

WORK STRESS AND ALCOHOL USE AMONG BUS DRIVERS

*Kaur Amanpreet, **Kaur Ramanpreet & ***Singh Harpreet

*Associate Professor Khalsa College of Nursing, Amritsar, Punjab, India.

**Staff Nurse, Civil Hospital, Khadur Sahib, Tarn Taran (Punjab), India.

***Village Brindpur, Post Office Sheikhpur, Tehsil & Distt Kapurthala, Punjab, India.

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ABSTRACT

Impaired driving is a significant traffic safety problem, and stress and alcohol taken while driving contribute substantially to this problem. This can increase the risk of mistakes or cause an incident or accident. The aim of the present study was to explore the work stress and alcohol use among bus drivers of both public and private transport. Using purposive sampling, 82 bus drivers were selected who were driving buses on GT Road from Amritsar to either Kapurthala, Jalandhar, Hoshiarpur, Ludhiana, Patiala, Ambala, Delhi, Chandigarh, Panchkula or Shimla. The work stress was assessed by work stress scale and level of alcohol consumption is assessed by standardized tool i.e. AUDIT (Alcohol Use Disorder Identification Test) among them. The maximum number of bus drivers (74.4%) had severe stress whereas nearly one fourths (26.1%) had mild level of alcohol consumption. Work stress and alcohol consumption were positively correlated. There was statistically significant association of monthly income with both the study variables at $p < 0.05$. Conclusively this study revealed that the drivers do face work stress associated mildly positively with alcohol use.

Key Words: Work stress, alcohol use, bus drivers

About Author:



Author Ms Amanpreet Kaur is Associate Professor at Khalsa College of Nursing, Amritsar, Punjab, India.



Author Ms Ramanpreet Kaur is Staff Nurse at Civil Hospital, Khadur Sahib, Tarn Taran (Punjab), India.



Author Harpreet Singh is Village Brindpur, Post Office Sheikhpur, Tehsil & Distt Kapurthala, Punjab, India.

INTRODUCTION

A bus driver, bus operator or omnibus driver is a person who drives buses professionally. Bus drivers typically drive their vehicles between bus stations or stops.¹ Bus drivers may be employed for public or private companies. Bus drivers may be employed for public or private companies. The road transport sector requires high levels of professional skills and competence. Like many other passenger transport industries, the safety of travellers and other road users is of prime importance. Bus drivers must successfully balance the competing demands of safety, customer focussed service and company operating regulations. The physical and psychological health of the bus driver is a critical factor in driving performance. There clearly is a need to actively address the psychosocial work environment of the bus drivers.

Drink driving is a major road safety problem in many countries, although the extent of the problem is often unclear especially in low and middle-income countries. Even in quite modest amounts, alcohol impairs the functioning of several processes required for safe road use, including vision and motor skills. Alcohol impairment increases the chance that all road user groups, including drivers, riders and pedestrians, will be involved in a crash.

Strictly bus drivers are screened for blood alcohol concentration (BAC) and breathe alcohol concentration (BrAC) by country-wise driving regulations. The blood/alcohol limit for India is 0.03% (0.3mg/ml) as per section 185 of Motor Vehicle Act 1988. On a first offence, the punishment is imprisonment of 6 months and/or fine of 2000 Indian Rupees (INR). If the second offence is committed within three years, the punishment is 2 years and/or fine of 3000 Indian Rupees (INR).²

The effects of alcohol on risk of a crash Alcohol impairment has a significant effect on the crash risk of drivers, riders and pedestrians; it is routinely reported as one of the most serious contributing factors to road crashes in motorized countries. Drivers who have been drinking have a much higher risk of involvement in crashes than those with no alcohol in their blood, and this risk grows rapidly with increasing blood alcohol concentration. The drivers who had consumed alcohol had a much higher risk of involvement in crashes than those with a zero BAC, and that this risk increased rapidly with increasing blood alcohol levels.

Studies have shown that there are marked health differences for bus driving compared to other occupations. A study of 14,677 Norwegian males aged between 40 and 49 drawn from a group of different occupations showed that the bus drivers were one of the professions with worst health based on a range of health indications (e.g. Serum cholesterol levels, systolic blood pressure, body weight). Fatigue for them is usually apparent. Around 13 % of 376 British bus drivers had mental well being comparable to psycho-neurotic patients and was higher with 5-10%.³

To cope with stress and strain, alcohol use amongst urban bus drivers had been common. The number of heavy drinkers (more than 15 drinks per week) was also progressively higher as service tenure increased. A positive association was found not only between consumption and self reported frequency of job stress, but also consumption and strain reactions⁴. Drivers with low back pain seek relief by using medicinal drugs especially minor tranquillizers (and alcohol)⁵. The resultant outcomes are absenteeism, turnover, accidents, negative emotions and social isolation among them.

