



Motorcycle accidents: causes and outcomes

Thursday 23 August, 2012

A study in the most recent issue of the *ANZ Journal of Surgery* aims to assess the true cost of motorcycle accidents and identify how rider, crash and speed influence patient outcomes.

The research, undertaken by a team at Royal Perth Hospital, includes those accidents that occur off-road, a major component of any comprehensive study given that dirt bikes and all-terrain vehicles comprise 36.9% and 17.6% of motorcycle sales respectively.

In terms of on-road accidents, the study notes that while motorcycle travel equates to less than 1% of the vehicle kilometres travelled by cars and light commercial vehicles per year, motorcycle travel accounts for 15% of road fatalities.

The prospective study involved all motorcycle, scooter, trike and quad bike accident victims presenting at Royal Perth Hospital over a four month period ending 31 March 2009.

There were 143 admissions and 1,344 days of hospitalisation, with the mean length of stay 6.56 days. One hundred and eighty-five (90%) of victims were male, with ages ranging from 14 to 73 (mean=32).

Study co-author Professor René Zellweger said the team's analysis of accident causation revealed those involved in crashes because of loss of control due to intoxication, and those being struck by another vehicle, have significantly worse measurable patient outcomes.

"Of particular note is the high incidence of previous drug or alcohol abuse, and much higher average engine size within the severely injured group," Professor Zellweger said.

While travelling above the speed limit also yielded the worst patient outcomes, the study found that hitting a stationary object and travelling below the speed limit were the most common accident features.

Professor Zellweger cautioned that reliable correlation of patient outcomes with crash variables was problematic as minor crashes and off-road crashes are under-reported. "It must also be remembered that, as Western Australia's only level 1 trauma centre, Royal Perth Hospital receives the more severely injured patients," he said.

The *ANZ Journal of Surgery*, now in its 80th year and published by Wiley-Blackwell, is the pre-eminent surgical journal published in Australia, New Zealand and the South-East Asian region. The Journal is dedicated to the promotion of outstanding surgical practice, and research of contemporary and international interest.



**Media inquiries: Bridget Hooper, Media & Public Relations Officer
0437 008 891 or (03) 9276 7430**