Cultural aspect of pedestrian injuries amongst expat workers in Qatar: An opportunity for an injury prevention program

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Background:
In the State of Qatar, the majority of workers are expatriates from different ethnicity and culture. Most of them are liable to pedestrian motor vehicle crashes (MVC). We sought to understand the anatomy, time and date of injuries amongst expat workers in relation to their country of origin, culture and traditions.

Methods:
Retrospective analysis of prospectively collected data obtained from trauma registry was done. Analysis includes all traffic related pedestrian injuries admitted to the trauma surgery service at Hamad General Hospital, the only level I trauma center in Qatar, between January 2009 and December 2011. Demographics, time and season of injuries, ISS, type of injuries, anatomical body parts injured, ethanol intake, hospital length of stay, length of ICU stay, and mortality were analyzed.

Results:
Of the 4997 injured patients admitted to the section of trauma, 603 (12.1%) were pedestrians [(non-Arab (75%), Arabs (17%) and nationals (8%)]. The mean age was 31.8±17 years with 93% males. The mean ISS was higher in those who were injured on Friday and Saturday (16±10 and 15±10; p=0.32) in comparison to the week days. Moreover, mean ISS was also relatively high in those who got injured during the winter season (15.2±11) compared to other months (13.5±10). Head injury (45%) was the most common injury followed by injury of the lower limbs (37%), upper limbs (24%), ribs (22%), pelvic area (20%), lung (17%), spleen (10%), liver (7%) and kidney (4%). Alcohol intake was highest amongst expatriate workers from Nepal and Sri Lanka. The median hospital length of stay was 7 (range 1-312) days, TICU stay was 4 (range 1-150) days and ventilator days was 2 (range 1-36) days. The overall mortality was 11.6 % (83% non-Arabs, 9% Arab non-Qataris and 8% Qataris; p=0.08).

Conclusion:
Majority of the pedestrian injuries involved expatriate workers with poor socio-economic status and cultural barrier in communication. Injury severity was higher in winter season particularly during weekends. These injuries pose economic burden to the healthcare system of the country and thus need urgent injury prevention measures such as education and awareness campaigns among expat workers in Qatar.