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Research Article

A 10-Year Comparative Study Of Prevalence And Pattern Of Substance Abuse Among Patients In A Drug Treatment Center.

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INTRODUCTION

The abuse of drugs and substance is a global phenomenon. So much efforts has been made in many parts of the world to reduce the menace, but it seems such efforts are not yielding much fruits; but rather on the increase with attendant physical and mental health consequences. Over the last decade, drug addiction patterns have evolved, influenced by a variety of factors, including the availability of new substances, socio-economic pressures, and changes in public health approaches to treatment. According to world health organization (WHO), Substance abuse is consistently or sporadic drug use is inconsistent with or unrelated to acceptable medical practice.[1] It is seen that drug abuse and drug dependence is showing an increasing trend which is an important health problem throughout the world including Nigeria.

According to 2023 world drug report,[2] 1 in every 17 people aged 15–64 in the world had used a drug in the past 12 months. The estimated number of users grew from 240 million in 2011 to 296 million in 2021 (5.8 per cent of the global population aged 15–64). This is a 23 per cent increase, partly due to population growth. Cannabis continues to be the most used drug, with an estimated 219 million users (4.3 per cent of the global adult population) in 2021. Use of the drug is increasing and although globally cannabis users are mostly men (about 70 per cent), the gender divide is reducing in some sub regions; women account for 42 per cent of cannabis users in North America.[2]

Recent trends also indicate that the use of substances have dramatically increased worldwide, particularly in developing countries.[3,4] The vulnerable groups like child labourers, street children, those with family history of substance use and those with emotional and behavioural problems are at particularly higher risk.[5] Alcohol, Tobacco, Cannabis and opioids are most frequently use substance in Nigeria.

According to UNODC 2018 drug report, the past year prevalence of any drug use in Nigeria was estimated at 14.4 per cent or 14.3 million people aged between 15 and 64 years.[6] The extent of drug use in Nigeria was comparatively high when compared with the 2016 global annual prevalence of any drug use of 5.6 per cent among the adult population.6 Durowade et al in their study revealed that the prevalence of substance use was 71.9%, alcohol (32.0%) and over the counter drugs (29.9%) were the two most commonly used substance.[7] Mehra et al showed the prevalence of Substance use among male population was 47%, and among all the other substance use, smokeless tobacco showed highest prevalence.[8]

The interplay of biological and environmental factors contributes to the etiology, management and prognosis of substance use. Socio-economic status is also a determinants of the types of substance abused with lower classes showed a preference for alcohol and tobacco, as these are cheap and easily available while opium are favoured by the higher class.[9] Parents have a tremendous influence on their children and the children of smoker parents are twice likely to become smokers.[10] Parental disapproval of smoking makes an adolescent less likely to initiate smoking.[11] The children are also more likely to smoke whose elder siblings are smokers.[12] So it can be said that many cultural, behavioral and psychological variables interact in the development of substance abuse disorder.[13]

Despite the extensive implications arising from widespread use of alcohol and other psychoactive substances, and with the concerted efforts made by government and other agencies

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to curtail the menace, it rather seems to be on the increase. This study aims to compare and contrast the prevalence and patterns of substance abuse among participants in a drug treatment center over a period of ten years. By examining this data, the study seeks to provide a comprehensive view of the shifting trends in substance use and the effectiveness of treatment protocols over time.

MATERIALS AND METHOD

The study was conducted in a drug rehabilitation center at Jos South Local Government area of Plateau state, Nigeria, which has a population of 306,716 at the 2006 census. The center was established in 2012 with a vision of providing mental health promotion, treatment and rehabilitation for general mental illnesses and substance abuse as well as training and research. It offers residential treatment based on therapeutic community model as well as out-patient treatment. Ethical clearance was obtained from the Ethical committee of the Bingham University Teaching Hospital for the study and permission by the QHC Management to access data from records of patient's document notes

During a period of 24 months (January to December of the years 2013 and 2023), and, retrospectively, all the medical records of the patients in the drug treatment center were studied where there had been positive testing's of urine or self report of alcohol and other drugs of abuse. A total of 297 medical records were collected, out of which, 138 were selected in the year 2013 and 159 in 2023, respectively. By means of a data collection protocol the following were recorded: registration details, such as: age, sex, marital status, ethnicity, religion, occupation, educational level.

