Prevalence And Determinants Of Drug Abuse Among Youths In A Rural Community In North Western Nigeria

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Abstract

Drug abuse is a global public health problem that impacts negatively on health, family, society, educational and professional life. Majority of youths ignorantly depend on one form of substance or the other for various daily activities such as social, educational, political and moral. The objective of this study was to assess the prevalence and determinants of drug abuse among youths in a rural agrarian community in North Western Nigeria.

A cross-sectional, community based descriptive study conducted among 359 rural youths aged 15-35 years. The study was conducted from 19th September 2016 to 14th October 2016. An interviewer-administered questionnaire was used to collect data which was analyzed using SPSS (version 20).

The prevalence of drug abuse was 10% and the most abused drug was Tramadol (52.8%). There was a statistically significant association between drug abuse and the following variables: Type of family ($P=0.025$); occupation of respondents ($P=0.001$) and monthly income ($P= 0.005$). Farming occupation was a determinant of drug abuse. Farmers were 6.52 times more likely to abuse drugs than non-farmers (OR= 6.52, **95% C.I: 2.25 – 18.91,** $P=0.001$).

The result indicated that youth in the study area abuse drugs such Tramadol and Marijuana and farming occupation was a determinant of drug abuse. For effective control of drug abuse in the study area, there is need for health education campaigns on harmful effects of drug abuse.

Key words: Drug abuse, prevalence, determinants, youth, rural, Nigeria

Introduction

Drug use and abuse is a social and public health problem in most countries worldwide, as a result of the several negative effects it may have on people's emotional and physical development.[1] Drug abuse is the maladaptive addictive use of drugs for non-medicinal purposes. It is characterized by an emotional, psychological or physical dependence or compulsion to take drugs constantly to experience its mental effects. It involves the repeated and excessive use of chemical substances which may be obtained from the street or with prescription.[2]

According to *UNODC* reports on the use of illicit substances, there was an increase usage rate throughout the world in recent years.[3] Drug abuse and addiction have negative consequences for individuals and for society, spawning crimes, spreading diseases like AIDS and killing people.[4] The global disease burden attributable to alcohol and illicit drugs is estimated at 5.4%.[5] The trend is increasing as period goes [6]. Estimates of the total overall costs of substance abuse in the United States, including productivity and health- and crime-related costs exceed $600 billion annually. There are an estimated 90 million drug users around the world and no country is immune and no person really is.[4]

Youths are a high risk group for the use of drugs .[7] Among the youth, drug abuse is a worldwide epidemic that can impact negatively on health, family, society, and educational and professional life. [8-10] Majority of Nigerian youth ignorantly depend on one form of substance or the other for various daily activities such as social, educational, political and moral .[11] In Nigeria today, there is no part of the country that is free from the curse of misguided drug use and addiction, and the epidemic has assumed an alarming dimension causing enormous problems to the individual and society. There is evidence that rural youth are more likely to use drugs such as marijuana, cocaine, methamphetamines, and inhalants than are urban youth. [12-15]

Young people abuse drugs due to complex social and peer groups influence, frustration, depression, curiosity, sub-cultural and psychological environment that induce the youths to take drugs. Major risk factors responsible for drug abuse are family disorganization, parental neglect, parent-child conflict, loss of spouse strife, indiscipline, isolation, lack of emotional support, rejection of love, over protection, unemployment, repeated failure and personality mal adjustment and easy availability of drugs.[16] Parental

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deprivation due to deaths, divorces, separation or discord has also been strongly associated with drug abuse .[17]

In Nigeria, youths have been identified as the most affected group by drug abuse[18] and the North-western region (where our study area is located) was rated as having the highest rate of drug abuse (37.47%) followed by Southwest (17.32%); then south-East(13.5 %); then the North-central (11.71%) and lastly the North-East zone (8.54%).[19] There is scanty data on patterns of drug abuse in specific groups in the community and due to increasing urbanization of the country, there is a tendency of changing patterns in illicit drug use and therefore the need to constantly update information on the use of drugs among Nigerian youths .[20] The aim of this study was therefore, to assess the prevalence and determinants of drug abuse among youths in a rural agrarian community in North Western Nigeria .

