

An assessment of Personality profile of people with substance use disorders in Jos, North Central Nigeria

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ABSTRACT:

Personality characteristics play an important role in shaping substance use patterns, yet little is known about this relationship in North-Central Nigeria. This study examined the personality profiles of individuals with substance use disorders admitted at the Centre for Addiction Treatment and Research, Vom, Plateau State. A descriptive cross-sectional design was employed, and all inpatients who provided informed consent were included. Data were collected using the Minnesota Multiphasic Personality Inventory (MMPI-2) alongside sociodemographic and clinical questionnaires. The majority of participants were young, single males with a mean age of 29.6 years. Alcohol was the most commonly abused substance, followed by opioids and cannabis. High rates of comorbid conditions such as depression, PTSD, hypertension, and HIV/AIDS were observed. Personality assessment revealed a predominance of antisocial, paranoid, and schizoid traits among respondents. These findings underscore the strong association between maladaptive personality patterns and substance abuse in this setting. Incorporating personality assessment into substance use treatment may enhance clinical outcomes by informing tailored therapeutic interventions.

Keywords: *Assessment, Personality traits, people, Substance use disorders, Jos Nigeria*

INTRODUCTION:

People are known to behave in certain unique ways as reported by early scholars. Hippocrates classified people as either choleric, sanguine, phlegmatic or melancholic based on prevailing traits, Kretschmer described people as mesomorphic (muscular, active); ectomorphic (restrained, aloof) and endomorphic (social, relaxed) while Henderson classified people as 'aggressive', 'creative' or 'inadequate'.

Personality has been described in many ways by different people. Some conceptualize it as the characteristic pattern of feelings, thinking, perception and behaviours that defines the interaction of an individual with the environment.¹

Personality traits have been defined by Diener and Lucas (2017)² as long lasting disposition in behaviour that show differences across individuals which tend to characterize the person across different situations. It is also described as that tendency to feel, perceive, think and behave in relatively consistent ways across

situations in which the trait may be manifested (American Psychiatric Association, 2013)³.

On the other hand, substance abuse is a major social issue confronting all countries of the world and Nigeria is not exempted. (Adamson & Akindele, 1994; Gureje, Degenhardt, Olley, Uwakwe, Udofia, & Wakil, 2007)^{4,5} and the problem has been on the increase (Adelekan et al., 2000; Reddy et al., 2007)^{6,7}.

Substance dependence, which often leads to substance Use disorders and subsequent admission to rehabilitation facilities for treatment is a chronic relapsing brain disease, which is characterized by compulsive drug seeking and use despite knowledge of the negative consequences by the individual (Butcher, Mineka, & Hooley, 2013)⁸.

Personality and substance abuse There is a complex relationship between personality and drug use. Many personality dimension exist which have been hypothesized to influence drug use in different ways at several levels. (Cox, 1985)⁹.

Some studies in different setting among different samples showed the link between personality characteristics and drug use (; Lawal and Ogunsakin, 2012)¹⁰

To the best of my knowledge very few studies (if any) assessed personality profile in people with substance use disorders in north central Nigeria hence the need for this study .

MATERIALS AND METHODS:

This was a hospital-based, cross-sectional descriptive study conducted at the **Centre for Addiction Treatment and Research (CATR), Vom, Plateau State, Nigeria**. The centre is owned by the **Church of Christ in Nations (COCIN)** in collaboration with **Jos University Teaching Hospital (JUTH)** and is located within the premises of Vom Christian Hospital, about 30 km south of Jos.

Study Population:

The study population comprised **all inpatients** admitted at CATR during the study period. Both male and female patients were included.

- **Inclusion criteria:** All inpatients on admission during the study who consented to participate.
- **Exclusion criteria:** Outpatients, individuals with severe cognitive impairment, and those who refused consent.

Ethical Considerations:

Ethical clearance was obtained from the management of CATR. Written informed consent was obtained from all

participants. Privacy and confidentiality were maintained by omitting personal identifiers such as names and hospital numbers.

Instruments and Data Collection:

Participants were administered the **Minnesota Multiphasic Personality Inventory Version 2 (MMPI-2; Graham, 1993)** to assess personality traits. Additional information collected included:

- **Socio-demographic data** (age, sex, marital status, education, employment, religion).
- **Clinical data** (comorbid medical and psychiatric conditions).
- **Substance use history** (type of substances, duration, and pattern of use).

Procedure:

Data collection was carried out by trained clinical staff under supervision of a clinical psychologist. Each participant completed the MMPI-2 along with a structured proforma for demographic and clinical data.

