

Letter to the Editor

Media Influence on Poison Center Call Volume After 11 September 2001

Although the media have profound, widespread effects on all facets of society, including medicine, these effects have been minimally studied in the medical literature. With the emerging threat of bioterrorism and its undying media coverage, the impact can and will be felt in many public arenas. As a result, the regional poison center not only must understand key influences upon societal behavior, but be able to adapt to them as well.

In 2001, Pfefferbaum *et al* showed that children experienced a more severe stress response with longer or more intense exposure to a disaster or its media coverage.¹ It has been suggested that not only limiting intrusion of the media in survivors' lives, but protecting them from media coverage as well, lessens the risk of post-traumatic stress disorder.^{2,3} Studies have demonstrated an association between media exposure of violence and increased societal aggression.⁴ These conclusions suggest a link between the news and the behavior of those it serves.

We believe that the anthrax threat after 11 September 2001 exemplifies the effect of the media on society, instilling not only fierce patriotism, but fear and paranoia as well. To test this hypothesis, we performed a search of our poison center database (>70,000 calls per year) during the years 2000–2002 using the words: anthrax, white powder, unknown substance and exposure.

During the year 2000 and before 11 September 2001, no calls were recorded regarding anthrax information or potential exposure. During September 2001, one call was made without obvious exposure. Interestingly, in October 2001, 201 calls were recorded with 42 potential exposures. The first anthrax death occurred 06 October 2001.⁵ Seventy-nine calls with 13 possible anthrax exposures were recorded in November 2001. Ten calls with two potential exposures were made to the poison center in December 2001. During the entire year of 2002, however, only 10 calls were recorded regarding anthrax with three potential exposures. The anthrax agent was not identified in any of the potential exposures (48 samples tested negative by the state Health Department).

Mass psychogenic illness or epidemic hysteria refers to "widespread subjective symptoms thought to be associated

with environmental exposure to a toxic substance in the absence of objective evidence of an environmental cause." Intense media coverage is thought to be one of its causes.⁶ The increased media coverage following the anthrax attacks heightened municipal concern, causing, in essence, epidemic hysteria. Because a biological toxin was at issue, the Poison Center felt the shockwaves emanating from an epicenter of public fear.

The aforementioned Poison Center data suggest that the incessant media coverage of the anthrax threat during the months of October and November 2001 likely contributed to the sharp increase in Poison Center calls regarding anthrax. This may have implications in terms of increasing Poison Center staff and education during such times of increased media reporting.

Frank LoVecchio, DO, MPH;^{1,2} Kenneth Katz;¹
David Watts;¹ Abbe Pitera²

1. Banner Good Samaritan Regional Poison Center
2. Maricopa Medical Center, Department of Emergency Medicine

Correspondence:

Frank LoVecchio

E-mail: Frank.LoVecchio@bannerhealth.com

References

1. Pfefferbaum B, Nixon SJ, Tivis RD, *et al* Television exposure in children after a terrorist incident *Psychiatry* 2001,64 202–211
2. Austin LS, Godleski LS Therapeutic approaches for survivors of disaster *Psychiatr Clin N Am* 1999,22 897–910
3. Allwood MA, Bell-Dolan D, Husain SA Children's trauma and adjustment reactions to violent and nonviolent war experiences *J Am Acad Child Adol Psych* 2002,41 450–457
4. Centerwall BS Television violence The scale of the problem and where we go from here *JAMA* 1999,267 3059–3063
5. Bush LM, Abrams BH, Beall A, Johnson CC Index case of fatal inhalational anthrax due to bioterrorism in the United States *N Engl J Med* 2001,345(22) 1607–1610
6. Jones TF Mass psychogenic illness attributed to toxic exposure at a high school *N Engl J Med* 2000,342(2) 96–100