

Analytical Survey of Road Accidents in India and Drinking Abuse Driving

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ABSTRACT

India had earned the dubious distinction of having more number of fatalities due to road accidents in the world. Road safety is emerging as a major social concern around the world especially in India. Drinking and driving is already a serious public health problem, which is likely to emerge as one of the most significant problems in the near future. The role of alcohol in traffic safety has produced more controversies than any other topic. Alcohol and driving don't mix, but still, many people love to drink and drive resulting in numerous road mishaps. A drunken driver is a potential murderer as he cannot perform his tasks without risks and endangers road safety. An intensive drive against drunken driving is the need of the hour to promote road safety. It is important to initiate necessary steps to achieve this by overcoming all the challenges.

Keywords: Road Safety; Drunken Driving; Blood Alcohol Concentration (BAC).

INTRODUCTION

World Health Organization's , first ever Global Status Report on Road Safety reveals that 90% of deaths on the world's roads occur in low and middle income countries (21.5 and 19.5 per lakh of population, respectively) though they have just 48% of all registered vehicles. India has the second largest road network in the world with over 3 million km of roads of which 60% are paved. These roads make a vital contribution to the India's economy. According to a government report, road accidents in India killed 1,34,000 people in 2010 (an average of 336 a day). Accidents due to drunken driving are a major problem in India. The problem is unrecognized and hidden due to lack of good quality research data. A study conducted by Alcohol & drug Information Centre (AIDC), India revealed that around 40% of the road accidents have occurred under the influence of alcohol. Young male drivers are at a high risk of such accidents. Though some efforts are being taken to reduce the Road Accidents due to drunken driving, considering the gravity of the situation it is important to change strategies and mechanisms with foresight and effective implementation.

Although Belluschi slowly recovered, the 1964 crash was not the last drunk driving incident involving a member of her family. Her favorite cousin, Tommy, grew up to be a drunk driver who, at the age of 21, killed himself and two others in a drunk-driving crash on March 28,1966. After her lengthy recovery and rehabilitation, Belluschi went on to earn a BA in sociology at the University of Iowa with the intent of becoming a social worker. When she realized that she couldn't make a living as a social worker, she accepted a position at a Chicago bank. Despite this shift in area of employment, Belluschi remarks, It is interesting to me that everything that I've ever done has led to involvement a social issue. I always find myself working for the greater good, like when I became a lead participant in the successful discrimination suit against the bank where I worked. My core issues are truth and justice and I think it all relates to the car crash and from the strength that comes from being gravely injured. And it's what you get when you've faced death directly. I think that if it hadn't been for my crash, I would have been much more ego-centric.

I don't really think it's survivor guilt, but I think I live with a responsibility of surviving. I think I owe a debt to the strangers who came to give blood for me and the doctors and others who helped to save my life. How do you repay something like that? Well, I think it's by doing good in the world. (Belluschi 2001a and 2004) In 1982, when she first heard about MADD, she sent them a check for \$10. Despite this early financial support, she was reluctant to talk about her experiences as a victim of a drunk driver. She frequently wore turtlenecks to hide the scars on her neck so people wouldn't ask questions about what had happened, and she told almost no one about being a crash victim, a victim of a crime. In 1985, she joined

MADD in Illinois, then an all-volunteer organization. Because of her finance background, she took the treasurer position specifically so she could use her professional skills and also so she could stay out of the limelight. She reports, "In 1985, I heard that the Chicagoland area MADD chapter had begun and I contacted them and said I'd like to help and that I'd be the treasurer so nobody could steal the money, which is a perennial problem for charities. I was interested in limiting my involvement to the treasurer's job. I had no intention or interest in doing presentations or anything else" (2001a, 2004). However, once, when the fledgling organization needed to honor a speaker request, Belluschi was asked to speak to a school group, "just this one time." The presentation was a

LITERATURE SURVEY

A study conducted on an epidemiology and consequence of drinking and driving in social and behavioural science department, Boston University School of Public Health USA. Alcohol is a major factor in traffic crashes, and crashes involving alcohol are more likely to result in injuries and deaths than crashes where alcohol is not a factor. Increasing Blood Alcohol Concentration (BACS) have been linked to increased crash risk. This study shows that overall marked reductions in alcohol related traffic deaths since the early 1980s there has been little reduction since. The mid-1990s, and alcohol related traffic deaths have increased slightly in the past 3 years.

