

Prevalence of Road Traffic Accidents: A Cross-Sectional Analysis at a Tertiary Care Centre

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ABSTRACT

Background: Road traffic accidents are a leading cause of mortality and morbidity globally. Thus, the present study was conducted to estimate the prevalence of road traffic accidents.

Material and Methods: The present study was a hospital based cross sectional study carried over on the cases sustaining road traffic injuries. Total patients registered for this study was 80. Spot deaths, deaths during transportation, attending private hospitals, treated by quack, neglected injuries and discharged on slip but couldn't interviewed were not included in the study. A pretested, semi-structured questionnaire was used to study socio-demographic variables, place of injury and various risk factors related to Road Traffic Accidents. When patient was in a fully conscious state, questions asked by patients, otherwise history was obtained preferably from persons who were either present at the time of accident or who brought the patient to the hospital. Statistical analysis was done by using SPSS, version 22 (SPSS, Inc., Chicago, IL) and $p < 0.05$ was considered statistically significant.

Results: The result of our study shows that males are more prone to road traffic accidents than females. The most affected age group was 21-30 years.

Conclusion: It is obvious that multiple factors are involved in road traffic accidents. There is a need that road users need to be educated on factors involved in the road accidents. Emergency care system has to undergo serious reforms.

KEYWORDS: Road Traffic Accidents, Prevalence.

INTRODUCTION

Road traffic accidents are defined as a collision involving at least one vehicle in motion on a public or private road that results in at least one person being injured or killed.¹

It has been predicted that by 2020 global death rates from road traffic accidents will rise by 67% due to the effect of rapid population growth, industrialisation and an increase in road vehicles. The World Health Organisation predicts that road traffic injuries would become the sixth commonest cause of death by the year 2020 and the fifth by 2030.¹

During 2008, Road Traffic Injuries ranked fourth among the leading causes of death in the world.² Nearly 1.3 million people die every year on the world's roads and 20 to 50 million people suffer non-fatal injuries, with

many sufferers sustains a disability as a result of their Road Traffic injury.³

Road traffic injuries are the leading cause of death among young people aged 15-29 years and cost countries 1-3% of the gross domestic product (GDP).^{3,4} According to the World Health Organization (WHO), road traffic injuries are the sixth leading cause of death in India with a greater share of hospitalization, deaths, disabilities and socio-economic losses in the young and middle-aged population.⁵

Road traffic injuries also place a huge burden on the health sector in terms of pre-hospital and acute care and rehabilitation.⁶

Thus, the present study was conducted to estimate the prevalence of road traffic accidents.

MATERIALS AND METHODS

The present study was a hospital based cross sectional study carried over on the cases sustaining road traffic injuries. Total patients registered for this study was 80. Spot deaths, deaths during transportation, attending private hospitals, treated by quack, neglected injuries and discharged on slip but couldn't interviewed were not included in the study.

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RESULTS

The result of our study shows that males are more prone to road traffic accidents than females. The most affected age group was 21-30 years.

Table 1: Distribution of road traffic accidents according to gender

Gender	N(%)	p-value
Male	48(60%)	<0.05
Female	32(40%)	
Total	80(100%)	

Table 2: Distribution of road traffic accidents according to age group

Age group	N	p-value
0-10	3	<0.05
11-20	11	
21-30	25	
31-40	16	
41-50	10	
51-60	9	
>60	6	

DISCUSSION

The result of our study shows that males are more prone to road traffic accidents than females. The most affected age group was 21-30 years. According to a study by Sathiyasekaran BWC, 80% of patients involved in road traffic accidents were males.⁷

Singh et al. conducted a study and shows the result that 79.47% of the victims were in the age group of 15–50 years, Males were 88.77 and female were 6.70%.⁸

Huda N et al revealed that the majority of victims were in the age group of 11-44 years (81.89%) and males (71%).⁹

Singh SK et al found that maximum number of cases of Road Traffic accidents were in the age group of 21-30 years of age (30.53%), males (74.34%), educated up to primary school (29.77%) and labourer by occupation (51%).¹⁰

Saadat and Karbakhsh concluded that mean age of road accidents was 41.8 (± 11.53) and males affected were 4.6% and females were 13%.¹¹

Patil et al. shows that average age of road traffic accidents was 32.5 years; 6% Male were affected and 82.3% were females.¹²

CONCLUSION

It is obvious that multiple factors are involved in road traffic accidents. There is a need that road users need to be educated on factors involved in the road accidents. Emergency care system has to undergo serious reforms.

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