

## Relationship between the Proliferation of Drug Enterprises and Drug Abuse in Kano Metropolis, Nigeria

Bashir Aliyu<sup>1</sup>, Aminu Muhammad Dukku<sup>2</sup> and Usman Sani Abdulkarim<sup>3</sup>

<sup>1</sup>Kano State Senior Secondary Schools Management Board

<sup>2</sup>Department of Sociology, Bayero University Kano

<sup>3</sup>Philoma University, Abuja

**Abstract:** Drug abuse has become a critical public health and security challenge in Nigeria, with Kano metropolis identified as a major hotspot partly due to the rapid proliferation of drug enterprises and informal drug markets. This study examined the relationship between the proliferation of drug enterprises and drug abuse in Kano metropolis. A cross-sectional survey design was adopted, involving 1,000 respondents drawn through multistage cluster and purposive sampling across eight metropolitan local government areas, complemented by in-depth interviews with key stakeholders. Quantitative data were analyzed using SPSS with correlation and regression techniques, while qualitative data were thematically analyzed. Findings revealed strong and statistically significant positive relationships between the proliferation of drug enterprises and drug abuse ( $r = .724$ ), youth criminality ( $r = .681$ ), crime rate ( $r = .697$ ), and diversion of licit drugs ( $r = .589$ ). Regression results further showed that socio-economic factors; unemployment, poverty, low income, and economic hardship significantly predicted the upsurge of drug enterprises, jointly explaining 34.7% of the variance. The study concludes that increased availability of drugs through expanding drug enterprises, reinforced by adverse socio-economic conditions, fuels drug abuse and related social problems in Kano metropolis. It therefore recommends stricter regulatory enforcement targeting drug enterprises by monitoring their operations to prevent their escalation, establishment and monitoring of coordinated wholesale centers, youth-focused socio-economic empowerment programs, and strengthened multi-stakeholder collaboration in prevention, and sensitization efforts to effectively address drug enterprises proliferation and hike in drug abuse in the study area.

**Keywords:** Drug Abuse; Drug Enterprises; Proliferation; Socio-economic Factors Licit and Illicit drug.

### INTRODUCTION

Drug abuse represents a pressing global public health crisis, with far-reaching social, economic, and security consequences, including elevated crime rates such as theft, violence, and organized trafficking. In 2023, an estimated 316 million people aged 15–64 used illicit drugs worldwide, equivalent to 6% of the global population in that age group an increase from 5.2% in 2013 (World Drug Report, 2025). This escalation has been accompanied by heightened criminality, as drug markets fuel organized crime, corruption, and instability (World Drug Report, 2022).

Within Africa, and particularly West Africa, the non-medical use of pharmaceutical opioids has surged, positioning the region as a major hub for consumption and contributing to rising crime rates linked to dependency and illicit trade (World Drug Report, 2022). Nigeria exemplifies this regional challenge on a national scale, recording one of the highest prevalence rates of psychoactive substance use in Africa, with significant implications for health complications, criminality, societal instability, and increased crime rates (Akunna & Lucyann, 2023; Jatau *et al.*, 2021; Ebonyi & Bello, 2024). An estimated 14.4% of Nigerians aged 15–64 approximately 14.3 million people engaged in past-year drug use, nearly three times the global

average (United Nations Office on Drug and Crime, 2018). Non-medical use of pharmaceutical opioids, especially tramadol, remains widespread, exacerbating dependency, overdose risks, and associated crimes (World Drug Report, 2022; Oweibia *et al.*, 2025; Ahmad & Saleh, 2024). Youths are particularly vulnerable, as substance abuse disrupts education, productivity, future leadership potential, and often correlates with higher involvement in criminal activities (Peter *et al.*, 2022; Ajiboye & Olademo, 2025).

Factors such as easy access through unregulated outlets and diversion of prescription drugs were assumed to intensify the problem in Nigeria, where prevalence rates exceed global averages, leading to heightened risks of dependency, overdose, and crime (Ikoh *et al.*, 2019; United Nations Office on Drug and Crime, 2018). West Africa, including Nigeria, has emerged as a key area for non-medical opioid consumption, driven by availability and contributing to elevated regional crime rates (World Drug Report, 2022).

