

Transport Surveillance and Methods

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UNDERSTANDING ANATOMICAL INJURY SEVERITY OF FATAL ROAD CRASHES

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Background Road crashes are regarded as an important cause of mortality due to the increasing number of vehicles, changes in life-style and the risk behaviours among general population.

Aims/Objectives/Purpose This study aims to understand anatomical injury severity for fatal road crashes.

Methods Retrospective analysis of medical autopsies was conducted between April 2010 and March 2011 for six governmental hospitals within Klang Valley, Malaysia.

Results/Outcomes Out of 898 autopsies conducted, 70% of victims sustained at least 1 injury to the head and followed by thorax by 44%. Intracranial injury accounts for 52% of head injury and 31% with skull fracture. 94% of intracranial injury involved the cerebrum. On the other hand, 22% of victims sustained injuries to more than 3 different body regions. 45.2% of patients who died in hospital required ICU admission. The mean duration of stay in ICU for patients who died in hospital was 7–8 days. Occupants of motorized two wheelers (62.4%), passenger vehicle occupants (15.7%) and pedestrians (10%) were the common victims of fatal road crashes.

Significance/Contribution to the field In view of the above findings, it provides valuable insights to medical practitioner to strengthen emergency healthcare and response. In addition, these findings will enable better vehicle designs and safety equipment to avoid or reduce injury in road crashes.