Prevalence and factors associated with illicit drug use among commercial motorcyclists in Egbedore Local Government Area, Osun State

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Abstract

Introduction: Illicit drugs are substances that alter the central nervous system by stimulating, depressing, or causing hallucinations and are globally prohibited due to their harmful effects. Commercial motorcyclists are particularly prone to substance use, often relying on such substances to boost energy, reduce fatigue, and relax after long work hours.
Objective: This study sought to determine the prevalence and factors associated with illicit drug use among commercial motorcyclists in Egbedore Local Government Area of Osun State.
Methodology: A descriptive cross-sectional design was conducted, using a multi-stage sampling technique to recruit 290 respondents. Data were collected through an interviewer-administered questionnaire assessing socio-demographics, knowledge and awareness of illicit drugs, usage patterns, influencing factors and perceived effects. Data were analyzed using SPSS version 25.0, with statistical significance set at $p < 0.05$.
Results: Respondents had a mean age of 37.02 ± 7.32 years, and all were male. Lifetime use of at least one psychoactive substance was 68%, with alcohol being the most commonly used substance among the majority (60.7%). Nearly half (46.9%) used substances after riding, while the primary reason cited was to increase energy for further work. Substance use showed significant associations with educational level ($p=0.001$) and perceived effects such as blackouts ($p=0.047$), fights/arguments ($p<0.001$), road accidents ($p=0.001$), increased self-confidence ($p=0.023$), improper relation with customers ($p<0.001$) interpersonal conflicts, and dependence ($p<0.001$)
Conclusion: Illicit drug use among commercial motorcyclists in Egbedore LGA is high (68%), posing notable physical and social risks. These findings call for urgent intervention through awareness campaigns, policy enforcement, and support programs.

Prévalence et facteurs associés à la consommation de drogues illicites chez les motocyclistes commerciaux dans la zone de gouvernement local d'Egbedore, État d'Osun

Abstrait
Introduction : Les drogues illicites sont des substances qui altèrent le système nerveux central en stimulant, en déprimant ou en provoquant des hallucinations. Elles sont interdites dans le monde entier en raison de leurs effets nocifs. Les motocyclistes professionnels sont particulièrement enclins à consommer de telles substances, qu'ils utilisent souvent pour se ressourcer, réduire la fatigue et se détendre après de longues heures de travail.
Objectif : Cette étude visait à déterminer la prévalence et les facteurs associés à la consommation de drogues illicites chez les motocyclistes commerciaux dans la zone de gouvernement local d'Egbedore dans l'État d'Osun.
Méthodologie : Une étude transversale descriptive a été menée, utilisant une technique d'échantillonnage à plusieurs degrés pour recruter 290 répondants. Les données ont été recueillies au moyen d'un questionnaire administré par un intervieweur évaluant les caractéristiques sociodémographiques, la connaissance et la sensibilisation aux drogues illicites, les habitudes de consommation, les facteurs d'influence et les effets perçus. Les données ont été analysées à l'aide du logiciel SPSS version 25.0, avec une signification statistique fixée à $p < 0,05$.
Résultats : L'âge moyen des répondants était de 37,02 ± 7,32 ans et tous étaient des hommes. 68 % des répondants ont consommé au cours de leur vie au moins une substance psychoactive, l'alcool étant la substance la plus fréquemment consommée par la majorité (60,7 %). Près de la moitié (46,9 %) ont consommé des substances après avoir fait du vélo, la principale raison invoquée étant le besoin d'énergie pour la poursuite du travail. La consommation de substances a été significativement associée au niveau d'éducation ($p = 0,001$) et aux effets perçus tels que les pertes de connaissance ($p = 0,047$), les bagarres/disputes ($p < 0,001$), les accidents de la route ($p = 0,001$), une confiance en soi accrue ($p = 0,023$), des relations inappropriées avec les clients ($p < 0,001$), des conflits interpersonnels et la dépendance ($p < 0,001$).
Conclusion : La consommation de drogues illicites chez les motocyclistes professionnels de la zone locale d'Egbedore est élevée (68 %) , ce qui présente des risques physiques et sociaux notables. Ces résultats appellent à une intervention urgente par le biais de campagnes de sensibilisation, de l'application des politiques et de programmes de soutien.
Mots-clés : prévalence, facteurs, drogue illicite, consommation de substances, motocycliste commercial, État d'Osun

