

Causes of Road Accidents in Makran Coastal Highway Balochistan

Social Sciences

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Abstract

According to World Health Organization (WHO), road traffic accidents (RTAs) are a global public health issue. Currently ranked ninth, RTAs are predicted to be the fifth leading cause of death in 2030. Every year more than one million people die worldwide because of RTAs more than 2500 deaths every day. 90 % of the RTA related fatalities occur in low and middle income country." This study explores the causes of road accidents in Makran Coastal Highway. A large number of people are killed and injured on our roads. Road accidents are becoming public health issues, unreasonably affecting a large groups of people, especially bus users. Main causes which are found behind these road accidents are unskilled drivers, use of cell phone during driving, lack of interest of government, rash driving, use of drugs, and over-loading. If these causes are tackled in a good way then it is possible to minimize the road accidents and it can save thousands precious lives.

Key words: Road accidents, Public health, Makran Coastal Highway

Introduction and Literature Review

"The Makran Coastal Highway is a 653 km-long; which is located in Balochistan, Pakistan. It follows the Arabian Sea coast from Karachi to Gwadar. Previously there was a muddy track linking Karachi with the town of Gwadar. Journeys between the two could take several days as the safest route was to travel via Quetta. The journey time has now been reduced to six or seven hours with the construction of the Makran Coastal Highway (National Highway N10). The highway was built as part of an overall plan to improve transport facilities in southern Balochistan.

Since, the construction of Makran coastal highway, there is an alarming increase in accidents and deaths. Fatality risk in Makran coastal Highway is

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increasing over the years. it is believed that road accidents are increasing since Gwadar Port became functional where number of vehicles increased.

An estimated 240 people were killed in road accidents in Balochistan in 2014, the highest number of casualties over the last four years in the province, according to the Home and Tribal Affairs Department of Balochistan. As many as 115 people were killed in fatal accidents across Balochistan in 2010, 172 people in 2011, 192 in 2012, and 168 people in 2013 were victims of road accidents. (Express Tribune, February 9th, 2015).

The rate of road traffic accidents is (RTA) increase in many developing and developed countries. This is attributed in part to urbanization, industrialization, as well as the increase in the number of vehicles on the roads. In World, many lives are lost daily through vehicle accidents. Road traffic accidents (RTA) are a major, cause of any disability, death and economic loss in developing countries like Pakistan. Pakistan is also a developing country where a large number of people are killed and injured on our roads. Road accidents are becoming a public health issue, unreasonably affecting many people, particularly bus users." Road accidents occur as the result of one or more than one of the following factors; human factors, vehicle factors and environmental factors. Human factors are described as that which the person did or did not do at the time of accident. It includes the following characteristic: speeding, appropriate speed for circumstance, traffic violation, alcohol, drugs, negligence driver error and age. Vehicle factors refer to design or mechanical fault of vehicle, which includes lack of maintenance. Road environmental factors includes all aspects of road maintenances, construction work, weather condition and problems with signage and lighting. The most notable is the human factor, which in conjunction with the other two factors." (Austroad, 1994)

In developing countries, the population groups exposed to the highest risks of injury and death from road crashes, pedestrians and users of motorized two-wheelers – are from lower socioeconomic groups (Nantulya, 2003 and Ghaffar A, 2004). In Mexico, the second commonest cause of children being orphaned is traffic crashes (Hijar etal, 2003). Pakistan is also a developing country where a large number of people die every day because of the road-side accidents. Especially death proportion of pedestrians and motorcyclists are very high which mostly belong to lower socio-economic groups of society. Recent studies have shown that pedestrians and motorcyclists have the highest rates of injury in Asia (Yang, etal 2003 and Suriyanwongpaisal etal 2003). In Pakistan incidences of road traffic injuries was 15.0 (including minor injuries) per 1,000 persons per year (Ghaffar etal 2004). If we use this rate in 2008 it will be in millions.

Road traffic injuries are a major but neglected global public health problem, requiring concerted efforts for effective and sustainable avoidance. Worldwide, the number of people killed in road traffic crashes each year is estimated at almost 1.2 million, while the number injured could be as high as 50 million (WHO, 2004).

Livneh and Hakkert (1972) accomplished a comprehensive case study on road accidents in Israel. Utilizing employment and population data, Partyka (1984) built up uncomplicated models with an outlook to recognize the variety of factors distressing the augment of accidents in developing countries. According to Andreassen (1985), the Smeed's method cannot be concerned commonly to all countries. Mekky (1985) exercised the time series data for his study and premeditated the effects of a quick amplify in motorization stages on fatal accident rates in various developing countries. Mohan (1985) endeavored to comprehend total crash patterns in Delhi. Jacobs and Cutting (1986) endeavored additional to modernize the association based on former studies. The investigation on the effect of speed restrictions on road accidents has been performed by Fieldwick and Brown (1987). According to Fieldwick and Brown (1987), it was originated that speed limits have a substantial effect on security equally in urban and rural areas.

