

ANALYSIS OF ENDURING FACTORS INFLUENCED IN TRENDS OF ROAD ACCIDENT OCCURRENCE IN SRI LANKA DURING LAST TWO DECADES

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Introduction/Background

Road Accidents has become a dreadful phenomenon in the world which creates embarrassing circumstances by losing thousands of lives and damaging properties of a human being. According to the estimations of the World Health Organization WHO, 1.25 million people die every year by road traffic crashes and 20 to 50 million injuries occur worldwide with many injuries incurring disabilities of the victims. As per the available statistics, more than 90 percent of road accidents take place in low and middle-income countries which have lower socio-economic backgrounds. Road injuries have become the tenth leading course of deaths globally and predicted to become seventh leading cause by 2030, except having remedial actions to overcome this disastrous tendency WHO.

Road Accidents in Sri Lanka has become a serious issue in the present context of road transportation and conceivably creates gigantic economic losses in the country with an enormous effect on future sustainable development. The economic cost of road accidents has been valued at over Rs 10,000 million annually which is around 1 percent of the GDP of Sri Lanka (Kumarage 2003). The traffic police records (2017) in Sri Lanka revealed that on average six people die in road accidents daily whereas thousand road accidents occur weekly creating many people seriously injured and damages of possessions. As per the road accident database which maintained by the Traffic Police Headquarters, 7 percent of total accidents are fatal while 20 percent are grievously injured in 2017.

Many researchers have investigated the trends of road accident over the years and revealed the risk factors affected in the fluctuations of these

deadlier occurrences. Atubi (2012) shows that road accidents significantly increase with increased length of roads (km), presence of road safety corps and increased population in Lagos State, Nigeria. The findings of his study confirmed that better quality of highways results in more accidents because of drivers most likely over speed on quality roads, leading to more frequent and fatal accidents (Onakomaiya 1988; Filani and Gbadamosi, 2007). Adhikari (2016) conducted a research to find the road traffic accidents trends on Kathmandu-Bhaktapur road after addition of lanes and concluded that there is an increase in accidents immediately after completion of the widening of the road due to unfamiliarity among drivers with the increased design speed and unchanged behavior of pedestrians. Somasundaraswaran (2006) conducted a research using road accident statistics during 1989-2005 and revealed that alarming rate of vehicle ownership together with inadequate road network development to support the demand for transportation are the most significant reasons for the increased road crashes in Sri Lanka. Kumarage et. al (2009) revealed that accidents have steadily increased with time on Sri Lankan roads and rapidly increasing vehicle fleet. Accordingly, the most doable reason for the road accident trend is rapid motorization together with road developments around the world making a higher risk to all road users.

The past researches concluded that the statistics on non-grievous accidents are unreliable due to low reporting rate to the police with insurance claims whereas grievous accidents are almost reported and reliable to be considered for road accident analysis in Sri Lanka.

Conclusion

The model results conclude that when operated vehicles and road length increases fatal and severe accidents increases continuously. This reveals that investment on new road construction in order to cater the existing traffic demand is not a viable solution to smoothen the existing road accident trend. As such, improvement of road designs providing facilities for vulnerable road users and proper maintenance programmes are indispensable. Policy makers should introduce new awareness programmes and campaigns to enhance road safety while imposing and enforcing rules and regulations in order to minimize existing road accident trend.