Original Article

Trends of Mortality of Road Traffic Accidents in Fars Province, Southern Iran, 2004 – 2010

Jafar HASANZADEH, Mehdi MORADINAZAR, *Farid NAJAFI, Touraj AHMADI-JOYBARY

1. Dept. of Epidemiology, Shiraz University of Medical Sciences, Shiraz, Iran
2. Research Center for Environmental Determinants of Health, School of Public Health, Kermanshah University of Medical Sciences, Kermanshah, Iran
3. Imam Khomeini Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran

*Corresponding Author: Email: farid_n32@yahoo.com

(Received 24 May 2014; accepted 15 July 2014)

Abstract
Background: The aim of this study was to investigate the trends in mortality from road traffic accidents (RTA) in Fars Province, southern Iran.
Methods: The Age and sex-standardized mortality rate attributed to RTA from 2004 to 2010 in Fars Province was calculated using world standard population. We also used linear regression and chi-squared tests.
Results: Over the period of study (7 years), 12954 people died in RTA. The age- and sex-standardized mortality rate was 27 per 100,000. While the rate of death due to RTA had an incremental rate in age group 18-30 years and among women, it had a decreasing trend in age groups 35-45, under18 and among men.
Conclusion: An increase in mortality rate of RTA among people aged 18-30 yr and women need to be addressed by health policy makers and other involved sections.

Keywords: Trends, Mortality, Road-Traffic accident

Introduction

Road traffic accidents (RTA) are one of the leading causes of fatality throughout the world (1) imposing a considerable cost on the countries’ economy (2). According to the statistics of WHO, 5.6 million people die in unintentional injuries of whom 65% are victims of RTA (3, 4). Iran, representing 1% of the world population comprises one fortieth of road traffic accidents. The country has 17 million vehicles (approximately one vehicle for every four individuals), a number higher in eastern Mediterranean but lower comparing to industrialized and developed countries(5) which is also annually increasing by 1 to 1.5 million. The figure for fatalities is estimated at an annual rate of 5-6 million per 10000 cars worldwide. However, 35 people die for every 10000 cars in Iran (6, 7). In addition, RTA stands as the most prevalent cause of injury and the second leading cause of death in Iran (8, 9).

Accidents of these kinds can be reduced significantly through effective planning (10, 11). Yet, despite implementing interventions that target road user behavior such as, greater use of speed cameras and imposing heavier fines and penalties, the annual number of deaths is still on the rise and therefore the epidemiology of RTA need further investigations (12).

Although there have been numerous studies on the road-traffic accidents, the study of trends is limited in Iran. In addition, similar to other prov-