

A Review on Road Safety and Causes of Accidents on Tasgaon-Sangli Road

A.K. Patil¹, M.Y. Patil², S. R. Phadatare³, P. A. Kadam⁴, A.V. Pawar⁵

¹Assistance Professor, Dept. of Civil Engineering, NMCE Peth (Maharashtra)

^{2,3,4,5}Student, TE civil Engineering, NMCE Peth (Maharashtra) INDIA

ABSTRACT:- The India is a fastest growing and developing country in the world. In India and other countries road accidents are one of the causes of death. In India more than 150000 peoples are killed each year in traffic accidents which is big concern. This is due to the lack of awareness among the peoples about the road safety devices which is installed above or on the road for the safety of road users like pedestrians, motorcyclists and cyclist. Road safety accidents are human tragedy. The current status of Road safety research does not give solutions to the problem. It requires advanced methodologies and resolutions in each country. This study provides degree and various proportions of road accidents and the road safety management.

Keywords: Road safety, Methodology, Causes of accidents and suggestion

1. INTRODUCTION:

Road traffic injuries are the one of the major problem in the country. This is due to increasing no of vehicles per day and increasing traffic volume on roads especially on the rural roads. According to the safety status report 2016, 150,785 persons were killed and 494,624 injured in road traffic crashes in India.

The drivers in India takes the traffic rules easily and handle it carelessly. Due to which road accidents are happened. Road traffic crashes or injuries are maximum among the age group of 10-44 years.

Road safety in India should be established the greatest importance because youngsters are pampering in habits like drunk driving or driving under effect of various drugs. Such actions can not only danger to the lives of the people in the car or on motorcycle, but also to the innocent people who are walking or driving on the same road.

By suitable traffic management the accident rate can be reduced. For this a suitable study of traffic accidents are required to be carried out. Proper control measures can also be identified by proper investigation.

It is important to notice traffic laws in India due to the many pedestrians on the roads and the fact that most of India's population prefers to walk or take the public transport services like buses or taxis. The approach

about traffic rules is very slack when it comes to India, but that should be kept in mind when remarkable fines or penalties for breaking the law.

2. METHODOLOGY:

The various information related to this review is collected from various research papers and manual related to the road safety and management. The statistical data collected from the manual of ROAD SAFETY IN INDIA STATUS: REPORT 2016. For the review paper we have take a case study of the Tasgaon-Sangli road. The no of road accidents happens on this road in year 2016 is about 803 from which 376 were dead and 791 were injured. The information also collected by observations. The most of the accidents happens due to high speedy vehicles.

The objective of the review paper is:

- 1) To study the causes of road accidents.
- 2) To study the factors which is responsible for the road affections.
- 3) To study the solutions needed for reducing accidents.

3. CAUSES OF ACCIDENTS:

Road accident is most undesirable thing happen to a road users or pedestrians. Most of the road users are familiar of the general rules and safety measures while using roads but they have carelessness which cause accidents. Main cause of accidents and crashes are human errors which occurs either by proper intension or without proper intension. We have some of the common behavior of humans which are reasons for accident:

1. Over Speed of the vehicles with breaking the speed limit.
2. Driving of vehicles by drinking alcohols.
3. Carelessness while driving.
4. Breaking of Red Light signals.

5. Avoiding Safety equipment like Seat belts and Helmets.

6. Overtaking of vehicles in a wrong direction.

3.1 DIFFERENT FACTORS RESPONSIBLE FOR ACCIDENTS:

Driver's behavior:

Over-speeding, rash driving, violation of rules, failure to understand signs, fatigue, alcohol.

Pedestrian behavior:

Carelessness, illiteracy, crossing at wrong places moving on carriageway, jaywalkers.

Passenger behavior:

Projecting their body outside vehicle, by talking to drivers, alighting and boarding vehicle from wrong side travelling on footboards, catching a running bus etc.

Vehicles situation:

Failure of brakes or steering, tyre burst, insufficient headlights, overloading, projecting loads.

Road Conditions:

Potholes, damaged road, eroded road merging of rural roads with highways, diversions, illegal speed breakers.

3.2 RESULT OF ACCIDENTS:

1. Death
2. Injury
3. Property Damage



Figure 1A truck ferrying labourers overturned near TASGAON in Sangli, dead 10 and injuring 20 others in this accident.



Figure 2 Accident happens on Tasgaon-Sangli Road due to the speedy driving.

Table 3: Accident information of Sangli district

YEAR	ACCIDENT	DEATH	INJURED
2010	983	282	957
2011	873	278	926
2012	845	314	849
2013	832	325	971
2014	873	321	946
2015	913	330	823
2016	803	376	791

5. "Road Traffic Accidents in India: Issues and Challenges" Sanjay Kumar Singh- Professor of Economics at the Indian Institute of Management Lucknow, India.
6. Aparna Verma, Ashutosh Gupta and Baikunth Nath dept of civil engg. Gorakhpur (UP) "Road safety improvement in India".
7. Head, Department of Economics, Bharati Vidyapeeth's Dr.Patangrao Kadam Collage, Sangli, Maharashtra. "Road accident causes in Sangli District".

SUGGESTIONS:

- ✚ Don't drink and drive.
- ✚ Use seat belt and helmet while driving.
- ✚ Follow rules and regulations while driving.
- ✚ Drive vehicles within speed limits.
- ✚ Be safe and Make safe.

CONCLUSION:

Road accidents happen on Sangli-Tasgaon road due to illiteracy about sign boards. So it is concluded that training programs and camps should be conducted frequently. It is highly recommended that videos in local language are produced and displayed at crowdie areas like bus stand, railway station, bank, schools and colleges etc. Traffic control devices can also be played an important role in reducing accident. Proper placement and maintenance of the road safety devices can reduces the death rate by accidents. Lots of peoples are aware of the causes of road accidents and its effect but instead of that they are not follow the rules and regulations.

REFERENCE:

1. Dinesh Mohan, Omer T simhoni, Michael Sivak, Michael J. Flanagan- the University of Michigan Transportation Research Institute Ann Arbor, Michigan 48109-2150 U.S.A. "Road safety in India: Challenges and opportunities".
2. Manual of advancing road safety in India by National Institute of Health and Neuroscience.
3. RANGANATHAN.B.A Associate Professor, Dept. of Civil Engineering, New Horizon college of Engineering, outer ring road, near Marathalli Bridge, Bengalure-56103, India "ROAD SAFETY AND ACCIDENT PREVENTION IN INDIA" Research framework for ROAD SAFRTY by WORLD HEALTH ORAGANIZATION 2015.
4. Road safety in India status report 2016.