Methodology

Kwaba community is a rural agrarian settlement in Dutsen Abba district of Zaria Local Government Area of Kaduna State, North-western Nigeria. The community has a total population of 2,324 with 240 households; 395 women of reproductive age .[20] They have a community Youth Association. There was only one health facility (a Primary Health Care centre) in the community. Non-mechanized farming was the predominant occupation.[20]

A cross-sectional, community based descriptive study conducted from 19th September 2016 to 14th October 2016. The study population comprised all male youths (aged 15- 35 years) in the community (total population study). Data was collected using a structured interviewer administered questionnaire with closed and open ended question. It contains questions on socio-demographic profile of respondents and their utilization of unprescribed drugs.

The data obtained was cleaned and analyzed using IBM Statistical Package for Social Sciences (SPSS) software (version 21.0) and results were presented in tables. Bivariate analysis was done using Chi-square test to assess the association between socio-demographic variables and use of unprescribed drugs. The level of statistical significance was set at a p-value of 0.05 and the corresponding χ^2 value and degrees of freedom (df) were cited. Variables that were statistically significant in the bivariate analysis were included in a multivariate analysis using logistic regression model in which level of significance was set at 0.05. Appropriate entry permission to conduct the study was sought from Zaria Local Government Area, Kaduna State and from Kwaba community leaders. Informed written consent was obtained from all the respondents.

Results

Table 1 shows the socio-demographic characteristics of the respondents. Majority of the respondents were from nuclear families (65.2%); the mean household size was 10.8 ± 7.2; only 27.8% had formal education; almost half of them (49.6%) were unemployed and their mean monthly income was N2,211 ± 5.11. Few, 16.6% of respondents' father had formal education while 6.4% of respondents' mother had formal education. Table 2 presents the type of drugs abused by respondents. The most abused drug was Tramadol (52.8%), followed by Tobacco (38.9%), Marijuana33.3% and pentazocine16.7%). Other abused drugs were alcohol (19.4%); codeine (5.6%); cocaine (5.6%) and Heroine (2.8%).

Table 3 presents results of bivariate analysis of the relationship between socio-demographic characteristics of respondents and drug abuse. As shown in the table, 36 respondents (10.0%) were drug abusers and there was a statistically significant association between drug abuse and the following variables: type of family (P=0.025); occupation of respondents (P=0.001) and monthly income (P= 0.005). There was no statistically significant association between drug abuse and respondents' household size (P=0.965); educational level (P=0.222); paternal education (0.822) and maternal education (P=0.856).

Table 4 shows results of simple logistic regression of drug abuse on the associated factors. As shown in the table, of all variables that were significantly associated with drug abuse at bivariate level, only farming occupation (P=0.001); other occupations (P=0.047) and monthly income (P=0.002) were associated with it after regression analysis.

Table 5 shows results of multivariable logistic regression of drug abuse on the associated factors. As shown in the table, only farming occupation was a determinant of drug abuse. Farmers were 6.52 times more likely to abuse drugs than non-farmers (OR= 6.52, 95% C.I: 2.25 – 18.91, *P=0.001)*

Discussion

Prevalence of drug abuse among respondents was 10%. This is lower than the regional value of 37.47%. The most abused drug was Tramadol, an opioid analgesic that produces euphoric high when taken in high doses. Some of its abusers take it for its euphoric and mood-enhancing effects.[21] This finding is similar to findings of two other Nigerian studies conducted in Ilesa and Oshogbo where analgesics were also the most abuse drugs among which was Tramadol. According to the study done on substance use among senior secondary students in rural and urban communities in Ilesa, south western Nigeria , the most commonly used drugs and their current prevalence