In Kano Metropolis, a recognized hotspot, high prevalence is tied to the proliferation of drug enterprises including pharmaceutical chemists, patent medicine vendors, and open drug markets facilitating widespread access and associated

criminal behaviors (Namadi, 2016; Musa, 2024). These outlets were suspected to frequently divert licit drugs like opioids, stimulants, and depressants for non-medical use, often managed by non-professionals (Aliyu & Ugwuoke, 2024). Urban expansion and population growth have amplified demand, resulting in availability even in informal settings and potential links to rising local crime rates (Dukart *et al.*, 2022). Preliminary observations suggest increasing impact on youths and women, with drugs readily obtainable in provision stores and markets (Ubale, 2019).

The rapid expansion of drug enterprises, encompassing wholesalers and retailers, has sparked concerns over their contribution to enhanced availability, dependency, and escalating crime rates (Aliyu & Ugwuoke, 2025). Regulatory efforts, such as relocations from open drug markets like Sabon Gari, have encountered obstacles, while proliferation persists, potentially aggravating risks for vulnerable groups. Initiatives like establishment of Coordinated Wholesale Centre (CWC) seek to regulate distribution, yet enforcement gaps remain a burden. (Aliyu & Ugwuoke, 2024). This unregulated growth may drive misuse of over-the-counter (OTC) and prescription drugs, intensifying health crises and criminality (Igbo, 2007; Anyanwu, 2023).

Despite interventions from regulatory agencies, community organizations, and government programs, drug abuse rates in Kano remain elevated, underscoring the need for in-depth exploration of the connection between drug enterprise proliferation and drug consumption patterns, including their role in fueling crime (Nwadike-Fasugba & Nwosu, 2024; Ahmad & Saleh, 2024). Prior research emphasizes availability as a primary risk factor linked to criminal outcomes (Ubale, 2019; Jatau *et al.*, 2021), but empirical studies on enterprise proliferation are limited, revealing a critical knowledge gap. This study, therefore, investigates the relationship between the proliferation of drug enterprises and drug abuse in Kano Metropolis, Nigeria.

### Hypotheses

- H<sub>01</sub>: There is no significant relationship between the proliferation of drug enterprises, Drug abuse, youth criminality, crime rate and diversion of licit drug in the Kano metropolis.
- H<sub>02</sub>: Socio-economic factors do not significantly influence the upsurge of drug enterprises in Kano metropolis.

## LITERATURE REVIEW

### Drug Abuse

Drug abuse involves the harmful non-medical or excessive use of licit and illicit psychoactive substances, resulting in serious physical, psychological, and social consequences (Jatau *et al.*, 2021; World Drug Report, 2022). In Nigeria, this problem has shifted from traditional substances to the widespread misuse of synthetic and prescription drugs such as tramadol, codeine-based syrups, and benzodiazepines (Akunna & Lucyann, 2023). With about 14.4% of Nigerians aged 15–64 reporting drug use far above the global average drug abuse represents a major public health and security challenge to national development (United Nations Office on Drug and Crime, 2018; Ebonyi & Bello, 2024).

Drug abuse in Nigeria disproportionately affects youths and other vulnerable groups, disrupting education, reducing productivity, and weakening future leadership capacity (Peter *et al.*, 2022; Ajiboye & Olademo, 2025). The problem increasingly affects women, particularly through dependence on cough syrups and pharmaceutical opioids, while its broader impacts include crime, family breakdown, and community instability (Ubale, 2019; Anyanwu, 2023). In urban areas such as Kano metropolis, substance abuse is closely linked to violence and antisocial behavior, highlighting the need to understand contributing factors like drug availability and distribution networks.

### Drug Enterprises and Informal Drug Markets

Drug enterprises in Nigeria include both formal and informal establishments involved in the sourcing, distribution, and sale of pharmaceutical products, ranging from licensed pharmacies to patent medicine vendors and unregulated retailers (Aliyu & Ugwuoke, 2024). While these enterprises support healthcare delivery, their rapid expansion especially in urban areas like Kano metropolis has exceeded the monitoring capacity of regulatory bodies such as NAFDAC and the Pharmacists Council of Nigeria, creating regulatory gaps (National Drug Policy, 2005; Dukart *et al.*, 2022; Aliyu & Ugwuoke, 2025). This weak oversight has enabled the diversion and misuse of prescription medications, thereby intensifying the drug abuse problem (Nwadike-Fasugba & Nwosu, 2024).