INTRODUCTION

Since the beginning of time, humans have searched for substances that will protect and sustain them and, by interacting with the neurological system, produce enjoyable experiences. Drugs are perceived as enjoyable because they relax muscles, enhance sensation, and promote inner peace and happiness**.** (1)

Substance abuse is defined as the use of tobacco, alcohol, prescription drugs, or other substances in ways that are detrimental to the individual's overall health. (2, 3) Psychoactive substances are chemicals that influence mood, perception and consciousness. (4) They can alter thoughts, feelings and behaviors. Illicit drugs are substances that are banned or restricted due to their potential for abuse, harm, or addiction, and are associated with negative consequences. (2,5) Illicit drug markets continue to expand in terms of harm as well as scope, from the growing cocaine supply and drug sales on social media platforms to the relentless spread of synthetics. They can be produced from naturally occurring substances, like heroin, or they can occur naturally, like cocaine or marijuana, or entirely synthetic, like amphetamines (4).

Hallucinogens, opioids, stimulants, and depressants are the four primary groups. (4) These drugs can be taken in many ways, including eating (cannabis), smoking (cannabis, cigarettes, methamphetamine), drinking (alcohol), sniffing or nasal insufflations (tobacco, cocaine), as well as injection into the skin or veins (cocaine) (6). According to estimates from the UNODC and the World Health Organization, 275 million individuals used psychoactive drugs in 2020. This represents 5.6% of the global population, primarily those between the ages of 15 and 16, and a 2021 report for emerging nations shows a consistent rise in the consumption of psychoactive substances. (7) Commercial motorcycle riders abuse at least one psychoactive substance at a significant rate (73.3%) in Anambra State and they had highest rate of alcohol abuse (93.8%), while 61.5% of motorcycle riders in Ekiti State, Southwestern Nigeria, abuse drugs. In Benue State, 92.8% of commercial motorcyclists consume at least one psychoactive substance where 87% drink alcohol and 42.2% smoke cigarettes. (6, 8, 9)

Motorcycles, often called "*okadas*", are used to carry people from one place to another and for work-related reasons. This practice has infiltrated Nigerian transportation activities, accounting for roughly 24% of all modes of transportation. (8) The bulk of the population relies on commercial drivers for transportation, making them an essential component of socioeconomic advancement. Perhaps because it is quicker and more convenient to use, particularly in places without cab service or when there are unpleasant and significant traffic jams, it is gradually taking over as the most popular option. *Okada* riders have come to bridge the huge public transport gap in most cities across the country. (6,10)

Public health experts worldwide concede that there is a global epidemic of road traffic accidents. The incidence, however, is higher in developing countries and linked with substance abuse. (9) Among substances that are abused are alcohol, tobacco, marijuana, cocaine, heroin, opiates, hallucinogens, inhalants, local psychoactive drugs and stimulants. (11)

One of the most often abused substances is tobacco which has been reported to have claimed more lives than any other addictive substance. It contains nicotine and over 7000 other chemicals out of which at least 250 have been proven to be harmful. (12,13) Driving under the influence of psychoactive substances, illicit drugs and alcohol is among the main causes of road traffic accidents among motorcycle riders. (14, 15)

Motorcycles are a fairly common form of public transit for middle-class and lower-class people in many developing nations, including Nigeria's thereby causing a steadily increasing use of commercial motorbikes. (9, 16) Due to the current lack of job prospects for the teeming young population, many young men have resorted to riding commercial motorcycles as a source of income. A careful investigation of this group of people revealed that most of them are involved in substance abuse, which is readily available around major garages and parks. (17, 18)

According to reports, commercial motorcycle riders are more likely to consume drugs than the general population since they frequently do so to improve their moods, modify perception, suppress fatigue, relax, and fight weariness (6, 12, 19). Motorcycle operators who ride under the influence of psychoactive substances are fraught with risks, including reckless driving, disregard for traffic laws, especially among young commercial riders. Illicit drug use affects driving ability and jeopardizes the safety of motorcycle riders and their passengers. It also increases the risk of road traffic violations and road traffic accidents. (13, 17-20)

There is a considerable knowledge gap on the factors associated with illicit drug abuse among commercial motorcyclists. Thus, among this particular artisan workforce in Egbedore Local Government Area of Osun State, this study

assesses the prevalence of psychoactive substance use, the types and patterns of use, associated factors, perceived effects and the relationship between social demographics and other characteristics.