The statistical processing of the data was analyzed using SPSS version 22. Descriptive analysis was carried out. The qualitative variables have been expressed in the form of percentage and absolute number (Chi-square test and fisher's exact test) Confidence interval was set a 95%.

RESULT

Table 1: shows the socio-demographic characteristics of the subjects from both 2013 and 2023. The mean age of the subjects 2013 was 27.3±2.7 years compared to 31.7± 3.9 years in 2023. More participants 108 (67.9) in 2023 had degree level of education compared to participants 78 (56.5) in 2013, while more school dropouts 18 (13.0) were recorded in 2013 compared to in 2023, 7 (4.4). More participants were recorded in Islam religion 22 (15.9) in 2013 compared to in 2023, 14 (8.8).There were more unemployed participants 24 (15.1) in 2023 compared to participants 17 (12.3) in 2013

Table 1. Showing Socio-demographic characteristics of the Respondent.

Variables	Subjects		
	Year 2013 (N=138) n(%)	Year 2023 (N=159) n(%)	Total (N= 297) n(%)
Age group			
<18	6 (4.3)	4 (2.5)	10 (3.4)
18-32	82 (59.4)	93 (58.5)	175 (58.9)
33-47	32 (23.2)	48 (30.3)	80 (26.9)
48-62	9 (6.5)	8 (5.6)	17 (5.7)
63-77	7 (5.1)	6 (3.8)	13 (4.4)
>77	2 (1.4)		2 (0.7)
Gender			
Male	122 (88.4)	133 (83.6)	255 (85.8)
Female	16 (11.6)	26 (16.4)	42 (14.1)
Marital status			
Single	97 (70.3)	112 (70.4)	209 (70.4)
Married	38 (27.5)	46 (28.9)	84 (28.3)
Widowed	3 (2.2)	1 (0.6)	4 (1.3)
Religion			
Christianity	116 (84.1)	145 (91.2)	261 (87.90)
Islam	22 (15.9)	14 (8.8)	36 (12.1)
Educational level			
Primary	6 (4.3)	4 (2.5)	10 (3.40)
Secondary	15 (10.9)	19 (11.9)	34 (11.4)
Diploma	17 (12.3)	19 (11.9)	36 (12.1)
Degree	78 (56.5)	108 (67.9)	186 (62.6)
None	4 (2.9)	2 (1.2)	6 (2.0)
Drop out	18 (13.0)	7 (4.4)	25 (8.4)

Occupational group			
Civil servants	28 (20.3)	33 (20.8)	61 (20.5)
Students	56 (40.6)	58 (36.5)	114 (38.4)
App/unemployed	17 (12.3)	24 (15.1)	41 (13.8)
Farmer	7 (5.1)	3 (1.9)	10 (3.4)
Business/self-employ	15 (10.9)	23 (14.5)	38 (12.8)
Artisan	2 (1.4)	2 (1.3)	4 (1.3)
Clergy	2 (1.4)	2 (1.3)	4 (1.3)
Retiree	5 (3.6)	3 (1.9)	8 (2.7)
Others	6 (4.3)	11 (6.9)	17 (5.7)
Ethnicity			
Hausa	7 (5.1)	10 (6.3)	17 (5.7)
Yoruba	4 (2.9)	7 (4.4)	11 (3.7)
Igbo	9 (6.5)	12 (7.5)	21 (7.1)
Plateau indigene	51 (32.0)	36 (22.6)	87 (29.3)
Others	67 (48.6)	94 (59.1)	161 (54.2)

Table 2: shows the pattern and prevalence of alcohol/substance use among the subjects The prevalence of current multiple use of more than one substance in 2013 was 79 (57.2%) as against 70 (44.0%) in 2023. Alcohol {16 (11.6%) vs 21 (13.2%);p=0.675}; opioids {21(15.2) vs 16 (10.4); p=0.174}; cannabis {11 (8.0%) vs 14 (8.8%); p=0.796}; cocaine {6 (4.3%) vs 21 (13.2%); p=0.014}; amphetamine {2 (1.4%) vs 17 (10.7%); p=0.002}; alcohol/tobacco {9 (6.5%) vs 8 (5.1%); p=0.856}; alcohol/opioids {14 (10.1) vs 12(7.5); p=0.429}; alcohol/cannabis {7 (5.1%) vs 10 (6.3%); p=0.653}. cannabis/opioids {8(5.8) vs 6 (3.8); p=0.412}; alcohol/benzodiazepine (6 (4.3%) vs 9 (5.7%); p=0.606}, tobacco/cannabis 7(5.1%) vs 11 (6.9%); p=0.506}, alcohol/tobacco/cannabis 22(15.9%) vs 29(18.2%),p=0.601}, alcohol/tobacco/opioid 6 (4.3) vs 5(3.1); p=0.584.

