initial estimates spoke of 10,000 people in each of the two towers, all of them either killed or injured. Local hospitals prepared for the worst, and in the first few hours there were hundreds of patients with crush injuries and burns. Sadly, however, the predicted thousands of treatable patients failed to materialize.

Horror and sadness has now been replaced by anger, fear, and the determination to be better prepared next time. This determination not only exists in politics but also in health care, and as with all attempts to enforce change there needs to be a period of collecting opinions and data. In this issue of *Critical Care*, there is a series of nine articles offering varied perspectives of the events of 11 September 2001.

The series begins like many disaster responses – with a paramedic. Louis Cook is an Advanced Life Support Coordinator with the Fire Department of New York. On page 301, he describes how the Fire Department of New York took charge, set up command and control, and then had to evacuate, replace lost personnel, and resume control after the tower collapsed. "This was a monumental task", writes Cook, "given the psychological impact of the event" [1].

The command and control center was also staffed by the New York Police Department and, on page 304, the Deputy Chief Surgeon, Charles Martinez, describes his experiences, including the part he played in helping police to ensure surrounding buildings were not "used by terrorists to launch a subsequent attack ... with the specific aim of harming the rescue effort" [2]. The article, co-authored by Dario Gonzalez, Medical Director for Clinical Affairs of the Fire Department of New York, concludes that, while the incident was dramatic, the lessons to be learnt "are the same as those from previous disasters".

On page 307, J David Roccaforte of Bellevue Hospital, only 2.5 miles (4 km) from the World Trade Center, tells us how they reacted – from how they triaged "as well as could be expected" to how it was "difficult to anticipate needs" [3]. Donald B Chalfin, an attending intensivist at Maimonides Medical Center, New York, offers on page 310 his eye witness observations of the attack as he sat in the city's traffic. "Like so many other physicians ..." he writes, "I was paralyzed knowing that I was unable to give help ..." [4].

Those that could give help were the uninjured survivors. On page 312, David Crippen draws on his experience of the

1988 earthquake in Armenia to suggest that, while specialized search and rescue teams may be useful, “a more cost-effective approach [would be] to teach Life Supporting First Aid to the general public” [5]. But whoever intervenes, whether it be medical personnel or the general public, there is potential psychological sequela – post-traumatic stress disorder. Jeffrey Hammond and Jill Brooks state, on page 315, that treating post-traumatic stress disorder has “only a marginal effect”, and that early intervention, in the form of critical incident stress management, can “limit the establishment of maladaptive and disruptive cognitive or behavioral patterns”, both in health personnel and victims [6].

Ron Simon and Sheldon Teperman of the Jacobi Medical Center, New York, were part of the hospital's disaster committee and offer some straight-talking criticism of the city's reaction [7]. “The lack of communication probably resulted in more problems than all other factors combined”, they say, going on to suggest that “time, effort, and resources were wasted ... because of lack of direction and information” (page 318).

At the time of writing, suspected bioterrorism in the form of anthrax has gripped the American consciousness. On page 321, Vlad Kvetan suggests that, while New York absorbed the blow of the World Trade Center attack well, “major stress was placed on ... biohazard resources” [8]. He suggests that because the Internet has disseminated sophisticated information about bioterrorism, comprehensive guidelines on managing all kinds of outbreaks, from anthrax to smallpox, are needed.

Finally, in the concluding article on page 323, Kenneth Mattox questions to what extent we are prepared, or can be prepared, for the unexpected, and whether the bureaucrats behind health care have the ability to make those preparations [9]. The frameworks for multifaceted care required during disasters can only be created, he points out, “by leaving egos and personal agendas at the front door and working for a common benefit”.

We hope this 10-part series of articles in *Critical Care* facilitates the opinion and data collecting that is required before changes in disaster preparedness can be enforced. The series is dedicated to the first responders – fire, police, and medical personnel – who attended the World Trade Center disaster of 11 September 2001. They did not hesitate to place themselves in harm's way to rescue the innocent, and without their efforts many more would have perished.

Competing interests

None declared.

Acknowledgements

The authors acknowledge David Crippen's assistance in the creation of this 10-part review series.

This article, and the series it is part of, is dedicated to the first responders – fire, police and medical personnel – who attended the World

Trade Center disaster of 11 September 2001. They did not hesitate to place themselves in harm's way to rescue the innocent, and without their efforts many more would have perished. They will not be forgotten.

References

1. Cook L: **The World Trade Center Attack. The paramedic response: an insider's view.** *Critical Care* 2001, 5:301-303.
2. Martinez C, Gonzalez D: **The World Trade Center Attack. Doctors in the fire and police services.** *Critical Care* 2001, 5:304-306.
3. Roccaforte JD: **The World Trade Center Attack. Observations from New York's Bellevue Hospital.** *Critical Care* 2001, 5:307-309.
4. Chalfin DB: **The World Trade Center Attack. Eye witness: observations of a physician on the outside looking in.** *Critical Care* 2001, 5:310-311.
5. Crippen D: **The World Trade Center Attack. Similarities to the 1998 earthquake in Armenia: time to teach the public life-supporting first aid?** *Critical Care* 2001, 5:312-314.
6. Hammond J, Brooks J: **The World Trade Center Attack. Helping the helpers: the role of critical incident stress management.** *Critical Care* 2001, 5:315-317.
7. Simon R, Teperman S: **The World Trade Center Attack. Lessons for disaster management.** *Critical Care* 2001, 5:318-320.
8. Kvetan V: **The World Trade Center Attack. Is critical care prepared for terrorism?** *Critical Care* 2001, 5:321-322.
9. Mattox K: **The World Trade Center Attack. Disaster preparedness: health care is ready, but is the bureaucracy?** *Critical Care* 2001, 5:323-325.