

The high rate of road accidents in Malaysia: what the causative factors are?

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ABSTRACT

Road accidents become one of the crucial social problems over the world. The number of accidental death worldwide became the third largest after HIV/AIDS and TB, approximately with 0.8 million of deaths per year. In Malaysia, road accident is become one of major problem with high rate of road accident occurrences. This paper attempts to review the present status of road accidents in Malaysia and what the causative factors are. This paper uses an overview of previous road accidents statistic in Malaysia, the total numbers of casualties, and data of registered vehicles.

Keywords

Crucial social problems, road accidents, high rate, causative factors, accidents statistics

1.0 INTRODUCTION

Road accident is a social problem that affects the public health¹ and has many bad impacts on societies. It is one of the largest cause of death in the world, with 1.2 million people are killed worldwide every year with injuries or disabilities of 20 to 50 million people (Goswami & Sonowal, 2010). Like other countries, Malaysia also facing the problem of road accidents. The rate of road traffic accidents and casualties in Malaysia getting increased and becomes one of the highest in the world. It has been increased at the average of 9.7 per cent per-annum over the last three decades (Mustafa, 2006). Its became worst during festivals season or school

¹ Public health refers to the overall health and wellbeing of people in a community.

holiday's period such as Hari Raya Aidilfitri, Chinese New Year, Deepavali festival, Christmas Day's and so on.

This research is purposely to make some review about the current overview and the causations of road traffic accidents in Malaysia. Based on the result outcomes of this research, perhaps appropriate approach can be taking to solve this problem for the benefit of all related parties such as road safety department, road user and so on.

2.0 LITERATURE REVIEW

Road accidents are among of the leading cause in Malaysia with the increasing number of cases recorded. Based on research data of Paris International Transport Forum, Malaysia is on the very first place with the highest death rate with 23.8 deaths per 100 000 populations, 6.3 per cent higher than United Kingdom, Sweden and Netherland (Department of Road Safety Malaysia, 2012). It does tend to be serious social problem when the accidents statistic showed a strong growth of the total cases occurred. There were 373 047 road accidents that lead to 6527 fatalities in 2008, whereby the number of fatalities due to road accidents in Malaysia has been consistently above 6000 since year 2003 (Hizal Hanis H. ,& Sharifah Allyana S.M.R, 2009). From the observation on the present road accidents situation and

previous data analysis, it can be said that there are many factors leads to road accidents in Malaysia.

2.1 Factors contributing to road accidents

I) Drunk driver

Driving under the influence of alcohol is one of the factors that lead to road traffic accidents and might be dangerous to other road users. They may cause the driver unable to give full attention on driving and failed to control their vehicles, fail to look properly on the road regulation signs and cannot identify any warning signal from other road users or surrounding. Road accidents caused by drunk drivers frequently occurred on the night time and during festive season.

II) Vehicle speeds

Exceeding the speed limit or going too fast for conditions were reported as a contributory factor in 15 per cent of all accidents (Robinson D., & Campbell R, Contributory Factor to Road Accidents). Speeds have a large effect on road safety and become the main contributory factors of collision on the road. Drove over the speed limit is influences by some factors such as age, gender, number of vehicle on the road, alcohol level and the road surface. As

an example, young male driver is more likely to speed over the limit allowed. It's more dangerous when a driver speed the vehicle in congested areas, non-straight road layout and while the road surface is wet in raining day's.

III) Driver fatigue

Cited from Fadhli *et al*, 2009, in Malaysia, a number of tragic crashes occur during the early hours of the morning and these often result in serious casualties. These crashes have been at least partially attributed to fatigue and sleepiness. (Norlen Mohamad *et al*, 2011). There's lot of road accidents cases recorded with the drivers fatigue as factors of occurrences. Normally, the road accidents caused by fatigue factor occurred on long-distance travel and on the early morning. Most of vehicles involved in accidents resulting from fatigue are buses, lorry, trucks and cars.

IV) Road & weather condition

Road condition is one of road accidents factors. It may refer to the surface, structure and safety level. Bad condition of road such as has too many dangerous bends and wet road surface. Wet road surface might be caused by bad weather condition such as rain. Driving in other bad weather condition such as storms,

fog and so on also leads to road accidents cases

V) Failed to look properly

Drivers failed to look properly on other road user signal or any warning signal is one of road accidents factors. Failed to look properly was the most frequently reported contributory factor and was involved in 32 per cent of all accidents (Robinson & Campbell, Contributory Factors to Road Accidents). It is necessary for drivers to concentrate while driving on the road to avoid any road accidents that might be occurs at any time. For example, a driver who used mobile phone while driving and did not look properly on surrounding might hit another car that enters to his route suddenly.

VI) Failed to follow road and safety regulations

Others factor of road accidents is driver failed to follow road and safety regulations. What is meant by failing to follow the law and road safety is failing to comply with warning signs, traffic lights violation, used mobile phone while driving and failed to follow vehicle ahead in a proper distance. All of these violations of laws poses a danger to the driver itself and also to other road users, besides it might caused road accident.