Road traffic collapses can place a serious difficulties on the family and friends of the injured person. According to WHO estimates for 2002, there were 180500 children killed as the result of road crashes. Some 97% of these child road deaths occurred in low-income and middle-income countries (WHO, 2004).

Some other research evidence also indicates that the human element is responsible for 80 to 85% of all traffic accidents. Traffic violations, driving while intoxicated and lack of driving courtesy are the results of human actions. Unsafe highway and road conditions cause about 10% of all traffic accidents while mechanical deficiencies are responsible for nearly 5% of all traffic problems (Aaron,1990; Collier, 1983; American Automobile Association, 1988; Mc Glade, 1980).

Data Collection and Methodology

This study is based on primary data which is collected from people belonging to Makran (Kech/ Gwadar) transporters, drivers of buses and passengers. For this purpose, 100 respondents were selected from the area. Data was administered by descriptive survey method through questionnaire. The purpose and convenience techniques of non-probability method applied.

Data Analysis and results

On the basis of primary data, when we asked respondents about the main reason behind road accidents, then 56% of the respondents answer rash driving at is the main reason of road accidents. While 23% respondents

answered that untrained drivers are the cause of road accidents and 21% of the view that use of cell phone the cause of road accidents. This entire issue is shown in table 1.

Table 1. Reasons of Road Accidents

Accidents	Percent	Cumulative Percent
Rash driving	56.0	56.0
Untrained drivers	23.0	79.0
Use of cell phone	21.0	100
Total	100	

Respondents answered another issue about the use of drugs during driving causing road accidents. The answer being that only 11% of the respondents view that drugs is not a cause of accidents while 83% and 6% response yes and to some extent, respectively. As shown in table 2 below.

Table 2. Use of Drugs during Driving Cause Accidents

Use of drugs	Percent	Cumulative Percent
Yes	83.0	83.0
No	11.0	94.0
Some extent	6.0	100
Total	100	

Table 3. Is Lack of Awareness Causes Road Accidents

The 59 % of the respondents answered that lack of awareness about driving rules and other safety measures is the cause of road accidents while 33% of the respondents view that it is not a cause of road accidents and 8% response was to some extent. As shown in table 3.

Lack of Awareness	Percent	Cumulative Percent
Yes	59.0	59.0
No	33.0	92.0
Some extent	8.0	100
Total	100	

Table 4. Awareness of people regarding traffic rules

Respondents were asked about how much awareness they have regarding traffic rules. The question was responded that only 4% of the respondents view that they have little awareness while 93% and 3% response no and to some extent, respectively. As shown in table 4 below.

Awareness about rules of traffic	Percent	Cumulative Percent
Yes	4.0	4.0
No	93.0	97.0
Some extent	3.0	100
Total	100	

Table 5. Role of Govt. in Reducing Traffic Accidents

When we ask about role of government in reducing the ratio of accidents than 79% of the respondents answer that the role of Government is poor .14% respondents answer that its role is satisfactory while only 7% response that government is playing excellent role, detail about this is given in table 5.

Role of Government	Percent	Cumulative Percent
Poor	79.0	79.0
Satisfactory	14.0	93.0
Excellent	7.0	100
Total	100	

Table 6. How much time a bus takes to reach

The 71 % of the respondents answer that buses take nearly 8 to 10 hours to reach their destinations while 22% of the respondents view that they take 10-12 and 7% response answer 10-14. As shown in table 6.

Hours	Percent	Cumulative Percent
8-12	71.0	71.0
10-12	22.0	93.0
10-14	7.0	100
Total	100	

Recommendations

On the basis of achieved results and findings the following recommendations were developed ;Government should work on weak infrastructure areas of Makran Coastal Highway and drivers should follow all

rules and regulations to drive, drivers should be trained regarding skills , road design and rules and regulations ,bus owners should hired two drivers for a bus ,Government of Balochistan should develop a mechanism to control overloading, the necessary use of safety seat belts for the driver and the front passengers should be implemented and speed of buses should be monitored and they should be bound to obey speed .

Conclusion

It is concluded that the main cause of Makran coastal Highway accidents is due to lack of proper monitoring mechanism by Government, bus-owners and passengers and secondly the lack of awareness regarding road designs and rules , so there is immediate need to monitor the buses and other vehicles and also a campaign for awareness about rules. National Highway Authority (NHA) may take this responsibility to monitor and aware public.

Some other burning issues which causes road accidents are use of cell phone, overloading and drugs addiction by majority of the drivers. These issues can be countered by Government to create awareness and have to apply some punishment to defaulters. By controlling on these reasons we can save thousands of precious lives.

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