Prevalence and Effects of Illicit Drug Use among Male Artisans in Nkpor, Anambra State, Nigeria

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ABSTRACT

Background: Illicit drug use is a growing public health concern in Nigeria, with increasing evidence suggesting high vulnerability among workers in the informal sector. Male artisans engaged in physically demanding occupations may be particularly at risk due to occupational stress, fatigue, and limited access to health services. However, empirical data on substance use among artisans in southeastern Nigeria remain scarce.

Objective: This study assessed the prevalence and effects of illicit drug use among male artisans in Nkpor, Anambra State, Nigeria.

Methods: A cross-sectional descriptive study was conducted among 120 male artisans selected through stratified random sampling. Participants included mechanics, welders, carpenters, block moulders, masons, and general labourers. Data were collected using a structured questionnaire, and information on socio-demographic characteristics, types of drugs used, and work- and health-related effects were obtained. Data analysis was performed using descriptive statistics and chi-square tests, with significance set at $p < 0.05$.

Results: Overall, 41.7% of respondents reported current use of at least one illicit substance. Cannabis (25.0%) was the most commonly used drug, followed by alcohol misuse (20.8%) and tramadol (16.7%). Illicit drug use was significantly associated with reduced productivity ($p < 0.001$), workplace accidents ($p = 0.02$), interpersonal conflicts ($p < 0.01$), sleep disturbances ($p = 0.002$), and chronic fatigue ($p = 0.005$).

Conclusion: Illicit drug use is prevalent among male artisans in Nkpor and is associated with significant adverse occupational and health outcomes. Targeted occupational health interventions, substance use education, and strengthened regulatory enforcement are urgently required to address this emerging public health issue.

Keywords: Illicit/Psychoactive drug use, Artisans, Cannabis, Alcohol misuse, Tramadol.

INTRODUCTION

Illicit drug use remains a major public health and socio-economic challenge globally, with disproportionate effects in low- and middle-income countries. In Nigeria, substance misuse has escalated over the past two decades, affecting individuals across age groups, occupations, and socio-economic strata. According to the United Nations Office on Drugs and Crime (UNODC), approximately 14.4% of Nigerians aged 15–64 have used at least one psychoactive substance for non-medical purposes, translating to over 14 million people nationwide [1]. Cannabis is the most commonly used illicit drug, whereas opioids such as tramadol and codeine-containing cough syrups are increasingly misused [2], probably due to their accessibility and perceived functional benefits.

Artisans and manual labourers constitute a substantial proportion of Nigeria's informal workforce and play a critical role in urban development and economic productivity. Occupations such as mechanics, welders, carpenters, block moulders, masons, and general labourers are physically demanding and often characterized by long working hours, unstable income, and limited access to occupational health services. These conditions may predispose workers to the use of psychoactive substances as coping mechanisms for bodily pain, exhaustion, stress, or peer influence [3][4].

Evidence suggests that substance use among workers in physically intensive occupations may negatively affect productivity, safety, and overall well-being [5]. Psychoactive substances can impair judgment, coordination, and reaction time, thereby increasing the risk of workplace accidents [6], as well as interpersonal conflicts. Despite these risks, there is limited empirical research focusing specifically on illicit drug use among male artisans in southeastern Nigeria, particularly at the community level.

Nkpor, a commercial hub in Anambra State, hosts a large population of artisans and labourers engaged in informal economic activities. Understanding the prevalence and effects of illicit drug use in this population is essential for designing targeted public health and occupational interventions. This study, therefore, aimed to assess the prevalence of illicit drug use and examine its effects on work performance and health among male artisans in Nkpor, Anambra State.

METHODS

Study Design and Setting

A cross-sectional descriptive study was conducted among male artisans in Nkpor, Anambra State, Nigeria. Nkpor is a semi-urban town with a high concentration of informal industrial activities, including automobile repairs, construction, and metal works.

Study Population and Sampling

The study population consisted of male artisans aged 18–50 years engaged in manual trades. A total of 120 participants were recruited using a stratified random sampling technique to ensure representation across occupational groups. The occupational categories included mechanics, welders, carpenters, block moulders, masons, and general labourers. Eligibility criteria included being male, aged 18 years or older, and having at least one year of continuous work experience in the current occupation.

Data Collection Instrument

Data were collected using a structured, interviewer-administered questionnaire that captured information on socio-demographic characteristics, types of substances used, frequency of use, and perceived effects on work performance and health. Substances assessed included cannabis, tramadol, codeine-containing cough syrups, alcohol (misuse), and energy drinks used for stimulation.