Informal drug markets constitute a critical aspect of drug enterprise proliferation, operating in unregulated environments and providing easy access to prescription and controlled substances

without professional supervision (Ojerinde, 2020; Namadi, 2016; Sandberg & Peterson, 2008). In Kano metropolis, open drug markets such as in Sabon Gari and Kurmi markets function as major distribution hubs, making opioids and psychotropic drugs readily available, particularly to youths, at low cost (Ikoh *et al.*, 2019). Despite regulatory interventions, the persistence of these markets reflects economic incentives, weak enforcement, and high demand, collectively increasing drug availability anticipating fostering patterns of misuse and abuse (Aliyu & Ugwuoke, 2024; Igbo, 2007).

### Theoretical Framework

#### Availability and Proneness Theory

Availability and Proneness Theory as advocated by Smart (1970), was developed from public health and alcohol research in the 1970s. It explains substance use patterns by linking increased availability to higher levels of consumption (Bruun *et al.*, 1975). The theory argues that physical, economic, and social accessibility of substances significantly shapes use within populations with greater outlet density, affordability, and social acceptance leading to increased consumption, (Single, 1988; Gruenewald, 2011). Empirical studies in alcohol policy research strongly support this perspective, demonstrating that factors such as outlet density, operating hours, and ease of access are reliable predictors of both consumption levels and related harms (Livingston *et al.*, 2007). By shifting focus from individual pathology to environmental and structural determinants, Availability and Proneness Theory provides a robust framework for understanding substance abuse as a socially conditioned phenomenon rather than solely a personal choice.

Applied to the Kano metropolis, The theory offers a useful lens for examining how the proliferation of drug enterprises contributes to rising drug abuse. The growing density of pharmaceutical outlets, patent medicine vendors, and informal drug markets increases physical availability, while low prices in unregulated markets enhance economic access, particularly for youths and economically vulnerable groups (Namadi, 2016; Babor *et al.*, 2010; Ahmad & Saleh, 2024). It also best explains why individuals that choose to use drugs, especially the at-risk individuals consuming drugs because they are exposed to the available drugs they can easily access within their vicinity while the economic and environmental factors make them more prone. Most importantly,

availability and proneness theory entail the initiation and continuation, relapse and restart of drug abuse. Grounding the study in this framework allows for identification of specific supply-side mechanisms through which enterprise proliferation facilitates drug misuse, thereby supporting policy interventions aimed at regulating availability to reduce drug abuse and its associated harms in Kano metropolis (Edwards *et al.*, 1994).

#### Empirical Review

Ikoh *et al.* (2019) investigated "Factors Affecting Entry into Drug Abuse Among Youths in Lafia Metropolis: Implications on Security," focusing on understanding the pathways through which young people initiate substance use. The study adopted a mixed-methods approach, combining survey questionnaires with focus group discussions to gather comprehensive data from youth participants in Lafia, Nasarawa State. Quantitative data were subjected to statistical analysis, while qualitative data underwent thematic analysis to identify recurring patterns. The study found that curiosity, peer pressure, and the influence of drug-using role models were primary factors facilitating entry into drug abuse. Additionally, the research identified that the proliferation of patent medicine stores and the ease of obtaining prescription medications without valid prescriptions created an enabling environment for substance experimentation.

Ubale (2019) conducted research on "The Effect of Drug Abuse Among Youth in Nasarawa Local Government, Kano State, Nigeria (2014-2017)," examining the consequences of substance misuse on young people within a specific administrative area. The study utilized a descriptive survey methodology, collecting data through questionnaires and interviews with youth participants, community leaders, and law enforcement officials. Analysis combined quantitative and qualitative techniques to provide a comprehensive understanding of drug abuse effects. The findings demonstrated that drug abuse among youth in the study area led to multiple negative outcomes, including poor academic performance, family conflicts, health deterioration, and involvement in criminal activities. The research also documented that drugs were readily available through patent medicine stores, provision shops, and open markets, with minimal regulatory oversight. The accessibility of substances such as tramadol, codeine, and cannabis was identified as a key enabling factor for widespread abuse.

