Innovations

Alcohol drinking and driving: analysis of risk-taking behavior among commercial drivers in Lagos metropolis

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Abstract

Alcohol use by commercial drivers is becoming an issue of concern in Nigeria. This study aimed to determine the prevalence of alcohol use among commercial drivers in Lagos metropolis, to ascertain the relationship between alcohol use and risk-taking behavior, to find out the influence of age and marital status on risk-taking behaviour among this population. This was a cross-sectional study that included 112 commercial drivers. A self-administered questionnaire which consisted of the socio-demographic variables, the Alcohol Use Disorder Identification Test (AUDIT) and the Risk-taking questionnaire (RT-18) was used to assess the participants. The collected data were analyzed with descriptive and inferential statistics, chi-square, and two-three analysis of variance. The mean age of the participants was 43.3% (SD=7.61). The majority of them were males (99.1%), married (82.1%), and had valid driver's licenses and a minimum of secondary school education (44.6%). The prevalence of alcohol use in this study was 50.9%. A considerable proportion (43.8%) of the participants were in the high risk-taking category. Participants who were high on risk-taking behavior demonstrated more problematic alcohol use. Age and marital status did not have any significant influence on risk-taking behaviour. There is a need to pay attention to this special population by introducing programs that aim at controlling alcohol use among commercial drivers.

Keywords: *1.Alcohol, 2.alcohol use, 3.drinking and driving, 4.Risk-taking behaviour*

Introduction

Alcohol is the most widely consumed substance in Nigeria. The reason for this popularity is not far from its socio-cultural value. There is hardly any culture in Nigeria where alcohol is not used. It plays an important role in many social and business activities including festivals, weddings, funerals, naming ceremonies, house warming among others. Many people have discovered that alcohol help them to suppress overwhelming emotions, shyness, anxiety, tension and stage fright that interfere with their ability to function effectively. Although some people drink responsibly, some others including commercial drivers are particularly at a higher risk of hazardous alcohol use (Bamiso&Naimot, 2014). While many of the drivers are self-employed and own the vehicles, a good number of them make daily or weekly returns to their employers. They work for many hours (sometimes without rest) in order to meet up with their financial targets. Consequently, they indulge in the use of substances such as alcohol with the belief that it will significantly improve their Performance, keep them alert for as long as possible and minimize their stress.

Although the use of alcohol is socially acceptable in many societies, it does not rule out the social and health consequences associated with it.Alcohol consumption has been identified as the world's third largest risk factor for disease and disability. The WHO Global Status Report on Alcohol and Health (2018) indicated that 3 million deaths

(5.3% of all deaths) linked to harmful alcohol use occurred in 2016; and over 200 diseases and injuries have been implicated in harmful alcohol use (WHO, 2014). The use of alcohol while driving has been linked with the display high-risk behaviours among drivers (Ulinski, Moyse, Werneck, and Moyse, 2016). Alcohol being a depressant affects the mental state of drivers leading to altered perceptions, delayed reactions time, and poor speed control (Oladehinde, Adegbehingbe, Adeoye, and Onakoya, 2009). It could also increase the tendency of involvement in high risk behaviors on the road such as over speeding (Ogden and Moskowitz, 2004) and poor speed control which could lead to crash. Sutlovic, Scepanovic, Bosnjak, Versic-Bratincevic, and Definis-Gojanovic (2014) in their study on the relationship between alcohol and road traffic accident in Croatia reported that alcohol was the main contributing factor for accident. Studies have shown that certain behaviours such as the use of mobile phone while driving and non-use of seat belt/helmet impair driving performance and increase the risk for traffic injury (Kulkarni, Kanchan, Palanivel, Papanna, Kumar, and Unnikrishnan, 2013). Similarly, Treloar, Morris, Pedersen, and McCarthy (2012) reported that the desire for pleasure and impulsivity trait were responsible for drinking and risky behavior. In a study on drinking and risky behavior among university students in southern Nigeria, Abayomi, Babalola, Olakulehi and Ighoroje (2016) found that alcohol use and drink driving were associated with multiple risky behaviors, including nonuse of protective gear (seat belts and helmets), mobile phone use, and driving against traffic.

The prevalence of drink-driving among adult drivers has been reported by several researchers. Mir, Khan, Ahmed, and Razzak (2012) in their study on alcohol and marijuana use among commercial drivers in Pakistan found that about 10% of the drivers drink alcohol while driving. In a similar study, Damsere-Derry, Pak, and King (2016) reported 9.7% prevalence of alcohol drinking among drivers. In the same vein Brubacher, Chan, Martz, Schreiber, Asbridge, Eppler, et al., (2016) in their study on the prevalence of alcohol and drug use in injured Bristish Columbia drivers reported 17.8% prevalence. In Nigeria, previous studies reported prevalence of alcohol use among commercial drivers within the range of 67.3% – 85.4% (Abiona, Aloba, and Fatoye, 2006; Bello, Ndifon, Mpama and Oduwole, 2011; Bamiso&Naimot, 2014). From the above mentioned studies, Nigeria appeared to have the highest prevalence of alcohol use in the population of interest. Most of the studies were basically among long distance drivers. There is dearth of literature on alcohol use and risk taking behavior among commercial drivers in a metropolitan city like Lagos.

