Assessing Substance Abuse among Commercial Motorcyclists in Ijero Township, Ekiti State, Southwestern Nigeria: It’s Implication to Public Health

Fasoro Olatunji1, Olusuyi Abimbola2, Dada Abiodun3, Adewumi Michael3, Oluwatuyi Victor2

1Department of Pharmacy, Ekiti State College of Health Sciences and Technology, Ijero-Ekiti, Nigeria
2Department of Community Health, Ekiti State College of Health Sciences and Technology, Ijero-Ekiti, Nigeria
3Department of Environmental Health Studies, College of Health Sciences and Technology, Ijero Ekiti, Nigeria

Abstract

In recent years, commercial motorcyclist (known as okada riders in Nigeria) has come to bridge the huge public transportation gap in most cities across the countries. This is a means of livelihood especially among the Nigerian youths and unemployed graduates. The usage and abuse of drug substances and other the anti-social behaviour according to the recent findings are more common among the commercial motorcyclist. Hence, the rationale for this study. A descriptive cross-sectional design using a semi-structured questionnaire was adopted for this study. A purposive samples of the total number of registered commercial motorcyclist in Ijero Township were used. The data was analyzed using SPSS software package, Frequency distribution table(s), simple percentages and mean were used to present the data. Cross tabulation of important variable was also done using Chi-square test and the statistical significance was set at P<0.05. The result showed that majority of the respondent 67 (61.5%) used drugs without prescription, 23 (20.5%) (N=111) and 45 (57%) (N=79) of the respondents claimed the drugs are cheap and introduced by peers respectively. The mostly used substance is Tramadol 26(29.2%) (N=89). There was a statistical association between the ages of the respondents and road crashes at p<0.05 because respondents within the age group 16-25, 26 (83.9%) were mostly involved in road crashes and There is statistical relationship between the educational level of the respondents and the substance abuse. We concluded that drugs substances were used without prescription and the rate of road crashes is also high. In view of this, there is need for public sensitization on the health implication of drug abuse while relevant agencies should intensify efforts to regulate and enforce strict sanctions against drug abuse.

Keywords: Drug abuse, Implications, Motorcyclists

Introduction

Drug abuse is the illegal, non-medical use of a limited number of substances that are capable of changing functions of cells in the body, have properties of altering the mental state that are considered by social norms. Drug abuse is a matter of grave concern to educational stakeholders, medical practitioners, sociologists, religious leaders, counselors and parents. It is a national and international sensitive issues that needs urgent attention due to the alarming rate of the youths involved in substance abuse. Among these substances are alcohol, substituted amphetamines, barbiturates, benzodiazepines (particularly alprazolam, temazepam, diazepam and clonazepam), cocaine, methaqualone and opioids [1].

A survey was conducted by Nigeria’s National Bureau of Statistics (NBS) and the Center for Research and Information on Substance Abuse in 2018, it was observed that nearly 15% of the adult population in Nigeria (around 28.3 million people) reported a “considerable level” of use of psychoactive drug substances—it’s a rate much higher than the 2016 global average of 5.6% among adults. It showed the highest levels of drug use was recorded among people aged 25 to 39, with cannabis being the most widely used drug. Sedatives, heroin, cocaine and the non-medical use of prescription opioids were also noted. Accidents happen almost on daily basis on Nigerian roads and highways [2]. The frequent accident experienced on roads and high ways in Nigeria over the past years have caused many homes problems for the development of the country and carnage arising from it has become the bane of the country’s social economic development. Available literature revealed that the primary causes of most road accidents include
acts of indiscipline and substance abuse among the drivers and the cyclists. Commercial motorcycle / okada is the second most used mode of transportation in Nigeria next to motor-vehicle [3]. Motorcycles cover 24% of all modes of transportation. Between January and June 2010, 5,560 cases of accidents were recorded in which 3,183 persons lost their lives and 14,349 others sustained various degrees of injuries [4]. An increasingly large proportion of these burdens were due to motorcycle crashes, many of which were used for commercials commuting. There is no doubt that commercial motorcyclists (okada riders) have come to bridge the huge public transport gap in most cities across the country. However, this is not without the dangers they pose to themselves, passengers and to other road users. Accidental injuries, physical disabilities, diseases and possible overdose are among the risks for alcohol and other abused substance commonly found among the commercial motorcyclists [5]. Drug related suicides, homicides and illness which may result to death are also common among the youths [6]. Furthermore, motorcycle riders are 30 times more likely than car occupants to die in a traffic crash and 8 times more likely to be injured (NHTSA, 2007). There is a considerable knowledge gap on the health and social implications of drug abuse among the commercial motor cyclists, hence this study assess the level of awareness, possible causes and implications of substance abuse among specific artisan workforce in Ijero township.