Jatau et al (2021) conducted a scoping review titled "The Burden of Drug Abuse in Nigeria: A Scoping Review of Epidemiological Studies and Drug Laws," which synthesized existing evidence on the prevalence, patterns, and policy responses to substance abuse in the country. The methodology involved systematic searching of academic databases to identify relevant epidemiological studies and policy documents, followed by narrative synthesis of findings. The review established that Nigeria bears a substantial burden of drug abuse, with prevalence rates exceeding those in most African and global populations. The analysis revealed that cannabis, opioids (particularly tramadol), and cough syrups containing codeine were the most commonly abused substances. The study also examined Nigeria's drug control laws and found significant gaps in implementation and enforcement, contributing to continued availability of controlled substances through both formal and informal channels.

Ahmad and Saleh (2024) conducted a study titled "Investigation of the Factors Predisposing Drug Abuse by Youths in Kano Metropolis, Nigeria," which aimed to examine the determinants of substance abuse among young people in the urban centre. The study employed a cross-sectional survey research design, utilizing structured questionnaires administered to a sample of youths across various local government areas within Kano metropolis. Data were analyzed using descriptive statistics and inferential techniques to identify significant predictors of drug abuse. The findings revealed that peer influence, unemployment, easy accessibility of drugs, and weak family structures were the most significant factors predisposing youths to substance abuse. Notably, the study found that the availability of drugs through numerous retail outlets and informal markets significantly increased the likelihood of experimentation and eventual dependency among young people.

Aliyu and Ugwuoke (2025) examined public perceptions of the rapid proliferation of drug enterprises in Kano metropolis, Nigeria, framing the issue through Rational Choice theory to explain the deliberate decisions driving the growth of drug shops. Employing a mixed-method

research design, the study integrated quantitative surveys with qualitative interviews to explore economic, social, political, and regulatory factors contributing to this trend. Key findings revealed an overwhelming majority of respondent (83%) acknowledging a significant upsurge in the number of drug enterprises between 2019-2024. This is highlighting that the proliferation of drug enterprises in kano metropolis is a severe issue driven primarily by socio-economic factors like poverty (90.3%) and employment (94.8%), inadequate regulatory enforcement, and high demand for drugs among youths were also facilitating the surge in drug outlets and the associated risks of drug misuse, abuse, and diversion from licit to illicit use. The authors concluded that these insights underscore the need for evidence-based policies and targeted interventions to curb unchecked drug enterprise expansion and mitigate its adverse public health implications in the region.

## METHODS

This study adopted a cross-sectional survey design to collect data from respondents. The target population comprised adult male residents of Kano metropolis, including drug users, police, regulators, civil society, and traditional leaders across eight (8) metropolitan local government areas. A sample size of 1000 respondents was used and multistage cluster sampling was employed for general public representation clustering by local governments and wards with random selection within clusters (Creswell, 2014)) combined with purposive sampling for specific subsets in high-prevalence areas and key stakeholder groups (Katharine., 2004). Data were collected via structured questionnaires for quantitative insights and unstructured in-depth interviews (IDI) for qualitative data from purposively selected groups, administered physically with research assistants and supplemented online. Quantitative data were analyzed using SPSS, with correlation and regression analysis to test hypotheses, while qualitative data underwent thematic analysis with illustrative quotes to complement findings.

## RESULT

### Demographic Characteristics

**Table 1:** Frequency of the Response Rate

Variables	Frequency	Percent
Questionnaire Distributed	1000	100%
Returned Questionnaire	913	91.3

Rejected Questionnaire	5	0.5
Retained Questionnaire	908	90.8

*Source: Field Survey (2025)*

As shown in Table 1 above, a total of 1000 questionnaires were distributed, which is considered suitable for this study. A total of 913 completed questionnaires from the questionnaires distributed were returned to the researcher, yielding a response rate of 91.3%. Of these, a total of 908 representing (90.8%) were used for

analysis. While 5 questionnaires representing 0.5% were rejected. According to Mugenda and Mugenda (2016), a response rate of 50% is adequate for a study, 60% is good and 70% and above is excellent. Thus, a response rate of 90.8% was fit and reliable for the study.