Data Analysis:

The collected data were cleaned, coded, and entered into a statistical package for analysis. Results were presented in descriptive form using **tables, figures, and percentages** to illustrate socio-demographic characteristics, comorbidities, types of substances used, and personality profiles of the respondents.

RESULTS:

The majority of the respondents were young single males. Their ages range from 19 to 56 years with mean age of 29.6 and (SD $\pm$ 8) as shown in table1.

Table 1. Socio -demographic characteristics

		N	%
Gender	Male	40	83.3
	Female	8	16.7
Age	Mean age	29.6 $\pm$ 8 years	
	Range	19 to 56 years	
Education	None	0	0
	Primary	6	12.5
	Secondary	32	66.7
	Tertiary	10	20.8
Occupation	Unemployed	17	35.4
	Student	10	20.8
	Trading	9	18.8
	Armed forces	2	4.2
	Civil servant	3	6.3
	Farming	7	14.6

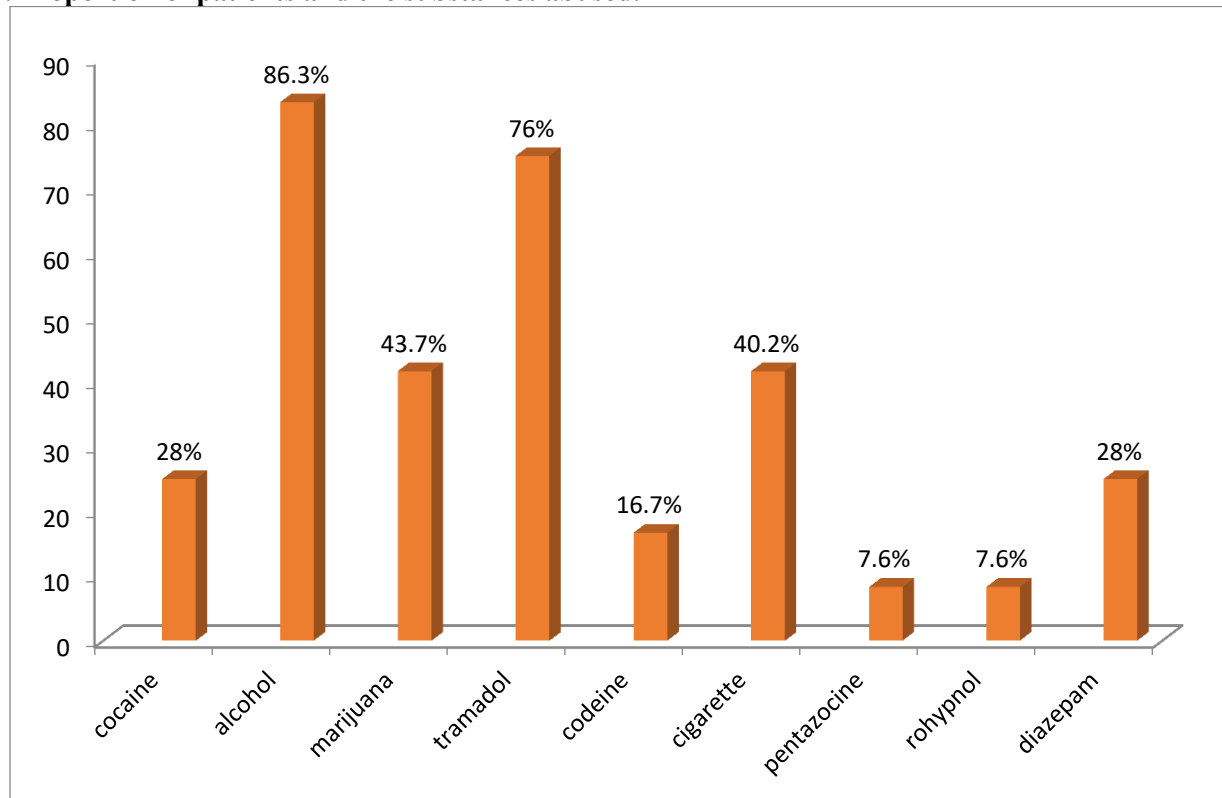
Marriage	Single	28	58.3
	Married	11	22.9
	Divorced	4	8.3
	Separated	3	6.3
	Widow(er)	2	4.2
Religion	Christianity	42	87.5
	Islam	6	12.5
	Others	0	0.0

Many had comorbid illnesses such as depression, PTSD, hypertension and HIV /AIDS as seen in table 2

Table 2. Comorbid disorders

Psychiatric disorders		N	%
	None	15	31.2
	Depression	12	25.0
	PTSD	3	6.3
	Schizophrenia- like disorder	6	12.5
	Others	12	25.0
Physical illnesses	No	28	58.3
	Hypertension	4	8.3
	Diabetes	1	2.1
	Hepatitis	3	6.3
	HIV /AIDS	1	2.1
	TB	0	0
	Malaria	1	2.1
	Others	10	20.8

Figure 1. Proportion of patients and the substances abused.