Methods

Study design

A descriptive cross-sectional design using a semi-structured questionnaire was adopted for this study.

Study settings

Ijero-Ekiti is a town in Ekiti State of Nigeria in West Africa. It is situated in the Northwest part of Ekiti State. Ijero Ekiti is the headquarter of Ijero Local Government since 1976. Ijero has other component towns under its control such as Ijurin-Ekiti, Ikoro-Ekiti, Ayegunle Ekiti, Ipoti Ekiti, Temidire Ekiti and others are Epe-Ekiti, Ara-Ekiti, Araromi-Ekiti and Odo Owa Ekiti. The main language spoken by the indigenes of Ijero-Ekiti is Yoruba and English language. Their major occupations are Farming, Artisan and Civil servants. The population of Ijero-Ekiti as at 2006 Census was 221, 406.

Study area

The study area is Ijero Township which is headquarter of the Local government. This town is more populated and has a lot of commercial activities, including tertiary institutions and several health care centers. The respondents are commercial motorcyclists.

Sampling techniques

A purposive samples of the total number of registered commercial motorcyclist in Ijero Township were used. 109 commercial motorcyclist which forms the total commercial motor cyclists in Ijero metropolis were recruited. A semi-structured questionnaire was used to elicit information from the respondents.

Advocacy and Informed consent

A letter was sent to the Authorities and Association of Commercial motorcyclist in Ijero-Ekiti seeking for their permission and cooperation in carrying out the research and informed consent were obtained from all individuals that participated in the study.

Statistical analysis

The data was analyzed using SPSS software package 16.0. Frequency distribution table(s), simple percentages and mean were used to present the data. Tabulation of variables was also done using Chi-square test and the statistical significance was set at P<0.05.

Results

Socio-demographic Characteristics

| Variable | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Age groups( in years) | | |
| 25 and below | 31 | 28.4 |
| 26 – 35 | 49 | 45 |
| 36 – 45 | 21 | 19.3 |
| Above45 | 8 | 7.3 |

Table 1: Age of the Respondents (N=109).

| Variable | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Educational background | | |
| Primary | 25 | 22.9 |
| Secondary | 56 | 51.4 |
| Tertiary | 28 | 25.7 |

Table 2: Educational background of the respondents (N=109).
Variable | Frequency | Percent (%)  
---|---|---  
Awareness of substance abuse (N=109)  
Yes | 81 | 74.3  
No | 28 | 25.7  
Source of information (multiple responses) N=87  
Hospital | 11 | 12.6  
Radio | 29 | 33.3  
Television | 15 | 17.2  
Poster | 8 | 7.3  
Workshop | 11 | 12.6  
Friends | 6 | 6.9  
Others | 7 | 6.4  
Awareness of the negative effect of taken drugs without medical advice (N=109)  
Yes | 80 | 73.4  
No | 29 | 26.6  

| Table 3: Respondents’ awareness of substance abuse. |

| Usage of drugs without medical prescription (N=109) | Frequency | Percentage (%) |
|---|---|---  
Yes | 67 | 61.5  
No | 42 | 38.5  

| Usage of drugs while riding motorcycles (N=109) | Frequency | Percentage (%) |
|---|---|---  
Yes | 44 | 40.4  
No | 65 | 59.6  

| Duration of involvement of drugs usage (N=67) | Frequency | Percentage (%) |
|---|---|---  
Less than 6 months | 12 | 17.9  
6 months - 2 years | 29 | 43.3  
More than 2 years | 26 | 38.8  

| Mostly used substances (multiple responses) N=89 | Frequency | Percentage (%) |
|---|---|---  
tobacco | 23 | 25.8  
alcohol | 24 | 27  
Indian hemp | 7 | 7.9  
Procold | 9 | 10.1  
Tramadol | 26 | 29.2  

| Table 4: Attitude of respondents toward substance usage. |
Main factors responsible for substance abuse (N=111)

| Variable                  | Frequency | Percentage (%) |
|---------------------------|-----------|----------------|
| Pleasure                  | 21        | 18.9           |
| Medical condition         | 26        | 23.4           |
| Improve ridding skill     | 19        | 17.1           |
| Sexual performance        | 7         | 6.3            |
| Cheapness                 | 23        | 20.7           |
| Availability              | 15        | 13.5           |