MATERIALS AND METHODS

Description of Study Area.

This study was conducted in Egbedore Local Government Area (LGA), situated in Osun State in the southwestern region of Nigeria. The administrative headquarters of the LGA is located in the town of Awo, positioned at coordinates 7°46′00″N and 4°24′00″E. As of the 2006 national census, the population was recorded at 74,435, with current estimates suggesting approximately 89,077 residents. The area is predominantly inhabited by the Yoruba ethnic group, and the Yoruba language is widely spoken. Christianity and Islam are the two major religions practiced in the region.

Egbedore LGA spans a land area of 270 square kilometers and comprises several towns and communities, including Ofatedo, Ekuro, Idoo, Isangbe, Olorunsogo, Ara, Ido-Osun, Ikotun, Iragberi, Iwoye/Origo, Ojo, Okinni, Apeke, Arun, Awo-Alara, Balogun, Bara, Ebunla, Elesu, and Fagbayibi. The local economy is primarily based on agriculture, with key crops including cocoa, cassava, rice, and maize. A notable feature of the area is the Aje International Market, a major commercial hub where a variety of goods are traded. Egbedore LGA was officially established in 1989, following its creation from the former Ede Local Government Area.

Study Design: The study adopted a descriptive cross-sectional design.

Study Population: This comprised of selected commercial motorcyclists from parks and garages in Egbedore Local Government Area of Osun State.

Inclusion Criterion: Commercial motorcyclists who are registered in various parks or garages and have been engaged in the occupation for at least six months.

Exclusion Criterion: Non-consenting commercial motorcyclists

Sample Size Determination : The sample size for the study was calculated using Leslie Fischer's formula, and the prevalence of substance use and abuse among commercial motorcyclists is 78.05% (12), yielding a minimum sample size of 264. Adjusting for a 10% non-response gave an overall sample size of 290.

Sampling Technique: A multistage sampling technique was employed to select study participants. Three out of the ten wards in the Local Government Area were selected using simple random sampling by balloting method. Within each selected ward, all existing motorcycle parks or garages (29 in total) were identified, and approximately one-third (10 parks) were chosen using systematic sampling. Respondents were recruited from these selected parks through proportionate allocation based on the number of registered riders in each park relative to the overall calculated sample size.

Data collection and analysis: An interviewer-administered questionnaire was used to collect relevant data from respondents to capture the objectives of this study. The questionnaire contained five (5) parts; Section A contained questions on sociodemographic data, Section B assessed the awareness and knowledge of the illicit drug, Section C determined the prevalence and pattern of substance use, Section D explored the perceived effects of substance use, while Section E identified factors that influence illicit drug use among the respondents.

The data collected was cleaned, collated, sorted, and validated manually. The data was analyzed using IBM SPSS 25.0 and was presented using percentages on charts and frequency tables. All analyses were done at a 95% confidence interval and the level of significance was at a p-value less than 0.05.

Ethical Consideration: Ethical approval for the study was sought and obtained from the Health Research and Ethics Committee of the College of Health Sciences, Osun State University, Osogbo (UNIOSUNHREC2023/PBH)089). Permission to conduct the research was also secured from the chairmen of the selected commercial motorcyclist parks and garages within the study area. Informed consent was obtained from all participants before data collection. All information provided by respondents was treated with the utmost confidentiality.

RESULTS

Table 1 shows the socio-demographic characteristics of the respondents. A little more than half of the respondents were aged 30 years and younger (154.5%), with 20 years being the

youngest age, while the mean age (SD) was 37.02 (±7.32). More than half (63.4%) of the commercial motorcyclists were married, (66, 22.8%) were single, (6.9%) were divorced/separated, and the rest were widowed (20, 6.9%). Regarding religion, (142,49.0%) practiced Christianity, (138,47.6%) practiced Islam, and (22, 7.6%) practiced traditional religion. The predominant ethnic group among the respondents was Yoruba (230, 79.3%), (38, 13.1%) were Igbo, while (22,7.6%) were Hausa. A total of 34 (11.7%) of the respondents did not have any formal education, 68 (23.4%) had only primary education, 128 (44.1%) had attained secondary education, while 60 (20.7%) had tertiary education. The majority of the respondents (248, 85.5%) reside in urban settlements, while the remaining (42, 14.5%) reside in rural settlements. The majority of the respondents (178, 61.4%) own their bikes, and a little less than a quarter of them (68, 23.4%) are part owners, paying in instalments. More than half of the respondents (64.8%) ride between 6 and 9 hours a day, (33.8%) ride for 10 hours or more and only 4 of the respondents (1.4%) ride for 5 hours or less in a day.