A study conducted on to evaluate the relationship that tiredness and sleepiness in bus drivers have no accidents in Peru. Information from various countries indicates that driver's sleepiness plays an important role in road accidents. They have concluded by this study that Tiredness and sleepiness while driving were common among the bus drivers, with various possible cause: acute and chronic sleep deprivation, irregular schedule changes, and sleep disorders due to the drivers' working conditions. Our result supports the hypothesis that fatigue and sleepiness among bus drivers are related to road accidents.

A study conducted on blink duration as an indicator of drivers sleepiness in professional bus drivers, at university of Melsinki, Finland. This study focused on eye blink duration as a measure of sleepiness in on road driving and on the driving performance of professional bus drivers with polysomnographically confirmed mild Obstructive Sleep Apnea Syndrome (OSAS). Ten bus drivers with OSAS and their matched controls participated in the study. Prior to treatment the average blink duration in the driving task was significantly longer and sleep latency in the MWT was significantly shorter for bus drivers with OSAS than for controls (mean blink duration 82.3 ms; 51.9 ms and mean sleep latency 23.2 min; 35.4min), indicating increased daytime sleepiness. These results support earlier findings on blink duration as an indicator of increased sleepiness and have important implications for those involved in the transport technological industry. The findings also suggested that nasal (PAP) treatment is effective in reducing excessive daytime sleepiness.

A study conducted on a health fitness of professional drivers and recurrence of alcoholism. In the occupation medicine unit of the primary Health Centre in Rijeka health ability of 6695 professional drivers and applicants for professional driving license was assessed in respect to alcohol abuse over the period from 1991 until mid 1995. A total of 354 drivers were found to be unfit for driving a motor vehicle. Among them 66 drivers (19% of the unit and 1% of all examined drivers) were found to be unfit because of alcoholism. Therefore a change is proposed to be made in the book of rules for the assessment of health ability for motor vehicles driving, calling for assessment of disability for driving during an extended period after the first established relapse of alcohol dependence.

The study conducted on the alcohol problem on the road. Alcohol is the most important single cause of road accident fatalities and injuries. Recent legislative counter measures extend the community's capability to detect and eliminate drinking drivers from the road and additionally identify road casualties with alcohol problems. Improved facilities are urgently for re-education and rehabilitation programmes.

A study conducted on alcohol incidence in rural drivers. A roadside survey operated at 42 rural sites in Vermont, USA between 10.30pm and 3.00am obtained breath alcohol concentration (BAC) from 1663 motorists. Interview data concerning biographical variables, drinking patterns, and knowledge about drinking and driving were also obtained. BACS of 0.10 or higher were found in 4.6% of this nocturnal driving population. Interview results confirmed that young male motorists are an important population-at-risk, but older male and female liquor drinkers are also prevalent. The importance of heavy and frequent beer drinking was noted, and the prevalence of a double standard with regard to beer and liquor was apparent. Intervention strategies and ideas are suggested on the basis of the data obtained in this study.

An investigation of arrest for drinking and driving, serum gamma glutamyl transpeptidase activities, blood alcohol concentrations, and road traffic accidents; the Tayside safe driving project. Serum gamma glutamyl transpeptidase activity

was measure in 440 drivers at the time of arrest for driving under the influence of alcohol. The results were compared with information gathered by the arresting police officer. One third of drivers over the age of 30 had abnormal gamma glutamylranspeptidas activities at the time of arrest. These findings argue against the department of transport’s criteria for high risk offenders and indicate a clear need for new measure against problem drinkers among drinking and driving offenders.

A study on contribution of alcohol to deaths in road traffic accidents in 1982-6. In India the precise number and relative proportion of deaths among drivers, passengers, and pedestrians in read traffic accidents related to alcohol are not known. These data were obtained in Tayside by cross matching police accident records with blood alcohol concentrations at necropsy. Of 71 alcohol related deaths 30 were the drivers themselves, 9 were their passengers, 23 were pedestrians with raised blood alcohol concentrations, and 9 were innocent victims. The time at which these accidents occurred was related to licensing hours and this should be taken into account when considering changes in licensing laws.

