

# Knowledge, Attitude and Practice of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis

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## ABSTRACT

**Introduction:** Substance abuse, the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs, presents a significant public health challenge globally and particularly in Nigeria. Substance abuse among commercial vehicle drivers is a significant concern, impacting road safety and public health. This is because psychoactive substances alter mood, behavior, and psychological states, influencing an individual's decision-making, which can have dire consequences when combined with high-risk activities like driving.

**Objective:** This study aims to assess the awareness, knowledge, attitude, and practices regarding substance abuse among commercial vehicle drivers in Abakaliki Metropolis, Ebonyi State.

**Materials and methods:** This is a descriptive cross-sectional study. Four hundred commercial drivers were recruited using a multistage sampling technique. Data was collected using structured, interviewer-administered questionnaire adopted from previous studies.. Data was analyzed using IBM SPSS version 25.0 Descriptive analysis was summarized using frequency and proportion. Bivariate analysis was done using a chi-squared test to assess the factors associated with the practice of substance abuse. The level of statistical significance was pegged at  $p < 0.05$

**Results:** Two hundred and ninety four 294 (73%) is aware that driving under the influence of a substance is illegal, 332 (83%) of the respondents has good knowledge of substance abuse, 303 (75.8%) had positive attitude towards substance abuse and 213 (53.8%) use substances to cope with stress. The factors found to be associated with practice of substance abuse are age ( $\chi^2 = 9.753$ ,  $P = 0.008$ ), years of driving experience ( $\chi^2 = 14.563$ ,  $P = 0.001$ ), and park from which the drivers operated ( $\chi^2 = 36.707$ ,  $P = <0.001$ ).

**Conclusion:** Though there was high level of awareness, good knowledge and positive attitude but reduced proportion of substance use and abuse. Periodic sensitization, monitoring and regulation are recommended

**Key Words:** Substance, abuse, knowledge, attitude, practice.

## BACKGROUND INFORMATION

Substance abuse, defined as the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs, presents a significant public health challenge globally and particularly in Nigeria. Psychoactive substances alter mood, behavior, and psychological states, influencing an individual's decision-making, which can have dire consequences when combined with high-risk activities like driving. Substance abuse among commercial vehicle drivers in Nigeria poses significant social concerns, impacting road safety and public health. Research has identified several substances commonly abused by these drivers as follows; studies reporting usage rates ranging from 51% to 75.1%.<sup>1,24</sup> Cigarettes, approximately 27% of drivers report smoking, contributing to health risks.<sup>1</sup> Alcoholic Herbal Mixtures, about 16% of drivers consume these

mixtures, which are often locally prepared and may contain psychoactive substances.<sup>1</sup> Tramadol, an opioid analgesic, to enhance alertness and reduce fatigue.<sup>1</sup> Cannabis (Marijuana), used by high proportion of drivers, can impair driving abilities.<sup>1</sup> Kolanut: Consumed for its stimulant effects, is used by some drivers to stay awake.<sup>1</sup> Amphetamines, Consumed for their energizing effects, are used by some drivers for perceived performance enhancement and in order to stay alert on long trips.<sup>1</sup>

Substance abuse among commercial vehicle drivers is of special concern due to its direct correlation with road traffic accidents. The abuse of stimulants to manage fatigue, enhance alertness, or cope with the stresses of long driving hours is prevalent, particularly among those operating within the transportation sector.<sup>2,3</sup>

In Nigeria, the prevalence of substance abuse is high. According to the United Nations Office on Drugs and Crime (UNODC), approximately 14.4% of Nigerians aged 15–64 have used drugs, with cannabis being the most common illicit substance, followed by alcohol.<sup>4</sup> In Lagos, a study<sup>5</sup> found that 69% of tanker drivers admitted to using psychoactive substances, with significant usage before or during driving shifts. In Abakaliki, the general trend among commercial drivers mirrors this pattern, suggesting a widespread abuse that could be even more pronounced given the city's role as a transport hub in Ebonyi State.<sup>6</sup>

The health implications of substance abuse among drivers extend beyond individual users to affect public safety. Chronic use can lead to addiction, tolerance, and severe health issues like liver cirrhosis, cardiovascular diseases, and mental health disorders.<sup>7</sup> Psychoactive substances impair cognitive functions vital for safe driving, such as reaction time, decision-making, and motor coordination, directly increasing the risk of accidents.<sup>8</sup> The World Health Organization (WHO) notes that alcohol-impaired driving is a leading cause of road traffic deaths globally, a statistic likely mirrored in Nigeria where road safety remains a significant concern.<sup>9</sup>

Economically, substance abuse among drivers leads to decreased productivity, increased healthcare costs, and higher insurance premiums due to accident rates. Socially, it contributes to family breakdowns, domestic violence, and community degradation, particularly in areas where transport hubs are located. The 2007 Global Status Report on Alcohol highlighted that alcohol consumption in Nigeria often leads to domestic violence, with 55% of women reporting abuse related to their husbands' drinking.<sup>10</sup>

## **Rationale/justification**

The prevalence of substance abuse among commercial vehicle drivers has been recognized as a significant public health, safety, and socio-economic issue globally.<sup>11</sup> Despite this acknowledgment, there is a notable gap in research concerning the knowledge, attitude, and practice (KAP) of substance abuse among commercial vehicle drivers specifically within Abakaliki Metropolis, Nigeria, which hinders the formulation of targeted interventions, thereby perpetuating risks to public safety, economic stability, and social well-being.

