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## Road accidents-A great challenge- An Analysis of Himachal Pradesh *Dr. Pawan Kumar*

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### Abstract:

Road accidents is utmost undesirable occurrence with road traffic users time and again, despite that people don't realize from these unfortunate incidents. Most of motorists are pretty conscious about general traffic guidelines including safety measure while driving or walking however it is just negligence to put their life on risk. India, being a swiftly emerging nation with growing economy has its specific problems concerning road accidents owing to speedy production of motor vehicle. Road accidents instigates immense injury and death simultaneously, consequently, the toll to be collected is quite burdensome. Main cause of accidents and crashes in the state are due to human error, bad road conditions and rash driving. The net health loss from road traffic injuries in India approximately three times that from maternal disorders. This paper focuses on depth analysis of contributing factors in road accidents and to create a relationship between cause and consequences.

**Keyword:** Road accidents, Economic Development, Infrastructure, vehicular Growth, Environmental safety.

## Introduction:

Road transport is a basic infrastructure of economic development. The growth of industry, trade, commerce and agriculture are not only functions of road transport but also support to development of socio- economic goals. Consistent growth in transport sector arise a big question of safety and environmental problems. Road safety endures to be a foremost evolving a public health issue as in case of India, road injuries are one of the top four leading causes of mortality and health loss, as per the Global Status study 2018 on Road Safety exceeding 1.35 million persons are killed worldwide with 91% of fatalities and 12% alone considered for India. As reported in study about “Road accidents in India 2019”, the figure of mortality owing to traffic crashes in India were 1,51,223 in 2019. Certainly, as a serious concern that regardless of the enduring attempts of the Authorities and our promises for reducing casualties no noteworthy improvement is registered. Manifold proposals related to road engineering and vehicle along with educational events for introducing consciousness have been implementing by Ministry of Road Transport and Highways. In 2019 stringent initiatives related to traffic safety includes the enforcement of the “Motor Vehicle Amendment Act 2019”, contributes as the supportive factor in bringing discipline and a answerable attitude for traffic rules violations as well as increase in penalties amongst road abusers. It is strongly believed that the implementation of the “Motor Vehicle Amendment Act 2019”, can change the scenario nationwide. In addition to it some detrimental effect of traffic on environment are as:

1. Safety 2.Noise. 3 Hand consumption 4.Air pollution 5.Degarding the aesthetics. Participating elements contain misinterpreting a curve or loss of vehicle control, or make an attempt to evade crashing with another motorway operator or a creature. Head on collision on that point opposite tops of two automobiles strike with each other in oppose directions.

**Table .1: Total count of individuals injured and killed in Road accidents during 2015- 2019**

Year	Total figure of Injured People (in numbers)	Percent change	Total figure of Mortality (in numbers)	Percent change	Total figure of Accidents (in numbers)	Percent change
2015	5,00,280		1,46,144		5,01,432	
2016	4,94,633	-1.12	1,50,776	3.17	4,80,625	-4.15
2017	4,70,967	-4.67	1,47,902	-1.80	4,64,900	-3.27
2018	4,69,407	-0.22	1,51,408	2.28	4,67,052	0.45
2019	4,51,359	-3.76	1,51,104	-0.10	4,49,005	-3.85

Source: Road accidents in India. Ministry of road Transport.

It is observed that 4,49,005 total count of road accidents were registered in 2019 by States and Union Territories (UTs) out of them 1,51,104 persons killed and 4,51,359 were injured that converts into an aggregate of 1,232 road crashed and 415 fatalities on a daily basis and nearly 52 accidents and 16 persons killed every single hour.

**Table .2: Reported Road accidents by States and Union Territories**

Region	States	Year 2018	Year 2018	Year 2020
East	West Bengal, Bihar, Odisha and Jharkhand	13910	14285	12884
North East	Assam, Arunachal Pradesh, Meghalaya, Manipur, Mizoram, Sikkim, Nagaland and Tripura	5019	5359	3977
West	Gujarat, Maharashtra, Dadra & Nagar Haveli, Daman & Diu	13352	11871	9735
North West	Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Chandigarh, Delhi and Rajasthan	18307	17118	13867
North	Uttar Pradesh and Uttarakhand	17014	16843	14219
South	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, Goa, Andaman & Nicobar Islands, Lakshadweep, Pondicherry	59280	57457	48476
Central	Madhya Pradesh and Chhattisgarh	13962	14251	13296
	Grand Total	140843	137191	116496

SOURCE: Press Information Bureau, Government of India

The north-west region (Chandigarh, Delhi, Himachal Pradesh, Haryana, Jammu & Kashmir, Punjab and Rajasthan), which reported the second-highest road traffic injuries in 2019 at 17,718 reduced the numbers to 13,867 in 2020. The second-highest (14,219) road accidents were reported in north region of (Uttarakhand and Uttar Pradesh) in 2020.

