

Socio-Demographic Variables and Personality Profiles of Patients with Substance Use Disorder in a Drug Abuse Treatment Facility in Nigeria

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Abstract

Studies in Nigeria on substance abuse have examined the use/abuse/misuse of substances among selected groups. The objective of this study was to examine the relationship between sociodemographic variables, personality types and substance abuse/misuse among patients admitted in a drug abuse facility. This cross-sectional study carried out between 2008 and 2011 with 65 participants who underwent psychological assessment in the drug abuse unit of Federal Neuropsychiatry, Uselu made use of a semi-structured socio-demographic questionnaire to get information on age, gender, occupation, level of education, marital status, duration of substance use and Minnesota Multiphasic Personality Inventory Version-2 (MMPI-2) to assess patients' personality. It was concluded that male, unemployed, single, likely to be in a tertiary institution or holds a certificate of one tertiary institution are more likely than other categories to abuse psychoactive substance; while antisocial, passive-dependent and passive-aggressive personality appear to be the most common personality type.

Keywords: Sociodemographic; personality profile; substance use disorder, substance abuse patients.

1. Introduction

It is no longer a conjecture that all living cells react to chemicals. That fundamental fact explains why drugs are so important to human well-being. The effort to find and use beneficial drug to treat the ills of body and mind has been the major effort of civilized medicine in the century-long struggle against suffering. Ironically, the most widely used drug in Nigeria is neither paracetamol, nor antibiotics, nor any other drug commonly prescribed by the physician, but alcohol and cannabis (Adamson, Onifade, & Ogunwale, 2010) which are material of minor medical importance, yet it is consumed by hundreds of millions of people, sometimes in dangerous quantity. Indeed a large majority of the world's population have probably partaken of it, or will partake of it (Obot, 1993), at some time during their lives (Anumonye, 1980). However, alcohol and cannabis is not alone in this race, other substances of abuse/misuse such as LSD, methamphetamines to mention but a few are also inclusive.

In Nigeria, alcohol and other substance of abuse is now a house hold problem. United Nations Office on Drugs and Crime (UNODC) World Report (2011) revealed that Nigeria tops the list of countries in Africa in the use of illicit drugs. According to the report, the annual prevalence rate for cannabis use in Africa is between 4% - 14%, with the Nigeria prevalence put at about 14% in the region, and is rated as the highest in the world. The annual prevalence of cocaine use in Africa in 2009 ranged between 0.2% and 0.8%, Nigeria prevalence is put at 0.7%, again is among the top consumers within the region. The annual prevalence for opiate use in Africa is estimated at between 0.2% and 0.6%. In Nigeria the opiate prevalence rate was estimated to have increased from approximately 0.6% to 0.7% in 2009. This means that Nigeria is housing about 500,000 heroin users. The prevalence rate for amphetamine-type stimulants in Africa was put at between 0.2% and 1.4% and the Nigeria prevalence is put at 1.4%, also the highest in Africa.

Substance abuse is a broad spectrum, multi-etiological disorder which has many negative long-lasting effects on individual well-being, particularly that of young adults (Khodarahimi & Rezaye, 2012). The various forms taken by substance abuse disorders include health risk behaviours that are often linked together, and, as a rule, all of these disorders originate in three etiological factors that comprise: psychopathology, personality characteristics, and a negative social environment (Dryfoos, 1990). Several studies have examined the prevalence (Anumonye, 1980), epidemiology (Obot, 1993), prevention, (Asuni 1990; NDLEA 1994), pattern, (Odejide, Ogunleya, & Meletoyitan, 1993), rate, (Ebie & Pela, 1981), trends, (Adamson, Onifade, & Ogunwale, 2010), and influence of substance use disorders in Nigeria (Gureje, & Olley, 1993). Studies have found association between personality trait and substance use (Swenden et al, 2002), while other studies suggest that psychopathology and personality have effect on substance abuse, (Khodarahimi, & Rezeye, 2012) even in adolescents, (Clark, Kirisci, & Moss, 1998b; Lynskey, & Fergusson, 1995) and co-morbidity of personality disorders in individual with substance use disorders, (Verheul, 2001). As a result, many researchers have adopted a comorbidity hypothesis to explain substance abuse disorders in various different populations; this decision may prove to be correct because of the probable effects of sociodemographic variables, psychopathology and personality factors in substance abuse disorders.