Figure 1 shows the prevalence of substance use among respondents; 68% reported having used a substance at least once in their lifetime, while 32% reported non-usage of substances at any point in their lives.

From Table 2, the results showed that a large number of the respondents (95.9%) were aware of illicit drugs or substances. Alcohol (93.8%), cigarettes (93.1%) and marijuana (93.1%) and tramadol (82.8%) were predominantly reported examples of illicit drugs known to respondents. About half of the respondents (49%) do not know that caffeine, as a psychoactive substance, can be abused.

Table 3 depicts the types and frequency of illicit drugs and substances used among the respondents. More than half (60.7%) of the respondents reported using alcohol often, (11.0%) used alcohol occasionally, and (28.3%) have never taken alcohol. More than half of the respondents, 154 (53.1%), have never smoked cigarettes, but 35.2% uses it often, 11.0% use it occasionally, whereas only 0.7% replied that they rarely use it as a substance. About three-quarters of the respondents replied to not use marijuana; among those who do, (20, 6.9%) use it often, (52, 17.9%) use it occasionally, and (2.1%) rarely do. Other substances that were recorded to be often used are; caffeine (20%), kolanut (16.6%), palm wine (13.8%), sleeping pills (9.7%), "*alabukun"* (14, 4.8%), tramadol (4.1%), then snuff and skunk (2.8%) each.

Table 4 shows the pattern of illicit drugs and substances used among the respondents. The majority of respondents (206,71.0%) were introduced to illicit drugs by their friends, (17.2%) were introduced by their family members, and (34, 11.8%) were introduced to it by their neighbors. The majority of the respondents (44.8%) got their substances from provision/convenience stores, (42.8%) got theirs from person-to-person dealings, and (12.4%) got theirs from pharmacies. 9% of those who use substances were unable to stop using substances whenever they wanted to, and 88.3% were able to stop using. Regarding the occasion the substances were used, (11%) took substances before riding, (1.4%) during riding, (40.7%) at home, while the majority (136, 46.9%) took substances after riding or in between riding episodes.

Table 5 shows the physical experiences and psychological changes linked with illicit substances as perceived by the study respondents. A little above one-third of the respondents (104, 35.9%) reported that it led to blackouts, whereas (25.5%) reported it had led them to engage in arguments or fights, while (24.8%) said they had been involved in road accidents due to substance use. One-fifth of the respondents (58, 20%) reported that it led to anxiety. Other effects recorded were: feeling of happiness (46.9%), improved memory 37.9%), reckless driving (31.7%), increased self-confidence (56.6%), sleep disorder (13.8%), improper relations with customers (17.2%) while (16.6%) reported that it led to dependence on the drug.

Table 6 shows the reasons for which the respondents use psychoactive substances. The majority of the commercial motorcyclists who engaged in substance use, (82.1%) used substances to increase energy for work, followed by (78.6%) who indicated that they use drugs due to their availability and for recreational purposes, (75.2%) use substance because they could afford it, (74.5%) reported that they use substance because of their social/work environment, (71%) indicated that they use substance because of peer pressure, (68.3%) indicated they use substance to think, (62.8%) took substance to forget about problem, and family with routine substance use (53.1%) is the least considered reason for using substance.

The association between socio-demographic characteristics and prevalence of psychoactive substance use was shown in Table 7. (70.4%) of the respondents who used drugs are of the Yoruba ethnicity, 68.4% are Igbo, and 45.5% are Hausa. Respondents who had primary and secondary education made a higher use of

psychoactive substances compared with those with tertiary education. The difference showed a statistically significant association (p = 0.001)

In Table 8, the association between the perceived effect and the prevalence of illicit substance use was shown. There is a statistically significant association between majority of the perceived effects and consequences of psychoactive substance use such as blackouts (p=0.047), fights/arguments (p<0.001), road accidents (p=0.001), increased self-confidence (p=0.023), improper relation with customers (p<0.001) interpersonal conflicts, and dependence (p<0.001) and the ability to stop or inability to stop.