Public safety is directly compromised as substance abuse can lead to impaired driving, which is a major cause of road traffic accidents (RTAs). Without localized data on the KAP of substance abuse, developing effective educational and regulatory measures becomes challenging, leaving drivers, passengers, and other road users vulnerable to the consequences of drugged driving.

Addressing the health implications of substance abuse among drivers can lead to better health policies and interventions, potentially reducing the burden on healthcare systems. Understanding the patterns of substance use can inform targeted road safety campaigns, reducing accident rates and saving lives. policy development and social stability.

## **General Objective**

To assess the awareness, knowledge, attitude, and practices regarding substance abuse among commercial vehicle drivers in Abakaliki Metropolis, Ebonyi State.

## Specific Objectives

To determine the level of awareness among commercial vehicle drivers in Abakaliki Metropolis about substance abuse.

To evaluate the level of knowledge among commercial vehicle drivers in Abakaliki Metropolis concerning substance abuse.

To analyze attitudes of commercial vehicle drivers in Abakaliki Metropolis towards substance abuse.

To investigate the “practice” of substance use, including the prevalence of substance use, types of substance used, frequency of use, sources of substances, patterns of use, factors influencing use, and consequences of abuse, among commercial vehicle drivers in Abakaliki Metropolis.

To establish the demographic factors that affect the practice of substance use among commercial drivers in Abakaliki metropolis

## MATERIALS AND METHOD

### Study Area

Ebonyi State, with its capital in Abakaliki, was established on October 1, 1996. Located in southeastern Nigeria, the state has approximate geographic coordinates of 6.15°N latitude and 8.05°E longitude; bound to the north by Benue State, Enugu State to the west, Cross River State to the east and south by Abia State. It covers a total land area of 6,400 square kilometers, with a population (2022 estimate) of about 3,242,500.43

Abakaliki metropolis is made up of two local Government Areas, Ebonyi and Abakaliki. The metropolis has one major park (containing many mass transport companies) and about three other minor parks (containing other commercial transporters) with many bus stops scattered within the town. Taxi driving is not well developed in the metropolis, but motorcycle and Keke riders who engaged in town services.

### Study Population

The study population consisted of commercial motor vehicle drivers operating in and out of Abakaliki metropolis parks.

#### Inclusion Criteria

All commercial motor drivers operating within the Abakaliki metropolitan area.

Drivers who are registered with the transport unions

#### Exclusion Criteria

Respondents who did not provide informed consent to participate in the study.

### Study Design

The study employed a descriptive cross-sectional design.

### Sample Size Determination

The sample size was calculated using Cochran's formula for simple proportions:

$$N = \frac{Z^2 \times p(1-p)}{d^2}$$

Where:

N is the minimum sample size,

Z is the critical value of the normal distribution (1.96 for a 95% confidence level),

d is the margin of error (5%), and

p is the estimated prevalence of 74.6%.15

$$N = \frac{1.96^2 \times 0.746(1-0.746)}{0.05^2} = \frac{3.8416 \times 0.746 \times 0.254}{0.0025} = 291$$

Adding a 10% (0.1) non-response rate (r):

$$N = \frac{N}{1-r}$$

Where N is sample size adjusted for nonresponse.

$$N = \frac{291}{1-0.1} = \frac{291}{0.9} = 323$$

Our sample size adjusted for nonresponse (N) was, therefore, 323 subjects.

### Sampling Method

Multistage sampling method was employed.

Stage 1, commercial vehicle drivers in Abakaliki metropolis were divided into sampling units/clusters according to the transport park groups from which they operated.

Stage 2: Four mass transit companies within the Central Park in Abakaliki were selected as primary sampling units or clusters. These parks included GUO, Ifesinachi, Okeyson, and Peace parks. Additional parks, which were analyzed and summarized together under “other” parks as the fifth primary sampling unit, were also included to capture a wider range of drivers for a more representative data collection and results.

Stage 3: A proportionate systematic sampling was conducted among the drivers within each park.

### Sampling Technique

A proportionate stratified systematic sampling technique was first employed whereby the total sample size was allocated proportionally across the selected parks based on the estimated number of drivers in each park. Parks with larger driver populations contributed a correspondingly larger number of participants to the overall sample, ensuring fair representation.

Then, Systematic Sampling method was used to select the respondents. A complete list of all commercial drivers present at each park during the study period was compiled. This list served as the sampling frame, with each driver assigned a unique identifier (e.g., Driver 1, Driver 2, Driver 3, etc.). The sampling interval (k) was determined; A random starting point within the sampling frame was selected using a random number generator. Subsequent participants were selected by adding the sampling interval (k) to the position of the last selected driver.

