ABSTRACT

Road Traffic Accidents has become a global issue over the last years. Many people die or get injured and some are left handicapped as a result of this tragedy. For developing countries like Sri Lanka occurrence of a road traffic accident is huge cost for the economy. This empirical study analyze the risk factors in road traffic accidents in Sri Lanka, identify the most significant risk factors and the type of relationships between the risk factors and types of road traffic accidents.

Road Traffic Accidents (RTAs) records for 10 years from 2004 to 2013 were gathered mainly from the database of Traffic Head Quarters in Sri Lanka. Total of thirty five variables were gathered under six categories; Number of reported accidents in Sri Lanka, Number of people involved in accidents by gender, Number of fatalities by road user type, Number of reported accidents by the day of the week, Number of people involved in accidents by age categories and Number of died pedestrians by age categories. Statistical measures including correlation analysis were applied to identify the significant risk factors for each type of road traffic accident. Four multiple regression models were created using stepwise method for fatal accidents, grievous accidents, non-grievous accidents and damage only accidents to identify their type of relationships with the significant risk factors. Finally this research paper gives recommendations to reduce the risk of occurring road traffic accidents in Sri Lanka along with the findings of the analysis.

Key words: Road Traffic Accidents, Stepwise Regression, Sri Lanka