Participants were categorized into two groups based on self-reported substance use in the past 30 days: **current illicit drug users** (participants who reported using at least one illicit substance) and **non-users** (participants who reported no illicit drug use during the same period).

Ethical Approval and Informed Consent

Ethical approval for this study was obtained from the Health Research Ethics Committee of School of Medical Laboratory Technicians, Iyi-Enu, Anambra State. The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki.

Written informed consent was obtained from all participants prior to data collection. Participants were adequately informed about the purpose of the study, procedures involved, potential risks, and benefits. Participation was entirely voluntary, and respondents were assured of confidentiality and anonymity. No personal identifiers were

collected, and participants were informed of their right to withdraw from the study at any point without any consequences.

Data Analysis

Data analysis was performed using descriptive statistics (frequencies and percentages). Associations between drug use and work-related or health outcomes were assessed using chi-square tests, with statistical significance set at $p < 0.05$.

RESULTS

Table 1 presents the socio-demographic characteristics of the 120 male artisans. The majority were aged 25–34 years (45%), followed by 35–44 years (26.7%). Occupational distribution was relatively even, with mechanics representing the largest group (18.3%), followed by welders (16.7%), block moulders (16.7%), masons (16.7%), general labourers (16.7%), and carpenters (15%).

Table 2 shows the prevalence of illicit drug use among participants. Overall, 41.7% reported current use of at least one substance. Cannabis was the most commonly used drug (25%), followed by alcohol misuse (20.8%) and tramadol (16.7%). Codeine-containing cough syrup and energy drinks were reported by 12.5% and 15% of participants, respectively, and multiple substance use was reported by 18.3%.

Table 3 compares work-related and health outcomes between male artisans who reported current illicit drug use (n = 50) and non-users (n = 70). Illicit drug use among workers was significantly associated with adverse outcomes compared to non-users. Users reported markedly higher rates of reduced productivity (60% vs. 20%, p<0.001), workplace accidents (20% vs. 8.6%, p=0.02), and interpersonal conflicts (48% vs. 21.4%, p<0.01). Health-related effects were also more prevalent, with sleep disturbances (44% vs. 17.1%, p=0.002), chronic fatigue (38% vs. 15.7%, p=0.005), and headaches (34% vs. 14.3%, p=0.008) occurring more frequently among drug users.

Table 4 illustrates the distribution of drug use across occupational groups. The distribution of illicit drug use across occupations shows notable patterns. Cannabis use was relatively common among all groups, ranging from 22.2% in carpenters to 27.3% in mechanics. Tramadol misuse varied between 15–20%, with block moulders reporting the highest proportion (20%). Codeine-containing cough syrup use was less frequent but still present across occupations (9–15%). Alcohol misuse was reported by roughly one-fifth of workers in most categories, peaking at 25% among general labourers. Energy drink consumption, often used as a stimulant, was also observed across all groups, with rates between 11.1% and 20%.

Figure 1 shows the distribution of illicit drug use by occupation. Cannabis and alcohol misuse stand out as the most prevalent substances, with mechanics showing the highest cannabis use and general labourers reporting high levels of both cannabis and alcohol. Tramadol and codeine cough syrup are less common but still present across all occupations. Energy drinks are also widely consumed, with general labourers leading (Figure 1).

Table 1: Socio-Demographic Characteristics of Participants (n = 120)

Variable	Frequency (n)	Percentage (%)
Age (years)		
18–24	22	18.3
25–34	54	45.0
35–44	32	26.7
45–50	12	10.0

Occupation		
Mechanics	22	18.3
Welders	20	16.7
Carpenters	18	15.0
Block moulders	20	16.7
Masons	20	16.7
General labourers	20	16.7

Table 2: Prevalence of Illicit Drug Use among Participants

Substance	Number (n)	Percentage (%)
Cannabis	30	25.0
Tramadol	20	16.7
Codeine cough syrup	15	12.5
Alcohol misuse	25	20.8
Energy drinks	18	15.0
Multiple drug use	22	18.3
Overall current use	50	41.7

Table 3: Work and Health Effects of Illicit Drug Use

Outcome	Users (n=50)	Non-users (n=70)	p-value
Reduced productivity	30 (60%)	14 (20%)	<0.001
Workplace accidents	10 (20%)	6 (8.6%)	0.02
Interpersonal conflicts	24 (48%)	15 (21.4%)	<0.01
Sleep disturbances	22 (44%)	12 (17.1%)	0.002
Chronic fatigue	19 (38%)	11 (15.7%)	0.005
Headaches	17 (34%)	10 (14.3%)	0.008

