

Traumatic brain injury: an underappreciated public health issue



The public health consequences of traumatic brain injury (TBI) are currently woefully underappreciated. The burden created is often presented as number of deaths and injuries, with the cost calculated by the expense of ongoing care. However, many patients and their families live with the psychological consequences of minor TBI that have hidden costs such as the inability to hold down work, disinhibited (often aggressive or easily agitated) behaviour, and altered mood states.¹ The increased incidence of brain injury within vulnerable populations—especially homeless people,² and the prison³ and refugee⁴ populations—is considerable, and many of these people enter a downward spiral of head injury associated with altered behaviour, alcohol, and further head injuries.⁵ Such escalation probably contributes to the substantially shortened life expectancy observed after mild TBI compared with other forms of injury.⁶

In *The Lancet Public Health*, Marek Majdan and colleagues⁷ used the best data available to attempt to quantify the burden of TBI across Europe. The currently unavoidable differences in coding however mean that comparisons between countries are limited. For example, it is hard to explain a range of admission rates that varies between 0.3% and 44%, or a mean length of stay from 3 days (Norway) to 21 days (Malta) as differences in quality of care.

For TBI comparisons to be meaningful, a variable that reflects severity of disease is crucial. The traditional measure of initial Glasgow Coma Score is poor at reflecting differences in TBI. A tool quantifying the nature of the condition (extradural, subdural, contusion, diffuse axonal injury) and the severity of the injury (mild, moderate, severe) would give considerably more granular data and allow meaningful comparisons. The uptake of EuroTARN—the Trauma Audit and Research Network, and the use of the Abbreviated Injury Scoring system might enable such comparisons. Similarly, the comparative analysis work of the Center-TBI project,⁸ which is studying TBI across Europe might give more insights into the demographics of TBI and the comparative outcomes from differences in management.

However, such collaborations and analyses will reflect TBI management at those centres that have the capacity and resources to undertake Center-TBI. As such, hospitals recruiting to the study might not be representative of hospitals in poorer areas of the same country.

Despite these limitations, the authors have used the best data available to provide an interesting and much needed glimpse into the epidemiology of TBI across Europe. This Article demonstrates the need for a unified approach to the classification and recording of brain injury. Recording of these data in a consistent manner is key to be able to estimate the burden of TBI accurately, and to evaluate the impact of public health measures (eg, alcohol control, public safety initiatives) that are initiated to tackle TBI, accordingly. Trauma is a disease that affects the poorer and more vulnerable members of society;⁹ brain injury specifically leads to a cycle of yet further vulnerability.

Mark H Wilson

Imperial Neurotrauma Centre, Faculty of Medicine, Department of Surgery & Cancer, Imperial College, London SW7 2AZ, UK
mark.wilson@imperial.nhs.uk

I declare no competing interests.

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