**Table 2: Socio-Demographic Characteristics of the Respondents**

Demographic Variable	Category	Sample (n = 908)	
		Frequency	Percentage (%)
Age	Below 20 years	116	12.7
	20 – 29 years	187	20.6
	30 – 39 years	256	28.2
	40 – 49 years	223	24.6
	50 years – Above	126	13.9
	<b>Total</b>	<b>908</b>	<b>100</b>
Marital Status	Single	275	30.3
	Married	456	49.8
	Separated	102	11.2
	Divorce	38	4.2
	Widowed	41	4.5
	<b>Total</b>	<b>908</b>	<b>100</b>
Educational Qualification	Non-Formal Education	109	12.0
	Primary certificate	172	18.9
	Secondary certificate	224	24.7
	University	373	41.1
	Others, specify	30	3.3
	<b>Total</b>	<b>908</b>	<b>100</b>
Occupation	Less than 5 years	174	19.2
	1-5 years	278	30.6
	6-10 years	268	29.5
	11-15 years	125	13.8
	16 years and above	63	6.9
	<b>Total</b>	<b>908</b>	<b>100</b>

*Source: Field Survey (2025)*

The socio-demographic characteristics of the respondents in Table 2 provide a broad overview of the population surveyed across various variables, including gender, age, marital status, educational qualifications, and occupation (experience). These factors offer insights into the composition of the population under study. The table reveals that the majority of the respondents are male, accounting for 54.9% (499 out of 908), while females represent 45.1% (409 out of 908). This indicates a slight male dominance in the sample size but with a relatively balanced gender distribution overall. The age distribution shows a diverse range of respondents across different age groups. The

largest age group falls between 30 and 39 years, comprising 28.2% of the respondents. This is followed by the 40-49 age group (24.6%) and the 20-29 group (20.6%). Those below 20 years represent 12.7%, while respondents aged 50 years and above make up 13.9%. The data suggests that most respondents are within their working age, particularly in the 30 to 49 years range, which makes up more than half of the respondents.

In terms of marital status, nearly half of the respondents (49.8%) are married, making them the largest group. Single individuals constitute 30.3%, while a smaller percentage is separated (11.2%),

divorced (4.2%), or widowed (4.5%). This shows that the majority of the respondents are in a stable marital relationship. Regarding education, the majority of respondents have attained a university degree (41.1%), indicating a highly educated sample. This is followed by those with secondary school certificates (24.7%) and primary certificates (18.9%). Non-formal education was reported by 12.0% of the respondents, while 3.3% have other forms of education. This indicates that a significant portion of the population has formal education, with a higher emphasis on university-level education.

In terms of work experience, respondents vary significantly. The highest percentage (30.6%) falls in the category of having 1-5 years of experience.

Those with 6-10 years make up 29.5%, and respondents with less than 5 years represent 19.2%. Those with 11-15 years and more than 16 years of experience constitute 13.8% and 6.9%, respectively. The data suggests that the sample has a mix of early-career and mid-career professionals. The socio-demographic characteristics of the respondents show a balanced gender representation, a predominance of working-age individuals, a mix of educational backgrounds with a significant proportion having higher education, and a diverse income range. The population is also predominantly Muslim, with a notable representation of Christians.

**Substantive Responses**

**Table 3:** Distribution of the respondents on The Activities of Drug Enterprises having triggered youth involvement in Drug Abuse

Responses	Frequency	Percentage
Yes	827	91.1
No	81	8.9
Total	908	100

*Source: Researcher's Survey (2025)*

Table 3 reveals that a significant majority, 827 respondents (91.1%), believe that the activities of drug enterprises have triggered youth involvement in drug abuse. Conversely, 81 respondents (8.9%) do not share this view. This overwhelming majority highlights the strong association between

drug enterprises and increased drug abuse among the youth. It underscores the need for targeted interventions to address both the activities of drug enterprises and their impact on young people, suggesting that tackling these enterprises could be pivotal in mitigating youth drug abuse.