Data Collection instrument

Data was collected using an interviewer-administered, structured questionnaire divided into five sections: A, B, C, D, and E. Section A gathered socio-demographic information about the participants; Section B included questions assessing awareness; Section C included questions assessing knowledge; Section D included questions assessing attitude; and Section E included questions assessing practice.

Measurement of Variables

The quantitative variables in the independent variables were measured using students t-test for the means (standard deviation), while categorical variables were measured using Pearson Chi-square for the difference in respondents' proportions. The dependent variables were made up of knowledge, attitude, practices and factors among the respondents. Composite variables were constructed to assess knowledge. For each correct answer, a score of one was awarded and zero awarded to wrong answers. The total score was calculated and converted to percentage. This was used to grade knowledge into good or poor knowledge, with 50% as the cut-off. Scores 51% to 100% were graded as good knowledge while scores zero to 50% were regarded as poor knowledge. Attitudes towards substance abuse was measured using Likert scale to assess agreement with statements reflecting different attitudes. Statements covered a range of attitudes from permissive to prohibitive regarding substance use. Practice was measured by evaluating actual behaviors related to substance use among the drivers. The association between putative factors for substance abuse was determined using bivariate analysis of the Chi square variety. Level of statistical significance was set at  $p < 0.05$  with 95% confidence interval. After cross tabulation of socio-demographic variables with the factors, independent variables with a cut off p-value  $\leq 0.1$  were modelled into a Binary Logistic regression model for a multivariate analysis which determined the predictors of the actual factors of substance abuse among the respondents.

Data Management

Data collected from the participants was managed systematically to ensure accuracy, confidentiality, and ease of analysis. All completed questionnaires were checked for completeness and accuracy before data entry. Data was entered into a secure database using International Business Machine Statistical Package for Service Solutions (IBM SPSS) to minimize entry errors and ensure data consistency.<sup>23</sup>

Data Analysis

Statistical analyses were conducted using International Business Machine Statistical Product for Service Solution (IBM SPSS statistics), Version 25, to address the study's objectives.<sup>23</sup> Both descriptive and inferential statistical methods were employed to explore relationships and trends in the data:

Ethical Considerations

Several steps were taken to address ethical issues in this study: Ethical approval for the study was sought from the Ethics Committee of Ebonyi State Ministry of Health. On informed consent, the respondents were given detailed the study's purpose, significance, and the extent of their involvement. Participation was voluntary, and respondents were assured that refusal to participate or withdrawal after consent would not result in any form of victimization. Participants were assured that all responses would be respected, kept confidential, and not tied to any identifying information such as their names.

RESULTS

Table 1: Socio-demographic Characteristics of the Participants

| Variable    | No of Respondents (N=400) | Percentage (%) |
|-------------|---------------------------|----------------|
| Age (years) |                           |                |
| 25-34       | 76                        | 19.0           |

|                                    |     |      |
|------------------------------------|-----|------|
| 35-44                              | 216 | 54.0 |
| >45                                | 108 | 27.0 |
| <b>Gender</b>                      |     |      |
| Male                               | 400 | 100  |
| Female                             | 0   | 0.0  |
| <b>Highest Level of Education</b>  |     |      |
| Primary Education                  | 212 | 53.0 |
| Secondary Education                | 145 | 36.3 |
| Tertiary Education                 | 43  | 10.9 |
| <b>Years of Driving Experience</b> |     |      |
| Less than 5 years                  | 27  | 6.8  |
| 5-10 years                         | 205 | 51.2 |
| Above 10 years                     | 168 | 42.0 |
| <b>Park</b>                        |     |      |
| GUO                                | 62  | 15.5 |
| Ifesinachi                         | 31  | 7.8  |
| Okeyson                            | 54  | 13.5 |
| Peace                              | 63  | 15.8 |
| Other                              | 190 | 47.5 |

Table 1 showed that the greatest proportion of the respondents were 35-44 years of age (216, 54%) Majority of the respondents' highest level of education was primary education (212, 53%) and only a few has achieved tertiary education (43, 10.9%). The greatest proportion of the respondents have attained the range of 5 and 10 years of driving experience (205, 51.2%), and only a few has their years of driving experience less than 5 (27, 6.8%).

Table 2: Awareness of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis

| Items                                           | No of Respondents (N=400) | Percentage (%) |
|-------------------------------------------------|---------------------------|----------------|
| <b>How did you learn about substance abuse?</b> |                           |                |
| School                                          | 191                       | 47.8           |
| Media (TV, Radio, Newspapers)                   | 258                       | 64.5           |
| Billboards or Posters                           | 64                        | 16.0           |
| Awareness Campaigns                             | 15                        | 3.8            |
| Workshops and/or Seminars                       | 24                        | 6.0            |
| Health Professionals                            | 81                        | 20.3           |
| Coworkers and/or Friends                        | 343                       | 85.8           |
| Internet/Social Media                           | 181                       | 45.3           |
| "I don't know what substance abuse is"          | 2                         | 0.5            |

