An epidemiologic survey of road traffic accidents in Iran: analysis of driver-related factors.

Moafian G[1], Aghabeigi MR, Heydari ST, Hoseinzadeh A, Lankarani KB, Sarikhani Y.

Abstract

OBJECTIVE:

Road traffic accident (RTA) and its related injuries contribute to a significant portion of the burden of diseases in Iran. This paper explores the association between driver-related factors and RTA in the country.

METHODS:

This cross-sectional study was conducted in Iran and all data regarding RTAs from March 20, 2010 to June 10, 2010 were obtained from the Traffic Police Department. We included 538 588 RTA records, which were classified to control for the main confounders: accident type, final cause of accident, time of accident and driver-related factors. Driver-related factors included sex, educational level, license type, type of injury, duration between accident and getting the driving license and driver's error type.

RESULTS:

A total of 538 588 drivers (91.83% male, sex ratio of almost 13:1) were involved in the RTAs. Among them 423 932 (78.71%) were uninjured; 224 818 (41.74%) had a diploma degree. Grade 2 driving license represented the highest proportion of all driving licenses (290 811, 54.00%). The greatest number of accidents took place at 12:00-13:59 (75 024, 13.93%). The proportion of drivers involved in RTAs decreased from 15.90% in the first year of getting a driving license to 3.13% after 10 years'of driving experience. Neglect of regulations was the commonest cause of traffic crashes (345 589, 64.17%). Non-observance of priority and inattention to the front were the most frequent final causes of death (138 175, 25.66% and 129 352, 24.02%, respectively). We found significant association between type of accident and sex, education, license type, time of accident, final cause of accident, driver's error as well as duration between accident and getting the driving license (all P less than 0.001).

CONCLUSION:

Our results will improve the traffic law enforcement measures, which will change inappropriate behavior of drivers and protect the least experienced road users.