



Socio-demographic parameters of drug addiction in the southern cross river, Nigeria

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ABSTRACT

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Drug addiction has become a serious public health challenge in Nigeria today, and there is an urgent need to address this problem. In this study, we investigated the impact of some socio-demographic factors on drug addiction in the southern district of Cross River State, Nigeria. During the study, a questionnaire survey with 381 respondents who were sampled from the study region was conducted. The results showed that sex, peer influence, occupational status, social environment, and individual level of education strongly influenced drug addiction. About 93% (354) of the respondents agreed that men were more addicted to hard drugs than women, but 62.5% of them considered that there was no difference between men and women as to who took more variety of drugs. Three hundred and seventeen respondents agreed that younger people abuse drugs more than older ones, and 83.2% of them were certain that drug abuse was more prevalent among secondary school students. 61.4% responded that young addicts influence children into addiction. The majority of the surveyed population, specifically 90%, identified unemployment as a significant factor contributing to drug addiction. Additionally, 76% of the respondents said that illiteracy is associated with an increase in drug misuse, as the number of addicts without education surpassed those with education. Many of the addicts suffered from the double stigma of low socioeconomic status and drug dependency. It was determined that a reduction in poverty and unemployment, the provision of good-quality childcare, support for social capital, and effective early intervention programs, such as parental support in the early years of a child's life, would greatly minimize addiction.

Contribution/Originality: The study addresses the menace of drug addiction in Cross River state, Nigeria, by evaluating the underlining factors of sex, peer influence, level of education, and the social environment. Addiction can be minimized by reducing poverty and unemployment, providing quality child care, and introducing an effective social support program.

1. INTRODUCTION

Globally, people have used drugs and related substances as pain relief and providers of pleasurable sensations. The oldest are those derived from the cannabis plant, the opium poppy, and the coca bush. The search for beneficial drugs to treat human illnesses has been the focus of modern medicine. However, drug use disorder has since been, and still remains, one of the most serious public health challenges worldwide. The number of global deaths from drug misuse increased by more than 60% between 2000 and 2015. Drug misuse is a threat to both personal health

and socioeconomic well-being, such as poverty and family breakdown. In Nigeria, the most widely used and abused substances are alcohol and cannabis, which are materials of minor medical importance but consumed by millions of people in the country. There are cases of other substance abuse or misuse, such as lysergic acid, diethylamide, tramadol, and methamphetamines. To obtain comparable and trustworthy data for addressing the threat, it is critical to identify the socio-demographic characteristics and prevalence of usage of these substances.

Tobacco smoking or the use of hard drugs are leading causes of mortality and morbidity. Nearly one billion people worldwide consume tobacco, and smoking is a great economic burden on health systems and families of smokers, especially in developing countries with limited resources. In Nigeria, substance abuse has become a household problem, and Nigeria is the leading consumer of illicit drugs among African countries. The prevalence rate for amphetamine use in Africa was 0.2-1.4%, and that in Nigeria was also the highest in Africa (Ajayi & Somefun, 2020).

Drug addiction, which is a broad-spectrum, multi-etiological disorder, has many negative, long-lasting effects on individual well-being, particularly that of young adults. Several studies have examined the prevalence, epidemiology (Obot, 1993), prevention, rate, trends, and influence of substance use disorders. Some studies have found an association between personality traits and substance use, while others have found that psychopathology and personality traits have an effect on substance abuse, even in adolescents. A co-morbidity of personality disorders in individuals with substance use disorders has also been reported. Thus, many researchers have used a comorbidity hypothesis to explain substance abuse disorders in different populations. Nguyen et al. (2019) examined the knowledge on human immunodeficiency virus (HIV), perceived risk, and HIV testing among users of methadone maintenance services in some Vietnamese communities and found satisfactory knowledge of the disease among users, with most of them conducting safe practices towards transmission. However, newly admitted patients in the area clinics showed high levels of HIV-risk behaviors such as drug injection, smoking, drinking, and unprotected sexual intercourse. Longer duration of methadone maintenance therapy was significantly correlated with reduced illicit drug use, and higher levels of psychological distress were associated with increased use of illicit drugs among patients.