The age at which an individual starts something is significant so is the age of starting substance abuse. There has been report about the adolescent's starting age of drug use and abuse, (Hsieh, & Hollister, 2004; National Survey on Drug Use and Health, 2011; Office of National Drug Control Policy, 2002). These reports confirmed age 12 year and above for substance abuse. There is also the high presence of substance use and abuse among age 18-24 people, (Augustine, & Godiya, 2014). Also, young adults aged 18-25 use more illicit drugs when compared to age lesser than the grade. There are similar rates of use of illicit drug in 2011 amongst the age grade 26-49 when compared to past years, and similar increment in rates amongst age graders 50 and above, (National Survey on Drug Use and Health, 2011).

Gender predisposes one to substance abuse. Research has confirmed that there is less likelihood for women than men to abuse substance, and if at all it happens, the abuse happens much more lately in life than men, (Hernandez-Avila, Rounsaville, Kranzer, 2004; Hser, Huang, Teruga, Anglin, 2004). Although, there may be more males than females in abuse of some substances than the others, females have been shown to abuse some other substances than males. For example, females consume more alcohol than any other substances, and abuse more alcohol and tobacco than males as reported in (Pillon O'Brien, & Piedra, 2005). And the report from Office of Applied Studies (2000) showed that males use more substance than females.

Marriage or being married is considered as the beginning of being responsible in this part of the world and the responsibility permeates almost every facet of life. Also, the role of marital status and substance abuse cannot be overlooked because it may serve as a support for not using and if there is a strain in this, it can be as a susceptible factor for abuse which can make an irresponsible being out of one. This view receives support as it was found out that there was more full time substance dependence amongst individuals who are never married when compared against married and separated/widowed/divorced statuses, Office of Applied Studies, (1999 & 2000).

There has been link between employment status and substance use. Being unemployed have been found to lead to an increase in level of alcohol consumption which is caused indirectly by stress generated from the unemployment, (Perrucci, & Perrucci, 1990; National Survey on Drug Use and Health, 2011). Also, it is evidenced that those who are not working are more predisposed to higher rates of illicit drug use. This unemployment may be as a result of exclusion from vocational services, amotivational symptoms associated with substance abuse and or inadequacy about the jobs.

Level of education, most especially tertiary level has been proven to be a consistent predictor to substance abuse, (Okoza et al, 2009; Chikere, & Mayowa, 2011; Owoaje, & Bello, 2010; Augustine, & Godiya, 2014) and (National Survey on Drug Use and Health, 2011). Perhaps, the university is serving as an enabling vehicle for the utilization of independence from homes and guidance by the students.

Apart from the demographic variables highlighted above, personality type proves to be a very strong predictor to substance abuse. The MMPI-2 has been commonly used in the assessment of substance abusers. In a historical highlights of MMPI-2 from 1949-2010, (Butcher, 2012); there was chronicle of studies which had profiled alcohol and other substance abusers using MMPI or MMPI-2. Of most use in the highlight to this study is the finding of (Patalano, 1980). 48/84 and 49/94 code types were found to be the most frequent two point codes and 80.6% of the MMPI protocols could be classified into only seven two-point codes, 48/84, 49/94, 24/42, 89/98, 46/64, 78/87, and 28/82. This is similar to findings in (Schroeder, & Piercy, 1979; Graham, 2006; Johnson, Tobin, & Cellucci, 1992; Lesswing, N.J., Dougherty, 1993; Donovan, Soldz, & Kelley, 1998), which found most especially about 24/42 code types indicating psychopathic deviation, acting behavior and a negative attitude.

Although previous research has examined various variables and personality profiles of patients with alcohol and substance use disorders, personality variables and gender link have been proposed for substance use disorder, however, there is scarcity of literature on previous studies that examined the influence of level of education, employment, marital status and personality profile on substance use disorders in Nigeria.

