

Assessing the prevalence, causes and socio-economic consequences of drug abuse among Okada riders in Oshimili north local government area of Delta State, Nigeria

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Abstract

Drug abuse remains a major public health concern globally and in Nigeria, particularly among commercial motorcyclists who are exposed to occupational stress, peer influence, and easy accessibility to psychoactive substances. A cross-sectional research design was adopted for this Study with the aim of assessing the prevalence, causes and socio-economic consequences of substance abuse among Okada riders in Oshimili North Local Government Area of Delta State. The sample comprised of 263 Okada riders selected using stratified random sampling technique. Data were collected using a researcher self-developed questionnaire. The instrument was validated and tested for reliability using Cronbach's alpha coefficient which yielded a result of 0.8. Data collected were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (Chi-square) at 0.05 level of significance. Findings revealed a high prevalence of drug abuse among Okada riders, with alcohol 71.9% as the most predominantly used, tramadol 32.7% as the primary substance among users, as well as cannabis 16.7%, and heroine 8.4% as being the most commonly abused substances. Major perceived causes included financial problems 39.9%, stress and anxiety 37.3%, peer influence 19.0%. The study further identified significant perceived socio-economic consequences such as reduced productivity ($M = 2.87$), financial difficulties/debts ($M = 2.81$). The study concluded that drug abuse among Okada riders poses serious public health, social, and safety concerns

Keywords: Drug Abuse; Prevalence; Okada Riders; Social-Economic Consequences

1. Introduction

The burden of drug abuse is a major public health concern globally (Jamilu and Dantsoho, 2020). The United Nations Office on drugs and Crime, (UNODC, 2019), estimated that 271 million (5.5%) of the global population (aged between 15 and 64 years) had used drugs previously. The use of drugs by Okada riders is not left out since the okada workforce falls between the above age range and is one of the major causes of Road Traffic Accidents and constitute a major public health burden, with far-reaching social and health consequences. (WHO, 2020). Substance abuse has plagued the society, caused its members to lose self-consciousness and led to mental disorders, death, addiction and other hardship (Fagbe, 2019). Olatunji (2019) has it that because Okada riders provide a vital transportation service in many urban and rural areas, they are often exposed to high levels of stress, fatigue, and economic pressure, which often make them prone to substance abuse.

Prevalence according to Prevalence statistics (2022) is the proportion of a particular population found to be affected by a medical condition (typically a disease or a risk factor such as smoking or seatbelt use) at a specific point in time (point prevalence) or over a specific period (period prevalence). Prevalence, in a general sense, refers to "how common something is with a specific population". The prevalence of substance abuse among okada riders is alarmingly high, with

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studies suggesting that up to 70% of okada riders in Nigeria use psychoactive substances, including cannabis, tramadol, and alcohol. Azi, Jatau, Kakwi, Abdulraheem and Raimi (2024), has it that some of the drugs and substances mostly abused are alcohol, tobacco and cannabis all of which has been closely linked to adverse health outcomes and consequences.

According to Blanco – Gandia, Mateos – Garcia and Garcia - Pardo (2019), one of the causes of drug abuse is the availability and accessibility of the drugs around the parks. Fasoro, Dada, Adewumi and Oluwatuyi (2020) has it that the causes of drug abuse among Okada riders include Easy accessibility and affordability, peer influence and social pressure, stress and fatigue, lack of education and awareness, poverty and economic hardship.

The social consequences of drug abuse among okada riders are severe and far-reaching. Drug abuse can lead to impaired cognitive and motor functions, increasing the risk of road traffic accidents and injuries (World Health Organization, 2018). Additionally, drug abuse can contribute to social problems, such as crime, violence, and family breakdown. The socioeconomic consequences of drug abuse include: reduced productivity, increased health care cost, loss of income, strained relationships, increased risk of Accidents, negative impact on community including increased rates of crime, social disorder and decreased public safety. World Health Organization (2022) also linked Substance abuse to an increased risk of road traffic accidents, injuries, and fatalities.