Table 2. Showing Pattern and prevalence of substance use among the Respondents

Substances	**Subjects**			
	2013 (N=138) n (%)	**2023 (N=159) n (%)**	**X2**	**P-Value**
Alcohol	16 (11.6)	21 (13.2)	0.176	0.675
Opioids	21 (15.2)	16 (10.1)	1.799	0.179
Cannabis	11 (8.0)	14 (8.8)	0.067	0.796
Cocain	6 (4.3)	21 (13.2)	5.985	0.014
Amphetamine	2 (1.4)	17 (10.7)	9.052	0.002
Tobacco	3 (2.2)			
Alcohol/tobacco	9 (6.5)	8 (5.1)	0.033	0.856
Alcohol/opioids	14 (10.1)	12 (7.5)	0.624	0.429
Alcohol /cannabis	8 (5.8)	10 (6.3))	0.203	0.653
Cannabis /opioids	8 (5.8)	6 (3.8)	0.673	0.412
Alcohol /benzodiazepine	6 (4.3)	9 (5.7)	0.265	0.606
Tobacco /cannabis	8 (5.8)	11 (6.9))	0.442	0.506
Alcohol /tobaco/canabis	23 (16.6)	29 (18.2)	0.274	0.601
Alcohol/tobacco/opioids	6 (4.3)	5 (3.1)	0.584	0.584
Multiple (>1 substance)	76 (55.1)	70 (44.0)	3.179	0..075

DISCUSSION

The findings from this study reveal notable shifts in the patterns and prevalence of substance abuse over the past decade. Demographic shifts were observed over the 10 years in which the average age of participants in the treatment center increased slightly after 10 years and with a noticeable rise in female participants after the past decade. This could partly be due to population growth, and for the rise in female participants, this could be due to increase social pressure and body image issues where some of them often use drugs in attempt to change the way they look, if they feel they are too fat. There was also a noticeable rise of the unemployed/applicants involvement in drug use after a decade. This could be a coping strategy

due to psychological stress experience by the unemployed/ applicants. This is in agreement with previous studies which have demonstrated the correlation between substance use and unemployment.[14,15]

Over the ten-year period, the prevalence of substance abuse remained high, but slight shifts in the substances used were evident. The most common substances abused among participants were alcohol, opioids, cannabis, cocaine and ampheyamines. However, the relative frequency of each substance shifted slightly between the two periods. The increase in alcohol has been related to the social and cultural acceptability,[16] and the combination of alcohol and BZD or of alcohol and cocaine and cannabis has been related to the higher incidence of attempted suicide,[17,18] and with recreational and leisure factors.[19]

The decline in opioids after the past decade could be due to strict laws regarding the sell of opioids especially codein containing syrup, which was announced and endorse by agencies such as national drug law enforcement agency in the country in 2018 by the government of Nigeria.[20] Stimulants drugs such as amphetamines and cocaine saw a significant rise after the period of 10years. The increase in stimulants has been related to increase availability and accessibility,[21,22] and or the portrayals of stimulants by social media as performance enhancers or party drugs which can perpetuate misconceptions and encourage experimentation.[23]

The findings suggest that changes in societal factors, such as the increasing availability of stimulants and synthetic drugs, are influencing the nature of addiction in society. As these substances become more prevalent, drug treatment centers must adapt their approaches to address the unique challenges posed by these substances.

CONCLUSION

This 10-year comparative study on the prevalence and patterns of substance abuse highlights significant trends and shifts in the nature of addiction. Stimulants and synthetic drugs are becoming more common, and increasingly prevalent among those seeking treatment. Drug treatment centers must adapt their approaches to address the unique challenges posed by these substances. Therefore enhanced prevention strategies where public health campaigns and education programs targeting the rising abuse of drugs especially stimulants and synthetic drugs should be the watchword.

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