**Table 4:** Distribution of the respondents on Believe that proliferation of drug enterprise facilitates the diversion of licit drug for illicit use

Responses	Frequency	Percentage
Yes	839	92.4
No	69	7.6
Total	908	100

*Source: Researcher's Survey (2025)*

Table 4 shows that 839 respondents (92.4%) believe that the proliferation of drug enterprises facilitates the diversion of licit drugs for illicit use, while 69 respondents (7.6%) disagree. This significant majority suggests a widespread belief that the expansion of drug enterprises contributes

to the illegal diversion and misuse of legally prescribed drugs. The data underscores the need for tighter regulations and monitoring of drug distribution to prevent the diversion of legitimate medications and combat the broader issue of drug misuse.

**Table 5:** Distribution of the respondents on Drug Enterprise have significant impact on crime rates in the metropolis

Responses	Frequency	Percentage
Yes	859	94.6
No	49	5.4
Total	908	100

*Source: Researcher's Survey (2024)*

Table 5 reveals that 859 respondents (94.6%) believe that drug enterprises have a significant impact on crime rates in their neighborhoods, while only 49 respondents (5.4%) disagree. This overwhelming majority indicates a strong perception that the presence and activities of drug enterprises are closely linked to increased crime rates. The data highlights the critical need for targeted interventions to address drug enterprises and their role in escalating criminal activities, emphasizing the importance of comprehensive crime prevention strategies and community safety measures.

### Interview Response

In support to the above statistical data, an in-depth oral interview described the potential diversion of licit drugs to illicit use in the Kano metropolis as an issue of significant concern. The first interviewee, medical personnel, expressed the view that licit drugs from drug shops are indeed being diverted to illicit uses. He noted that some medications, especially those with psychoactive properties such as opioids or benzodiazepines, common cough syrups and simple analgesics are sometimes misused by individuals who obtain them legally through prescriptions. This diversion often occurs when patients sell or share their prescribed medications, or when drugs are obtained from shops that do not strictly enforce prescription requirements.

Supported this perspective, a regulator, highlighting that the diversion of licit drugs to illicit use is facilitated by the ease with which such drugs are obtained. The interviewee observed that in some cases, drugs intended for legitimate medical purposes are repurposed by users seeking to exploit their psychoactive effects. This diversion contributes to the broader issue of drug abuse and creates a market for illicit drug use within the metropolis. The interviewee emphasized that the lack of proper oversight and the accessibility of these medications can lead to their diversion and possible misuse and abuse. He suggested that stricter enforcement of prescription requirements

and enhanced monitoring of drug distribution could help reduce the diversion of licit drugs to illicit use.

Another interviewee, a traditional ruler, affirmed that the increasing number of drug enterprises in the Kano metropolis has significantly contributed to youth involvement in drug abuse. He explained that the easy availability of drugs, particularly in neighbourhood drug shops and informal outlets, exposes young people to substances at an early age. According to him, many youths experiment with drugs out of curiosity and peer influence, but sustained access through these enterprises gradually leads to regular use and dependency. He emphasized that when drugs are readily accessible and affordable, youths are more likely to abuse them, thereby increasing the prevalence of drug abuse among young people.

Another interviewee, policeman, also linked the proliferation of drug enterprises and rising drug abuse to the increasing crime rate in the Kano metropolis. He noted that many youths involved in drug abuse often engage in criminal activities such as theft, street violence, and drug peddling to sustain their drug habits. According to him, drug abuse impairs judgment and increases aggressive behavior, making users more prone to criminal acts. He further stated that communities with a high concentration of drug outlets tend to experience higher levels of insecurity, suggesting that drug enterprises indirectly contribute to youth criminality and social instability.

### Correlation Analysis

- $H_0$ : There is no significant relationship between the proliferation of drug enterprises, Drug abuse, youth criminality, crime rate and Divergent of Licit Drug in the Kano metropolis.
- $H_1$ : There is significant relationship between the proliferation of drug enterprises, Drug abuse, youth criminality, crime rate and Divergent of Licit Drug in the Kano metropolis.