Though studies have been conducted on the topic under study in various parts of the state and country, in Oshimili North LGA of Delta State, the prevalence, social and medical consequences of drug abuse among Okada riders is not well understood. This study thus seeks to investigate the prevalence and perceived social and health consequences of substance abuse among okada riders in Oshimili North LGA, Delta State. In addressing this, answers to the various questions were raised: What is the prevalence of substance abuse among okada riders in Oshimili North Local Government Area of Delta State? What are the causes of drug abuse by Okada Riders in Oshimili North Local Government Area of Delta State? Are there socio - economic consequences of drug abuse among Okada Riders in Oshimili North Local Government Area of Delta State? From the study, it is anticipated that the demographic characteristics (such as age, marital status, and level of education) will not significantly influence the prevalence of drug abuse among okada riders in Oshimili North LGA of Delta State

2. Material and methods

The study adopted a cross-sectional research design. Using Taro Yamane's formula, 263 Okada Riders were selected out of a total of 593 target population for this study which were all Okada riders in Oshimili North Local Government Area of Delta State. Specifically, those who ride in five towns of Oshimili North (Akwukwu – Igbo, Ebu, Illah, Okpanam, Ugbolu,). Stratified sampling technique was used to select the five towns in Oshimili North Local Government Area where okada is allowed; namely; Okpanam, Akwukwu - Igbo, Ugbolu, Illah and Ebu. Okpanam has 6 okada units, Akwukwu – Igbo has 7 units, Illah, Ebu and Ugbolu have 5 units respectively. Proportionate sampling techniques was thereafter used to select respondents from all of the units thus comprising the sample size. The instrument for data collection is a researcher self - developed questionnaire which was constructed in line with the study objectives to elicit responses from the respondents. The instrument has a reliability coefficient of 0.8 and was validated by three experts in the field of public health, Medicine and Measurement and Evaluation who ensured that the instrument met both face, content, criterion and construct validity. Data was collected by the researcher and research assistants. Permission was obtained from the Chairman of the okada riders association in each of the community after due approval from the Ethical Review Board Ministry of Health Asaba, Delta State. Consent was obtained from the study participants after explaining to them the study objectives and their right to refuse not to participate. Study participants was also informed that all information gotten from them will be kept confidential and private as well as anonymity maintained. Questionnaire for data collection were administered twice a week on Wednesdays and Saturdays in the evening for a period of one (1) month and this elapsed as soon as the sample size was attained. Data collected was coded and analyzed with the aid of the IBM Statistical Package for Social Sciences data software version 25 (SPSS 25) using percentages.

3. Results

Table 1 Socio-demographic and Baseline Characteristics of Study Participants

Variables	Frequency (n= 263)	Percentage (%)
Marital Status		
Married	118	44.9
Single	110	41.8
Divorced	20	7.6
Widower	15	5.7
Highest Level of education		
No formal education	30	11.4
Primary School	32	12.2
Secondary School	67	25.5
Tertiary	134	51.0
Religion		
Christian	206	78.3
Islam	17	6.5
Traditionalist	40	15.2
Duration of Okada riding		
Less than 1 year	55	20.9
1-3 years	102	38.8
4-6 years	60	22.8
7-9 years	33	12.5
10 years and above	13	4.9
Family Average Monthly Income		
Less than #100,000	172	65.4
Above #100,000	91	34.6

Table 1 above presents the socio-demographic and baseline characteristics of participants. The study sample comprised 263 Okada riders with diverse socio-demographic characteristics. The distribution of marital status revealed that married participants constituted the largest proportion (44.9%, n = 118), followed closely by single riders (41.8%, n = 110). Educational attainment showed a notable trend, with the majority holding tertiary qualifications (51.0%, n = 134), while 11.4% (n = 30) had no formal education. Religious affiliation was predominantly Christian (78.3%, n = 206). Experience in Okada riding varied considerably, with the largest group reporting 1-3 years of experience (38.8%, n = 102), and only 4.9% (n = 13) having operated for 10 years or more. Economic vulnerability was evident, as 65.4% (n = 172) reported monthly family incomes below ₦100,000.