Alcohol use was the commonest followed by opioids, cannabis as graphically shown in figure 1.

The respondents had many personality types but the most prevalent was the Antisocial ,schizoid or paranoid personality as shown in table 3.

Table 3. Personality traits/types.

Personality descriptors.	N	%
Distrustful for others and /or avoidance of deep emotional ties	24	50
Disregard for social standards and authority figures	14	29
Perception of insecurity /poor self esteem /poor self concept.	25	52
Impulsiveness/poor control of gratification	15	31
Commonly associated personality types	N	%
Paranoid , schizoid	5	10
Antisocial ,schizoid or paranoid	8	17
Emotional lability	6	12
Anxious , dependent	4	8

Passive -aggressive	3	6
Antisocial	2	4
Anxious	2	4
Others	11	23

DISCUSSION:

Demography:

An overwhelming majority were single unemployed males with at least secondary school education or higher with average age of 29 years. The majority christian religion reflects the demography of the people in the community where the study was conducted (Haa, T.N et al)¹² in contrast to the findings by Onyencho et al.2015)¹³.

This finding is also similar to Abayomi et al. (2012)¹⁴ who found an average age of 31.8 in their study with most of their participants being unmarried males. Also, Eze et al. (2009)¹⁵ stated that their respondents were mostly single, unemployed males.

As for educational attainments and employment status, this study found 66% of the participants attended secondary school while 35% are unemployed while Abayomi et al. (2012)¹⁴ reported that 61.9% had less than secondary school education .

Substance abuse:

Different studies report slight variations in their pattern of substance use. Pattern of psychoactive substance use were analyzed in this study. Alcohol was found to be the Commonest drug of abuse followed by opioids and cannabis. This findings differ from Makanjuola et al. (2014)¹⁶ who found that tobacco is the most currently use substance, followed by alcohol, caffeine, and cannabis. On this the other hand , Adamson et al 2010)¹⁷ found cannabis to be the predominant drug. In another study, cannabis was found to be the most prevalent and linked to the bulk of the treatment demand (WHO, 2004)¹⁸. However, this seems to differ from the study of Gureje et al. (2007)¹⁹ which reported alcohol to be the most commonly use drug in Nigeria, followed by tobacco, sedatives, stimulant and cannabis.

In a study in South Africa, 28.9% of adolescents in Cape Town and 31.8% of Durban adolescents who presented to trauma units had positive breath for alcohol, (Parry et al., 2004)²⁰.

Comorbid illnesses:

This study found that the patients had several comorbid medical conditions such as hypertension, diabetes, hepatitis and HIV as well as mental health condition like

depression, PTSD and so on. This result is in keeping with previous reports (Makput)²¹.

Personality and substance abuse:

The role of personality in initiating and sustaining substance abuse has long been recognized by researchers. This study found that many of the patients had paranoid, schizoid antisocial personality traits as revealed by their scores on MMPI-2. This result is similar to those from a previous study done in south western Nigeria (Adamson2010)¹⁷ who also found a large number of the patients had personality descriptor of poor self-esteem/concept. This has some clinical relevance, because poor self-esteem has long been associated with drug dependence Other research teams used different personality instruments to assess patients. Sher et al. (2000)²² reported high score on measure of Psychoticism and Neuroticism among heavy users. Many were Extraverted similar to Oluwatelure (1995)²³ who found a positive correlation between Extraversion and substance abuse.

CONCLUSION:

This study found alcohol and opioids as the most common substances and the predominant personality traits among individuals with substance problems using MMPI-2 was paranoid, schizoid antisocial personality traits. High scores on these domains are strongly associated with psychoactive substance abuse.

Recommendation:

It is recommended that personality assessment should be indicated in individuals with substance abuse problem.

Limitations:

Being a hospital based study and the small sample size are possible limitations.

