



Research Paper

ROAD ACCIDENTS AND ITS SOCIAL AND ECONOMICAL EFFECTS

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This paper include social and economical aspects concern road safety. Road vehicular accidents have been so frequent and common to everyday life that people tend to disregard that these "high velocity moving lumps of metal" are very lethal and sometimes pose as "weapons of mass destruction". The problem in road safety transcends the transport sector. It is a health, social, and economic problem as well. Families are displaced and their futures shattered because of the sudden demise of their breadwinners, which is a social welfare problem. The scale and magnitude of the effects of road accidents on the lives of the people involved and the society in general must be clearly defined for purposes of raising awareness and as an input to the planning and evaluation of the government's road safety intervention measures.

Keywords: Accident, Road, Safety, Injury

INTRODUCTION

The population is increase day by day and from the beginning of this century the vehicle population is going on increasing. From the past studies they are increased to double within 5 year duration but the length of the road existing is not able to place this much of increasing traffic. Hence, mixed traffic conditions are arising and congestion will takes place. After certain limit they may cause road crashes by which loss of human live is happening. By this the loss in world economy is over US \$50 Billion per year. In India the accident is occurring for every minute. In India the accident problem is a combination of various factors viz., prevailing lack of traffic

management measure, improper placement of traffic control devices, roadside hazards and ribbon development along the road network. Road accident scenario in the country is a very grim, more so on National Highway. In fact the present study corridor, portion of NH-3 accounts, more rates of the accidents. This paper presents an analysis of accidents, types and causes of accidents and importance of road safety.

Road safety is very important as transportation is one of the basic things that people use and need in their everyday lives. Due to increase in transportation there is increase in use of vehicles like cars buses, and motorcycles. This is the reason why there

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are a lot of vehicular accidents that happen every day. It may be caused by a lack of discipline of the driver, due increase refusal to follow traffic rules, or poor infrastructure. Vehicular accidents usually lead to injuries or even death. we could help in lessening the number of accidents that happen every day by starting in ourselves and performing our role as a good member of the community.

MATERIALS AND METHODS

Survey of accidents - The magnitude of road accidents and fatalities in India is alarming. This is evident from the fact that every hour there are about 56 accidents (about one accident every minute). Similarly, every hour more than 14 deaths occur due to road accidents i.e. one death in every 4 minutes.

Figure 2.1: Total Number of Road Accidents, Person Killed and Person Injured During 2001 - 2009



Figure 2.2: Total Road Accidents by Motor Vehicle Involved (2009)

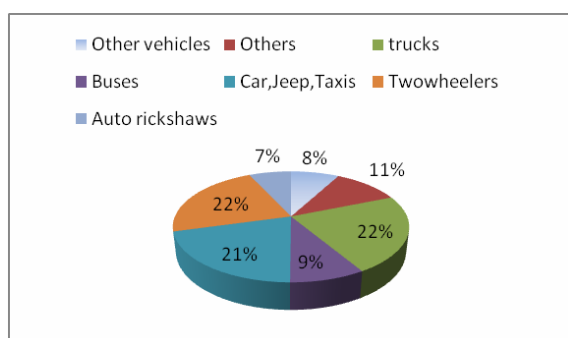


Figure 2.3: Total Person Injured in Road Accidents (2009)

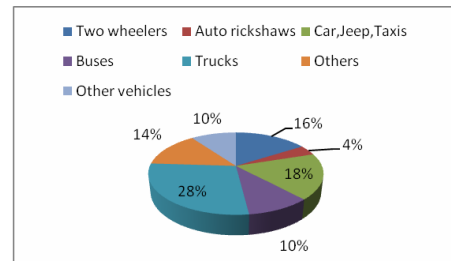


Figure 2.4: Person Killed in Road Accidents by Type of Road Users Category (2009)

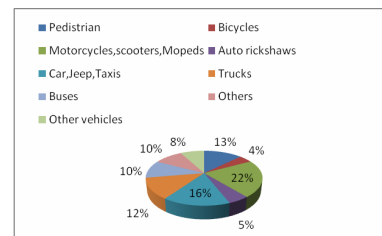


Figure 2.5: Road Accidents Victims by Age Group Causes of Road Accidents (2009)