Table 2 showing the percentage distribution of the prevalence of drug abuse among Okada riders in Oshimili North Local Government Area of Delta State

Prevalence		Frequency	Percentage (%)
Usage of the following Substances	Alcohol	189	71.9
	Cannabis	44	16.7
	Cocaine	8	3.0
	Heroin	22	8.4
How often the substance is used while riding Okada	Daily	81	30.8
	Weekly	59	22.4
	Monthly	21	8.0
	Rarely	102	38.8
Primary substance used while riding Okada	Heroin	31	11.8
	Marijuana	30	11.4
	Tramadol	86	32.7
	Ice	24	9.1
	Mkpuru mmiri	22	8.4
	Others	70	26.6
Time of the day substance is usually used	Morning	91	34.6
	Afternoon	26	9.9
	Evening	81	30.8
	Anytime of the day	65	24.7
Time substance is taken before riding Okada	Less than an hour	101	38.4
	1-2 hours	112	42.6
	3-4 hours	50	19.0

Table 2 shows the prevalence of substance abuse. The prevalence assessment revealed alcohol as the predominant substance used (71.9%, n = 189), followed by cannabis (16.7%, n = 44) and heroin (8.4%, n = 22). Frequency of substance use while riding showed that 38.8% (n = 102) used substances rarely, while 30.8% (n = 81) reported daily usage. Tramadol emerged as the primary substance among riders (32.7%, n = 86), surpassing other drugs including heroin (11.8%, n = 31) and marijuana (11.4%, n = 30). Temporal patterns indicated morning use was most common (34.6%, n = 91), with 24.7% (n = 65) consuming substances at any time of day. Timing relative to riding showed that 42.6% (n = 112) consumed substances 1-2 hours before riding, while 38.4% (n = 101) used substances less than an hour before operating their motorcycles.

Table 3 showing the percentage distribution of the causes of drug abuse by Okada Riders in Oshimili North Local Government Area of Delta State

Variables		Frequency	Percentage (%)
Motivation to start using drugs	Peer pressure	50	19.0
	Stress and anxiety	98	37.3
	Financial problem	105	39.9
	Others	10	3.8
Do you use drugs to enhance your performance while riding Okada	Yes	160	60.8
	No	103	39.1
Have you experienced any traumatic event that may have contributed to your drug use	Yes	145	55.1
	No	118	44.9
Do you feel pressure from your peers to use drugs	Yes	102	38.8
	No	161	61.2
Have you ever been offered drugs by a colleague or friend	Yes	183	69.6
	No	80	30.4
Do you think that drug use is a way to cope with stress and anxiety	Yes	182	69.2
	No	81	30.8
Have you ever used drugs to stay awake during long hours of riding	Yes	184	70.0
	No	79	30.0
Do you use drugs to cope with stress or emotional problems while riding Okada?	Yes	183	69.6
	No	80	30.4
Do you think that drug use is a way to boost your energy and confidence	Yes	183	69.6
	No	80	30.4
Do you think that drug use is a problem among Okada riders	Yes	196	74.5
	No	67	25.5

Table 3 above presents the causes of drug abuse. Financial problems were identified as the leading motivation for drug initiation (39.9%, n = 105), closely followed by stress and anxiety (37.3%, n = 98), while peer pressure accounted for 19.0% (n = 50). Performance enhancement was a significant driver, with 60.8% (n = 160) reporting drug use to improve riding performance. Over half of respondents (55.1%, n = 145) acknowledged experiencing traumatic events that contributed to their drug use. While 61.2% (n = 161) denied feeling peer pressure, 69.6% (n = 183) had been offered drugs by colleagues or friends. Functional motivations were prominent, as 69.2% (n = 182) viewed drugs as a coping mechanism for stress and anxiety, 70.0% (n = 184) used substances to maintain alertness during long hours, 69.6% (n = 183) employed drugs to manage stress or emotional problems, and an equal proportion believed drugs enhanced energy and confidence. Recognition of the problem was widespread, with 74.5% (n = 196) acknowledging that drug use constitutes a significant issue among their peers.