Therefore, the purpose of this study is to investigate whether there is a relationship between personality profile and substance use disorder among treatment-seeking substance abuse patients in a drug treatment facility in Nigeria, and to examine the role of age, gender, occupation, marital status, level of education, duration of substance use, on substance use disorders.

2. Method

2.1. Setting and Participants

The study was carried out at the Drug Abuse Unit of the Federal Neuropsychiatric Hospital, Uselu, Benin-city, Nigeria. It is a 250-bed hospital, 19 of that are in the drug abuse unit. The hospital is situated in Benin one of the oldest city in the Niger Delta region and the capital of Edo state, Nigeria. The hospital is one of the two federal psychiatric hospitals in the south-south geopolitical zone of Nigeria. The hospital serves the entire state and the five adjoining states with an estimated population of about 21 million people (Nigerian Profile, 2011). The drug abuse unit is a standalone drug treatment facility inside the hospital and it was established in 1994. Before then, the drug dependence patients receive care in the psychiatric wards with the other patients, even now, a large

percentage of the drug abuse patients are still been treated at the psychiatric wards despite having a specialized and dedicated ward for drug abuse, this is because they are yet to/did not meet the criteria to be eligible for drug abuse ward. During this period, the treatment programme at the drug abuse unit is mainly centered on detoxification and relapse prevention. Patients were admitted for a minimum of 8 weeks. 65 patients (56 male & 9 female), their age ranges from (18-62 years old) with a mean age of 31.49 and (SD = 9.21); the participants were all admitted in the drug abuse ward.

2.2. Instrument

A semi-structured socio-demographic questionnaire was used to get information on age, gender, occupation, level of education, marital status, duration of substance use and Minnesota Multiphasic Personality Inventory Version-2 (MMPI-2), (Butcher et al, 2001) was used to assess patients' personality. The assessments were carried out by a trained clinical psychologist. The questions were all completed in the assessment room in the clinical psychologist office with the clinical psychologist supervising their completion. Before the study took place, the participants were asked for their consent. Ethical approval was obtained from the ethics committee of the hospital.

2.3. Design

This is a cross-sectional study carried out between 2008 and 2011; participants were made up of 65 patients of the drug abuse unit of the hospital who are able to undergo psychological assessment.

2.4. Data Analysis

The results of the socio-demographic questionnaire were analyzed using the statistical package for social sciences (SPSS 16.0). The proportion of the different variables and determine the relationship while the MMPI-2 was analyzed based on the standard procedure to generate a two-point code-type to determine the personality profile.

3. Results

3.1. Socio-demographic variables

There were 65 participants (86% male & 13.8% female). Their age ranges from (18-62 years old) with a mean age of 31.49 years (SD = 9.216), more than half (83.1%) were single while (16.9) were married, with (1.5%) having first leaving certificate, (47.7%) have senior secondary certificate and (50.8%) having tertiary education. Less than a quarter (24.6%) were employed, (41.5%) unemployed and (33.8%) schooling. The participants abused four categories of substance; (38.5%) abuse cannabis, (3.1%) abuse nicotine, (23.1%) abuse alcohol, (4.6%) abuse cocaine, while (30.8%) abuse more than one drug at a time.

Table 1. Socio-demographic variables and commonly misuse substance (n = 65)

Variable	Items	Mean (n)	Percentage (%)
Age	Range	18 – 62	
	Mean	31.49	
	Standard Deviation	9.216	
Gender	Male	56	86.2
	Female	9	13.8
Marital Status	Single	54	83.1
	Married	11	16.9
Occupation	Employed	16	24.6
	Unemployed	27	41.5
	Schooling	22	33.8
Level of Education	Primary	1	1.5
	Secondary	31	47.7
	Tertiary	33	50.8
Substance Misuse	Cannabis	25	38.5
	Nicotine	2	3.1
	Alcohol	15	23.1
	Cocaine	3	4.6
	Multiple	20	30.8
Duration of use	Mean	11.86	
	Standard deviation	9.102	
	Range in years	1 – 43	
Personality/Trait Types	Antisocial	31	47.7
	Schizoid	4	6.2
	Passive-dependent	15	23.1
	Passive-aggressive	15	23.1