Table 4: Distribution of Illicit Drug Use by Occupation

Occupation	Cannabis (n, %)	Tramadol (n, %)	Codeine cough syrup (n, %)	Alcohol misuse (n, %)	Energy drinks (n, %)
Mechanics	6 (27.3)	4 (18.2)	2 (9.1)	5 (22.7)	3 (13.6)

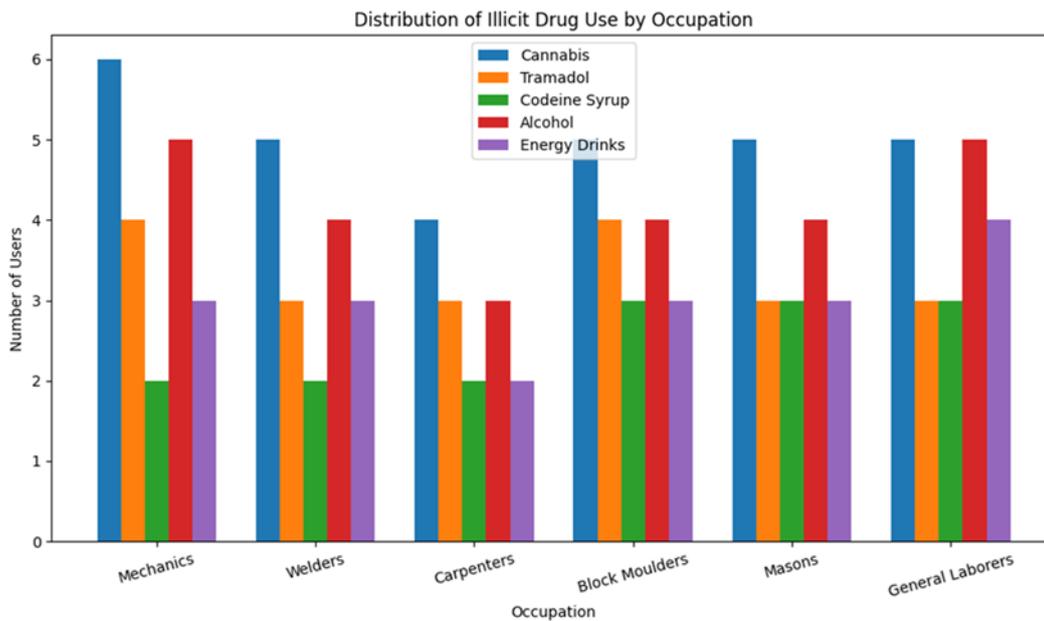| Welders	5 (25.0)	3 (15.0)	2 (10.0)	4 (20.0)	3 (15.0)
Carpenters	4 (22.2)	3 (16.7)	2 (11.1)	3 (16.7)	2 (11.1)
Block Moulders	5 (25.0)	4 (20.0)	3 (15.0)	4 (20.0)	3 (15.0)
Masons	5 (25.0)	3 (15.0)	3 (15.0)	4 (20.0)	3 (15.0)
General labourers	5 (25.0)	3 (15.0)	3 (15.0)	5 (25.0)	4 (20.0)

Figure 1: A bar chart showing the distribution of illicit drug use by occupation.

DISCUSSION

This study demonstrates a substantial burden of psychoactive substance use among male artisans in Nkpor, with 41.7% reporting current use of at least one drug. Cannabis (25%) and alcohol misuse (20.8%) were the most prevalent, followed by tramadol (16.7%), energy drinks (15%), and codeine-containing cough syrup (12.5%). These findings are consistent with the UNODC Drug Use in Nigeria Survey, which identified cannabis as the most widely used illicit substance nationally [1], and with the WHO Global Status Report on Alcohol and Health, which highlighted alcohol misuse as a leading contributor to morbidity in low- and middle-income countries [6]. The relatively high use of tramadol and energy drinks reflects coping strategies for physically demanding work, echoing Akinnawo et al., who found that Nigerian artisans often self-medicate with prescription drugs to manage pain and fatigue [7].