Means of involvement in substance abuse (n=79)

| Means of involvement | Frequency | Percentage (%) |
|----------------------|-----------|----------------|
| Friends              | 45        | 57             |
| Parents              | 25        | 31.6           |
| Net                  | 9         | 11.4           |

Table 5: Factors responsible for substance abuse.

Road crashes that occurred while riding motorcycles (N=109)

| Variable                                | Frequency | Percentage (%) |
|-----------------------------------------|-----------|----------------|
| Yes                                     | 71        | 65.1           |
| No                                      | 38        | 34.9           |

Nature of injury sustained (multiple responses) N=87

| Nature of injury sustained             | Frequency | Percentage (%) |
|----------------------------------------|-----------|----------------|
| Broken bone                            | 9         | 10.3           |
| Head injury                            | 13        | 14.9           |
| Minor bruises                          | 65        | 74.7           |

Hospitalization due to accident (N=71)

| Hospitalization due to accident        | Frequency | Percentage (%) |
|----------------------------------------|-----------|----------------|
| Yes                                    | 31        | 43.7           |
| No                                     | 40        | 56.3           |

Accident due to substance abuse (N=71)

| Accident due to substance abuse        | Frequency | Percentage (%) |
|----------------------------------------|-----------|----------------|
| Yes                                    | 17        | 23.9           |
| No                                     | 54        | 76.1           |

Mood changes after taken drugs (N=67)

| Mood changes after taken drugs         | Frequency | Percentage (%) |
|----------------------------------------|-----------|----------------|
| Yes                                    | 48        | 71.6           |
| No                                     | 19        | 28.4           |

Table 6: Respondents’ associated health problems related to substance abuse.
| Variable                                                          | Frequency | Percentage (%) |
|------------------------------------------------------------------|-----------|----------------|
| Financial Problems experienced among the respondents with substance abuse (N=67) |           |                |
| Yes                                                              | 31        | 46.3           |
| No                                                               | 36        | 53.7           |
| Involvement in physical fight (N=109)                            |           |                |
| Yes                                                              | 37        | 33.9           |
| No                                                               | 72        | 66.1           |
| History of arrest by law enforcement agent (N=109)               |           |                |
| Yes                                                              | 29        | 26.6           |
| No                                                               | 80        | 73.4           |
| Involvement of domestic violence (N=109)                          |           |                |
| Yes                                                              | 33        | 30.3           |
| No                                                               | 76        | 69.7           |

Table 7: Respondents’ financial and social problems associated with substance abuse.

**Involvement of Road Crashes**

![Involvement of Road Crashes](image)

Figure 1: Respondents involvement in road crashes.

**No of time involved in road crashes**

![Number of times respondents were involved in road crashes](image)

Figure 2: Number of times respondents were involved in road crashes.
**Figure 3:** Nature of Injury sustained when there are crashes due to abuse of drugs.

**Figure 4:** Societal problems experienced by respondent.

**Figure 5:** Factors affecting drug use among the respondents.
Figure 6: Level of drug abused among respondents.

Figure 7: Duration of drug abuse among the respondents.
Table S1: Cross-tabulation between the age of respondents and awareness of substance abuse.

(Table S1) revealed that respondents with age group 16-25 were mostly aware of substance abuse, although no significant association between the age of respondents and their level of awareness of substance abuse since p-value 0.718 is greater than 0.05 alpha level of significance. Hence, age of the respondents is not associated with level of awareness.

Table S2: Cross-tabulation between the age of respondents and level substance abuse.

(Table S2) showed that respondents with age group 26-35 were mostly involved in substance abuse however, no significant association exist between the age and substance since p-value 0.822 is greater than 0.05 alpha level of significance. Hence, age of the respondents is not associated with level of substance abuse.
### Table S3: Cross-tabulation between the age of respondents and crashes.