|                                                                                                 |     |      |
|-------------------------------------------------------------------------------------------------|-----|------|
| <b>Do you think substance abuse is a problem among commercial vehicle drivers in Abakaliki?</b> |     |      |
| Yes                                                                                             | 297 | 74.3 |
| No                                                                                              | 103 | 25.8 |
| <b>Have you personally witnessed or known of any driver who uses substances while on duty?</b>  |     |      |
| Yes                                                                                             | 353 | 88.3 |
| No                                                                                              | 47  | 11.8 |
| <b>Would you recognize the signs of substance use in a fellow driver?</b>                       |     |      |
| Yes                                                                                             | 378 | 94.5 |
| No                                                                                              | 22  | 5.5  |
| <b>Are you aware that driving under the influence is illegal?</b>                               |     |      |
| Yes                                                                                             | 294 | 73.5 |
| No                                                                                              | 105 | 26.5 |

Table 2 above shows that most respondents learned about substance abuse from coworkers and/or friends (343, 85%), and the least proportion of respondents do not know what substance abuse is (2, 0.5%). Most of the respondents have personally witnessed or known of a driver who uses substances while on duty (353, 88.3%),

Table 3: Prevalence of Awareness of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis

| Items                   | Number of respondents (n=400) | Percentage (%) |
|-------------------------|-------------------------------|----------------|
| Good level of Awareness | 243                           | 60.8           |
| Poor level of awareness | 157                           | 39.3           |

Table 3 above shows the prevalence of good and poor levels of awareness of substance abuse among commercial vehicle drivers in Abakaliki metropolis based on our criteria for measuring awareness as described in chapter 3 section 3.7.2. Majority of the respondents demonstrated good awareness of substance abuse (243, 60.8%).

Table 4A: Knowledge of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis

| Items                                                                                                        | Frequency (N=400) | Percentage (%) |
|--------------------------------------------------------------------------------------------------------------|-------------------|----------------|
| <b>Taking ògógóró (káí kái) or beer can improve your quickness of control (reaction times) when driving.</b> |                   |                |
| True                                                                                                         | 193               | 48.3           |
| False (correct)                                                                                              | 207               | 51.7           |
| <b>Which of the following is true concerning Ìgbó, loud, or càná?</b>                                        |                   |                |
| Incorrect options                                                                                            | 183               | 45.8           |

|                                                                                                                         |     |      |
|-------------------------------------------------------------------------------------------------------------------------|-----|------|
| They impair one's ability to drive well (correct)                                                                       | 217 | 54.2 |
| <b>Which of the following substances cannot impair your driving ability?</b>                                            |     |      |
| Incorrect options                                                                                                       | 141 | 35.2 |
| None of the above (Correct)                                                                                             | 259 | 64.8 |
| <b>Which of these is not common effect of substance use on driving?</b>                                                 |     |      |
| Incorrect Options                                                                                                       | 137 | 34.2 |
| Improved concentration (Correct)                                                                                        | 263 | 65.8 |
| <b>Taking ògógóró (kái kái) or beer can reduce your ability to judge speed and distance.</b>                            |     |      |
| True (Correct)                                                                                                          | 374 | 93.5 |
| False                                                                                                                   | 26  | 6.5  |
| <b>Which of the following is a potential health risk associated with chronic (prolonged) use of Ìgbó, loud or càná?</b> |     |      |
| Incorrect Options                                                                                                       | 141 | 35.3 |
| Cognitive impairment (Correct)                                                                                          | 259 | 64.7 |
| <b>Which of the following is not a health risk associated with long-term ògógóró (kái kái) or beer use?</b>             |     |      |
| Incorrect options                                                                                                       | 190 | 47.5 |
| None of the above (Correct)                                                                                             | 210 | 52.5 |
| <b>Substance abuse only affects the individual user and not the public safety.</b>                                      |     |      |
| True                                                                                                                    | 157 | 39.3 |
| False (Correct)                                                                                                         | 243 | 60.8 |

Table 4A above shows our assessment of the knowledge level of substance abuse among the respondents investigated in this study. Majority of the respondents answered all of the questions correctly.

Table 4B: Knowledge of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis (Continuation)

| Items                                                                               | Frequency (N=400) | Percentage (%) |
|-------------------------------------------------------------------------------------|-------------------|----------------|
| <b>In Nigeria, what is the legal blood alcohol concentration limit for drivers?</b> |                   |                |
| Incorrect Options                                                                   | 362               | 90.5           |

|                                                                                                               |     |      |
|---------------------------------------------------------------------------------------------------------------|-----|------|
| 0.05% (Correct)                                                                                               | 38  | 9.5  |
| <b>Driving under the influence of any substance, even if legally prescribed, can lead to legal penalties.</b> |     |      |
| True (Correct)                                                                                                | 284 | 71.0 |
| False                                                                                                         | 114 | 29.0 |
| <b>The risk of becoming dependent on/addicted to substances increases with regular use.</b>                   |     |      |
| True (Correct)                                                                                                | 360 | 90.0 |
| False                                                                                                         | 40  | 10.0 |
| <b>Which is not a common symptom of withdrawal from substance abuse?</b>                                      |     |      |
| Incorrect options                                                                                             | 151 | 36.7 |
| Increased energy (Correct)                                                                                    | 249 | 62.3 |

Table 4B above shows our assessment of the knowledge level of substance abuse among the respondents investigated in this study. Majority of the respondents answered all of the questions correctly.