DISCUSSION

This study on factors associated with illicit drug use among commercial motorcyclists in Egbedore Local Government Area of Osun State showed respondents' socio-demographic statistics is exclusively male-dominated, with no female participation at all. This further demonstrates the male predominance in commercial motorcycling public transportation in Nigeria, as shown in a related study (21). The majority of respondents (54.5%) were aged 30 years or younger, with 30 being the modal age and 20 being the youngest recorded age. The mean age of the study's respondents is 37.02 (±7.32), which is comparable to the mean age of respondents in a study by among commercial drivers in Lagos State and Anambra State which reported 39.4 ± 10.0 and 39.5± 11.5 years respectively. (6, 22)

The majority (79.3%) are of Yoruba ethnicity, 63.4% were married and 49.0% practiced Christianity. Approximately half of the respondents, 44.1%, had completed secondary school. Dantosho *et al* also identified youths and young adults who have attended secondary and post-secondary education as the major users of substances (17) . This can be viewed as a reflection of the increasingly high unemployment rate and limited access to higher education among young persons. (12) More than half of the respondents (61.4%) have full ownership of their bike, as supposed by the findings of Ajibade *et al*, where two-thirds (64%) of respondents did not enjoy full ownership of the motorcycles they worked with. Hence, a larger proportion (64.8%) of the respondents in this study work for an average of 6-9 hours per day (11).

A substantial proportion of respondents (95.9%) are aware of illicit drugs and psychoactive substances, with 93.1% naming cigarettes and marijuana as examples of psychoactive substances they are aware of, 93.8% knowing alcohol, and just 40% knowing caffeine. Jatau *et al* reported the burden of commonly abused drugs, predominantly from cannabis, cocaine, amphetamine, heroin, diazepam, codeine, cough syrup, and tramadol (20). The majority (68%) of the respondents have used at least a psychoactive substance, with alcohol being the most often used substance among others, accounting for 60.7% of all respondents, which is similar to previous studies. (11,12,15)

The prevalence of 68.0% obtained in this study is lower than 92.8% reported in Benue State and 73.3% in Anambra State but higher than 61.5% reported in a study in Ekiti State. (6,8,12) This may be accounted for by variations in culture, lifestyle or geographical location.

The majority of respondents who use substances were introduced by friends (71%) in this study. Some studies have also shown that individuals whose friends engage in substance abuse are more likely to partake in such behavior compared to those whose social circles do not involve drug use. The most frequent source of obtaining psychoactive substances was from friends. (6, 20, 23) Deep *et al* reported similar peer group influence, identified it as a key predictor of drug abuse, a finding that has been consistently observed also in many other studies. (23, 24)

Social media is a most prominent modern influence that can cause adolescents and young adults to engage in substance use and abuse. It is an influential factor since today's adolescents and many young adults rely heavily on social media for interaction with peers and friends. Other means through which the respondents were introduced to these substances include relatives (17.2%) and neighbors (11.8%), a finding which corresponds with reports of findings from other settings including that from a rural community of Osun State. (25, 26, 27)

This research also identified some perceived factors that influence substance usage among commercial motorcyclists. Increase energy for work was perceived by the majority of respondents (82.1%) as the most common factor influencing substance use, followed by being readily available for recreational purposes (78.6%), 75.2% use substance because of its affordability while 74.5% use substance because of their social/work environment. The primary reason for using these substances was to enhance self-confidence by previous studies (6, 20, 23). A proportion of respondents (71%) use substances because of peer pressure, 68.3% use substance to assist them to think clearly, 62.8% claimed it helps

them to forget about their problems, and some have families with routine substance use (53.1%), which is the least considered reason for using substance. These findings are consistent with reports from previous studies conducted in Nigeria, Ethiopia, and Abu Dhabi. (26, 28, 29).

The perceived effects of substance use or changes observed following substance use as reported by respondents in this study include; blackouts (35.9%), arguments or fights (25.5%), reckless driving (31.7%), road traffic accidents (24.8%), anxiety (20%), happiness (46.9%), improved memory (37.9%), increased self-confidence (56.6%), sleep disorder (13.8%), improper customer relations (17.2%), and drug dependence (16.6%). These findings are supported by reports from similar studies. (6, 20, 23).