METHODOLOGY

A non-experimental approach and descriptive research design was used. The present study was conducted on 82 bus drivers using purposive sampling technique during June-July, 2014. Out of 82, 37 were driving private buses and 45 were employed in public transport. The drivers were mostly driving buses from Amritsar either to Kapurthala, Jalandhar, Hoshiarpur, Ludhiana, Patiala, Ambala, Delhi, Chandigarh, Panchkula or Shimla. Bus drivers who have actively worked for a period of one year preceding the study, and were present at the time of conduct of the study, were recruited for this study. Drivers that have worked for a period of less than one year and those who were not fulltime drivers were excluded in this study. The respondents were informed of the objectives of the study, and told that participation was voluntary. They were assured of anonymity and confidentiality.

The research tools consisted of socio-demographic data and scale of work related stress and Alcohol Use Disorders Identification Test (AUDIT) to assess work stress and alcohol use respectively. The socio-demographic data consisted of age, marital status, dietary habits, type of transport, working experience and monthly income. The work related stress scale had 35 questions related to work stress and categorized as no stress (below 70), mild (70-104), moderate (105-148) and severe (149-175) levels of stress. And AUDIT had 10 questions with low risk (zone I), medium risk (zone II), harmful/hazardous (zone III) and alcohol dependence (zone IV) levels of drinking scored as 0-7, 8-15, 16-19 and 20-40 respectively.

RESULTS & DISCUSSION

The findings revealed that nearly three- fourths (74.4%) of bus drivers were suffering with severe stress. The remaining (25.6%) were in moderate level of work stress and no one was found in mild or no stress category. According to the level of alcohol use among bus drivers, nearly one fourths (26.1%) were medium drinkers in zone II (figure 1)

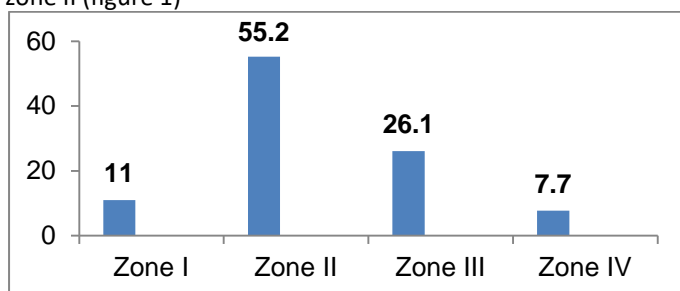


Figure 1: Percentage of Bus drivers according to Level of alcohol use

Pearson's coefficient of correlation showed positive correlation ($r=+0.34$) between work stress and alcohol use. The relationship of work stress and alcohol use among bus drivers with socio-demographic variables such as age, marital status, dietary habits, type of transport, working experience and monthly income was calculated and found statistically significant association with monthly income.

Rydstedt et al (1998) studied 52 bus drivers (35 male, 17 female) analysed increased workload over 18 months was strongly associated with self-reported perceived effort to carry out work and fatigue⁶. Winkleby et al (1988) investigated 1428 bus drivers in USA and a significant inverse association was found between self-reported stress and hypertension. Also significant positive association between self-reported stress and gastrointestinal, respiratory and musculoskeletal problems⁷.

A study on 376 male bus drivers in UK, mini-bus drivers had lower work stress and higher job satisfaction than the other bus drivers. Younger drivers concerned with health and home, older/longer serving drivers concerned with risk of assault and lack of involvement. 13% of drivers had as poor mental well-being as psycho-neurotic outpatients. Higher jobs were related to better mental health and self-reported better physical health⁸.

CONCLUSION

Growing threats to well being such as increased road traffic, violent passengers, and increasingly tight running schedules from company pressure will no doubt add to burden felt by bus drivers. Hence this work stress propel them to engage in maladaptive behaviours particularly alcohol.

Thus the bus drivers need to strengthen and enhance stress coping strategies i.e. relaxation exercises and counselling support learning how to change negative approaches of stressful situations. Also the bus drivers must be educated for health promotion on-site and motivating them to engage in regular physical exercise, adopt a healthy and balanced diet and reduce tobacco and alcohol intake.

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