**Table 6:** Correlation Matrix of Study Variables

Variables	1	2	3	4	5
1. Proliferation of Drug Enterprises	1.000				
2. Drug Abuse	.724**	1.000			
3. Youth Criminality	.681**	.756**	1.000		
4. Crime Rate	.697**	.712**	.634**	1.000	
5. Diversion of Licit Drugs	.589**	.523**	.498**	.476**	1.000

**Note:** Correlation is significant at the 0.01 level (2-tailed); N = 908

**Source:** SPSS Output from Field Survey (2025)

The correlation matrix in Table 5 reveals strong positive interrelationships among the study variables, all significant at the  $p < 0.01$  level. Drug abuse exhibits the highest correlation with youth criminality ( $r = .756$ ), followed closely by proliferation of drug enterprises with drug abuse ( $r = .724$ ) and crime rate ( $r = .697$ ). Youth criminality and overall crime rate are also substantially linked ( $r = .634$ ), while diversion of licit drugs shows moderate but consistent associations with the others ( $r$  ranging from .476 to .589). These patterns suggest a tightly interconnected cluster of drug-related enterprises, abuse, diversion, and criminal outcomes, particularly among youth, with drug abuse

appearing as a central mediating factor in the network. It can therefore be concluded that there is significant relationship between the proliferation of drug enterprises, drug abuse, youth criminality, crime rate and divergent of Licit Drug in the Kano metropolis.

**Regression Analysis**

- **H<sub>0</sub>:** Socio-economic factors do not significantly influence the upsurge of drug enterprises in Kano metropolis.
- **H<sub>2</sub>:** Socio-economic factors significantly influence the upsurge of drug enterprises in Kano metropolis.

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.589 <sup>a</sup>	.347	.344	.52143

a. Predictors: (Constant), Socio-economic Factors (Unemployment, Poverty, Low Income, Economic Hardship)

Source: SPSS Output from Field Survey (2025)

**Table 8: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	130.682	4	32.671	120.164	.000 <sup>b</sup>
Residual	245.432	903	.272		
Total	376.114	907			

a. Dependent Variable: Proliferation of Drug Enterprises

b. Predictors: (Constant), Economic Hardship, Poverty, Low Income, Unemployment

Source: SPSS Output from Field Survey (2025)

**Table 9: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	$\beta$	t	
(Constant)	1.124	.098		11.469	.000
Unemployment	.312	.038	.287	8.211	.000
Poverty	.258	.041	.231	6.293	.000
Low Income	.189	.039	.172	4.846	.000
Economic Hardship	.147	.042	.128	3.500	.001

a. Dependent Variable: Proliferation of Drug Enterprises

Source: SPSS Output from Field Survey (2025)

The model summary in Table 6 shows that socio-economic factors collectively explain 34.7% of the variance in the proliferation of drug enterprises ( $R^2 = .347$ ). The ANOVA results in Table 7 indicate that the overall model is statistically significant ( $F(4, 903) = 120.164, p < .001$ ). Table 8 reveals that all socio-economic factors unemployment ( $\beta = .287, p < .001$ ), poverty ( $\beta = .231, p < .001$ ), low income ( $\beta = .172, p < .001$ ), and economic hardship ( $\beta = .128, p < .01$ ) significantly and positively influence the upsurge of drug enterprises. The null hypothesis is rejected. Socio-

economic factors significantly influence the upsurge of drug enterprises in Kano metropolis.

**DISCUSSION**

The findings of this study demonstrate a significant positive association between the proliferation of drug enterprises and increased levels of drug abuse as well as youth criminality and crime rate in Kano metropolis. These interconnections highlight how the expansion of illicit drug networks directly contributes to elevated substance misuse and related delinquent behaviors among young people. Interviews

established a link between drug abuse and rising crime, as youths often engage in theft, drug peddling, and violence to fund their habits, with impaired judgment and aggression contributing to increased criminal behavior and insecurity. This pattern strongly aligns with Availability and Proneness Theory, as originally articulated by Bruun et al. (1975), who argued that enhanced physical, economic, and social accessibility of substances inevitably drives higher consumption and associated harms. In the context of Kano, the growing density of informal drug networks, pharmaceutical outlets, and patent medicine vendors amplifies physical availability, thereby fueling abuse rates and linked criminal activities a phenomenon corroborated by national surveys that document the widespread impact on urban youth (United Nations Office on Drugs and Crime, 2018; Jatau *et al.*, 2021).

