Impact of Road Traffic Accidents on the Elderly

Etehad H 1, Usef-zadeh Chabok Sh 1, Davoudi-Kiakalaye A 1, Dehnadi Moghadam A 1, Hemati H 1, Mohtasham-Amiri Z 1,2,3
1 Guilan Road Trauma research Center, Guilan University of Medical Sciences, Rasht/Iran
2 Sina Trauma and Surgery Research Center, Tehran University of Medical Sciences, Tehran, Iran
3 Social and Preventive Medicine, Guilan University of Medical Sciences, Rasht/Iran
Corresponding Author: Z Mohtasham-Amiri, MD, MPH

Abstract

Introduction: Older adults are a vulnerable road user group with high mortality and morbidity in road crash. The aim of this study was to show pattern of road traffic injuries in this special aging group.

Methods and Materials: In a cross sectional study, Pre-hospital emergency system reports, hospital and police records of all motor vehicle collisions injured above 60 years old who were admitted to Pour-Sina hospital from April 2011 to March 2012 were studied. Demographic data, characteristic of road traffic incidents and in-hospital medical profiles were derived. Data were analyzed with SPSS ver. 18. Differences between demographic and injuries situation were calculated by chi square test. A p-value of < 0.05 was considered statistically significant.

Results: One thousand three-hundred six old injured were admitted during study period that this amount accounted for 8.7% of total road accident injured. Mean age of them was 70.9 ± 6.7 years. Most of them were male (74.7%). 40.5% were pedestrians, 22.1% were car occupants and 19.1% were motorcyclists. 76.7% had multiple traumas. Head and neck were the most prevalent regions of injured. Total in-hospital mortality rate was 10.1% that was higher in old elderly, Pedestrians and motorcyclists in comparison to young elderly (16.1% vs. 7.9%) and other type of victims (p<0.000).

Conclusion: High mortality rate of road traffic injuries in this group especially in pedestrians should be taken into consideration and strategies aimed at the road-user safety including periodic medical examination and improvement of road structure and facilities.

Key Words: Road Trauma, Old Age, Traffic, Outcome