(Table S3) showed that respondents within the age group 16-25 were mostly involved in road crashes while those above 46 years were least involved in road crashes. There is statistical association between the age and road crashes as the p-value of 0.000 obtained is less than 0.05 alpha level.

### Table S4: Cross-tabulation between the educational level of respondents and substance abuse.

(Table S4) showed that respondents with primary school educational level were mostly involved in substance abuse and the least were those with tertiary educational level. There is statistical association between the educational level of the respondents and the substance abuse since the p value of 0.000 obtained is less than alpha value of 0.005.

### Table S5: Cross tabulation between educational level and road crashes.

(Table S5) showed that respondents with primary six certificates or less were mostly involved in road crashes while those with tertiary educational level were least involved. There is significant association between the educational level of the respondents and their involvement in road crashes.

### Table S6: Cross-tabulation between age category of respondents and number of involvement in road crashes (N=71).

| Age Category | 16-25 | 26-35 | 36-45 | 46 and Above | Chi-square | Degree of freedom | P-value |
|--------------|-------|-------|-------|--------------|------------|-------------------|---------|
| Once         | 12(34.3) | 18(52.9%) | 3(8.2%) | 1(2.9%) | 6.084 | 6 | 0.000 |
| Twice        | 9(26.4%) | 15(41.7%) | 3(8.2%) | 0(0%) | 5(50%) | 2(20%) | 1(10%) | 1(100%) |
Discussion

Intra-city commercial transportation by motorcyclist has become one of the major means of public transport system in virtually all the towns and cities in Nigeria. This is not without its attendant risks of road traffic accidents among this sect of road users and/or their passengers. This study revealed that most of the motorcyclists were in the age-groups 26-35 years 49 (45%) and 8(7.3%) were 46 years and above and most of them 85(78%) were Yorubas. Most of the motorcyclists are well informed 81(74.3%) about information associated with substance abuse. Majority 29 (33.3%) of those who aware of substance abuse sourced their information from radio and 80(73.4%) were aware of the negative effect and risk of taken drugs without medical prescriptions. These findings were similar to findings from another study done among commercial motorcyclist in Zaria and Ibadan. Most of the drivers knew behavioral changes, mental illness, accident and death as effect of substance use [1].

This study also showed that 44(40.4%) of the motorcyclists used drugs while riding motorcycles and majority 29 (43.3%) who used drugs without medical advice have been on it between 6 months to 2 years. The most commonly reported psychoactive substances were 26(29.2%) tramadol, 24(27%) alcohol, 23(25.8%) tobacco and Indian hemp 7(7.9%) which is similar to that of a study in Lagos, western Nigeria among long distance commercial motorcyclists [7] and commonly abused drug chats indicated by the National Institute of drug abuse in 2016

Availability or accessibility of drugs is one of the factors contributing to the increasing drug abuse during recent decades [8]. which is also evident in this study in which the cyclists claims that the drugs are relatively cheap 23(20.7%) while 21(18.9%) used it for pleasure and 7(6.3%) used drugs to enhance sexual performance. Accidents were found to have occurred among more than half of the respondents 71(65.1%). Majority of those who had road crashes 65(74.7%) sustained minor bruises 13 (14.9%) reported to have sustained head injury, 9 (10.3%) had broken bones and 17 (23.9%) of the respondents were of the opinion that the crashes were due to psychoactive use.

This study also reported that 37 (33.9%) of the respondents were involved with physical fighting. 29 (26.5%) were arrested by law enforcement agent, 33 (30.3%) of the respondents were involved in domestic violence as a result of substance abuse. There was a statistical association between the ages of the respondents and road crashes at P<0.05. respondents within the age group 16-25, 26 (83.9%) were mostly involved in road crashes. Also, there was a statistical association between the education of the respondents and road crashes at P<0.05.

Conclusion

This study showed that accidents among commercial motorcyclists are a frequent occurrence as a result of psychoactive drug use which has an effect on their mood changes and behavior. Higher number of motorcyclists had reported to have had road crashes twice or more which is worrisome. There is need for public sensitization on the health implication of psychoactive usage while relevant agencies should intensify efforts to regulate and enforce strict sanctions against drug abuse. Law enforcement agencies; National Agency for Food and Drug Administration and Control, National Drug Law need to work in tandem so as to curb this societal menace.

Conflict of Interest

All authors declares no conflict of interest.

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