CORRESPONDENCE

A Comparison of the Treatment of Severe Injuries Between the Former East and West German States

by Dr. med. Carsten Mand, Dr. med. Thorben Müller, Prof. Dr. rer. medic. Rolf Lefering, Prof. Dr. med. Steffen Ruchholtz, Prof. Dr. med. Christian A. Kühne in volume 12/2013

Obvious Structural Deficiencies

The authors presented a valuable and relevant analysis of the Trauma Registry (TR-DGU) of the German Society for Trauma Surgery (*Deutsche Gesellschaft für Unfallchirurgie; DGU*) in their article. In contrast to small single-center studies, the presented study is important because it features comprehensive German data of trauma patients over a time period from 1993 to 2008. In the meantime, such analyses have become essential and are therefore of crucial importance.

Retrospective studies are often limited in terms of identifying causes because not all relevant influencing factors can be identified post hoc, and the interpretation of the data can therefore become difficult (2). Although this retrospective study did not find any major differences for the analyzed target variables between the old and new German states, it highlights some important issues very clearly: the mean duration from the accident to the arrival of the emergency medical services in Germany was 19±13 minutes and 17±13 minutes, respectively, and therefore exceeds the response times stipulated in different federal states, mostly a maximum of 10–12 minutes, but no longer than 15 minutes in any federal state (3). Strictly speaking, the response time starts with the incoming call at the dispatch unit (not with the accident), but this accounts for a maximum of 1–2 minutes and is therefore negligible in the evaluation. In Germany, the time from the accident to hospital admission (76±35 versus 69±35 mins) and the duration of treatment in the shock-room (65±40 versus 72±43 min) are much longer in actual reality than is stipulated in the interdisciplinary S3 guideline on polytrauma, from the Association of Scientific Medical Societies in Germany (*Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften, AWMF*).

In order to improve the prognosis in polytraumatized patients, this serious structural deficiency in Germany's emergency medical services will have to be eliminated. This would then mean a further reduction in polytrauma-induced mortality, since adherence to the "golden hour of shock" will become possible under these circumstances. DOI: 10.3238/arztebl.2013.0504a

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Conflict of interest statement
The author declares that no conflict of interest exists.

In Reply:

PD Dr Hinkelbein rightly comments that the time from preclinical emergency treatment to shock-room treatment is longer than stipulated. He also mentions that interpreting the data can be problematic, and not all possibly limiting or influential factors can be discussed in detail. The time of the accident, for example, is often merely an estimate and therefore rather imprecise. Furthermore, the arrival of the emergency services is documented but not that of the first emergency treatment, so that no conclusion can be drawn about the adherence, or otherwise, to the stipulated response times. Behrendt showed in 2009 that 95% of all emergencies are reached in 16.3 minutes, and 93.2% within 15 minutes (1). The high proportion of air transports is also likely to have a role in the duration of preclinical emergency treatment since these would often be the result of a secondary callout. The duration of preclinical emergency treatment has remained stable, at about 70 minutes, since the Trauma Registry of the German Society for Trauma Surgery (TR-DGU) was started (2). One possible explanation for this time period, which is rather long compared with non-trauma emergencies, is the fact that many accidents happen out of town and administering technical emergency treatment to persons involved in the accident often takes a long time.

Shock-room treatment is also subject to many variables that we were not able to discuss in detail. In 2010, Wutzler et al. investigated the time intervals during and after shock-room treatment on the basis of data from the TR-DGU (3). They found that the time to CT-scanning is usually about half an hour, and that especially the delay between the end of the diagnostic evaluation and a patient's referral or hospital admission could be optimized.

In order to verify possible structural deficiencies, further analyses of these partial aspects are required, because it is not possible to explain all problem areas in the context of a review article, owing to the different influencing factors. Data from the TraumaNetwork DGU of the German Society for Trauma Surgery (*TraumaNetzwerk DGU*) will help to find answers to these types of questions in the future. DOI: 10.3238/arztebl.2013.0504b

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Conflict of interest statement
Dr Mand has received reimbursement of travel costs from AUC (responsible for the Trauma Registry).