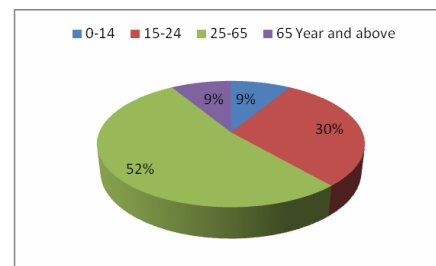


Figure 2.6: Total Road Accidents by Type of Motor Vehicle (2012)

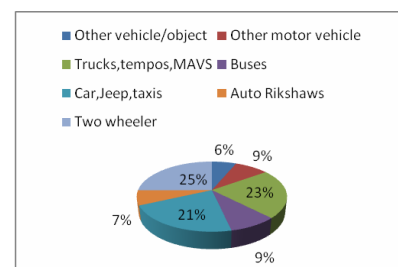


Figure 2.7: Persons Killed in Road Accidents (2012)

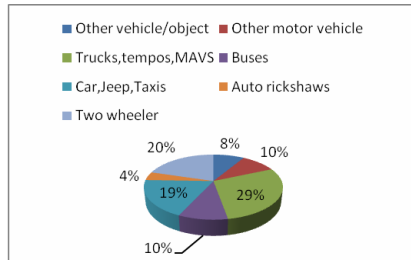


Figure 2.8: Persons Injured in Road Accidents (2012)

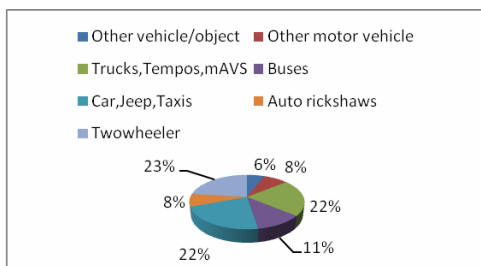


Figure 2.9: Road Accidents Victims by Age Group (2012)

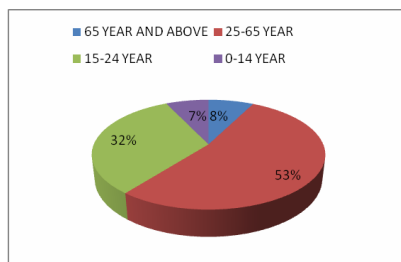
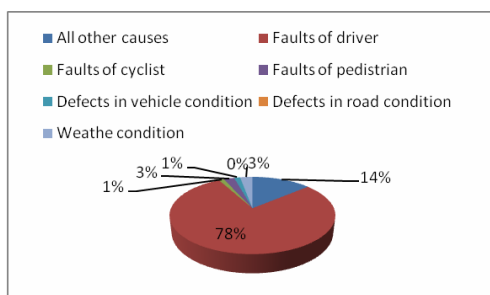


Figure 2.10: Causes of Road Accidents (2012)



Psychological aspect in driving

There are two perspectives on what people do as drivers, one external, the other, internal. The external view on driving includes road conditions and vehicle manipulation. Data on these is obtainable from instruments, measurements, and observer evaluation. The internal view on driving is the perspective of the drivers themselves: their sensations, perceptions, verbalizations, thoughts, decisions, emotions, and feelings. Data on these aspects of the behaviour of drivers cannot be obtained by instruments, nor by an observer. Instead, some method must be devised by which the drivers can make records of their on-going perceptions, thoughts, and feelings. A common method is to obtain self-witnessing reports made by drivers who talk out loud into a tape recorder while they are driving. These concurrent reports are superior to retrospective reports obtained by interviewing drivers or giving them tests. After-the fact data depend on recollection and other distortions, while concurrent reports during driving allow drivers to label thoughts and emotions as they occur, thus increasing the reliability, validity, and comprehensiveness of the report.