Similarly, Livingston et al. (2007) and Edwards et al. (1994) noted comparable effects of outlet density on consumption and harms in other settings, reinforcing the theory's applicability here. Moreover, the diversion of licit pharmaceuticals for illicit use heightens economic accessibility through affordable unregulated markets, a dynamic that echoes regulatory challenges identified by Babor et al. (2010) and more recent Nigerian analyses (Aliyu & Ugwuoke, 2024; Akunna & Lucyann, 2023). Aliyu & Ugwuoke, (2025) further support this view, with reports indicating that widespread drug enterprises exacerbate social problems by easing accessibility.

It was also observed that socio-economic factors such as unemployment, poverty, low income, and economic hardship significantly drive the proliferation of drug enterprises in Kano metropolis. These conditions foster an environment where individuals in financial distress may engage in or support drug-related activities as a means of economic survival, perpetuating a cycle that sustains both supply and demand. This relationship also complements Availability Proneness Theory by illustrating how economic vulnerabilities increase affordability and normalize drug access, especially among youth and marginalized populations (Ahmad & Saleh, 2024; Ikoh *et al.*, 2019; Edet, 2024). Prior studies have similarly emphasized poverty and unemployment as primary drivers of youth involvement in drug abuse and enterprises, prioritizing structural factors over individual explanations (Ebonyi & Bello, 2024; Musa, 2024).

Furthermore, Ajiboye and Olademo (2025) as well as Peter et al. (2022) observed similar surges in drug-related behaviors among youth in other regions, attributing them to accessible markets that enhance physical and economic availability patterns that mirror those in Kano. Likewise, analyses of organized crime and trafficking highlight how poverty propels participation in illicit economies, thereby strengthening social accessibility and weakening sanctions against drug use (Dike, 2021; Ubale, 2019; Aliyu & Ugwuoke, 2025). The role of pharmaceutical diversion adds further complexity, aligning with critiques of inadequate regulatory oversight in the sector and calls for stricter availability controls to mitigate harms (Aliyu & Ugwuoke, 2024; National Drug Policy, 2005).

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The study establishes a significant positive relationship between the proliferation of drug enterprises and drug abuse in Kano metropolis, with strong correlations indicating that increased density of pharmaceutical outlets, patent medicine vendors, and informal markets directly facilitates greater access to licit drugs diverted for illicit use, thereby exacerbating substance misuse and associated youth criminality. Furthermore, socio-economic factors such as unemployment, poverty, low income, and economic hardship were found to significantly drive the upsurge in the drug enterprises, creating a vicious cycle that sustains both supply and demand for abused substances. These findings, supported by overwhelming respondent perceptions (over 91% linking Proliferation of drug enterprises to youth drug involvement) and statistical evidence rejecting both null hypotheses, align with Availability and Proneness Theory and underscore the urgent need for integrated regulatory and socio-economic interventions to curb this public health and security crisis in Kano metropolis.

### Recommendations

- Policy makers at all levels should rigorously targeted the drug enterprises in their policies, closely monitor their operations to prevent their escalation and adverse consequences, being the supply source.
- The first-line interventions should focus on drug enterprises as the primary catalyst, instead of only managing the social consequences.

- Sensitization programs on regulations and drug control measures should be introduced by the policy makers to prevent the drug enterprises from diversion of licit drugs to illicit use.
- The Federal Ministry of Health and Kano State Government should expedite the establishment and strict monitoring of Coordinated Wholesale Centre (CWC) to restrict informal drug markets and ensure good distribution practice (GDP) and to restrict informal (open drug market).
- The Federal and state Governments should plan a robust youth-focused socio-economic empowerment programs to prevent them from engaging in drug trade and abuse.

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