Conducted study on attitudes regarding alcoholism among a group of drinking drivers. 94 drinking drivers were surveyed to assess their attitudes on nine factors related to alcoholism and the alcoholic. These drinking drivers were equally ambivalent in their attitudes towards alcoholism and the alcoholic when compared to the norm group.

A study on knowledge about responsible drinking in drinking drivers and social drinkers, on a questionnaire designed to assess knowledge about responsible drinking social drinkers performed significantly better than convicted drinking drivers. This difference was due almost entirely to the poor performance of drinking drivers reporting additional-alcohol-related problems. Exposure to education in the form either a talk about responsible drinking or a talk plus video presentation resulted in significant improvement in performance by both problem and problem –free drinking drivers. These findings have implications for programs directed at reeducating drinking drivers.

METHODOLOGY

A non-experimental ex post facto design was used in this retrospective investigation. Some limitations to this type of study exist. There was no pre-testing of the individual prior to being convicted of D U I. This study looked at health beliefs not health behavior. There was no control group and the investigator was not aware of any previous education about drinking and driving.

Sample Characteristics

The researcher attended the VIP in the months of July and September, 1994. In July, 57 surveys were distributed; 47 returned and 46 completed. Eighty surveys were distributed in the September meeting and forty were returned with 38 fully completed. A total of 84 subjects were obtained which was a 66% return rate. All were convicted of DUI in this mid western county. Twenty-six (32.5%) had a history of an alcohol-related MVC and 58 (67.5%) had no history of an alcohol-related MVC. Four people chose not to answer the question. Forty-four percent (n = 34) subjects had a prior history of being convicted or arrested for an alcohol-related offense and 56.4% (n = 44) subjects had no history of being convicted or arrested for an alcohol related offense. Six subjects chose not to answer the question. The demographic data included age, sex, occupation, employment, and income range. The mean age for the sample was 27 with a range from 17-49 (Table 1).

Table 1: Age of Respondents

Age Range	MVC Before n(%)	No MVC Before n(%)	Total group n(%)
17-21	4 (17)	12 (23)	10 (21)
22-26	10 (42)	21 (40)	31 (41)
27-31	2 (8)	6 (12)	8 (11)
32-42	5 (21)	12 (23)	17 (22)
42-49	3 (12)	1 (2)	4 (5)

There was no difference in age with those having a history of an alcohol related MVC and those having no history. The total sample revealed that 80% (n = 65) of the respondents were male and 20% (n = 16) female. The group with a history of an alcohol-related MVC had 96% (n = 25) males and 4% (or one) female. The group with no history of an alcohol-related MVC had 72% (n = 39) males and 28% (n= 15) females. The majority were Caucasian (85%) (see Table 2). There was no difference in race between the two groups.

Table 2 Race of Respondents

Race	MVC Before n(%)	No MVC Before n(%)	Total Group n(%)
Caucasian	23(89)	46(85)	69(85)
Afro-American	3(11)	3(5)	7(8)
Asian	0(0)	0(0)	0(0)
American-Indian	0(0)	1(2)	1(1)
Hispanic	0(0)	2(4)	2(3)
Other	0(0)	2(4)	2(3)

Halpern and Visker (1993) conducted a study that looked at the demographics of the drinking driver who was ticketed and/or arrested in the study County and found that 88% percent were white and the ages were 31-50 years. Of these drinking drivers, 85% were males and 14% were females. The present study's sample is similar to the findings of Halpern and Visker (1993).

CONCLUSION

In summary, demographic characteristics of the sample were similar between those with a history of an alcohol related MVC and those with no history of an alcohol-related MVC except on sex and employment status. The overall sample viewed the results of drinking and driving to be serious yet did not perceive themselves as being susceptible. The stated hypothesis was partially supported. A statistically significant difference does exist between the two groups in relation to health motivation. The Victim's Impact Panel may make a difference in the health beliefs.

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