Three Domains of Driving Behavior

Affective, Cognitive, Sensory-motor
 What pertains to the behaviour of the will is called affective behaviour and includes affections, feelings, motives, needs and everything that pertains to the goal-directedness of people's actions.

For example, signalling before changing lanes is a sensory motor behaviour embedded in an affective context: the driver maintains the motive of avoiding driving errors. In the absence of this motive, errors are committed and the driver fails to signal. Learning to maintain the motive of avoiding

driving errors is an important affective driving skill.

What pertains to the behaviour of the understanding is called cognitive behaviour and includes cognitions, thoughts, reasoning's and everything that pertains to the decision-making and analyzing aspects of people's actions. For example, signalling before changing lanes is not only embedded in an affective (motivational) context, but in a cognitive context as well: the driver processes information by common sense logic. Learning to make correct judgments in routine driving incidents, is an important cognitive driving skill.

What pertains to the individual's overt actions is called sensory motor (or psychomotor) behaviour and includes all experience that is mediated through sensory and motor channels. For example, signalling before changing lanes is a complex psychomotor action involving eye-hand coordination, motor readiness to apply the brakes if needed, twisting of neck to look behind, changes in breathing pattern, and less visible endocrine and neurologic changes.

Social and Economical effects of accidents

Social Effects of accidents

In India very large number of poor households depend on daily wages and temporary jobs, don't have health insurance, or the assistance of social welfare schemes, a serious injury can result in permanent reduction of income. In cases of prolonged treatment or death of the victim, the family may end up selling most of their assets and land and getting trapped into long-term indebtedness.

Investment in treatment of a seriously ill family member stops only when all assets get sold. Death of a male head of household

creates a household headed by a woman. Such families have to suffer serious social and economic hardships and can have negative health effects on children.

Every year the lives of almost 1.24 million people are cut short as a result of a road traffic crash. Between 20 to 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury.

Road traffic injuries cause considerable economic losses to victims, their families, and to nations as a whole. These losses arise from the cost of treatment (including rehabilitation and incident investigation) as well as reduced/lost productivity (e.g. in wages) for those killed or disabled by their injuries, and for family members who need to take time off work (or school) to care for the injured.

Economical effects of accidents

Accidents carry high economic costs, which are not easy to ascertain. The cost of road related injuries and accidents can be assessed in terms of (a) medical costs (b) other costs related to administrative, legal and police expenditure (c) collateral damage in terms of damage to property and motor vehicle and (d) loss due to income foregone arising out of absence from work or impairment/disability or untimely death. Besides accident survivors often live poor quality of life and have to live with pain and suffering which are difficult to estimate.

There are few estimates of the costs of injury, but an estimate carried out in 2000 suggest that the economic cost of road traffic crashes was approximately US\$ 518 billion. National estimates have illustrated that road traffic crashes cost countries between 1-3% of their gross national product, while the financial impact on individual families has been shown to result in increased financial

borrowing and debt, and even a decline in food consumption. Socioeconomic status

Global Road Safety Report

The World Health Organization (WHO) has identified through studies in disability-adjusted life years that road accidents would be the third leading cause of death by 2020.

Table 3: Process Parameters and their Levels

1990	2020
1.Lower-Respiratory infection	1.Ischaemic heart disease
2.Diarrhoeal diseases	2.Unipolar major depression
3.Conditions during Perinatal period	3.Road traffic injuries
4.Unipolar major depression	4.Cerebrovascular disease
5.Ischaemic heart disease	5.Chronic obstructive pulmonary disease
6.Cerebrovascular disease	6.Lower respiratory infections
7.Tuberculosis	7.Tuberculosis
8.Measles	8.War
9.Road traffic injuries	9.Diarrhoeal diseases
10.Congenital abnormalities	10.HIV

RESULTS AND DISCUSSION

In earlier days accidents were majorly caused due to the technical faults of vehicle (such as brake fail, tyre blown out etc) but now a days due to increase in transportation road accidents are increasing tremendously and the main reason behind this is psychological behaviour of the driver.

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DATA SOURCE

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