Table 1: Socio-demographic characteristics

Variable	Frequency (n = 359)	Percent
Type of family		
Nuclear	234	65.2
Extended	122	34.0
Single parent	1	0.3
Sibling household	2	0.6
Household size		
= 5	82	22.8
6 – 10	119	33.1
11 – 15	102	28.4
> 15	56	15.6
Mean household size	10.8 ± 7.2	
Median household size	10	
Education		
None	53	14.8
Qur'anic	204	56.8
Informal	2	0.6
Primary	78	21.7
Secondary	22	6.1
Father's education		
None	24	6.7
Qur'anic	275	76.6
Primary	36	10.0
Secondary	21	5.8
Tertiary	3	.8
Mother's education		
None	46	12.8
Qur'anic	289	80.5
Informal	1	0.3
Primary	17	4.7
Secondary	5	1.4
Tertiary	1	0.3
Occupation		
None	178	49.6
Farming	87	24.2
Petty trading	34	9.5
Student	40	11.1
Others	20	5.6
Monthly income (?)		
< 1,000	228	63.5
1,000 – 5,000	96	26.7
> 5,000	35	9.7
Mean income	2,211 ± 5.11	

Table 2: Types of abused drugs by respondents (n = 36)

Drug Type	Frequency
Tramadol	19 (52.8%)
Tobacco	14 (38.9%)
Marijuana	12 (33.3%)
Pentazocin	6 (16.7%)
Alcohol	7 (19.4%)
Codeine	2 (5.6%)
Cocaine	2 (5.6%)
Heroin	1 (2.8%)
Buska	2 (5.6%)
Others	9 (24.9%)

and diazepam (0.1%). [25]

The study revealed that only farming occupation was a determinant of drug abuse among youths in our study area. Other socio-demographic variables such as family type, educational level, paternal and maternal education, monthly income were not determinants of drug abuse. This is similar to findings in Rwanda were the level of education of the head of household, and the socio economic category of youth households were not associated with drug abuse (p > 0.15). [25] On the contrary, type of family was associated with drug abuse in Rwanda: youth without parents were more likely to use drugs than those with one or both parents (p < 0.001). [25]

A possible explanation as to why farming occupation was a determinant of drug abuse among youths is that farming, especially non mechanized, is associated with low back pains (LBP). [26] In rural settings, farmers complain of LBP than other dwellers. [26] Young Farmers therefore, take drugs, such as Tramadol, to relive the pains. Another possible explanation is from an economic perspective, where drugs are taken to enhance farming activities.

For effective control of drug abuse in the study area, sustained health education on drug abuse and its effects is recommended. This can be achieved through health talks in the community and through radio programmes. Farming youths can be reached for the health education through their association.

rates were salicylate analgesics, 48.7%; stimulants, 20.9%; antibiotics, 16.6%; alcohol, 13.4%; hypno-sedatives, 8.9% and tobacco, 3.0%. [22] In the study conducted in Oshogbo, Osun State, Nigeria, the substances that were found to be commonly currently abused were analgesics (46.7%), cannabis (16.7%), tobacco (14.3%) and inhalers (14.0%) while 8.3%, 7.4%, and 6.4% of the respondents were found to be using alcohol, sedatives and solvents respectively.[23] However, this finding is contrary to that of a study conducted in a rural community of Plateau State, Nigeria , where a combination of valium and amphetamine was the most abused drug(55.1%).[24] It is also contrary to findings in Rwanda where alcohol was the most abused drug (50.6%) among youths, followed by tobacco (10.6%); cannabis (4.4%); . solvents (5%)

Conclusion

The result indicated that youth in the study area abuse drugs such Tramadol and Marijuana and farming occupation was a determinant of drug abuse. For effective control of drug abuse in the study area, there is need for health education campaigns on harmful effects of drug abuse.

Conflict of Interest. The authors declare that they have no competing interests.