Table 5: Grading of Knowledge of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis

| Variable       | Frequency (N) | Percent (%) |
|----------------|---------------|-------------|
| Good knowledge | 332           | 83.0        |
| Poor knowledge | 68            | 17.0        |

Table 5 above shows the prevalence of good and poor levels of awareness of substance abuse among commercial vehicle drivers in Abakaliki metropolis based on our criteria for measuring knowledge as described in chapter 3 section 3.7.3. Majority of the respondents demonstrated good knowledge concerning substance abuse (332, 83%).

Table 6: Attitude towards of Substance Use among Commercial Vehicle Drivers in Abakaliki Metropolis

| Statement                                                                       | SA (%)   | A (%)    | N (%)    | D (%)     | SD (%)    |
|---------------------------------------------------------------------------------|----------|----------|----------|-----------|-----------|
| For me, it is a shame as a man to avoid taking beer.                            | 63(15.9) | 71(17.8) | 16(4.0)  | 74(18.5)  | 176(44.0) |
| Using ògógóró (kái kái) or beer occasionally is harmless.                       | 87(21.8) | 92(23.0) | 81(20.3) | 67(16.8)  | 73(18.3)  |
| Local alcoholic herbal mixtures (èkpètèshí) reliably boosts driver performance. | 56(14.0) | 61(15.3) | 7(1.8)   | 120(30.0) | 156(39.0) |
| It is okay for drivers to use Ìgbó, loud, or càná to cope with stress.          | 59(14.8) | 62(15.5) | 16(4.0)  | 111(27.8) | 152(38.0) |
| It is okay for drivers to use kolanut (ojí) to                                  | 73(18.3) | 71(17.8) | 12(3.0)  | 99(24.8)  | 145(36.3) |

|                                                                                                                            |           |           |         |           |           |
|----------------------------------------------------------------------------------------------------------------------------|-----------|-----------|---------|-----------|-----------|
| stay awake while driving.                                                                                                  |           |           |         |           |           |
| There should be more educational programs about the dangers of substance abuse for drivers.                                | 157(39.3) | 138(34.5) | 28(7.0) | 24(6.0)   | 53(13.3)  |
| Substance use by drivers does not need regulation of any sort.                                                             | 72(18.0)  | 63(15.8)  | 21(5.3) | 124(31.0) | 120(30.0) |
| I believe that there should be more support programs for drivers to help manage stress without resorting to substance use. | 148(37.0) | 161(40.3) | 16(4.0) | 16(4.0)   | 59(14.8)  |
| Stricter laws against substance abuse among drivers is absolutely necessary to improve road safety.                        | 111(27.8) | 173(43.3) | 0(0.0)  | 57(14.2)  | 59(14.8)  |
| I feel personally responsible for ensuring I drive safely, which includes not using substances.                            | 167(41.8) | 153(38.3) | 16(4.0) | 30(7.5)   | 34(8.5)   |
| The use of substances by drivers negatively affects the reputation of our profession.                                      | 124(31.0) | 138(34.5) | 32(8.0) | 52(13.0)  | 54(13.5)  |
| The purported consequences of substance abuse are unnecessarily overblown.                                                 | 46(11.3)  | 111(27.8) | 4(1.0)  | 160(40.0) | 80(20.0)  |

Index: SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree

Table 6 shows that the majority of respondents strongly disagree with the statement “For me, it is a shame as a man to avoid taking beer” (176, 44.0%). Majority agrees that using ògógóró (káí káí) or beer occasionally is “harmless” (92, 23.0%), although a strong proportion strongly disagrees (73, 18.3%).

Table 7A: Practice of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis

| Items                                                          | Number of respondents (n=297) | Percentage (%) |
|----------------------------------------------------------------|-------------------------------|----------------|
| <b>Which of the following substances have you used before?</b> |                               |                |
| Ògógóró (káí káí), beer, or palm wine                          | 336                           | 84.0           |
| Cìgá                                                           | 252                           | 63.0           |
| Èkpètèshí                                                      | 101                           | 25.3           |
| Kolanut (ojí)                                                  | 163                           | 40.8           |
| Ìgbó, loud or càná                                             | 182                           | 45.5           |
| Tramadol                                                       | 104                           | 26.0           |
| Mkpúrú-mmīrī, meth, or ice                                     | 109                           | 27.3           |
| Other                                                          | 54                            | 13.5           |

