DRUG-USE DYNAMICS, TREATMENT NEED AND AVAILABILITY OF TREATMENT FACILITY: EVIDENCE FROM SELECTED BUNKS IN UYO METROPOLIS IN NIGERIA

UŻYWANIE NARKOTYKÓW, POTRZEBA LECZENIA I DOSTĘPNOŚĆ PLACÓWEK LECZNICTWA: BADANIA WYBRANYCH MELIN W METROPOLII UYO W NIGERII

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Abstract

Introduction: Although it has not been empirically documented, bunk patrons are commonly perceived to engage in excessive and hazardous drug use. This study investigated drug use, treatment needs and availability of treatment facilities among patrons of bunks in Uyo.

Material and methods: The snowball technique was used to recruit 189 patrons from three bunks in the Uyo metropolis. Data were collected by the researchers and research assistants using a structured questionnaire consisting of widely-used measures of drug use, treatment needs and availability of facilities. Participant mean age was 26.54 years of age.

Streszczenie

Wprowadzenie: Niniejsze badanie dotyczyło używania narkotyków przez osoby korzystające z melin (*bunks*) w Uyo, potrzeb leczenia i dostępności placówek medycznych. Bywalcy melin – choć nie zostało to potwierdzone empirycznie – są powszechnie postrzegani jako osoby, które nadmiernie i ryzykownie używają narkotyków.

Materiał i metody: Rekrutację 189 klientów trzech melin w metropolii Uyo przeprowadzono metodą kuli śniegowej. Badacze i ich asystenci zebrali dane za pomocą ustrukturyzowanego kwestionariusza składającego się z powszechnie stosowanych narzędzi mierzących używanie narkotyków, potrzeby lecznicze i dostępność placówek medycznych.

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Results: A mean DUDIT (Drug Use Disorders Identification Test) score of 32.72 and a treatment need score of 11.05 was obtained. While 83.6% of respondents were polydrug users, 64.02% had injected drugs, 42.86% had used cocaine and 38.10% had psychiatric co-morbidity. Although 52% were motivated for treatment, only 11% were currently in counselling. There was a positive association detected between drug use and treatment needs (r = 0.32, p < 0.01). Male gender is associated with more drug use (r = -0.47, p < 0.01) and fewer treatment needs (r = 0.28, p < 0.05). Years of patronage is positively related to drug use and treatment needs.

Discussion: The findings were consistent with commonly-held perceptions regarding excessive and hazardous drug use in the bunks. This could be attributed to the availability of these drugs in an atmosphere devoid of apprehension about arrest by law enforcement agents.

Conclusions: We emphasised the need to provide affordable, accessible and evidence-based treatment as well as extending the healthcare system to include drug-use problems.

Keywords: Drug addiction, Bunk patrons, Treatment needs, Facilities, Uyo.

Średnia wieku uczestników badania wynosiła 26,54 roku.

Wyniki: Średni wynik DUDIT (Testu Identyfikacji Zaburzeń Związanych z Używaniem Narkotyków) wyniósł 32,72, a potrzeby leczenia – 11,05. Większość respondentów (83,6%) używała różnego rodzaju narkotyków, 64,02% – narkotyków w iniekcjach, 42,86% – kokainy, a u 38,10% używanie narkotyków współwystępowało z zaburzeniami psychicznymi. Chociaż 52% osób było zmotywowanych do leczenia, tylko 11% korzystało z pomocy. Stwierdzono dodatni związek między używaniem narkotyków a potrzebą leczenia (r=0,32, p<0,01). Mężczyźni używali więcej narkotyków (r=-0,47, p<0,01) i mieli mniejszą potrzebę leczenia (r=0,28, p<0,05) niż kobiety. Liczba lat korzystania z melin była pozytywnie związana z używaniem narkotyków i potrzebą leczenia.

Omówienie: Wyniki były zgodne z powszechnym przekonaniem dotyczącym nadmiernego i ryzykownego używania narkotyków przez bywalców melin. Można to przypisać dostępności tych narkotyków w atmosferze pozbawionej obaw o aresztowanie.

Wnioski: Wyniki badania wskazują na potrzebę zapewnienia niedrogiego, dostępnego i opartego na dowodach leczenia, a także potrzebę umiejscowienia problemów związanych z używaniem narkotyków w systemie opieki zdrowotnej.