### Literature Review

Shami (2005) described that exceeding seven million persons of India underwent in road accidents with minimal damages to solemn accidents and fatalities every year. Majority of them were vulnerable traffic operator's i.e. cyclists as well as pedestrians. However, vehicular campaigns concentrated on the effortless movement of transportation and importance of four-wheeler's drivers. India positioned at nearly 2 per cent of GDP as annual cost of road accidents, which was an inadmissibly extraordinary obligation. A well-versed and multi-sectoral attitude sponsored by resilient determined promise to diminish road accidents could produce about a considerable change.

Singh (2009) found that the injuries and fatalities in road traffic were hidden pandemic in the metropolises of Uttar Pradesh (UP) region even, accounted for maximum number of traffic accident mortalities in India. Regardless of that, road well-being was not an administrative priority in Uttar Pradesh. The government, as well as local authorities, should restrain road accidents through traffic awareness and execution the after-effect of accidents by constructing cautious highways with cost-effective manners.

The report prepared by "Sundar and Ghate (2013)" advocated the findings of Shami (2005) and proposed that owing to traffic-associated calamities, worldwide, India had the highest amount of mortality rate. Traffic mishaps were the 6<sup>th</sup> prominent ground of loss of life in the nation and in 2012 there was approximately 1,40,000 deaths due to traffic accidents. Even though being a significant society well-being concern that influences the most productive as well as susceptible segments of

community, traffic safety had not acquired any the attentiveness what it deserved. Moreover, they conferred regarding the traffic safety as a crucial movement, well-being, and justice matter but authority had not acknowledged in legislating to implement the formal mechanisms to encourage highway traffic safety.

Shobhana, Raviraj, Yadav and Kumar (2019) found that head injury is the most common provincial injuries an entity can endure in road accidents. The upper part of the body required an instantaneous care and medication being the more susceptible part. Despite the availability of these treatment to large extent, the mortality rate was excessive. However, Legislative alliances had been determinedly struggling to enforce the regulations related helmets, should be hold by

both travellers in two-wheelers. Since, the investigation was attempted in Bangalore, IT center, and a precipitously emerging region with expansion in vehicular activities. The report inferred after having an investigation in Bangalore, (IT center), that occurrence of road accidents was common amid 21-30 years of age group with masculine dominance who are two-wheel riders.

### Objectives

To figure out the contributory factors and the pattern of road accidents in India and to find out required initiation of road safety and to provide possible solutions.

### Research Methodology

This study undertakes road network and status of road safety of India. During this study various factors were focused which provide a platform to understand the relationship between cause effect relationship of road accidents and prevention strategies. In the study secondary data has been used such as: journals, published government reports and websites. The details affected people are shown below.

**Table: 3. Different Type of Trends in Traffic accidents (2015 to 2019)**

Type of road accident	Parameter	2015	2016	2017	2018	2019
Non-injury accidents	Number	57,395	36,091	34,743	34,087	27,339
	Percentage increase / decrease	2.8	-37.	-3.7	-1.9	-19.8
	share in total	11.4	7.5	7.5	7.3	6.1
Fatal accident	Number	1,31,726	1,36,071	1,34,796	1,37,726	1,37,689
	Percentage increase / decrease	4.7	3.3	-0.9	2.2	-0.03
	share in total	26.3	28.3	29.0	29.5	30.7
Minor injury accidents	Number	1,92,634	1,87,642	1,74,400	1,69,920	1,57,215
	Percentage increase / decrease	0.2	-2.6	-7.1	-2.6	-7.5
	share in total	38.4	39.0	37.5	36.4	35.0
Grievous injury accidents	Number	1,19,668	1,20,848	1,20,971	1,25,311	1,26,759
	Percentage increase / decrease	3.6	1.0	0.1	3.6	1.2
	share in total	23.9	25.1	26.0	26.8	28.2
Total	Number	5,01,423	4,80,652	4,64,910	4,67,044	4,49,002

	Percentage increase / decrease	2.5	-4.1	-3.3	0.5	-3.9
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Source : Road accidents in India. Ministry of road Transport.

It is evident from the given table 3 is that Minor injuries acquired the highest portion of approximately 35%, followed by fatal calamities of nearly 31% where Grievous injuries were 28% emphasize on the inevitability for guidelines of free health care service during the peak time to protect human lives that has currently been become a segment of the Motor Vehicle Amendment Act 2019. The proportion of Non-injury accidents was 6% out of the total figure.

**Table.4: Road accidents in Himachal Pradesh**

Sr. No	Year	Road accidents	Persons killed	Injured persons
1	2001-02	2,226	804	3,798
2	2002-03	2,830	804	3917
3	2003-04	2,607	867	4,188
4	2004-02	2758	920	4674
5	2001-05	2807	863	4833
6	2005-06	2756	886	4688
7	2006-07	2953	921	5272
8	2007-08	2840	898	4837
9	2008-09	3023	1173	5630
10	2009-10	3104	1105	5350
11	2010-11	3063	1051	5260
12	2011-12	2867	1057	5422
13	2012-13	3008	1116	4961
14	2013-14	3012	1179	5522
15	2014-15	3168	1271	5764
16	2015-16	3114	1203	5452
17	2016-17	3110	1208	5551
18	2017-18	2873	1146	4904
19	2018-19	1791	671	2520

Source: Police Department, HP/Deptt. Road Tpt. And Highways , GOI/Newspapers.