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Conflict of interest:

None

REFERENCES:

1. Verheul, R. (2001) Co-morbidity of personality disorders in individuals with substance use disorders. *European Psychiatry*, 16, 274–282
2. Diener, E., & Lucas, R. E. (2017). Personality traits. In R. L. substance abuse N Biswas-Diener and E. Diener P (Eds.), No b a text book services: Psychology champion. Illinois: DEF Publishers.
3. American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders, (5th Ed.). Washington D. C: American Psychiatric Association.
4. Adamson TA, Akindele MO (1994). Experience with an inpatient treatment model for alcohol and drug dependence in Nigeria. *West Afr. J. Med.* 13:105-108.
5. Gureje O, Degenhardt L, Olley B, Uwakwe R, Udofia O, Wakil A, Adeyemi O, Bohnert KM, Anthony JC (2007). A descriptive epidemiology of substance use and substance use disorders in Nigeria during the early 21st century. *Drug Alcohol Depend.* 91:1-9.
6. Adelekan ML, Ndom RJE, Makanjuola AB, Parakoyi DB, Osagbemi GK, Fagbemi O, Petu AO (2000). Trends analyses of substance use among under-graduates of University of Ilorin, Nigeria, 1988-1998. *Afr. J. Drug Alcohol Stud.* 1:39-52.
7. Reddy SP, Resnicow K, Omandien RG, Kambaran NS (2007). Prevalence and correlates of substance use among high school students in South Africa and United States. *Am. J. Public Health* 97(10):1859-1864.
8. Butcher, J. N., Mineka, S., & Hooley, J. M. (2013) *Abnormal psychology*. USA: Pearson Education Inc. Capone, C., & Wood, M. D. (2009).
9. Cox WM (1985). Personality Correlates of Substance abuse. In: Dubey C, Arora M, Gupta S, Kumar B (Eds.), *Five Factor Correlates: A comparison of substance abusers and non-substance abusers*. *J. Indian Acad. Appl. Psychol.* 36(1):107-114.
10. Lawal AM, Ogunsakin AO (2012). Drug use among people who patronize beer parlors: The function of big five personality factors and self monitoring. *Afr. J. Drug Alcohol Stud.* 11(1):37-43.
11. Graham, R. J. (1993) *MMPI-2: Assessing Personality and Psychopathology* (2nd edn). Oxford University Press.
12. Haa. T.N; M.Duwap; N.Dami; C.Maton; P.Dadem H.Emmanuel etal. A study of utilization of community meeting as an interactive strategy in substance abuse management. *World Journal of Advanced Research and Reviews* 11(1), 157-168.
13. Onyencho VC, Pindar, SK, Ibrahim ,AW, Makput,DM, Mukhtar, MY. Personality traits of in-patients with substance use disorder in a mental health facility in Nigeria. *Journal of Neurosciences and Behavioral Health*. 2016. 8(1) 1-8.
14. Abayomi O, Ojo TM, Ibrahim N, Adelufosi AO, Obasan A (2012). Prevalence and correlates of substance use among persons with mental disorders in a Nigerian psychiatric hospital. *Afr. J. Drug Alcohol Stud.* 11(1):28-34.
15. Eze G, James B, Omoaregba J, Osahon R (2009). Psychosocial characteristics of patients admitted to a drug rehabilitation unit in Nigeria. *Int. J. Health Res.* 2(4):333-338.
16. Makanjuola AB, Aina OF, Onigbogi L (2014). Alcohol and other psychoactive substance use among tanker drivers in Lagos, Nigeria. *Eur. Sci. J.* 10(15):545-559.
17. Adamson TA, Onifade PO, Ibikunle OI, Somoye EB (2010). Personality profiles of patients with alcohol and drug misused in a Nigerian treatment facility. *Int. Psychiatr.* 7(4):95-97.
18. World Health Organization (WHO) (2004). *Global status report on Turkey*, Geneva
19. Gureje O, Degenhardt L, Olley B, Uwakwe R, Udofia O, Wakil A, Adeyemi O, Bohnert KM, Anthony JC (2007). A descriptive epidemiology of substance use and substance use disorders in Nigeria during the early 21st century. *Drug Alcohol Depend.* 91:1-9.
20. Parry CDH, Plüddemann A, Louw A, Leggett T (2004). The 3-Metros study of drugs and crime in

South Africa: Findings and policy implications. *Am. J. Drug Alcohol Abuse* 30:167-185.

21. Makput DM, Nantok D, Piwuna, CG, Haa TN, Maton C. Prevalence of undiagnosed Post Traumatic Stress Disorder among in-patients in a substance use disorder treatment centre in Nigeria. *J Biomed Res Clin Pract.* 2018, 1 (2). 136-141.
22. Sher KJ, Bartholow BD, Wood MD (2000). Personality and substance use disorders: A Prospective Study. *J. Consult. Clin. Psychol.* 68:818-829.
23. Oluwatelure FA (1995). Drug beliefs and personality of undergraduate alcohol users and abstainers. *Niger. J. Basic Appl. Psychol.* 4(2&7):50-56.