It is important to explore the prevailing use of illicit drugs and the socio-demographic factors associated with their use in order to gain reliable and comparable data for addressing the menace. However, there is little research information to support a thorough understanding of the variables that predispose citizens to drug abuse or help in the formulation of effective measures for ensuring public health and safety in Nigeria. Here, we studied the socio-demographic factors, as perceived by the victims that affect drug addiction in the southern senatorial district of Cross River State, Nigeria. The factors examined were sex, peer influence, occupational status, social environment, and individual level of education.

2. METHODOLOGY

The study was conducted in the southern Senatorial District of Cross River, Nigeria, comprising Calabar municipality, Calabar South, Akpabuyo, Akamkpa, Bakassi, Biase, and Odukpani Local Government Areas (LGAs). Together, these areas have a population of about 1.6 million people (Table 1). The major languages spoken are Efik, Efut, and Ejaghama, according to the traditional residential areas of the Efiks, Efut, and Qua communities. The district is well known for its tourist and business activities and is home to Nigeria's premier Export Free Zone.

The sample size for this study comprised respondents admitted for drug abuse in the psychiatric hospital Calabar and those that could be assessed from the selected local government areas in the Southern Senatorial District. A total of 381 people were sampled from five out of the seven LGAs for the study: Akamkpa, Akpabuyo, Calabar South, Calabar Municipality, and Odukpani LGAs. Each of these five local government areas had 7 health facilities, including a general hospital in addition to the University of Calabar Teaching Hospital (UCTH) and the Calabar Neuropsychiatric Hospital. These public health facilities have frequent cases of drug and substance

reactions in emergency care units. Fifty-nine patients were sampled from the facilities in each of the five LGAs, while 35 patients were sampled from UCTH and 54 from Neuropsychiatric hospital, for a total random sample of 384 respondents.

Table 1. Population distribution of local government areas in Southern Senatorial District of Cross River State.

S/N	Local government areas	Population
1	Akamkpa	200,100
2	Akpabuyo	363,900
3	Bakassi	42,300
4	Biase	224,700
5	Calabar Municipal	245,500
6	Calabar South	255,900
7	Odukpani	257,300
Total		1,589,700

Source: National Bureau of Statistics – Federal Government of Nigeria (2016).

A questionnaire consisting of 48-item questions, subsumed into sections A, B, and C, was used. Section A solicited information on the demographic background of the respondents, such as sex, age, educational status, marital status, occupation, religion, etc. Section B carried structural questions measuring the opinions of respondents on the independent variables under study; Section C consisted of items focusing on the dependent variables – views on drug addiction. Most of the questions posed in this study were based on the Likert scale, with a series of opinion statements about drug addiction to which the respondents were asked to indicate the degree to which they agreed or disagreed with the opinions expressed. The questionnaire was distributed to 384 respondents, of whom 381 were retrieved for analysis. Returns from the field were checked to ensure that all the questionnaires were collected. The responses were coded and summarized using frequency distribution and simple percentages.

3. RESULTS AND DISCUSSION

The majority (87.1%, or 332) of the respondents were males, while 12.9% (49) were females (Table 2). Thus, male respondents dominated the study population, suggesting that the males are more likely to take drugs or be addicted than the females. Nearly 30% (114) of the respondents were aged 18-27 years, 24.1% (92) were aged 28-27yrs, 22.3% (85) were aged 38-47 years, and 23.6% (90) were aged 48 years or older. Thus, the youths aged 18-27 were the modal group of addicted persons in the study area. Augustine and Godiya (2014) also found a high incidence of substance use and abuse among people aged 18-24. About 49% (188) of the respondents were single, 35.4% (135) were married, 13.4% (51) were single parents, and 1.8% (7) respondents were divorced. Nearly fifteen percent (56) of the respondents had primary education, 37.5% (143) had secondary education, 36.5% (139) had tertiary education, and 11.3% (43) had no formal education. These data suggest that the majority of the addicts were secondary school leavers.

