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## **Original Research Article**

# Substance Use and Psychological Distress. The Experience of Tricycle Riders in Egor Local Government Area in Benin City

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## Abstract

**Purpose:** Drivers of tricycles work for long hours and this can have an effect on the psychological status of the drivers. They may also be exposed to substance use. This study examined substance use and psychological distress among tricycle drivers in Egor Local Government Area (LGA) in Benin City, Nigeria.

**Methods:** This was a cross sectional descriptive survey that assessed the health status of the respondents using the General Health Questionnaire. The respondents' socio-demographic characteristics and pattern of substance use was also assessed.

**Results:** Majority, 58 (70.7%) were married and consumed alcohol 50 (61%). About 25 (30.5%) drank alcohol daily and beer was the commonest form of alcohol consumed 29 (35.4%). A few, 11 (13.4%)

drink multiple substances. Though the majority of the respondents, 58 (70.7%), used different forms of psychoactive substances, those who consume alcohol were significantly more (X2=8.741, df=1, p=0.003). Some form of psychological distress was present in 52 (63.4%) of the drivers. There was no statistically significant relationship between substance use and psychological distress in the respondents (X2=0.714 df=1 p=0.398).

**Conclusion:** Majority of the respondents consume alcohol daily and have some level of psychological distress which could not be attributed to the use of psychoactive substances alone.

**Keywords:** Psychological distress, driving, substance, experience, tricycle

Indexing: Index Copernicus, African Index Medicus

# Introduction

Psychoactive substances are substances that affect the mind and mental processes [1]. Driving under the influence of such substances in the body can affect concentration and judgment and may significantly increase the risk of being involved in road traffic accidents [2].

Psychological distress is viewed as an emotional disturbance that may impact on the social functioning and day-to-day living of individuals [3]. As a general term, it is used to describe unpleasant feelings or emotions that impact on an individual's level of functioning. When there is psychological distress, there is the possibility of risky driving which may be influenced by the use of substances [4].

Substance use has to do with the consumption of one or more psychoactive substances either orally as in

the consumption of alcohol, smoking as with cigarettes or sniffing of chemicals such as volatile substances [5]. Motorists and motorcyclists which are related groups of commercial drivers generally have been known to use psychoactive substances [6]. Some of the reasons for their use of substances could be due to the influence of peers who are co-tricycle drivers or to manage the stress of the work. Other reasons that may possibly explain the use of substances among this group of commercial drivers is the fact that they were banned by the State government from plying the major roads in the city. Consequently, they moved to feeder roads where the Federal road safety personnel do not man. Since they are out of the radar of the law the restriction on the use of substances may be reduced. A related study done in the northern part of Nigeria looked at the prevalence of psychoactive substance use among commercial motorcyclists in Zaria but tricycle drivers were not included [3].

This study therefore aims at examining the substance use among a subset of commercial drivers i.e. the tricycle drivers, the common substances they use, the pattern of consumption and psychological distress among them.

# Methods

#### **Design/Instrument**

This was a cross sectional descriptive study which utilized a questionnaire to assess substance use and psychological distress among tricycle drivers in Egor Local Government Area (LGA) in Benin City.

Egor is one of the local government areas in Edo State. It accommodates two major institutions in the State i.e. the University of Benin Teaching Hospital and the University of Benin. These two institutions have a large number of workers and students that form the large customer base for the tricycle drivers. Thus, there is a large number of tricycle drivers in this region

The questionnaire had two parts, A and B. Section A consisted of questions on the social and demographic variables of the respondents as well as other aspects of the subject matter, while section B was the 12 item General Health Questionnaire (GHQ12) [7]. The GHQ12 has been widely used in this environment by various researchers8-10 to elicit probable psychiatric morbidity and has been standardized for use even in some local dialects like the Yoruba language. Validity coefficients of the GHQ show that its sensitivity and specificity range from71% - 91% and 71% - 93% respectively. The cut off point for this study was 0/1, using the GHQ scoring method. Besides the GHQ12 the questionnaire had a total of 12 items. Each item had a different emphasis either on alcohol use or on the use of other substances. After the initial design, the researchers had a focus group discussion with a sample population which was representative of the target group. The result of the discussion helped to restructure and to rephrase the relevant questions in the questionnaire in the final draft.

#### **Data Collection**

The study was done in a circumscribed area of Egor Local Government Area in Benin City. The location is at the border between two local government areas namely Egor and Ovia North East respectively. A large number of tricycles operate in this area because of the high density of pedestrians from the University of Benin and the University of Benin Teaching Hospital located around this border. This provides a heavy pedestrian traffic because of students and staff of these institutions. Furthermore, quite a number of the feeder roads to the expressway where these institutions are located are very bad and often not accessible to cars. Additionally, the ban on motorcycle operations in the area has led to the increase in tricycles in the neighboring communities.

#### Inclusion and Exclusion criteria

All tricycle drivers in the locality were included in the survey, however participation was only by consent. Issues such as drivers' license and vehicle particulars were not needed as these were not relevant to the study. The only individuals excluded were those not willing to participate.

#### Procedure

The authors recruited two university undergraduates as research assistants. They all read through the questionnaires together and harmonized positions on each item on possible issues that could be raised in case of doubt in the clarity of meaning of tenses and phrases. This was particularly applicable to items on the General Health Questionnaire which had phrases one could consider as above the understanding of a barely literate driver. For this reason, the researchers (assistants inclusive) decided that for uniformity the questionnaires should be filled for the drivers.

All the 5 functional parks in the area were surveyed. Upon visit to the parks, the chairman of the park or his approved representative was approached in each case with a detailed explanation on the purpose of the research and the need for them to participate by filling the questionnaire. In some instances, the chairman sought for a larger audience in order to allay fears that the study was for the purpose of collecting data for possible government taxes or perhaps other subtle and hidden motives. Questions were thereafter entertained to clear doubts. The interview proper was done while the drivers were waiting to take their turn in the queue for passengers.