The age distribution, with most users aged 25 to 34, underscores the vulnerability of younger adults. Peer influence, unstable income, and limited occupational health education likely contributed to this trend. Similar age-related patterns have been reported among Nigerian university students [8], and in Onitsha, Anambra State, where Onuora et al. documented high prevalence of substance use among residents aged 15 years and above [4]. These findings suggest that interventions should prioritize younger populations, who may be at greater risk of long-term dependence and occupational instability.

Work-related outcomes were significantly worse among users. Reduced productivity, workplace accidents, and interpersonal conflicts were all more common compared to non-users. These results corroborate Akande et al., who reported that psychoactive substance abuse among Nigerian bus drivers was strongly associated with road traffic crashes [9]. Similarly, WHO emphasizes that alcohol and drug use impair judgment, and coordination, increasing risks of accidents [6]. Health complaints such as sleep disturbances, chronic fatigue, and headaches

observed in this study are consistent with the National Institute on Drug Abuse (NIDA), which links substance use to disrupted sleep cycles, reduced energy, and psychosomatic symptoms [10]. Notably, Obi-Ezeani et al. showed that lifestyle factors and occupational exposures can alter reproductive hormones and micronutrient levels, suggesting that artisans may face compounded health risks when substance use interacts with hazardous work environments [11]. In addition, Okwara et al. found that alcohol consumption significantly reduced testosterone, luteinizing hormone, and follicle-stimulating hormone levels in males residing in Nnewi, highlighting the endocrine consequences of alcohol misuse [12]. This biochemical evidence reinforces the present study's findings that alcohol misuse among artisans not only impairs productivity but also threatens long-term reproductive health.

Occupational differences further illustrate how job demands shape substance use patterns. Mechanics reported the highest cannabis use (27.3%), while general labourers had the highest alcohol misuse (25%) and energy drink consumption (20%). These variations reflect coping strategies adopted by workers in physically intensive trades, where stimulants are used to sustain energy and depressants to relieve stress after work. Afolabi, similarly, reported that Nigerian automobile artisans perceived alcohol as a means to enhance stamina and reduce stress, despite its negative health consequences [13]. Chukwu et al. also observed a widespread use of prepared herbal remedies among artisans in Nsukka, suggesting that reliance on psychoactive substances and stimulants is embedded in occupational culture [14]. Furthermore, Ezeugwunne et al. demonstrated that cannabis smoking negatively affects antioxidant vitamins C and E among male smokers [15], underscoring the biochemical consequences of substance use that may exacerbate fatigue and poor health outcomes in artisans.

The finding that 18.3% of participants engaged in multiple substance use is particularly concerning, as poly-drug use compounds health risks and undermines workplace safety, and this highlights the dangers of combining substances in low-income labour settings. Oweibia et al. further emphasized that systemic gaps in Nigeria's public health response have allowed drug abuse to persist [16], underscoring the need for coordinated interventions.

Taken together, these findings indicate that substance use among artisans is prevalent and harmful, affecting productivity, safety, and health. Findings align with prior studies and highlight occupational and health patterns in informal labour. Targeted interventions are needed, including community-based programs, trade union engagement for peer education and counselling, workplace safety policies, routine substance screening in nearby health centres, stricter regulation of medicine vendors, and socioeconomic support such as skill development and access to safer tools.

This study offers insights into illicit drug use among artisans but has limitations. Its cross-sectional design prevents causal inference, and reliance on self-reports may introduce bias. Future research should use mixed methods, including qualitative approaches, to explore motivations such as stress, fatigue, and pain management, alongside objective toxicological screening to improve accuracy. Longitudinal studies are also needed to clarify causal pathways and assess long-term health, occupational, and socioeconomic impacts. Addressing these gaps will strengthen evidence and inform more effective prevention and intervention strategies.

CONCLUSION

Illicit drug use among male artisans in Nkpor is widespread, with cannabis and alcohol most common, and tramadol, codeine syrup, and energy drinks also notable. Use was linked to reduced productivity, workplace accidents, interpersonal conflicts, and health complaints, with younger workers and those in physically demanding trades most affected. Occupational differences: mechanics with higher cannabis use, block moulders with tramadol, and general labourers with alcohol and energy drinks reflect coping strategies shaped by job demands. Consistent with national and global evidence, these findings call for targeted interventions, health education, and stronger policy enforcement to safeguard worker well-being and productivity in Nigeria's informal labour sector.

Ethical Consideration: Ethical approval was obtained (as mentioned in the Methods Section).

Conflict of Interest: None.

Data Availability: Data are available from the corresponding author upon reasonable request.

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