By religious affiliation, 92.9% (354) were Christians, 3.9% (15) were Muslims, and 3.1% (12) were of other religions. About 93% of the respondents were not employed, 3.1% (12) were civil servants, and 3.9% (15) were farmers. This suggests that unemployment predisposes people in the area to drug addiction. Table 3 presents results on the perception of gender differences in relation to drug addiction. About 93% (354) of the respondents agreed that men were more addicted to hard drugs than women, while only 7.1% (27) did not; about the same ratio of respondents (91.3%) agreed that men use drugs more. However, 62.5% of the respondents considered that there was no difference between men and women as to who takes a greater variety of drugs, compared with 37.5% (143), who considered that there was a difference. The response by 314 respondents (82.4%) also showed that both men and women take tramadol and alcoholic drinks, and about 79% of them considered that addiction was more common

with males than females. For the specific drug, marijuana, 78.2% (298) of the respondents considered that it affects women more than men. The responses further showed that the intake of drugs varied between the sexes.

The observed perception of differences between the sexes confirmed an earlier report of gender differences in predisposition to drug and substance abuse. According to Hser, Evans, Teruya, Huang, and Anglin (2007), there is less likelihood for women than men to abuse drugs, and when this happens, the abuse occurs much later in life than in men. However, women were greater abusers of some other substances (e.g., alcohol and tobacco) than men. And women progressed from regular use to first treatment more rapidly than men for many substances, including alcohol, cannabis, and opioids.

Table 2. Socio-demographic background of the respondents.

Variable	Frequency	Percentage (%)
Sex		
Male	332	87.1
Female	49	12.9
Total	381	100
Age		
18-27 years	114	29.9
28-37 years	92	24.1
38-47	85	22.3
48 above	90	23.6
Total	381	100
Marital status		
Single	188	49.3
Married	135	35.4
Single parent	51	13.4
Divorced	7	1.8
Total	381	100
Education		
Primary education	56	14.7
Secondary education	143	37.5
Tertiary education	139	36.5
No formal education	43	11.3
Total	381	100
Religious affiliation		
Christianity	354	92.9
Islam	15	3.9
African traditional religion	12	3.1
Total	382	100
Occupation		
Not employed	354	92.9
Civil servant	12	3.1
Farmer	15	3.9
Total	1182	100

Table 3. Respondents' views on sex differences in drug addiction.

S/N	Question	Yes	No.
1	Men are more addicted to hard drugs than women	354(92.9)	27(7.1)
2	Men use hard drugs more because of unemployment	348(91.3)	33(8.7)
3	There is no difference in drug intake between men and women	238(62.5)	143(37.5)
4	In my community, both men and women take tramadol and alcoholic drinks	314(82.4)	6 (17.6)
5	Many reported cases of addiction involve more men than women	304(79.1)	77(20.9)
6	Igboh, or wi wi (Marijuana) affects women more than men	298(78.2)	83(21.8)

Table 4 presents data on the scale of peer influence on drug addiction. More (317) respondents agreed that younger people abuse substances more than older people, and 83.2% (317) of respondents were certain that drug abuse was more prevalent among secondary school students. The majority of respondents (61.4%) agreed that

young addicts influence children into addiction. Slightly over half (52%) of the respondents agreed to failure on the part of parents in checking the company their children keep, which results in them becoming addicts.