To ascertain the perceived socio - economic consequences of drug abuse among Okada Riders in Oshimili North Local Area of Delta State.

Table 4 Assessing the socio-economic consequences of drug abuse

Strategy	AA F (%)	O F (%)	R F (%)	N F (%)	Mean	Decision
I experience conflicts with family members due to drug use while riding Okada.	60 (22.8)	83 (31.6)	78(29.7)	42(16.0)	2.61	O
Drug abuse has affected my relationships with friends and colleagues while riding Okada.	63(24.0)	76(28.9)	81(30.8)	43(16.3)	2.60	O
I experience social isolation or loneliness due to drug use while riding Okada.	51(19.4)	61(23.2)	98(37.3)	53(20.2)	2.42	R
Drug abuse has affected my reputation or social status in my community while riding Okada.	60(22.8)	51(19.4)	101(38.4)	51(19.4)	2.46	R
Drug abuse has affected my income or ability to support myself and my family while riding Okada	75(28.5)	100(38.0)	67(25.5)	21(8.0)	2.87	O
I spend money on drugs instead of essential needs like food and rent while riding Okada.	98(37.3)	65(24.7)	56(21.3)	44(16.7)	2.83	O
I experience financial difficulties or debt due to drug use while riding Okada.	91(34.6)	77(29.3)	50(19.0)	45(17.1)	2.81	O
Drug abuse has affected my ability to save money or plan for the future while riding Okada	111(42.2)	76(28.9)	54(20.5)	22(8.4)	3.05	AA
Drug abuse has affected my job performance or academic achievement while riding Okada.	62(23.6)	106(40.3)	75(28.5)	20(7.6)	2.80	O
I miss work or school due to drug-related issues while riding Okada	57(21.7)	109(41.4)	77(29.3)	20(7.6)	2.77	O

AA = Almost Always; O = Often; R = Rarely; N = Never

Table 4 above shows the socio-economic consequences of drug abuse. Analysis of socio-economic consequences using a 4-point Likert scale (Almost Always, Often, Rarely, Never) revealed varying degrees of impact. Interpersonal relationships showed moderate impairment, with family conflicts occurring often (M = 2.61) and deterioration in collegial relationships also being frequent (M = 2.60). Social isolation occurred rarely (M = 2.42), as did damage to reputation (M = 2.46). Economic consequences were more pronounced, with riders often experiencing reduced income and compromised ability to support their families (M = 2.87). Resource misallocation was common, as participants often diverted money from essential needs to drug purchases (M = 2.83) and frequently encountered financial difficulties or debt (M = 2.81). The impact on future planning was particularly severe, with impaired savings capacity and financial planning occurring almost always (M = 3.05). Occupational consequences showed that job performance was often affected (M = 2.80), as was work attendance (M = 2.77).

4. Discussion of Findings

The findings from this study, shows a high prevalence of drug abuse among Okada riders in Oshimili North Local Government Area of Delta State. This finding aligns with reports from the National Bureau of Statistics and UNODC (2017), which indicate that more than 28 million people across the African continent had a current history of substance use. The finding of this study is also not far from the report of Anigwe et al. (2024) which reported 73.3% of respondents abusing drugs. This is also similar with the report of Yahaya and Dansoho (2020) in their study on prevalence of substance abuse, assessment of socioeconomic and demographic determinants of commercial motorcyclist in Katsina State where he reported that an overall prevalence of substance abuse and further concluded that substance abuse was endemic. The findings of this study can also be linked to Burbwa and Kimbi (2019) who investigated drug abuse among Okada riders business youths in Katsina – Ala LGA of Benue State and was found out that alcohol was commonly

abused (84%) among other substances. Omumu et al. (2017), also suggested that substance abuse is endemic within this occupational group.

