

Causes of Road Accidents in Pakistan

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Abstract

Every day many people are killed and injured on our roads. Men, women, children, biking or riding to school or work, playing in the streets or setting out on long trips, will never return home, leaving behind shattered families and communities. Road traffic injuries are a growing public health issue, disproportionately affecting vulnerable groups of road users, specially the poor. Main causes which are found behind these road accidents are lack of training institutes, unskilled drivers, poor road conditions, use of cell phone during driving, use of intoxicants, over loading and poor performance of government in this regard. If these issues are tackled in a manner way then it can positively affect the social and economic conditions of the residents of developing countries.

Keywords: Public Health, Road Accidents, Traffic Accidents

1. Introduction and Literature Review

The growth and development of a nation depends, largely, upon the capacity of its transport system to move persons and goods to desired locations safely. In Pakistani society, nuclear family system is very common. Here, it is like a trend that one or two members of family earn the money and other family members heavily depend on them. In developing countries, like Pakistan, roads often carry a wide range of users – from heavy goods-vehicles to bicycles and pedestrians without any separation. Road traffic accidents (RTA) are a significant cause of any disability, death and economic loss in developing countries like Pakistan. Among the pedestrians, the most vulnerable are those young people who play an important part in the socio-economic growth of the country. In Pakistan, male proportion play dominant role to run their families economically, so they have to face more problems like injuries and disability.

Every day many people are killed and injured on our roads. Men, women, children, biking or riding to school or work, playing in the streets or setting out on long trips, will never return home, leaving behind shattered families and communities. Road traffic injuries are a growing public health issue, disproportionately affecting vulnerable groups of road users, specially the poor. 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).

In economic terms, the cost of road crash injuries is projected at roughly 1% of gross national product (GNP) in low-income countries, 1.5% in middle-income countries and 2% in high-income countries (Soderlund, 1995). The economic cost of road crashes and injuries is estimated to be over Rs100 billion for Pakistan (Ahmad, 2008).

Lower socio-economic groups have limited access to post-crash emergency health care (Mock, et al 1997). In Pakistan also, a large portion of population has also limited access to post-crash emergency health care which causes a precious loss of lives. In many developing

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countries, the costs of prolonged medical care, the loss of the family breadwinner, the cost of a funeral, and the loss of income due to disability can push families into poverty (Hijar et al 2003).

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 et al, 2003). Pakistan is also a developing country where a large number of people die every 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, et al 2003 and Suriyanwongpaisal et al 2003). In Pakistan Incidence of road traffic injuries was 15.0 (including minor injuries) per 1,000 persons per year (Ghaffar et al 2004). If we use this rate in 2008 it will be in millions.

The burden of injury is unequal. More boys are injured than girls, and children from poorer families have higher rates of injury. In 2002, males accounted for 73% of all road traffic deaths, with an overall rate almost three times that for females: 27.6 per 100 000 population and 10.4 per 100 000 population, respectively (WHO, 2004). Pakistan is a patriarchal society, where most of the time male family members are the primary source of income. So, the higher rate of road traffic deaths among men, can even more severely affect the socio-economic status of the family as well as the whole social structure of the society. In Pakistan, among males of the economically active age group accidental death rate is very high, and also according to the study, motor vehicle injuries are the third most important cause of death in developing countries. (Soderlund 1995). It is projected that RTA will be the second most common cause of disability-adjusted life years in developing countries in the year 2020 (Murray, 1997).

Road traffic crashes can place a heavy burden 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).

There are many factors which cause the accidents. The motorized traffic on these roads is capable of high acceleration and speed, both key factors in the causes of road crash injury. Most of the factors of traffic accidents are the driver, the highway and motor vehicles (Aaron ,1990, Balogun et al,1992; Luby et al,1997 and Mock et al,1999).

Majority of road users including motorists and pedestrians lack road sense, leading to frequent road accidents and continued traffic jams across the country. 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).Traffic violations like signal crossing, driving without license, wrong parking, usage of mobile phones while driving, wrong overtaking, disregard of zebra crossing, riding motorbikes without lights and helmets, over-speeding, change of lane sans using indicators are so common in Pakistan which are the major cause of accident in our society.

2. Data Collection and Methodology

This study is based on primary data which is collected from people belongs to transportation system and drivers of LTV, HTV, motorcyclist and pedestrians. For this purpose 100 cases

were selected from the universe as described by Neumann (1997). Data is collected via discussion and questionnaire on causes of road accidents and its aspects from each side.

3. Data Analysis

On the basis of primary data, when we ask to respondents about the main reason behind road accidents then 40% of the respondents answer that ignorance of traffic rules is the main reason of road accidents. While 32% respondents answer that rash driving and 28% of the view that untrained drivers are the cause of road accidents. This whole issue is shown in table 1.

Table 1. Reasons of Road Accidents

	Percent	Cumulative Percent
Ignorance of traffic rules	40.0	40.0
Rash driving	32.0	72.0
Untrained drivers	28.0	100.0
Total	100.0	

When we put the question that is poor conditions of roads is responsible for accidents then 44% of the respondents answer that to some extent poor conditions of roads cause accidents and 32% people response that yes, poor condition of roads is responsible and all is shown in table 2.