About 80% of respondents considered that teen age is the most vulnerable age to becoming an addict and that children aged 12 years and older take tramadol. Less than half (48.6%) of the respondents were of the opinion that children think taking hard drugs makes them more recognized in their group, but a slight majority did not. Respondents were evenly split on their views as to whether the cause of children's involvement in illicit drug use was the polarized family structure. However, about 78% of them did believe that children from broken homes tend to be more addicted. Overall, the data showed that an association with children or friends who abuse drugs could influence others to become drug addicts. Hsieh and Hollister (2004) found that the age at which an individual starts substance abuse is significant, and peer influence was a major driver of this start. Peers may influence individuals directly by offering drugs or indirectly through social modelling and perceived norms. The high concordance between peer groups and drug use may be a result of individuals seeking out peers with similar interests and behaviours as their own.

There are several previous reports of young people ruining their lives through illicit drug use. Relative to other developing countries, Nigeria is among the highest users of dangerous drugs such as alcohol, tobacco, cannabis, benzodiazepines, cocaine, and opioids. In many higher institutions of learning in the country, there have been incessant students' unrests, riots, crimes, and cultism, many of which were directly or indirectly linked to drug abuse. The perception of the respondents as to the effect of social environment on drug addiction (Table 5) showed that about 82% of them believed that social environment can influence drug addiction. A majority (78.7%) of them understood that living in an environment where people take hard drugs may influence one's behaviour. About 83% of the respondents were aware that the annual Calabar carnival festival is a major cause of drug addiction in the area; a further 54% of them believed that the carnival has induced a significant number of youths to be addicted to drinking and smoking.

Table 4. Respondents view on peer influence and drug addiction.

S/N	Question	Yes	No
1	In my community, younger people abuse substances more than older people.	317(83.2)	64(16.5)
2	Many people believe that substance abuse is more common among secondary school students.	317(83.2)	64(16.8)
3	An association with young addicts influences children to become addicts.	234(61.4)	147(38.7)
4	Most parents do not check the company their children keep, which results in them becoming addicts.	198(52.0)	183(48.0)
5	Teenage is the most vulnerable age to becoming an addict.	310(81.4)	71(18.6)
6	In my community, a group of children aged 12 and older take tramadol.	304(79.8)	77(20.2)
7	Most children believe that taking hard substances makes them recognized in their group.	185(48.6)	196(51.4)
8	The cause of children's involvement in illicit drug use is their polarized family structure.	193(50.7)	188(49.3)
9	Children from broken homes tend to become addicted to hard substance.	296(77.7)	85(22.3)

Table 5. Respondents view on social environment and drug addiction.

S/N	Question	Yes	No
1	Do you believe that the environment promotes drug addiction?	313(82.2)	68(17.8)
2	Do you have any knowledge that if you live in an environment where people take hard substances, it may influence your behaviour?	300(78.7)	81(21.3)
3	Are you aware that in Cross River State, the carnival festival is a cause of high drug addiction?	317(83.2)	64(16.8)
4	Do you also know that the Calabar carnival has caused a significant number of youths to become addicted to drinking and smoking?	206(54.1))	118(31.0)
5	When you live in an environment where these drugs are produced, it can affect your health.	292(76.6)	89(23.3)
6	People in sub-urban areas in Calabar South tend to take harder substances.	313(82.2)	68(17.8)
7	Environment does not influence drug addiction.	351(92.1)	30(7.9)

Also, 82.2% (313) of respondents agreed that residents in the sub-urban area of Calabar South tend to take harder drugs. These results showed that a social environment like the Carnival Calabar and the associated business

environment during the Christmas season, as well as the riverine areas of Calabar south and places where hard drugs are sold freely, have a significant impact on people's vulnerability to drugs and could eventually lead to addiction. According to [Benavides and Bibb \(2004\)](#), the social environment in which people live could be a stimulant to drug use or addiction, as individuals residing in environments notorious for the sale of nicotine or other substances are likely to become addicts. Among illicit drug users in Vietnam, [Le et al. \(2020\)](#) found that family income, history of drug rejections, concurrence in drug usage, and distance from clinics affected methadone maintenance treatment. Scholars have considered close contact and the availability of drugs as risk factors for the use of drugs themselves. Thus, people can be put at risk because of their proximity and close contact with drugs and drinks.