|                                                                     |     |      |
|---------------------------------------------------------------------|-----|------|
| None                                                                | 32  | 8.0  |
| <b>Which of the following is your most commonly used substance?</b> |     |      |
| Ògógóró (káí kái), beer, or palm wine                               | 110 | 27.5 |
| Cìgá                                                                | 146 | 36.5 |
| Èkpètèshí                                                           | 22  | 5.5  |
| Kolanut (ojí)                                                       | 20  | 5.0  |
| Ìgbó, loud or càná                                                  | 49  | 12.3 |
| Tramadol                                                            | 15  | 3.8  |
| Mkpúrú-mmīrī, meth, or ice                                          | 24  | 6.0  |
| Other                                                               | 16  | 4.0  |
| <b>Which of the following is your least commonly substance?</b>     |     |      |
| Ogogoro, beer or palm                                               | 82  | 20.5 |
| Cìgá                                                                | 10  | 2.5  |
| Èkpètèshí                                                           | 29  | 7.2  |
| Kolanut (ojí)                                                       | 95  | 23.8 |
| Ìgbó, loud or càná                                                  | 40  | 10.0 |
| Tramadol                                                            | 63  | 15.8 |
| Mkpúrú-mmīrī, meth, or ice                                          | 32  | 8.0  |
| Other                                                               | 42  | 10.5 |

Table 7A above shows that most of the drivers (336, 84%) agreed to have taken alcohol (ògógóró (káí kái), beer, or palm wine) before. Majority say their most used substance is cigarette (cìgá) (146, 36.5%) and their least used substance is kolanut (95, 23.8%).

Table 7B: Practice of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis (Continuation 1/2)

| Items                                                                     | Frequency (N=297) | Percentage (%) |
|---------------------------------------------------------------------------|-------------------|----------------|
| <b>How often do you consume the substance that you most commonly use?</b> |                   |                |
| At least once a day                                                       | 243               | 60.8           |
| Few to several times a week                                               | 123               | 30.8           |
| Once a week                                                               | 16                | 4.0            |

|                                                                        |     |      |
|------------------------------------------------------------------------|-----|------|
| Less than 4 times a month                                              | 10  | 2.5  |
| <b>How often do you use the substance that you least commonly use?</b> |     |      |
| Few to several times a week                                            | 231 | 57.8 |
| Once a week                                                            | 41  | 10.3 |
| Less than a 4 times a month                                            | 59  | 14.8 |
| Less than once a month                                                 | 61  | 15.3 |
| <b>In what situations are you most likely to use substances?</b>       |     |      |
| Before starting work                                                   | 213 | 53.3 |
| During work breaks                                                     | 227 | 56.8 |
| After work to unwind                                                   | 200 | 50.0 |
| Social gatherings                                                      | 298 | 74.5 |
| All of the above                                                       | 151 | 37.8 |
| <b>Do you use substances to cope with the stress of your job?</b>      |     |      |
| Yes                                                                    | 215 | 53.8 |
| No                                                                     | 177 | 44.3 |
| <b>Have you ever driven while under the influence of substances?</b>   |     |      |
| Yes                                                                    | 177 | 44.3 |
| No                                                                     | 215 | 53.8 |
| <b>How long do you wait after taking substances before you drive?</b>  |     |      |
| Less than an hour                                                      | 46  | 11.5 |
| 1-2 hours                                                              | 109 | 27.3 |
| 3-4 hours                                                              | 30  | 7.5  |
| I do not drive after using substances                                  | 207 | 51.7 |
| <b>Where do you most commonly obtain the substances that you use?</b>  |     |      |
| Legal purchase                                                         | 360 | 90.0 |
| Friends or coworkers                                                   | 114 | 28.5 |
| Street dealers                                                         | 246 | 61.5 |
| Online                                                                 | 16  | 4.0  |

|                                                                           |     |      |
|---------------------------------------------------------------------------|-----|------|
| Other                                                                     | 23  | 5.8  |
| <b>Does your substance use vary based on your work schedule or route?</b> |     |      |
| Yes                                                                       | 110 | 27.5 |
| No                                                                        | 282 | 70.5 |

Table 7B above shows the continuation of our assessment of the practice of substance abuse among the respondents investigated in this study.

Table 7C: Practice of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis (Continuation 2/2)

| Items                                                                      | Frequency (N=297) | Percentage (%) |
|----------------------------------------------------------------------------|-------------------|----------------|
| <b>Have you increased your substance use over the past year?</b>           |                   |                |
| Yes                                                                        | 121               | 30.3           |
| No                                                                         | 271               | 67.8           |
| <b>Has your substance use led to any incidents or near-misses at work?</b> |                   |                |
| Yes                                                                        | 22                | 5.5            |
| No                                                                         | 370               | 92.5           |
| <b>Have you ever been late or missed work due to substance use?</b>        |                   |                |
| Yes                                                                        | 16                | 4.0            |
| No                                                                         | 376*              | 94.0           |
| <b>Do you think lack of money leads to your use of substances?</b>         |                   |                |
| Yes                                                                        | 32                | 8.0            |
| No                                                                         | 360               | 90.0           |
| <b>How much of your monthly income do you spend on substances?</b>         |                   |                |
| Too much                                                                   | 25                | 6.3            |
| Not too much                                                               | 81                | 20.3           |
| Very little                                                                | 286               | 71.5           |
| <b>Do you feel pressure from peers or colleagues to use substances?</b>    |                   |                |
| Often                                                                      | 2                 | 0.5            |
| Sometimes                                                                  | 153               | 38.3           |

|                                                                                       |     |      |
|---------------------------------------------------------------------------------------|-----|------|
| Rarely                                                                                | 8   | 2.0  |
| Never                                                                                 | 229 | 57.3 |
| <b>Have you ever joined in substance use because others around you were doing it?</b> |     |      |
| Yes                                                                                   | 177 | 44.3 |
| No                                                                                    | 215 | 53.8 |

Table 7C above shows the continuation of our assessment of the practice of substance abuse among the respondents investigated in this study.

