EDITORIAL

Be Prepared!

Hospital Planning for Major Public Events

Axel R. Heller

Editorial to accompany the article "Patient care at the 2010 Love Parade in Duisburg, Germany: clinical experiences" by Ole Ackermann et al. in this issue of Deutsches Ärzteblatt International

All hopes that the Love Parade would proceed smoothly were dashed by late afternoon on July 24, 2010, once the news agencies stopped reporting just two casualties due to falls from a barrier wall and it became clear that mass panic had broken out in the spectators' access tunnel. Ackermann and colleagues, who represent Duisburg's inpatient medical care network, became embroiled in a mass casualty incident (MCI). On the basis of previous experience of Love Parades, hospitals were well prepared to provide care centering on the abuse of drugs and inhaled substances, which was indeed confirmed in nearly 30% of the treated cases.

The features of mass casualty incidents

MCIs are notable for a discrepancy between demand for medical attention and the care available (1, 2). The observed distribution of injury severity among casualties at the 2010 Love Parade is approximately the norm for MCIs (1). This is too serious an incident for normal levels of medical care provision to deal with reliably (2, 3). However, the authors were able to provide suitable hospital treatment for their nearly 500 patients, thanks to appropriate preparation as shown in the text box of Ackermann et al.'s article and progression along the prehospital emergency care chain according to each patient's priority level.

Patient flows according to priority levels

In preparation for the 2006 Soccer World Cup in Germany, existing measures for major public events and civilian MCIs were adapted to today's needs by a group of professionals from various fields (2). The top priority was swift transport of the seriously injured to hospitals that would provide emergency care, avoiding long periods without treatment on site at casualty collection points with low levels of medical care. However, targeted communication and division of patient flows according to injuries by the head emergency physician on site played a decisive role in putting this into practice (4).

The authors' observation that patients did not arrive at trauma rooms until several hours after the event is in line with previous experiences of MCIs (5). In the system described by Stein (5), the emergency services make use of nearby hospitals with almost no prioritizing of cases, because there is no emergency physician on site to decide on cases' priority levels. Each hospital deals with incoming patients according to the concept of minimal acceptable care, in various waiting areas (CT, X-ray, ultrasound) or in the intensive care unit, until all seriously injured patients have arrived at hospital. This is to avoid blocking operating capacity with early-arriving low-priority patients. In contrast to this, the effective approach taken when dealing with the 2010 Love Parade victims, —the seriously injured being transported promptly (2) and those with minor injuries being attended to at the on-site casualty collection point—, shows once again the benefits of preclinical emergency physicians and close cooperation between the emergency services and medical experts on site when dealing with MCIs.

Can we ever be well prepared?

Knowledge of how MCIs tend to unfold can help when preparing for future challenges. The planning of major public events should therefore take into account how the demand on the region's healthcare system compares to normal activity levels (in this case, 250 000 festival attendees versus 500 000 inhabitants), and participants' ages, health, and proneness to violence. There are also differences between the diagnosis spectrum of a two-day music or sports event and that of a five-day church congress or visit by the Pope with the same number of visitors.

Ackermann et al.'s article should be compulsory reading for those planning future events, particularly the important indication that the number of routine patient appointments should be reduced before major public events. However, the DRG approach also imposes financial restrictions on this kind of planning and on appropriate in-hospital resource provision for public events and MCIs. On this subject one can only join with the authors in calling on organizers and community and ferderal authorities to provide better planning and to assume an appropriate share of the financial risk.

Klinik und Poliklinik für Anaesthesiologie und Intensivtherapie, Universitätsklinikum Carl Gustav Carus an der Technischen Universität Dresden, Prof. Dr. med. Heller

Conflict of interest statement
The authors declare that no conflict of interest exists.

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Corresponding author
Prof. Dr. med. Axel R. Heller MBA, DEAA
Klinik und Poliklinik für Anaesthesiologie und Intensivtherapie
Universitätsklinikum Carl Gustav Carus
Fetscherstr. 74
01307 Dresden, Germany
axel.heller@uniklinikum-dresden.de

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