Table 6 presents the perceptions of respondents as to whether unemployed youths tend to be more vulnerable to drug addiction. Ninety percent (343) of them agreed. About 85% agreed that unemployment had no influence on people becoming drug-addicted, and 60% did not agree that military personnel abused drugs more than civilians. The majority (87%) of the respondents opined that gainful employment would minimize the abuse of drugs, but 83% were of the opinion that there are unemployed people who do not abuse drugs or are not addicted to them. Nearly 60% of respondents agreed that addiction is genetic and not caused by occupational status, while slightly more than half (54%) concurred that a situation of low employability can cause addiction. The overall results showed that the nature of an individual's occupation or occupational status can be a factor in drug addiction in the study area. [Thompson \(2007\)](#) found a strong correlation between unemployment and drug-taking habits, whether in developed or developing countries, and that the life-time prevalence of drug abuse among the unemployed exceeded that among the employed by 60%. Employers can make significant contributions to the prevention of drug abuse, helping themselves and the community in the process. Effective workplace initiatives to prevent drug abuse should begin in the community and be directed at young people who are potential workers.

Table 7 shows the perceptions of respondents on the level of education in connection with drug addiction. About 76% of the respondents considered that uneducated people abuse drugs more, while 59% of them agreed that the number of uneducated addicts exceeded that of educated addicts. About 87% of respondents considered that a lack of education leads people to mix all kinds of drugs at once to stay active. Nearly 67% of them agreed that illiteracy predisposes young adults to taking hard drugs to enhance sexual performance. However, 69% of them understood that there is no health benefit to being high on drugs, while 74% of them agreed that using hard drugs could be harmful to the body. The result showed that an individual's level of education as well as knowledge of the effects of hard substances could moderate his use of those substances.

Previous reports by [Augustine and Godiya \(2014\)](#), [Ebirim and Morakinyo \(2011\)](#), [Okoza, Pacula, Ringel, and Ross \(2009\)](#), and [Owoaje and Bello \(2010\)](#) showed that level of education, most especially tertiary education, was a consistent predictor of substance abuse. Although there is global concern and education about psychoactive substances, many adolescents have little awareness of their adverse consequences. In Nigeria, a reasonable percentage of the national budget is used for the treatment and rehabilitation of people with substance abuse problems. However, validated information on the overall effectiveness and cost-benefit analysis of various approaches is not usually available. Drug use and academic failure have some common, measurable antecedents at the individual level, such as misbehavior and lack of interest in school, attention deficits, hyperactivity and depression, deviant peer groups, and early antisocial behaviour. The prevalence of these many measurable, common risk factors may suggest that unobserved risk factors tend to suppress the negative association between drug use and educational attainment. Thus, a strong correlation between drug use and low educational attainment may not reflect a causal relationship.

Table 6. Respondents view on occupational status and drug addiction.

S/N	Question	Yes	No
1	There is a relationship between unemployment and drug addiction.	343(90.0)	38(10.0)
2	Unemployment does not influence people to become addicts.	325(85.3)	56(14.7)
3	Military officer's abuse drugs more.	152(39.9)	229(60.1)
4	Those who work in cold weather tend to take hard Substance.	244(64.0)	137(36.0)
5	Unemployed status can lead to drug abuse.	331(86.9)	50(13.1)
6	There are unemployed people who do not abuse or are not addicted to drugs.	317(82.9)	65(17.1)
7	Addiction is genetic, not caused by occupational status.	225(59.1)	156(40.9)
8	Situation of low employability can cause addiction.	205(53.8)	176(46.2)

Table 7. Respondents view on level of education in relation to drug addiction.