Table 8: Relationship between Socio-demographic Variables and Practice of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis

| Socio-demographic variables        | Practice of Substance Abuse among Commercial Vehicle Drivers in Abakaliki Metropolis (N=297) |            | $\chi^2$ | p-value |
|------------------------------------|----------------------------------------------------------------------------------------------|------------|----------|---------|
|                                    | Poor                                                                                         | Good       |          |         |
| <b>Age (years)</b>                 |                                                                                              |            |          |         |
| 25-34                              | 31(40.8%)                                                                                    | 45(59.2%)  | 9.753    | 0.008   |
| 35-44                              | 79(35.6%)                                                                                    | 137(63.4%) |          |         |
| Above 45                           | 21(21.0%)                                                                                    | 79(79.0%)  |          |         |
| <b>Gender</b>                      |                                                                                              |            |          |         |
| Male                               | 131(33.4%)                                                                                   | 261(66.6%) | *        | *       |
| Female                             | 0(0.0%)                                                                                      | 0(0.0%)    |          |         |
| <b>Highest level of education</b>  |                                                                                              |            |          |         |
| Primary education                  | 76(35.8%)                                                                                    | 136(64.2%) | 2.579    | 0.275   |
| Secondary education                | 45(32.8%)                                                                                    | 92(67.2%)  |          |         |
| Tertiary education                 | 10(23.3%)                                                                                    | 33(76.7%)  |          |         |
| <b>Years of driving experience</b> |                                                                                              |            |          |         |
| Less than 5 years                  | 0(0.0%)                                                                                      | 27(100.0%) | 14.563   | 0.001   |
| 5-10 years                         | 74(36.1%)                                                                                    | 131(63.9%) |          |         |
| Above 10 years                     | 57(35.6%)                                                                                    | 103(64.4%) |          |         |
| <b>Park</b>                        |                                                                                              |            |          |         |
| GUO                                | 32(51.6%)                                                                                    | 30(48.4%)  | 36.707   | <0.001  |
| Ifesinachi                         | 15(48.4%)                                                                                    | 16(51.6%)  |          |         |

|         |           |            |  |  |
|---------|-----------|------------|--|--|
| Okeyson | 8(14.8%)  | 46(85.2%)  |  |  |
| Peace   | 5(9.1%)   | 50(90.9%)  |  |  |
| Other   | 71(37.4%) | 119(62.6%) |  |  |

Table 10 above shows the relationship between socio-demographic variables and knowledge of substance abuse among commercial vehicle drivers in Abakaliki metropolis. The following were found to be statistically significant: age (9.753, 0.008), years of driving experience (14.563, 0.001), and park from which the drivers operated (36.707, <0.001).

## DISCUSSION

The respondents from this study are mostly between 35-44 years of age, males and attained primary education. This is explainable by the fact that before this age, they have spent most of their younger age looking for better job opportunities which is not obtainable owing to the fact that they only attained primary education. They finally settle for driving due to the burdens and responsibilities that follow male gender. This was the case of this study where most of the respondents have more than 10 years' experience, which may be related to their age. This finding slightly differs in the reports of a study in Abia state, south east Nigeria, where most of the respondents were found to be between 30-39 years, 97% males and attained secondary education.<sup>26</sup> In Lagos, south west region Nigeria where majority of the respondents are between 30-40 years attended secondary school as their highest level of formal education, all males and have more than 5 years' driving experiences.<sup>25</sup>

Majority of the commercial drivers is aware that substance abuse is a problem among commercial drivers in Abakaliki. Which corroborates the findings of a preliminary investigation among commercial drivers in Ibadan who abuse drugs but are unaware of psychoactive substances. This indicates that the respondents' understanding of the meaning, kinds, and effects of substances was inadequate. This was inferred from the weighted mean results of the respondents (1.99) being below the criterion (mean = 2.5) on the knowledge of Psychoactive Substances among intra-city commercial drivers in Ibadan Metropolis.<sup>26</sup>