Alcohol emerged as the most commonly abused substance (71.9%), followed by cannabis (16.7%) and prescription opioids such as tramadol and codeine. This pattern is consistent with UNODC (2017), Fasoro et al. (2020), and NBS (2018), which identify alcohol and cannabis as the most widely abused substances in Nigeria. This also corroborates Anigwe et.al., (2024) in the study conducted in the South Eastern Nigeria on Riding under the influence, it was noted that alcohol has the highest use with 93.8% prevalence rate. The prominence of tramadol supports recent evidence that Nigeria is experiencing a rise in non-medical opioid use, particularly among young and economically active males.

The findings of this study revealed that financial problems (39.9%) were identified as the leading cause of drug initiation among respondents, followed closely by stress and anxiety (37.3%), while peer pressure (19.0%) also contributed significantly. These findings are in line with the survey conducted by the United Nations Office on Drugs and Crime (UNODC) (2018) in collaboration with the Federal Government of Nigeria who examined the prevalence and correlates of drug use in Nigeria. This study is also in line with the report of Onaolapo (2022) who conducted a narrative review on substance use trends in sub-Saharan Africa, focusing on socioeconomic determinants and concluded that economic inequality remains a structural factor sustaining drug abuse in developing countries. The findings of this study is also not far from the report made by Onaolapo (2022) in the work to investigate the factors influencing substance abuse among commercial motorcyclists in Ibadan, Nigeria. where Findings showed that 61% of respondents identified financial hardship and unstable income as major reasons for drug use.

The finding that stress and anxiety (37.3%) significantly motivated drug initiation is consistent with Zayed and Dhingra (2024), who opined that mental health disorders such as anxiety and depression can predispose individuals to drug use as a coping mechanism. This study also aligns with on knowledge and perception of substance abuse among Okada riders in Laaniba Community, Ibadan, Oyo State which reveal stress to be highest (65%) factor influencing drug abuse among commercial motorcyclists in Ibadan, Nigeria. This also corroborates the work of John, Otene and Antenyi (2023), on the overview of drug Abuse, causes, effects and control measures, where the study concluded that Frustration and depression, could make some people to take drugs to experience relief. This is also in line with report of the National Institute on Drug Abuse (2020), that individuals often use drugs to temporarily to relieve psychological distress, though this may worsen their condition over time.

This finding also aligns with the empirical study conducted by Burbwa and Kimbi (2019), which revealed that Okada riders abuse drugs to relieve stress, feel strong, and take away fear. Likewise, Adenike et al. (2024) found that stress was the highest influencing factor (65%) for substance abuse among Okada riders in Ibadan. The similarity between these studies and the present findings suggests that stress is a persistent and significant determinant of drug abuse among commercial motorcyclists. The finding that peer pressure (19.0%) contributed to drug initiation is also supported by Adenike et al. (2024) who revealed that peer pressure (12.5%) is also a factor influencing drug abuse among Okada Riders. Under social factors, peer influence was identified as a major determinant of substance abuse. The Journal of Adolescent Health (2020) reported that peer influence significantly predicts substance use among young adults. Similarly, John, Otene and Antenyi (2023) noted that drug abuse can be socially learned through peer group interaction, exposure to offers to use drugs, and social normalization of substance use.

Although peer pressure (19.0%) , was not the leading cause in this study, its contribution remains significant. This agrees with findings by Burbwa and Kimbi (2019), who reported that 26% of Okada riders engaged in drug abuse due to peer influence. This suggests that while financial and psychological factors may be primary triggers, peer dynamics reinforce and sustain substance use behaviors within rider communities.