S/N	Question	Yes	No
1	Do uneducated people abuse drugs more?	289(75.9)	92(24.1)
2	The number of uneducated drug addicts outnumbers educated addicts.	223(58.8)	157(41)
3	Due to a lack of education, people tend to mix all kinds of substances to keep themselves active.	332(87.1)	49(12.9)
4	Illiteracy makes young adults take hard substances in order to last in bed with a lady.	255(66.9)	126(33.1)
5	There is no health benefit t being high on hard substances.	281(66.8)	100(33.2)
6	Most people using hard drugs do not know that they are harmful to the body.	282(74.0)	99(26.0)

Table 8 presents the level of agreement with widely held views on drug addiction. The majority (262, or 68.8%), agreed that addiction is harmful to health. Also, the majority agreed or strongly agreed that the use of tramadol beyond practitioners' prescription kills and that addiction can cause an individual to indulge in crime. The majority of reported cases of rape are due to addiction, according to about 53% of respondents, and 15.2% strongly agreed. A simple majority (61.4%) agreed that taking hard drugs to enhance sexual performance could be harmful. However, less than half (41.5%) agreed that addiction causes severe economic damage. Also, nearly half (45.7%) agreed, and 22.8% strongly agreed, that addiction can result in poverty. Two hundred and thirty-four respondents (61.4%) agreed, and about 20% strongly agreed, that many youths have lost their lives through the use of hard drugs. Thus, the educational level of the individual, social environment, occupational status or nature of occupation, peer pressure, and sex difference have significant influences on drug addiction in the study area.

Table 8. Respondents view on drug addiction.

S/N	Question	Agree	Strongly agree	Disagree	Strongly disagree
1	Drug addiction is harmful to your health.	262(68.8)	55(14.4)	16(4.2)	48(12.3)
2	The use of tramadol beyond practitioners' prescriptions kills.	176(46.2)	118(31.0)	46(12.1)	41(10.8)
3	Drug addiction can cause an individual to indulge in crime.	199(52.2)	85(22.3)	56(14.7)	41(10.8)
4	Addiction is the primary factor in most reported cases of rape.	203(53.3)	58(15.2)	1(.3)	119(31.2)
5	Taking hard substances to satisfy a woman could be lethal.	234(61.4)	75(19.7)	38(10.0)	34(8.9)
6	Addiction has caused a lot of economic damage.	158(41.5)	86(22.6)	49(12.9)	88(23.1)
7	Addiction can result in poverty.	174(45.7)	87(22.8)	61(16.0)	59(15.5)
8	Many youths have lost their lives through the use of hard drugs.	234(61.4)	34(8.9)	75(19.7)	38(10.0)

4. CONCLUSION AND RECOMMENDATIONS

In this study, we investigated the socio-demographic factors underscoring drug addiction based on the opinions of addicts in the southern senatorial district of Cross River State, Nigeria. Using a standard questionnaire, the factors studied were sex variation, occupational status of individuals, social environment, peer influence, and level of

education. The results showed that the occupational status or nature of the individual's job had a considerable impact on drug addiction.

This portends significant problems in the workplace. Respondents also perceived low levels of education, high unemployment, and general poverty as direct triggers of drug addiction. As found during a supplementary interview session, many of the addicts who were chronic drug-dependent people suffer the double stigma of abject poverty and drug dependency. It seems that the social and psychological effects of drug addiction are severe and growing rapidly in the study area.

Public authorities should therefore focus attention on addressing the main causes of addiction by reducing poverty and unemployment, providing good-quality childcare, implementing labor market programmes, and providing effective early intervention programmes, such as parental support, in the first few years of a child's life. Parents should monitor the kinds of friends and associations their children belong to eliminate negative peer influence as early as possible.

The present study is limited to only one state in southern Nigeria. Future research should expand to more states in the region and also explore the effectiveness of government interventions in minimizing cases of drug addiction and abuse in the region.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

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