This study provides relevant information that will guide the policy framework regarding illicit drug use among commercial motorcyclists in order to address attendant physical and social risks. These findings further call for urgent intervention through awareness campaigns, policy enforcement, and support programs.

CONCLUSION

Substances were frequently used by the respondents, with many reporting regular consumption, especially after completing their riding activities. A significant number of users indicated that their initiation into substance use was influenced by friends. The main reasons cited for substance use included the desire to boost energy for work, influence from peers, the impact of their social and occupational environment, as well as the affordability and availability, while some used these substances to enhance mental clarity. The perceived effects of substance use, as reported by participants, varied widely. These included experiences of anxiety and depression, feelings of happiness, enhanced memory, reckless driving, heightened self-confidence, strained interactions with customers, and eventual drug dependence.

It is recommended that authorities should design and implement targeted educational and public awareness campaigns, sensitization, and support programs for commercial motorcyclists on the health implications of psychoactive drugs use, backed with policy enforcement and strict sanctions against drug abuse by relevant agencies.

Conflict of interest: The authors declare no conflict of interest in conducting this research.

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Table 1: Socio-demographic characteristics of respondents (n = 290)

Variables	Sub-variables	Frequency	Percent
Age as at last birthday (in years)			
	≤ 30	158	54.5
	31-40	94	32.4
	≥41	38	13.1
	Mean age (± SD) = 37.02 (± 7.32)		
Marital Status			
	Single	66	22.8
	Married	184	63.4
	Divorced/Separated	20	6.9
	Widow/Widower	20	6.9
Religion			
	Christianity	142	49.0
	Islam	138	47.6
	Traditional	10	3.4
Ethnicity			
	Yoruba	230	79.3
	Igbo	38	13.1
	Hausa	22	7.6
Educational Qualification			
	No Formal Education	34	11.7
	Primary Education	68	23.4
	Secondary Education	128	44.1
	Tertiary Education	60	20.7
Settlement			
	Rural	42	14.5
	Urban	248	85.5
Bike ownership			
	Own bike	178	61.4
	Paying in instalments	68	23.4
	Delivering to owner	44	15.2
Number of working hours (per day)			
	less than 5 hours	4	1.4
	6 to 9 hours	188	64.8
	10 hours or more	98	33.8

Table 2: Awareness and Knowledge of the type of illicit drugs or substances known to respondents (n =290)

	Frequency (%)		
Variable	**Yes**	**No**	**Don't know**
Being aware of illicit drugs or substances?	278 (95.9)	4 (1.4)	8 (2.7)
Examples of illicit drugs/ substances known			
Cigarette	270 (93.1)	8 (2.8)	12 (4.1)
Marijuana	270 (93.1)	6 (2.1)	14 (4.8)
Caffeine	116 (40)	32 (11)	142 (49)
Alcohol	272 (93.8)	2 (0.7)	16 (5.5)
Tramadol	240 (82.8)	8 (2.7)	42 (14.5)

Table 3: Types and frequency of illicit drugs and substances used among study respondents (n=290).

Variable	Frequency of use (%) Never	Often	Occasionally	Rarely
Alcohol	82 (28.3)	176 (60.7)	32 (11.0)	0 (0)
Cigarette	154 (53.1)	102 (35.2)	32 (11.0)	2 (0.7)
Codeine	270 (93.1)	2 (0.7)	6 (2.1)	12 (4.1)
Marijuana	212 (73.1)	20 (6.9)	52 (17.9)	6 (2.1)
Tramadol	222 (76.6)	12 (4.1)	22 (7.6)	34 (11.7)
Snuff	230 (79.3)	8 (2.8)	26 (9.0)	26 (9.0)
Alabukun	226 (77.9)	14 (4.8)	12 (4.1)	38 (13.1)
Skunk	278 (95.9)	8 (2.8)	2 (0.7)	2 (0.7)
Caffeine	146 (50.3)	58 (20)	66 (22.8)	20 (6.9)
Kolanut	198 (68.3)	48 (16.6)	32 (11.0)	12 (4.1)
Palm wine	174 (60)	40 (13.8)	52 (17.9)	24 (8.3)
Sleeping pills	64 (22.1)	28 (9.7)	130 (44.8)	68 (23.4)