Statement of problem

The effect of alcohol on the body is multifaceted. It interferes with information processing, decision making, and reaction time, thereby increasing the risk associated with certain behaviours which require a high level of alertness and concentration such as driving (Schweizer, Jolicoeur, Vogel-Sprott, and Dixon, 2004). Adekoya, Adekoya,Adepoju and Owoeye (2011) in their study on driving under influence among long distance commercial drivers in Ilorin, Nigeria reported that drivers who were involved in road traffic accident had high level of alcohol in their blood. Commercial drivers are very special group which deserve genuine attention with regards to issues of alcohol use. This is because they are involved in the transportation of large number of persons and goods, from one place to another. The use of alcohol by this population could endanger the lives of the passengers and result to destruction of resources. The need to provide an effective alcohol control among this group led to this study.

Statement of objectives

- To determine the prevalence of alcohol use among commercial drivers in Lagos metropolis
- To ascertain the influence of age and marital status on risk-taking behaviour among commercial drivers
- To ascertain the relationship between alcohol use and risk-taking behaviour

Significance of Study

The findings of this study are likely to provide policymakers and addiction professionals the information on factors that are associated with drinking and driving. This would enable them to design policies and programs that will focus on the prevention and control of alcohol use among commercial drivers.

Scope of study

This study was conducted at a bus park in Akoka, Lagos. It is one of the public vehicle parks located in the metropolitan city of Lagos. It was chosen for the study because of its cosmopolitan nature.

Methodology

Research Design

This was a cross-sectional survey study. It was conducted among the commercial bus drivers in Akoka, Lagos.

Population of study

This was made up of intra state commercial drivers who ply within the Yaba- Akoka area of Lagos. The participants were mostly males (99.1%). The mean age was 43.3 (SD= 7.61). Majority of them were married (82.1%), had valid driver's license, and had at least secondary education (44.6%).

The participants include drivers who were registered in the park, who have worked as commercial drivers in the park for at least six months, and who gave their consent to participate in the study. Drivers who were not present at the time of data collection at the park were excluded from the study.

Sample size

Purposive sampling method was used in selecting the participants for the study. The sample size was determined using the Taro Yamane formula (1975) below:

$$n = \frac{N}{(1 + N(e)^2)}$$

n = required sample size
N = estimate population (300)
e = degree of error tolerance (5%)

$$n = \frac{300}{1 + 300\ (0.05)^2}$$

Alcohol consumption has been identified as the world's third largest risk factor for disease and disability. The WHO Global Status Report on Alcohol and Health (2018) indicated that 3 million deaths (5.3% of all deaths) linked to harmful alcohol use occurred in 2016; and 13.5% of all deaths among individuals between ages 20- 29 years were attributed to alcohol consumption

$$1 + 300(0.0025)$$

$$n = \frac{300}{1+ 0.75}$$

$$n = \frac{300}{1.75}$$

$$n = 171$$

Instruments

A self-administered questionnaire was used for the study. It consisted of the socio-demographic variables, the Alcohol Use Disorder Identification Test (AUDIT) which is a 10-item questionnaire used to determine the

prevalence of alcohol use and to identify persons with hazardous and harmful patterns of drinking, and the Risk Taking questionnaire (RT-18) which is a 18-item questionnaire that measures engagement in risky behavior and acting without thinking.

Procedure

Ethical clearance was obtained from the Research and Ethical committee of Federal Neuropsychiatric Hospital, Yaba, Lagos. The drivers were seen in their park. The purpose of the study was explained to them in order to give them an informed choice to participate. Confidentiality of their responses was assured and verbal informed consent was obtained from each participant. The questionnaires were administered to them with the assistance of two trained research assistants who had a tertiary level of education. Instructions for completing the questionnaires were explained to them at the beginning and subsequently whenever the participants needed clarification.

Data Analysis

The collected data were imputed into the computer and analyzed using the Statistical Package for Social Sciences (SPSS) version 20. Descriptive and inferential statistics were computed. Chi square and two-three analyses of variance were used to test the objectives.

Results

A higher proportion (50.9%) of sampled commercial drivers indicated problem with alcohol use, and a considerably high proportion (43.8%) of sampled commercial drivers was found to be in the high risk-taking category.The study revealed that age did not have any statistically significant influence on risk-taking behaviours of commercial drivers ($F (2, 111) = .628$, $p>.05$). Similarly, Marital status did not have any statistically significant influence on risk taking behaviours of commercial drivers ($F (2, 111) = 1.039$, $p>.05$). Furthermore, both age and marital status when interacted together did not show any statistically significant influence on risk-taking behaviour of commercial drivers sampled for this study ($F (1, 111) = .334$, $p>.05$).

The result indicates that commercial drivers (51%) who showed higher risk-taking behaviour demonstrated more problematic alcohol use compared to their counterparts who had low risk-taking behaviours (50.8%). However, the difference was not statistically significant.

