



A STUDY OF CHANGES IN PATTERN OF ROAD TRAFFIC ACCIDENTS IN AND AROUND BHAGALPUR SIX MONTH AFTER COMPLETE PROHIBITION OF LIQUOR IN BIHAR

Surgery

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ABSTRACT

The aim and objective of this study is to show decrease in the number of road traffic accidents following complete ban on alcohol in Bihar. This study was conducted in Jawaharlal Nehru Medical College and Hospital, Bhagalpur, Bihar. This article highlights that drunken driving is one of the major cause of road accidents. Govt of bihar enforced a complete ban on liquor from 5th April 2016. Approximately 3 lakh population in the state were identified as habitual drinkers. Drunken driving is identified as one of the major contributors to road traffic accidents and death worldwide and resulting in undefined economic and social loss. A Leading cause for this malady is alcohol consumption and subsequent misadventure on the road which not only harms him but also the poor ones on the road. In our study from 6th may 2016 to 5th dec 2016 total number of road traffic accidents were gradually decreasing month by month after complete prohibition of liquor in bihar as compared to before prohibition of liquor. It clearly indicates that drunken driving is a major human factor of road traffic accidents.

KEYWORDS

Road traffic accidents. Trauma. Injury. Alcohol, Fatalities

INTRODUCTION:

A road traffic accident is an injury due to crashes originating from, terminating with or involving a vehicle partially or fully on a public road. Road traffic accident have been the bane of the modern civilization accounting for considerable loss to the nations. It is projected that road traffic accidents will move up to the third positions by the year 2020. World health organisation first ever global status report on road safety reveals that 90% of death on the world's road occur in low and middle income countries. In a report for WHO a multicentre collaborative study 'injury and alcohol' at National institute of mental health and neuro sciences bangalore it was found that the proportion of injuries linked to alcohol use was 58.9% of all injuries with 24% due to own drinking and 35% due to others drinking. Alcohol and driving don't mix, but still love to drink and drive resulting in numerous road mishaps. There was numerous effort which are taking place to curb this menace as it ruining families and society as a whole. But still each and every step is having loophole in its monitoring and execution.

IMPLEMENTATION OF THE ALCOHOL LAWS:

The government of india has taken different steps to regulate the consumption of alcohol through by making different laws and policy. Over 6 states of india has banned the alcohol sale and consumption.

BIHAR- with the passing of the Bihar excise bill 2016 the sale and possession of the liquor was prohibited in Bihar.

As drunken driving is one of the prominent causes of road traffic accidents various step being taken by the govt of bihar before enforcement of the ban. Govt started De-addiction centre in various District of Bihar. The de addiction programme especially banning the liquor in the state was found to be effective for reducing the incidence of road traffic accidents.

MATERIAL AND METHOD : The study was conducted in victims of road traffic accidents cases brought to casualty of Jawaharlal Nehru Medical College and Hospital Bhagalpur, Bihar. From 6th may 2016 to till 5th dec 2016. All the RTA cases constituted the study population. The data was collected from the emergency register and data centre as well. The patients of all age groups presenting with trauma caused by road traffic accidents were included.

The patients brought in dead were not included in our data. A retrospective study of patients admitted in the year 2016 before prohibition of liquor are included in this study.

RESULTS:

A total of 341 patients were admitted in the emer-gency from 6th may 2016 to 5th December 2016. Among these 341 patients, 295 (86.15%) were male while 46(13.84%) were female. In the previous month from 1st January to 5th may 2016 total patients admitted were 975 ,out of which 890 (91.2%) were male and 85 (8.98%) were female. Majority of them were conveyed by private vehicles ,only few were brought by

either Ambulance or Police. In our study of 341 patients ,most common age group was between 21 to 30 years (120 patients) followed by 31 to 40 years(75 patients) and 41 to 50 years (45 patients).

| Age group in years | No.of patients From 6th may to 5th dec 2016. | No,of patients From 1st jan to 5th may 2016. |
|---------------------|--|--|
| Up to 1 year | 4 | 8 |
| 1 year to 10 year | 15 | 21 |
| 11 year to 20 year | 34 | 55 |
| 21 year to 30 year | 120 | 351 |
| 31 year to 40 year | 75 | 215 |
| 41 year to 50 year | 45 | 165 |
| 51 year to 60 year | 28 | 76 |
| 61 year to 70 year | 15 | 65 |
| 71 year to 80 year | 2 | 8 |
| 81 year to 90 year | 3 | 9 |
| 91 year to 100 year | 0 | 2 |
| Total | 341 | 975 |

DISCUSSION: It was observed that less than one- third road traffic accidents occur after the complete prohibition of liquor in Bihar. It is observed that the age group between 21 to 30 years of age contained the highest number of cases, closely followed by the age group between 31-40 years of age.

The reason behind involvement of the younger age group is that they are mostly actively involved in occupation and hence are most ambulatory and use of alcohol as means of recreation . Less involvement of the extremes of age is thus self explanatory as they tend to remain indoors and avoid alcohol.

Highest number of cases occurred between 6pm- 12 midnight and 12 noon -6pm and least number of cases was seen in the interval between 6am- 12 noon.

With regard to road traffic accidents in the state before the de addiction programme and complete prohibition of liquor launched in the state in 2015 ,total 54992 cases were reported in bihar and 18056 cases alone in Bhagalpur .After implementation of the alcohol laws in state the cases of road traffic accidents in the state decreased closely one third in only 6 months .

As drunken driving is the one of the major causes of road traffic accidents , the study reveals that strict enforcement reduce the road traffic accidents.

Besides these,other measures like the use of helmets for two wheelers riders, setting and enforcing speed limits of the vehicles , setting and enforcing alcohol limits by respective govt, banning drivers from using hand held mobile phones while driving and following the road safety protocols can supplement and provide positive thrust in reducing the incidence of the road traffic accidents in the state

CONCLUSION:

In spite of all the positive impacts, it is true that prohibition of liquor through legal enforcement is a short term solution and if imposed for a considerably long period of time, its operation may become difficult. It may lead to illegal marketing of alcohol. Hence the emphasis should be on behavioural change of individuals and the society at large. Awareness generation and sensitization programs in school, colleges and other institutions clubbed with societal awareness drives by the government at regular intervals should be the key to usher in behavioural change.

The de-addiction programme especially banning the liquors in the state by the govt of Bihar was found to be effective for reducing the incidence of the road traffic accidents in the state.

In our study of 6 months after complete ban of liquor road traffic accidents gradually decrease month by month.

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