

Epidemiologic study of motor vehicle accidents resulting in injury and death in Mashhad, Iran (2006-2007)

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Abstract

This study aims to determine the general condition of driving accidents based on its distribution according to human factors, environmental conditions, the type and importance of vehicles effective in creating accidents and time and place factors. This is an analytic-descriptive research which has been done in a cross sectional way. After organizing with forensic medicine department, traffic department and teaching some people for collecting data, a collecting data form was provided. The validity of collecting data form was confirmed using earlier studies and consulting with authorities. Its reliability was confirmed by test-retest method among 10 persons with coefficient Cronbach Alfa 82%. Collected data was reviewed and after ensuring about its accuracy, it was encoded and entered into computer. To analyze the data, SPSS 11.5 software was used. The studied samples include all accidents resulting in injuries and deaths in Mashhad reported to Police Emergency department in 2006-2007 with reports prepared for them along with croquis. The number of studied samples is 2636 cases. Results suggest that 4.8% of accidents resulted in death and 4.4% resulted in both injury and death and the rest resulted in injuries. In 74 accidents with at least one death, drivers', passengers', pedestrians' and both driver's and passenger's deaths were 27.4, 11.8, 29.4 and 1.0%, respectively. The most occurrence times were in September in 12-18 hours and the most occurrence places were in the eastern and central parts of the city. The results also show that the main factor resulting in injury accidents is ignoring regulations, but most fatality accidents occurred due to driver's fatigue and sleepiness. Most cars, motorcycles and pedestrians' accidents relate to male drivers in age group of 20-29 which in 76.8% of cases the pedestrians had dark clothing on. Although, most injury accidents involve personal vehicles (77.6%), fatality cases relate more to heavy vehicles trafficking in the city. The results also show that 76.1% of accidents relate to drivers who took their driving licenses in less than 2 years ago. Since, the majority of accidents occur in young age group with little driving experience, giving particular attention to this class of people and applying special regulations and public education to introduce the proper driving culture for the youth and combating the main reasons of accidents such as exceeding speed limit and disobeying the driving regulations will have a great role in reducing driving accidents. © 2009 Asian Network for Scientific Information.

Author keywords

Death; Injury; Mashhad; Motor vehicle accidents

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