Head Injury in Road Traffic Crashes in Iran: a Cross Sectional Study

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Abstract

Road traffic injuries (RTIs) are a leading cause of death and disability worldwide. Head injury is one of the most important causes of death in various types of road users particularly among motorcycle and bicycle riders. Epidemiological pattern of head injury among victims of road traffic injury can improve road safety measures and it is an implication for any intervention. The current study was designed to map epidemiology of head injury as a result of road traffic injury in Iran.

A cross-sectional study was designed among fatal road traffic injury those registered in a national database called Forensic Medicine System. Data collection was between 23 March 2011 till 23 March 2014. There were 20069 fatal road traffic injuries in the study period. Finding of study indicated that 88% of fatal RTIs were men and more than 87% of fatal road traffic injury had head injury. Close to 25% of head injured were illiterate and around 44% were at primary and secondary school. Only 10% had higher education. The most important cause of death was head injury (60%) following by multiple-trauma (28%) and internal bleeding (12%). Among them, 58% of death occurred at crash scene and 45% at pre-hospital and hospital phase. Moreover, 76% of fatal road traffic injuries were car riders and 23% of them were pedestrian. Close to 80% of victims were transported by ambulance system. There is various measures for head injury prevention in Iran that are included speed management, wearing helmet and seat belts as well as crashworthiness and improving visibility in all car riders particularly for pedestrian. Severity of injury is one important cause of death. However, regarding post crash care it is also an implication for preventable death study in Iran.

Keywords: Head Injury, Road Traffic Crashes, Cross Sectional Study.

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