Road transport is a basic infrastructure of economic development. The growth of industry, trade, commerce and agriculture are not only functions of road transport but also support to development of socio- economic goals. Typically, transportation has been viewed as an enabling, but insufficient factor leading to economic development. Historically, contribution of transportation to economic development has been through providing access to markets and raw materials, and by alleviating congestion. Once raw materials and markets are made accessible, attention turn to relieving congestion in these sectors, which then facilitates productivity improvements. The transport sector has expanded manifold in the first fifty-sixty years of planned development. With this increase in quantity, there are several welcome developments in quantitative and qualitative in nature. Impressive as this progress is the country's transport system is far from adequate transport and suffers from a large number of deficiencies. In India transportation demand increasing day by day due to that motor population has unprecedented expansion. Consistent growth in transport sector arise a big question of safety and environmental problems. With the increase of road connectivity and number of vehicles plying on these roads in the State, the number of road accidents and loss of precious human lives is increasing day by day. The data from 2001-02 to 20019-20 would show an increasing trend in the number of accidents and the victims. The hilly terrain of the State and rash and negligent driving are the major cause of these accidents. The department of PWD has identified numerous black spots and the department is in the process of improving them to reduce road accidents.

Himachal Pradesh, popularly known as Devbhoomi, is a favourite tourist destination. It has limited air and rail connectivity and roads are the lifeline not only for the people of the state, but, also for the development of tourism, hydropower projects and the rapidly expanding industrial hubs. The state has witnessed rapid expansion in terms of highway construction and broadening of roads. However, road accidents remain one of the main concerns. Human errors are responsible for over 93 per cent of the total accidents in Himachal and about 30 to 35 per cent accidents occur on the national highways. Till October 15, 2021, 817 persons were killed and 2,617 injured in 1,862 accidents. In hilly roads, curves are designed for maximum speed of 45 km per hour speed, but drivers often negotiate a curve at a speed of 70 km to 80 km per hour. That causes accidents. Climate factors like landslides that block roads along with heavy rains and flash floods also result in roads and bridges being washed away, leading to loss of life and property. Remote areas have the problem of less number and frequency of buses and other vehicles which leads to overcrowding, increasing the chances of accidents.

The Road Accident Data Management System (RADMS) says in three years ending June 2019, the maximum accidents in the state are attributed to over speeding, followed by dangerous and negligent driving, wrong overtaking, bad road conditions, drug and alcohol abuse and other reasons including adverse weather conditions and mechanical faults. During this year, 98 per cent of the accidents that involved vehicles plunging down hillside occurred in rural areas while only two per cent of such road mishaps took place in urban areas. Out of these, 418 accidents (22.4 per cent) were caused due to vehicles veering off the road and rolling down steep hills, claiming 392 lives and injuring 672 persons.

How different factors of road contribute in accidents.

1. Drivers- rash driving, over speeding, failure to recognize indications, violation of rules, fatigue, alcohol.
2. Passengers- boarding on a running bus, projecting body part out of vehicle, travelling on foot boards, conversation with drivers, alighting side, etc.
3. Pedestrian- illiteracy, carelessness, shifting on carriage way, crossroads at wrong sides, jaywalkers.
4. Road conditions-fog, snow, heavy rainfall, wind storms, hail storms.
5. Vehicles- over loading, failure of brakes or steering, projecting loads.

Precautionary course of action for Road Traffic accidents.

1. Awareness and education of road safety.
2. Stringent implementation of law and regulation.
3. Manufacturing automobile design and road infrastructure as per the requirement.

Direct consequences of accidents.

1. Faulty- ( Death) 2. Injury. 3. Property damage.



## CONCLUSION AND SUGGESSTIONS

- The roads of India upgrading continuously but due to deteriorated conditions of roads transport system is unable to cater the requirement of traffic. Therefore it is suggested that government should allocate more budget for the safety purpose of the passengers.
- Since 21st century road of India upgrading continuously even though does not able to cater the requirement of traffic which look like pothole in the remarkable development in the field of education, technology, industrialization etc... Without proper size or sign board of speed breaker, misshape and faulty engineering are the major cause of road accidents. According to the report of Economic Bureau Minister for Road Transport and Highways Nitin Gadkari said that faulty engineering was one of the key reasons of road accidents.
- In case of overtaking a large vehicle needs good knowledge. Do not cut in too quickly unless you got complete room to overtake.
- Some of the common behavior of humans which results in accidents including red light jumping, drunken driving, over speeding, distractions to driver, avoiding safety gear like helmets and seat belt, non-adherence to lane driving and overtaking in wrong manner.

In a nutshell, the study can be concluded by saying that road accidents could be cancelled maximized to great extent by the concerned authorities by giving some warning before that or punishment traffic rules of driving, proper training of driving either heavy or small vehicle, by standardized road design these can be given. Road accidents in today environment have convert in a huge disaster than any other man made or natural. Although the government has already steps up in this direction but accident data increasing day by day so need of the hour is before buying vehicle an urgent awareness steps to be taken by government of India has become compulsory.

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