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EDITORIALS



Major incidents in England

Why aren't we learning from them?

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Reporting the results of every intervention is becoming the norm in medicine and provides an excellent basis for medical advancement and quality control. But major incidents have so far escaped this scrutiny. In England, agencies are not mandated to record or report major incidents. Reports that do exist are unstructured and unregulated, and it is difficult to derive useful information from them. Our understanding of major incidents and how best to respond to them is therefore limited.

A major incident is one that overwhelms capacity or, in the NHS's words, "any event that cannot be managed within routine service arrangements."¹ As recent media attention on emergency departments in England has shown, routine service arrangements are easily strained. With increasing threats from global terrorism and natural disasters,² major incidents are becoming a more familiar part of our everyday lives. A recent Dutch study examined reports from five consecutive national disasters and noted that, despite changes in protocol, legislation, organisation, and funding, the same mistakes were being made each time.³

Why is it so difficult to learn from major incidents? I was on duty in the emergency department at the main receiving hospital for a major incident in Kent after a 200 car pile-up. When I tried to write up the incident, I found it difficult to obtain the information I needed. A review of the literature indicated that others have encountered similar problems,⁴⁻⁶ and as a result, little formal documentation exists for the majority of major incidents that have occurred in England or, indeed, worldwide. For example, most of the 108 major incidents occurring in Britain during 1968-96 were unreported in the medical literature.⁴ Data were mainly obtained from government reports, newspaper archives, and surveys completed by ambulance service emergency planning officers. Owing to the chaotic nature of major incidents, reliable data are difficult to collect and are easily perishable.

Reporting major incidents can also be politically sensitive. Various government and private organisations are responsible for preparing for major incidents, and if the response is deemed inadequate, they may worry about being blamed. There is a reluctance to share information because it could threaten votes, funding, and employment. Various groups do report on major incidents, but much of this is "grey" literature, inaccessible through electronic indexing services. In addition, these reports are not peer reviewed, standardised, or scientific in their approach and are often self serving.

Publications on major incidents in the peer reviewed literature have increased substantially over the past 20 years, though most relate to events that have had international media attention.⁷ There is wide variation in the number of publications per major incident and some of this seems to be proportional to the media impact of the incident. A recent study identified 155 publications on the 2004 Indian Ocean tsunami and 686 publications on the 11 September attacks in the US.⁸ By contrast, there had been 11 publications on the London bombings and no publications on the second Bali bombings in 2005.

A problem with current peer reviewed reports on major incidents is that there is no standardised method of reporting. Reports use different methods, definitions, and sources. Major incidents are infrequent, unexpected, and differ in the populations, cultures, and geographical areas they affect. The design, acceptance, and implementation of experimental research, on which much of our medical knowledge is based is therefore problematic⁶ and we have become dependent on largely descriptive, anecdotal case reports with little structure to learn about the complex nature of these incidents. These reports are difficult to compare or derive a meaningful outcome from.⁹

Several guidelines and templates for a standard reporting method on major incidents have been proposed.^{5 10 11} In 2013, a systematic literature review was carried out on 10 articles that gave reporting guidelines or templates.¹² It found a great deal of heterogeneity between the guidelines, and the internal and external validity of the proposed methods varied. At the time of publishing, only three of them had been implemented in real life major incidents, and none had been tested for feasibility.¹² One reason for the delay in the acceptance of an international standard for reporting major incidents is the uncertainty about what constitutes essential data. This can be ascertained only once existing templates are put into practice and used to report on real life incidents.

Despite the drive towards a more standardised method of reporting, the UK has no national database of major incidents. The Trauma Audit and Research Network (TARN) was set up to provide a web based collection of standardised datasets for trauma patients.¹³ A similar system could be set up for major

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incidents. In the meantime, doctors should consider submitting a report to the global database for reporting prehospital major incidents at www.majorincidentreporting.org. The webpage, initiated and financed by the Norwegian Air Ambulance Foundation, provides an online reporting template that was developed by expert consensus. Following review by editors or associated peer reviewers, the report is published on the website. It could provide an initial method for reporting and recording major incidents in England.

The aim in any major incident is to achieve the best outcome for the most people, but to achieve this we need to analyse, compare, and learn from previous incidents. We can do this by improving data collection, having better access to these data, introducing a standardised reporting structure, and establishing an open access, centralised database for recording and reporting each major incident that occurs.

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