Table 4: Pattern of illicit drug and substance use among study respondents (n=29

Variable	Sub variable	Frequency	Percentage(%)
Source of interest/introduction to drug use	Family	50	17.2
	Friends	206	71.0
	Neighbors	34	11.8
Points ofsubstance purchase	Pharmacies	36	12.4
	Provision/ convenience store	130	44.8
	Person to person	124	42.8
Inability to stop drug use when attempted	Yes	256	88.2
	No	26	9.0
	Indifferent	8	2.8
Most preferred period of drugs/substancesuse	Before riding	32	11.0
	During riding	4	1.4
	After riding	136	46.9
	At home	118	40.7

Table 5: Respondents' perceived effects of psychoactive substance use; (physical experiences) (n = 290).

	Frequency (%) Yes	No	Don't know
Physical Experiences			
Blackouts	104 (35.9)	120 (41.4)	66 (22.8)
Arguments or fights	74 (25.5)	196 (67.6)	20 (6.9)
Involvement in road accidents	72 (24.8)	202 (69.7)	16 (5.5)
Psychological Changes			
Anxiety/Depression	58 (20)	182 (62.8)	50 (17.2)
Happiness	136 (46.9)	98 (33.8)	56 (19.3)
Improved memory	110 (37.9)	132 (45.5)	48 (16.6)
Reckless driving	92 (31.7)	178 (61.4)	20 (6.9)
Increased self-confidence	164 (56.6)	92 (31.7)	34 (11.7)
Sleep disorder	40 (13.8)	180 (62.1)	70 (24.1)
Improper relations with customers	50 (17.2)	218 (75.2)	22 (7.6)
Dependence on drug	48 (16.6)	198 (68.3)	44 (15.2)

Table 6: Factors influencing the use of illicit substance(s) (n=290).

Variable	Frequency (%) Yes	No	I don't know
To increase energy	238 (82.1)	36 (12.4)	16 (5.5)
Peer pressure	206 (71)	50 (17.2)	34 (11.7)
Family with routine drug intake	154 (53.1)	68 (23.4)	68 (23.4)
To forget about problems	182 (62.8)	56 (19.3)	52 (17.9)
Social environment	216 (74.5)	34 (11.7)	40 (13.8)
Affordability	218 (75.2)	50 (17.2)	22 (7.6)
To think more clearly	198 (68.3)	54 (18.6)	38 (13.1)
Availability	228 (78.6)	42 (14.5)	20 (6.9)
Recreational purpose	228 (78.6)	40 (13.8)	22 (7.6)

Table 7: Association between socio-demographic characteristics and illicit substance use (n=290).

Variable	Sub-variable	Substance use		Remarks
		Use (%)	Do not use (%)	
Age as at last birthday (in years)	≤ 30	102 (64.6)	56 (35.4)	$x^2 = 2.673$
	31-40	70 (74.5)	24 (25.5)	p = 0.263
	≥ 41	26 (68.4)	12 (31.6)	
Ethnicity	Yoruba	162 (70.4)	68 (29.6)	$x^2 = 5.785$
	Igbo	26 (68.4)	12 (31.6)	p = 0.055
	Hausa	10 (45.5)	12 (54.5)	
Religion	Christianity	98 (69)	44 (31)	$x^2 = 0.354$
	Islam	94 (68.1)	44 (31.9)	p = 0.341
	Traditional	6 (60)	4 (40)	
Marital status	Single	46 (69.7)	20 (30.3)	$x^2 = 5.241$
	Married	120 (65.2)	64 (34.8)	p = 0.155
	Divorced/separated	18 (90)	2 (10)	
	Widow/widower	14 (70)	6 (30)	
Education level	No formal education	16 (47.1)	18 (52.9)	$x^2 = 15.724$
	Primary	50 (73.5)	18 (26.5)	**p = 0.001***
	Secondary	98 (76.6)	30 (23.4)	
	Tertiary	34 (56.7)	26 (43.3)	
Hours spent riding (per day)	1 ≤ 5	4 (100)	0 (0)	$x^2 = 0.356$
	6 - 9	124 (66)	64 (34)	p = 0.837
	≥ 10	70 (71.4)	28 (28.6)	
Settlement of residence	Rural	32 (76.2)	10 (23.8)	$x^2 = 1.420$
	Urban	166 (66.9)	82 (33.1)	p = 0.233
Bike Ownership	Yes	126 (70.8)	52 (29.2)	$x^2 = 1.849$
	No, paying in instalments	42 (61.8)	26 (38.2)	p = 0.397
	No, delivering	30 (68.2)	14 (31.8)	

*Statistically significant association

Table 8: Association between perceived effects of drugs and respondent's ability to stop or inability to stop the use of substances (n=290).

