Crash counterpart vehicles play important role in on pre-hospital mortality: A Study Based on an eight-year period, 2006-2014

Homayoun Sadeghi-Bazargani\textsuperscript{a}, Bahram Samadirad \textsuperscript{b}, Nasrin Shahedifar \textsuperscript{a,*}, Mina Golestani\textsuperscript{a}

\textsuperscript{a} Road Traffic Injury Research Center, Statistics and Epidemiology Department, Tabriz University of Medical Sciences, Tabriz.
\textsuperscript{b} Legal Medicine Research Center, Legal Medicine Organization, Tehran, Iran.

Abstract:

\textbf{Background:} To study the association between crash counterpart vehicles and pre-hospital car-users fatalities during eight years, in East Azerbaijan, Iran.

\textbf{Methods:} The data related to 3051 car user road traffic fatalities (CURTFs) were registered in East Azerbaijan forensic medicine organization database, Iran, during 2006-2014. Data analysis was run using Stata 13 statistical software package. Descriptive statistics (Pvalue < 0.05) and inferential statistical methods such as Chi-squared test and multivariate logistic regression with P < 0.1 were applied.

\textbf{Results:} 3051 (39\%) of 7818 road traffic injury death were car users of whom 71\% were male (mean age of 36.7±18.5 years). In assessing the role of type of crash counterpart vehicle on pre-hospital mortality, considering the other cars to be the reference group for comparison, deceased victims were 1.83 times more likely to die before hospital when the counterpart vehicle was a truck and 1.66 times more for buses.

\textbf{Conclusion:} It seems necessary to identify those risk factors making crash counterpart vehicles have significant role on pre-hospital mortality

\textbf{Keywords:} Car Users, Crash Counterpart Vehicle, Mortality, Road Traffic Accidents, Epidemiology

\* \textbf{Corresponding Author at:}
Nasrin Shahedifar: Road Traffic Injury Research Center, Statistics and Epidemiology Department, Tabriz University of Medical Sciences, Tabriz. Email: swshahedi@gmail.com (Shahedifar N.).