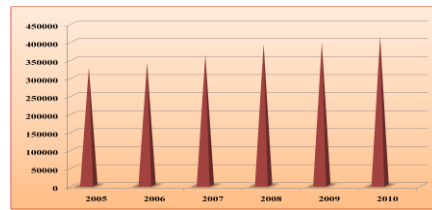
3.0 METHODOLOGY

3.1 Secondary data

In order to obtain information for this study, I have collected road accidents data from Royal Malaysia Police, data in vehicle registration in Malaysia and analysis of trends in road crashes using time series data from JKJR² and MIROS³. Other than that, I also have used previous studies and journals related to the topic of this research.

4.0 Findings

Figure 1: Number of Accidents in Malaysia, 2005-2010



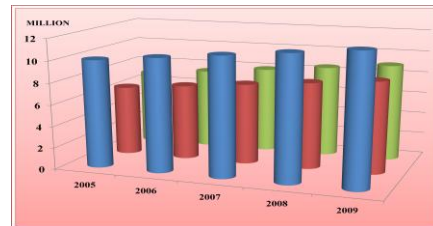
Source: Department of Road Safety Malaysia

² Department of Road Safety Malaysia, the Statistics of Road Accidents in Malaysia

³ Malaysian Institute of Road Safety Research

Figure 1 showed the number of accidents in Malaysia for year 2005 to 2010. During this period of 6 years, there are a total of 2,217,637 road accidents cases with a lot of fatalities, injuries⁴ and severity⁵.

Figure 2: Cumulative number of cars, motorcycle and drivers in Malaysia, 2005-2009



Source: Department of Road Safety Malaysia

Figure 2 showed the cumulative number of cars, motorcycles and drivers in Malaysia for year 2005 to 2009. The records showed that the numbers of registered vehicles and drivers/riders were increasing every year. The strong growth of traffic volumes indirectly contributed to the increased number of accidents occurred.

⁴ Fatalities and injuries together are called casualties

⁵ Severity refer to the degree of damages caused by a crash

Figure 3: Index of road deaths in Malaysia, 2005-2009

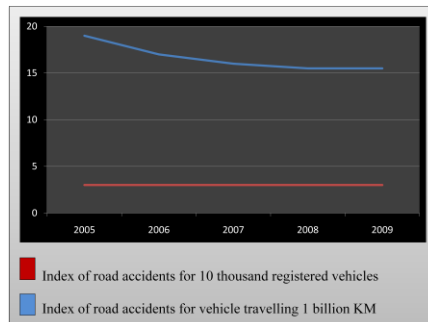
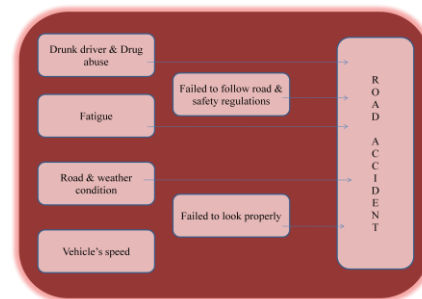


Figure 3 showed the index of road deaths in Malaysia for period of 2005-2009. Despite to the increasing number of road accidents, the index of road deaths continues to decline. For the period from 2005 to 2009, the index of road deaths⁶ respectively had decreased by 0.6 and 2.3.

⁶ The index for every 10 thousands registered vehicles and any vehicle travelling 1 billion kilometres.

5.0 THEORITICAL FRAMEWORK AND DISCUSSION



Theoretical framework

Theoretical framework shows the relationship between the factors of road accident as independent variable and road accidents in Malaysia as dependent variable. These independents have been identified and discussed in this research. Both independent and dependent variable have strong relationship to each other.

Based on the observation, survey and historical data analysis, it's founded that high road accidents in Malaysia is related to some causative factors such as drunk driver, vehicle speeds, failed to look properly, road & weather condition, driver fatigue, and failed to follow road and safety regulations. All of these factors contributed to the road accidents and increasing the cases occurred. Other than that, the exceeding

numbers of vehicles on the road also were lead to road traffic accidents occurrences in Malaysia.

6.0 CONCLUSSION

Road accident is a serious problem in Malaysia and worldwide. In Malaysia, the rate of rate accidents is increasing every year and caused losses in many terms such as fatalities, injuries and damages. Other than losses of manpower due to fatalities or disabilities, Government also has to spend billions to improve the road infrastructure and carrying out road safety campaigns. There are various causes that lead to road accidents in Malaysia such as fatigue, pain and so on. Hence, all relevant parties such as Department of Road Safety Malaysia, Ministry of Transport and road users should to cooperate to overcome the problem of road accidents in Malaysia. The level of awareness on road safety among Malaysians should also be improved because through studies conducted, it's founded that our awareness on this regard are still at unsatisfied level.

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