Variable	Sub variable	Substance use		Remarks
		Unable to stop (%)	Able to stop drugs (%)	
Blackouts as a result of substance abuse	Yes	18 (17.3)	86 (82.7)	$x^2 = 6.109$
	No	8 (6.7)	112 (93.3)	**p = 0.047***
	I don't know	8 (12.1)	58 (87.9)	
Gets into arguments or fights	Yes	18(24.3)	56 (75.7)	$x^2 = 15.384$
	No	14 (7.1)	182 (92.9)	**p = <0.001***
	I don't know	2 (10)	18 (90)	
Road accident	Yes	16 (22.2)	56 (77.8)	$x^2 = 14.876$
	No	14 (6.9)	188 (93.1)	**p = 0.001***
	I don't know	4 (25)	12 (75)	
Anxiety	Yes	10 (17.2)	48 (82.8)	$x^2 = 4.102$
	No	16 (8.8)	166 (91.2)	p = 0.129
	I don't know	8 (16)	42 (84)	
Happiness	Yes	20 (14.7)	116 (85.3)	$x^2 = 15.143$
	No	2 (2)	96 (98)	**p = 0.001***
	I don't know	12 (21.4)	44 (78.6)	
Improved memory	Yes	14 (12.7)	96 (87.3)	$x^2 = 0.660$
	No	16 (12.1)	116 (87.9)	p = 0.719
	I don't know	4 (8.3)	44 (91.7)	
Reckless driving	Yes	20 (21.7)	72 (78.3)	$x^2 = 13.243$
	No	12 (6.7)	166 (93.3)	**p = 0.001***
	I don't know	2 (10)	18 (90)	
Increased self-confidence	Yes	26 (15.9)	138 (84.1)	$x^2 = 7.539$
	No	4 (4.3)	88 (95.7)	**p = 0.023***
	I don't know	4 (11.8)	30 (88.2)	
Sleep disorder	Yes	2 (5)	38 (95)	$x^2 = 5.897$
	No	18 (10)	162 (90)	**p = 0.032***
	I don't know	14 (20)	56 (80)	
Improper relations with customers	Yes	8 (16)	42 (84)	$x^2 = 29.118$
	No	16 (7.3)	202 (92.7)	**p = <0.001***
	I don't know	10 (45.5)	12 (54.5)	
Dependence on drug	Yes	10 (20.8)	38 (79.2)	$x^2 = 20.263$
	No	12 (6.1)	186 (93.9)	**p = <0.001***
	I don't know	12 (27.3)	32 (72.7)	

*Statistically significant association

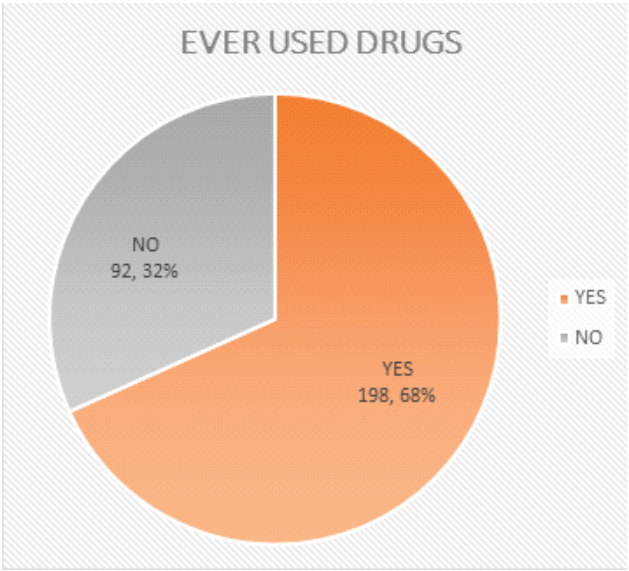

Figure 1: Prevalence of psychoactive substance use among the study respondents (n= 290)