Concerning the knowledge of substance abuse among commercial drivers, about 83% of the respondents have good knowledge of substance of abuse and its implications. Drivers in Ilorin, north central region, Nigeria on the use of Psychoactive Substances, found a comparatively high degree of knowledge and awareness regarding the availability, use, and presence of cannabis, alcohol, tobacco, and caffeine.<sup>26</sup> In Lagos State, south west region, Nigeria, a related study found that the percentage of respondents who were correctly informed about substance usage and the consequences of substance use on behavioral change is 282 (78.8%).<sup>25</sup> But, negates the popular opinion of drivers in this study that substance use improves concentration. The respondents showed vague knowledge of blood alcohol limit for drivers and legal penalties. This low level of knowledge could be that legal blood alcohol level is too complex and technical to understand. The respondents knew that the risk of becoming dependent on substance use increases with regular use which differs from a cross-sectional study done in Minna, north central region, Nigeria, among motorcycle riders using a 20-point rating system which was used to evaluate each respondent's knowledge and impression of the potential health effects of use of substances. Slightly less than half (47.0%) of the respondents had a good knowledge of health implications of psychoactive substance use.<sup>27</sup>

On attitude, the fact that about 75% have positive attitude may be due to effective education about risks and consequences of substance use which could be linked to their general perception that the use of substances by drivers affects the reputation of the driving profession and they feel personally responsible for ensuring safe driving. In Niger State, north central region Nigeria, the attitude of motorcycle riders was assessed where a score of  $\leq 10$  and  $> 10$  were classified as negative and positive perceptions respectively. Perception score relating to use of substances was  $11.2 \pm 4.7$ . Many (54.4%) had a positive Attitude of use of substances, 53.0% opined that some substances such as Cigarettes and Alcohol are socially acceptable while 52.6% were of the perception that substances do not increase accident rate<sup>27</sup> In Osun State, south west region, Nigeria a study done to evaluate the attitude of commercial drivers towards substance abuse, results showed that 90% of the

respondents have negative attitude towards substance abuse. Of those, 60% acquired the habit from peers and 40% from parents.<sup>28</sup>

More than half of the respondents use substances specially to cope with the stress of the job while 44.3% have driven under the influence of substances which presents discordance between their knowledge level and attitude. Among the 264 male Nigerian commercial truck drivers who took part in a multi-ethnic survey in Kano State, north eastern Nigeria<sup>29</sup>, 111 (42.0%) reported taking illegal drugs recently, 55 (20.8%) used drugs to increase their energy, and 90 (34.1%) reported feeling high after using illegal drugs. Among all the substances, marijuana was the most frequently misused drug with 77 (29.2%), followed by benzodiazepines with 34 (12.9%). The Hausa drivers had the highest concentration of psychoactive drugs in their urine samples. The risk of testing positive for methamphetamines is considerably higher for van and truck drivers.<sup>30</sup> In Iran, south eastern region, Asia, 414 motorcycle riders took part in a survey involving men, ranging from 16 to 64 years old, with a mean age of  $27.9 \pm 9.3$ . Alcohol, opium, and cannabis usage were prevalent among drivers: 150 (36.2%), 29 (7.0%), and 15 (3.6%), respectively. Thirty-four (15.5%) people reported using drugs or alcohol less than two hours before driving; 137 (33.1%) motorcycle riders reported wearing a crash helmet most of the time or always whereas 31.2% of the drivers possessed a valid driver's license, and 33 (8.0%) of them were younger than the 18-year-old legal minimum in Iran for obtaining a license.<sup>3</sup> Another study in Lagos State, south west region Nigeiria observed that the practice is not only for performance enhancement but also for coping with job-related stress.<sup>3</sup>

The study revealed that age, driving experience, and the specific motor park significantly shape commercial drivers' practice of substance abuse.

### Limitations of the Study

Despite the valuable insights provided by this study on the knowledge, attitudes, and practices (KAP) related to substance abuse among commercial vehicle drivers in Abakaliki metropolis, several limitations must be acknowledged.

Firstly, the scope of the study encompassed a broad range of substances,. While this wide coverage allowed for a general overview of substance abuse patterns, it limited the depth of analysis that could be applied to any single substance. Substances differ significantly in their patterns of use, sociocultural acceptance, health risks, and legal status. As a result, combining them into a single KAP framework may have introduced conceptual heterogeneity, making the study more exploratory in nature than analytically focused on a specific substance or class of substances.

### CONCLUSION

This study has revealed critical insights into the factors influencing substance abuse knowledge and practices among commercial drivers in Abakaliki. Despite their low educational status, a significant majority demonstrated good knowledge of the implications of substance abuse, recognizing that substances like alcohol, cannabis, and tobacco impair driving abilities. While most drivers acknowledge the dangers of substance use, a substantial proportion still admitted to use—often as coping mechanisms for job stress, fatigue, and pressure to maintain long driving hours. Easy access and affordability of local alcoholic beverages and cigarettes further compound this issue. Motor park environment, age and years of driving experience were significant factors.

### RECOMMENDATIONS

Drivers should be encouraged to abstain from psychoactive substance abuse and understand that their choices directly affect not only their own safety but that of passengers and other road users.

Forming peer-support groups to share healthy coping strategies can make a significant impact.

Drivers facing stress, fatigue, or addiction issues should be encouraged to seek help through available health services or NGOs.

Periodic sensitization by responsible agencies dangers of substance abuse should be energized.

Park unions should establish internal mechanisms to identify and discourage substance use, such as conducting routine spot checks and creating a “whistle-blower” policy to report unsafe practices.

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