Table 2. Personality Description and their Frequency

MMPI-2 two point codetype and associated personality			
Codetypes	Associated Personality	Mean (n)	Percentage (%)
48/84	Antisocial, schizoid or paranoid	12	18.5
49/94	Antisocial	12	18.5
24/42	Antisocial	8	12.3
46/64	Passive-Aggressive	7	10.8
12/21	Passive-Dependent	5	7.7
28/82	Borderline, Avoidance, schizoid	4	6.2
68/86	Paranoid or schizoid	4	6.2
14/41	Antisocial	3	4.6
27/72	Passive-Aggressive	3	4.6
78/87	Schizoid	2	3.1
13/31	Narcissistic, Antisocial, Borderline	2	3.1
34/43	Passive-Aggressive	1	1.5
47/74	Passive-Aggressive	1	1.5
69/96	Passive-Dependent	1	1.5

Table 2 above shows the fourteen code types generated by the MMPI-2 profile of the 65 patients.

4. Discussion

In this study, we explore relationship between personality profile and the role of age, gender, occupation, marital status, level of education, duration of substance use, on substance use disorders. It can be gotten from the result that there is more male patients than female patients receiving in-patient treatment, (86% male & 13.8% female). This is consistent with the result of (Hernandez-Avila, Rounsaville, & Kranzer, 2004; Hser, Huang, Teruga, & Anglin, 2004; Office of Applied Studies 2000; National Household Survey on Drug Abuse, 2000 & Pillion et al, 2005). This is still a confirmation of male chauvinism that has pervaded the gender debate for so long.

Age brackets gotten from the result of the study i.e. 18-62 years old are similar to (Augustine & Godiya, 2011). This age grade is seen as the period of freedom in Nigeria because at this time there is movement outside the direct parental care into tertiary institutions which can lead to experimentation with drugs or perpetuation of the habits if they have been using it before then. Age bracket 26-49 and 50 and above report use of illicit drug use as reported by (National Survey of Drug Use and Health, 2011). Abuses of drugs most of the time are not learnt at this time but becomes worsened.

More than half of the participants are single, this agrees with the report from (Office of National Drug Control Policy, 2002). Marriage as a formidable social support proves to be important in keeping in check the excesses of substance use.

It is ironic that the more people read, the more they tend to abuse substance. While 47.7 % of the participants hold a senior secondary school certificate, 50.8 % are either in tertiary institution or holding university degree. (Augustine & Godiya, 2014) and (National Survey of Drug Use and Health, 2011) found consistent result to support this. This may be because of the perceived knowledge that comes with being read which subject the substance abusers to do individualistic comparisons with another person who abuses substance but not having any social, occupational or relational impairment as a result of it.

There are more unemployed substance abusers than employed substance abusers as the result indicated. There is more tendency to have increment in the use of any particular substance, (Harrell, A.V., & Peterson, 1992). This may not be unconnected to the fact of what idleness can cause. Substance abuse can directly cause job loss; substance can make an abuser not employable and unacceptable.

The study also found out that there is more Antisocial, passive-aggressive and passive-dependent personality disorder appearing more in code types 48/84, 49/94, 24/42, 46/64, 12/21 which is not far from the results of (Johnson, Tobin, & Cellucci, 1992; Graham, 2006; Donovan, Soldz, Kelley, 1998).

5. Conclusion

Male, single, unemployed and likely to be in a tertiary institution or holds a certificate of one are more probable than other categories to abuse psychoactive substance; cannabis is the most commonly used psychoactive drug, while antisocial, passive-dependent and passive-aggressive personality appear to be the most common personality type.

6. Recommendation

Mental health professionals should be more sensitive to these dynamics in the life of substance abusers in order to have for a gainful treatment plan achievable.

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