Table 2. Is Poor Condition of Roads Responsible for Accidents

	Percent	Cumulative Percent
Yes	32.0	32.0
No	24.0	56.0
To some extent	44.0	100.0
Total	100.0	

Our next question highlight another burning issue that 68% of the road accidents occur due to untrained/ unskilled drivers while only 12% of the respondents view that unskilled drivers are not responsible, which is shown in table 3.

Table 3. Accidents Occur Due to Unskilled Drivers

	Percent	Cumulative Percent
Yes	68.0	68.0
No	12.0	80.0
To some extent	20.0	100.0
Total	100.0	

In most of the parts of the country, one wheeling occurs by young people on roads and 76% of the respondents view that this cause road accidents while only 4% of the respondents answer that one wheeling is not a cause of accidents. Table 4 shows detailed data on this issue.

Table 4. Is One Wheeling Causes Accidents

	Percent	Cumulative Percent
Yes	76.0	76.0
No	4.0	80.0
To some extent	20.0	100.0
Total	100.0	

Use of cell phones during driving cause road accidents and government take measures to avoid cell phone and there is some penalty. The 52% of the respondents answers that use of cell phone during driving cause accidents while 40% answer to some extent it cause, only 8% view that cell phone is not the cause of road accidents. This is shown in detail in table 5.

Table 5. Is Use of Cell Phone Causes Road Accidents

	Percent	Cumulative Percent
Yes	52.0	52.0
No	8.0	60.0
To some extent	40.0	100.0
Total	100.0	

Another issue was raised when we ask a question from respondents that are use of drugs during driving cause road accidents. The answer was astonished us that only 4% of the respondents view that drugs is not a cause of accidents while 72% and 24% response yes and to some extent, respectively. As shown in table 6 below.

Table 6. Use of Drugs during Driving Cause Accidents

	Percent	Cumulative Percent
Yes	72.0	72.0
No	4.0	76.0
To some extent	24.0	100.0
Total	100.0	

Overloading is another cause of road accidents and respondents answer that overloading is the cause of road accidents as shown in table 7.

Table 7. Is Overloading Causes Road Accidents

	Percent	Cumulative Percent
Yes	40.0	40.0
No	4.0	44.0
To some extent	56.0	100.0
Total	100.0	

The literacy rate in Pakistan is low which relates with road accidents because most of the drivers are illiterate and can't read anything even helping booklet/ safety guides on roads. The 72% of the respondents answer that lack of awareness about driving rules and other safety measures is the cause of road accidents. Only 8% of the respondents view that it is not a cause of road accidents and all this is shown in table 8.

Table 8. Is Lack of Awareness Causes Road Accidents

	Percent	Cumulative Percent
Yes	72.0	72.0
No	8.0	80.0
To some extent	20.0	100.0
Total	100.0	

Above all information explains the causes of road accidents but now we have collected some information about the role of different administrative institutes in overcoming these issues. When we ask about role of government in reducing the ratio of accidents then 40% of the respondents are of the view that government is playing poor role and there is need to improve its role. 28% respondents answer that its role is satisfactory while only 8% response that government is playing excellent role, detail about this is given in table 9.

Table 9. Role of Govt. in Reducing Traffic Accidents

	Percent	Cumulative Percent
Excellent	8.0	8.0
Very good	24.0	32.0
Satisfactory	28.0	60.0
Poor	40.0	100.0
Total	100.0	

The role of traffic police in reducing the road accidents is better and 52% of the respondents show satisfactory role of traffic police while 24% answers very good. So the overall role of traffic police is good but the problem exists when we make a comparison between roads and number of police servants. Only 8% of the respondents answer that traffic police is playing poor role, which is shown in table 10.

Table 10. Role of Traffic Police in Reducing Traffic Accidents

	Percent	Cumulative Percent
Excellent	16.0	16.0
Very good	24.0	40.0
Satisfactory	52.0	92.0
Poor	8.0	100.0
Total	100.0	

Conclusion

The main objective of this paper is to highlight the main causes of road accidents in Pakistan. On the basis of primary data we conclude the paper as following.

The main reason of traffic accidents is due to lack of awareness about rules and regulation, so there is need of institutes for awareness about these rules. Government may create awareness in public by offering different courses in educational institutes and also distribute some material for drivers and for general public also. Government needs to make some core courses/ training before the provision of license and traffic police should keep strong check and balance in this regard.

Another problem which causes road accidents is overloading, use of cell phone during driving and drugs addiction by majority of the drivers. These all issues can be solved by creating awareness and by applying some penalty to defaulters. These are not serious issues and easily solved by the strong system of check and balance by any administrative authority. By overcoming on these causes we can save a lot of benefits in the shape of monetary and non-monetary terms.

In a nut shell, we say that road accidents are playing prominent role in the families of victims of traffic accidents which is the loss of property on one side while death of humanity is on the other hand. These both can through a family into a vicious circle of poverty and then it

impacts on the overall economy. So need of the day is to take some encouraging steps by public side and individuals side also.

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