Table 3: Associations between socio-demographic characteristics and drug abuse

Variable	Drug abuse (%)			χ^2	df	p-value	Fisher exact p
	Yes	No	Total				
	n = 36	n = 323	n = 359				
Type of family							
Nuclear	22 (9.4)	212 (90.6)	234	9.350	3	0.025	0.134
Extended	13 (10.7)	109 (89.3)	122				
Single parent	1 (100)	0 (0)	1				
Sibling household	0 (0)	2 (100)	2				
Household size							
= 5	9 (11.0)	73 (89.0)	82	0.275	3	0.965	
6 – 10	12 (10.1)	107 (89.9)	119				
11 – 15	9 (8.8)	93 (91.2)	102				
> 15	6 (10.7)	50 (89.3)	56				
Education							
None	6 (11.3)	147 (88.7)	53	5.711	4	0.222	0.186
Qur'anic	16 (7.8)	188 (92.2)	204				
Informal	1 (50.0)	1 (50.0)	2				
Primary	10 (12.8)	68 (87.2)	78				
Secondary	3 (73.6)	19 (86.4)	22				
Father's education							
None	2 (8.5)	22 (91.7)	24	1.528	4	0.822	0.729
Qur'anic	26 (9.5)	249 (90.5)	275				
Primary	5 (13.9)	31 (86.1)	36				
Secondary	3 (14.3)	18 (85.7)	21				
Tertiary	0 (0)	3 (100)	3				
Mother's education							
None	5 (10.9)	41 (89.1)	46	1.947	5	0.856	0.731
Qur'anic	28 (9.7)	261 (90.3)	289				
Informal	0 (0)	1 (100)	1				
Primary	3 (17.6)	14 (82.4)	17				
Secondary	0 (0)	5 (100)	5				
Tertiary	0 (0)	1 (100)	1				
Occupation							
None	7 (3.9)	171 (96.1)	178	28.969	4	0.001	< 0.001*
Farming	21 (24.1)	66 (75.9)	87				
Petty trading	1 (2.9)	33 (97.1)	34				
Student	4 (10.0)	36 (90.0)	40				
Others	3 (15.0)	17 (85.0)	20				
Monthly income (?)							
< 1,000	15 (6.6)	213 (93.4)	228	10.705	2	0.005*	
1,000 – 5,000	13 (13.5)	83 (86.5)	96				
> 5,000	8 (22.9)	27 (77.1)	35				

Table 4 : Simple logistic regression of drug abuse on the associated factors (n = 36)

Variable	b	SE	Wald statistic	Odds ratio	95% CI		p-value
					Lower	Upper	
Occupation (Farming)	2.05	0.46	19.88	7.77	3.16	19.14	0.001*
Occupation (Petty trading)	-0.30	1.09	0.08	0.74	0.09	6.22	0.782
Occupation (Student	1.00	0.65	2.34	2.71	0.76	9.76	0.126
Occupation (Others)	1.46	0.74	3.95	4.31	1.02	18.22	0.047*
Monthly income group	0.73	0.23	9.91	2.08	1.32	3.27	0.002*

*Statistically significant; b = regression coefficient; SE = standard error

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Table 5: Multiple logistic regression of drug abuse on the associated factors (n = 36)

Variable	b	SE	Wald statistic	Odds ratio	95% CI Lower	Upper	p-value
Occupation (Farming)	1.88	0.54	11.90	6.52	2.25	18.91	0.001
Occupation (Petty trading)	-0.46	1.12	0.17	0.63	0.07	5.64	0.679
Occupation (Student)	0.98	0.65	2.24	2.66	0.74	9.60	0.134
Occupation (Others)	1.22	0.84	2.11	3.38	0.65	17.42	0.146
Monthly income group (1,2,3)	0.19	0.31	0.38	1.21	0.66	2.22	0.536
Constant	-3.41	0.51	43.83				

*Statistically significant; b = regression coefficient; SE = standard error

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