The total time to fill a questionnaire was about 15 minutes. The whole exercise was conducted in three days with two visits (morning and evening) each day.

#### **Data Analysis**

Descriptive statistics such as frequencies and means were calculated and presented in tables. Chi square test was used to compare categorical data such as substance use and psychological distress. The Statistical Package for Social Sciences ver. 16 for windows (SPSS 16) was used to analyze the data.

# Results

Out of the 100 questionnaires distributed 82 were successfully completed giving a response rate of 82%. Table 1 shows the socio-demographic characteristics of the respondents.

Table 1: Socio-. demographics of respondents

Variable	Frequency (%)
Marital Status	
Married	58 (70.7%)
Single	24 (29.3%)
Level of Education	
Primary	31 (37.8%)
Secondary	42 (51.2%)
Tertiary	7 (8.8%)
None	2 (2.4%)
Alcohol consumption	
Once a week	22(26.8%)
Social gathering	3(3.7%)
Daily after work	12(14.6%)
Any time	13(15.9%)
Type of alcohol consumed	
Kainkain	2(2.4%)
Beer	29(35.4%)
Wine	2(2.4%)
Gin	1(1.2%)
*Multiple substances	11 (13.4%)
Substance smoked	
Cigarette	9(11%)
*Multiple substances.	4(4.8%)

Multiple substances with regard to drinks refers to consumption of any brand of alcohol available and with regard to smoking refers to cigarettes, cannabis and other substances

All the respondents were males and had a mean age of  $36 \pm 1.18$  years with a range of 21 to 80 years. Majority, 58 (70.7%) were married and had a secondary level of education 42 (51.2%). Majority, 45 (54.9%) of the respondents also consume alcohol and of this number 25 (30.5%) take alcohol daily either after work or anytime during the day. The commonest type of alcohol consumed by the respondents was beer 29 (35.4%).

Only 15.9% of the respondents were smokers and smoking of multiple substances was minimal 4 (4.8%). Only a few 12 (14.6%) of the respondents both drink alcohol and smoke. Table 2.

Drinking	Smoking		
	Yes	No.	Total.
Yes	12 (14.6%)	33 (40.2%)	45 (54.9%)
No	1 (1.2%)	36 (43.8%)	37 (45.1%)
Total	13 (15.9%)	68 (84.9%)	82 (100.0%)
	X <sup>2</sup> =8.741	df=1 p=0.003	

The result of the GHQ showed that majority 52 (63.4%) of the tricycle drivers have some form of psychological distress (Table 3). This was highest 31 (37.8%) among those who use substances when

compared to those 21 (25.6%), who neither smoked nor drank. However, the difference in the prevalence of psychological distress among substance users and non-substance users was not statistically significant. P>0.05.

Table 3: Substance us	e and psycho	ological distress
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Substance use			
Smokes/drinks	Nil	Total	
15(18.2%)	15(18.2%)	30(36.6%)	
31(37.8%)	21(25.6%)	52(63.4%)	
46(56.0%)	36(43.9%)	82(100%)	
	Smokes/drinks 15(18.2%) 31(37.8%) 46(56.0%)	Smokes/drinks Nil   15(18.2%) 15(18.2%)   31(37.8%) 21(25.6%)	

# Discussion

Alcohol is the commonest substance used by the respondents, while psychological distress is found in the majority of them.

Ready availability may explain why alcohol is the commonest substance used in this study. Furthermore, it is a socially approved substance for recreation and dealers are licensed. This makes it almost ubiquitous. Availability of a psychoactive substance can be considered as one of the aetiologic factors in the use of such a substance [11]. Many tricycle drivers attribute the use of substances to weather. They claim that when the weather is cold as in the rain season and harmattan, the use of a substance comes in handy to keep them warm. This may be implicated in the development of the habit of drinking and/or smoking [12]. There is also the possibility of peer group influence in the development of the habit. In the process of socializing during or after work the drivers may acquire this drinking and/or smoking behavior.

Our finding (beer being the commonest form of alcohol consumed) is consistent with findings of similar studies elsewhere [13,14]. This is different from the expectation that this group of respondents may take more of the locally brewed alcohol referred to as 'kainkain' because it is cheaper.

Combined use of alcohol and cigarette is not a threat to this population as only a few of them use both smoke and use alcohol contrary to expectation.

Based on the General Health Questionnaire (GHQ) majority of the respondents have psychological distress. However, there was no statistically significant relationship between the use of psychoactive substance and psychological distress. Apparently, there are other reasons for psychological distress in this group of respondents than the use of psychoactive substances alone. The stress of the work as well as everyday challenges of life are probable explanations. It has been documented that the hassles level generally is inversely related to the daily health,

daily mood and overall health status of an individual [15]. Furthermore, the stress that people experience in their job is significantly associated with their mental health [16].

## Conclusion

Majority of the tricycle drivers consume alcohol particularly beer, daily. They also have high level of psychological distress which is however, not attributable to the use of psychoactive substances alone.

It will be beneficial to explore all the factors contributory to the psychological distress in this population of tricycle drivers with a view to helping the respondents manage this better.

# Acknowledgement

The contribution of the research assistants are highly appreciated. They assisted with data collection.

# **Conflict of Interest**

No conflict of interest is associated with this work.

# **Contribution of Authors**

We declare that this work was done by the author(s) named in this article and all liabilities pertaining to claims relating to the content of this article will be borne by the authors. Enobakhare Uwadiae was involved in the design of the study and mobilization for data collection. Israel Aina was involved with data analysis and manuscript writing.

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