From the theoretical perspective, the findings can be explained using the Health Belief Model (HBM). According to the model, individuals are more likely to engage in risky behavior when they perceive fewer barriers or underestimate the severity of consequences. Okada riders experiencing financial hardship or stress may perceive immediate relief from drug use as outweighing the long-term health risks. Additionally, peer pressure may serve as a cue to action that encourages initiation, especially when perceived susceptibility and severity are low. The findings of this study revealed that performance enhancement was a significant driver of substance use, with 60.8% (n = 160) reporting drug use to improve riding performance. This finding aligns with Adu and Salami (2019) in their study in Ibadan to examine psychoactive substance use among commercial motorcyclists which suggests that workers in physically demanding and high-risk jobs often resort to psychoactive substances to boost stamina and concentration.

Similarly, the study showed that traumatic experiences significantly influenced drug use, as 55.1% (n = 145) acknowledged that exposure to traumatic events contributed to their substance use. This supports the work of

Chinweuba and Okoronkwo (2017) to examine the relationship between occupational trauma and psychoactive substance use among commercial motorcyclists in Enugu whose findings revealed that 48.8% of the respondents had experienced at least one serious road traffic accident in the course of their work. Among those who had experienced such traumatic events, 62.3% reported initiating or increasing psychoactive substance use following the incident.

Peer-related factors were also examined. Although 61.2% (n = 161) denied experiencing direct peer pressure, 69.6% (n = 183) admitted they had been offered drugs by colleagues or friends. This indicates that while overt coercion may be minimal, social availability and normalization of substance use within peer networks play a critical role in sustaining drug abuse behaviors and this aligns with the findings of Adenike et.al., 2024 which revealed peer pressure (12.5%) as a factor influencing the use of drugs.

Functional motivations were strongly reported in the study. A majority of respondents identified drugs as coping mechanisms for occupational stress and emotional problems: 69.2% (n = 182) reported using drugs to cope with stress and anxiety; 70.0% (n = 184) used substances to maintain alertness during long working hours; and 69.6% (n = 183) employed drugs to manage stress or emotional instability. An equal proportion believed drugs enhanced energy and confidence. These findings are in line with Obadeji et al. (2018), in their findings which revealed that 63.5% of respondents admitted using at least one psychoactive substance while on duty. Specifically, 57.1% indicated that they used substances to enhance confidence while interacting with passengers and navigating traffic; 60.4% reported using drugs to boost energy and physical strength during long riding hours; and 54.8% acknowledged using substances to cope with financial stress and occupational pressure.

Furthermore, recognition of the magnitude of the problem was high, as 74.5% (n = 196) acknowledged that drug use constitutes a significant issue among their peers. This suggests awareness of the public health implications of substance abuse within the riding community and is in line with Idowu et. al., 2023 who in their study concluded that 80% of the respondents had good knowledge of substance abuse. This is also not far from Adenike et.al., 2024 who revealed in their study that 98.63% have knowledge about substance abuse thus necessitating health care providers to intentionally address misconception benefits that these riders have about psychoactive drugs. Though awareness alone may not translate into behavioral change.

The study revealed significant social and economic consequences of drug abuse, including financial instability, family conflict, unemployment, and involvement in unwholesome activities. These findings are consistent with Baker et al. (1996) and Johnson et al. (2001) in Abba and Shah (2019), who linked substance abuse with job loss, family disruption, truancy and drop out of School and mental health problems.

Drug abuse was found to impair riders' ability to save, plan for the future, and maintain stable relationships. This supports NIDA (2022), who documented the high economic cost of addiction at individual and societal levels. The findings further reinforce the cyclical relationship between poverty and substance abuse, where economic hardship both contributes to and results from drug use.

5. Conclusion

Based on the findings of this study, it is concluded that drug abuse is highly prevalent among Okada riders in Oshimili North Local Government Area of Delta State. The study concludes that factors such as peer influence, occupational stress, economic hardship, and easy availability of drugs significantly contribute to drug abuse among Okada riders

Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare no conflict of interest associated with the study

Statement of informed consent

Informed consent was obtained from all individual participants(Okada riders) included in the study.

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