Discussion

This study found high prevalence of alcohol use among commercial drivers. The preponderance of alcohol use observed in the current study is supported by the works of previous authors (e.g. Abiona et al., 2006; Bello, et al., 2011). More specifically, Abiona, et al., (2006) reported a worrisome prevalence of current use of alcohol to the tune of about sixty seven percent while Bello, et al., (2011) reported about eighty-five percent among similar population. The danger in this is enormous owing to the fact that with increased consumption of alcohol comes difficulty in concentration, impaired visual perception, poorer decision making and judgment, poorer coordination, and slower reaction time. It is already becoming a serious issue on our roads lately with incessant increased traffic congestions that are mostly caused out of inpatient and clumsy commercial drivers. In addition, majority of the Nigerian populace board the commercial transport vehicles regularly and this places huge dangers on the life of many.

The reason why this habit appeared common among this set of persons could be explained with the fact that alcohol is socially acceptable, particularly among commercial drivers. In some parks the best way to celebrate anything is by sharing alcoholic beverages. Also, the use of alcohol is legal in the country and all you can say is ‘drink responsibly’, ‘don’t drink and drive’. It is important to remind ourselves that, authors have found that aside from deriving pleasure from the use of alcohol, commercial drivers mainly use alcohol to reduce stress, ease tension, forget problems, to boost self-confidence and self-performance on and off the job, among many other reasons (Bello, et al., 2011). These reasons may be further influenced due to the tedious nature of driving job in a traffic congested city like Lagos as well as the ***triple ‘A’ factor*** (availability, accessibility and affordability). Invariably,

there are different brand of alcoholic beverages, readily available in the motor parks where these commercial drivers operate, many of which are pocket friendly to the drivers. The interesting part is that these drivers get to use alcohol without anybody raising eyebrow for the use.

Also, the rate of risk taking behaviour was reportedly high in about forty eight percent of the commercial drivers in this study. This could be explained using the findings of Treloar et al., (2012) who reported that the desire for pleasure and impulsivity trait were responsible for drinking and risky behavior. Impulsivity more importantly appeared to have increased the tendencies of an average commercial driver to have increased positive perception to risk-taking, such drivers may lack concern for other road users including passengers and other drivers, and tend to engage in driving behaviours, with consequences of crashes or accidents. With increased use of alcohol and considerably high risk-taking behaviour among commercial drivers in our locale, traffic congestions, road injuries and crashes may appear more frequent than ever before.
This is because the study showed that age and marital status did not have any statistically significant influence on risk taking behaviours of commercial drivers. This implies that these participants have the tendency to engage in risky behaviour irrespective of their age and marital status. This is in contrast with previous findings which found that younger drivers were more prone to risk taking behaviour including driving under the influence of alcohol (Abiona et al., 2006). Abiona et al., 2006 reported that younger age was associated with current alcohol use among this population. Some authors reported that younger people may not be experienced enough to control their ego while driving as such find drinking and taking risk while driving in the same positive light.

This study showed that there was no significant difference in the level of alcohol use between the commercial drivers who indicated higher risk taking behaviour and those who showed low risk taking behaviours. This implies that the use of alcohol among the study population has nothing to do with whether an individual has tendency for high or low risk taking behavior. This is contrary to the findings of previous studies (Abayomi et al., 2016) which showed that alcohol use was associated with multiple risky behaviors. The difference in findings may be due to the different population and setting used in the study. The commercial drivers used in this study were those plying from a university campus to various parts of the state, as a result they are frequently and routinely under check. Many of the drivers might have learnt that, driving with intake of alcohol and drugs, driving vehicles carelessly and over confidently, driving in high speed, overtaking the vehicles in high speed, bad condition of vehicles, overloading passengers & load, parking on a wrong side, driving wrong side of the road would increase the risk of road accident and would have mastered the best way to deal with it.

Recommendation

Preventive measures such as an awareness campaign on the effects of alcohol on the body should be put in place at various motor parks across the state. There is a need for the drivers to be educated on the alcohol use policies available. A random test for blood alcohol concentration (BAC) should be done for commercial drivers. The high prevalence of alcohol use among participants indicates that the consumption of alcohol is widespread at motor parks. Therefore, programs that will promote the understanding of the risk of alcohol use by this population is suggested

Limitations

The responses were purely based on self-report from the students, therefore may have some reliability issues. The sample size is small compared to the number of commercial drivers in Lagos. Hence, the result cannot be used to generalize. Data was collected from only those who were around and willing to participate at the time of the study. There is possibility that many of drivers with alcohol use problems were excluded.

Suggestions for Further Study

Similar studies should be conducted across a wider scope so as to obtain more representative findings on alcohol use and risk-taking behaviour among commercial drivers. Further studies that will use more objective measures for alcohol use should be considered

Conclusion

A significant percentage of commercial drivers use alcohol. About the same number also reported high tendency of risk taking behavior. There is need to pay attention to this special population by introducing programs that aim at controlling alcohol use by commercial drivers.

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