Słowa kluczowe: uzależnienie od narkotyków, klienci melin, potrzeby leczenia, placówki medyczne, Uyo.

■ INTRODUCTION

Drug addiction is a major public health concern for most countries, especially in developing world where resources needed to mitigate the various deleterious impacts of drug abuse and addiction are limited [1]. Widespread use of different types of psychoactive drugs among different populations has been reported [2-5] among about 275 million people worldwide, with roughly 5.6% of the global population of 15-64 years of age using drugs at least once in 2016 [1]. The report further suggests that, globally, 13.8 million young people of 15-16 years of age used cannabis in the past year, which is equivalent to a rate of 5.6%. A recent national survey of the United Nations Office on Drugs and Crime (UNODC) found that

an estimated 14.4% of the Nigerian population or 14.3 million people of 15-64 years of age had used drugs, apart from alcohol and tobacco, in 2017 [6]. In addition, 10.6 million people had used cannabis in the past 12 months, 4.6 million opioids (mainly tramadol, and to a lesser extent morphine), 2.4 million cough syrups (containing codeine or dextromethorphan), 481,000 tranquillisers, 340,000 ecstasy and 300,000 had used solvents/inhalants [6]. Furthermore, 1 of 5 of all drug users were injecting drug users, 1 in every 5 was dependent, 1 in every 3 users used cannabis, 1 in every 5 used opioids, 1 in every 7 used amphetamines and 1 in every 4 drug user was female [6].

Various health-related, social and economic problems associated with drug use are well documented [7-15]. Some of the 31 million drug users

suffer from drug use disorders [1]. Drug use has been shown to be a leading cause of violence and is a major cause of premature deaths [16]. In Nigeria, involvement of the youth in various antisocial activities, such as cultism, kidnapping, armed robbery and prostitution is often attributed to the influence of psychoactive substances [1]. Members of hidden or hard-to-reach populations have been shown to engage in a host of health-compromising behaviours like injecting drug use [14] and unprotected sex [17].

There is a huge and growing body of empirical literature on drug use in the general population, students and other easily accessible populations [2, 4, 5, 10]. It has been observed, however, that empirical evidence is scanty as regards our understanding of the dynamics of drug-use problems in hidden, hard-to-reach populations [18]. Although some researchers have reported higher and more hazardous patterns of drug use among hard-to-reach populations like injection drug users [14], law enforcement officers [18], transport workers [19] and commercial sex workers [17], there is no previous empirical documentation of drug use and treatment needs among bunk patrons.

However, in a study by Bah [20] to determine the risk and prevalence of drug abuse among street children (focusing on those in or around car parks), findings revealed a high level of drug abuse despite a reasonably high level of awareness of its negative impacts. Among this group, cannabis was the most commonly abused drug although use of cocaine, hashish and heroin was also reported [20]. Despite reported availability of treatment facility, participants were mostly reluctant to utilise the facilities due to fear of social stigmatisation, exclusion and discrimination and mistreatment by staff [20]. In one of the few available empirical investigation of drug use among hard-to-reach populations, Abdulmalik et al. [21] found high drug use and other forms of high risk behaviour among the Almajiris in northern Nigeria (Almajiri is a term used to describe children in northern Nigeria who are meant to learn the Qur'an and receive religious instructions, but mostly end up roaming the streets to beg and participate in other undesirable behaviours). According to Abdulmalik et al. [21], the prevalence of drug use among the Almajiris was 66.2% and the most frequently used drugs were stimulants (49.7%), volatile solvents (21.5%), cigarettes (19.1%) and cannabis (18.5%).

Drug treatment and control in Nigeria

In Nigeria, services are provided for people with drug-use problems by government-owned (tertiary) health facilities and some non-governmental organisations (NGOs). These facilities are mostly located in the state capitals, which implies that all potential service users that are not resident within the capital city (even some within the city, depending on residential location) would need to travel for several hours to get to the treatment facilities. The few available treatment facilities and inadequate personnel mean that waiting time would be unnecessarily extended since people congregate on the few available facilities from all over the state or even beyond. A number of NGO facilities, operating fee-based, residential treatment models (although some operate non-residential, out-patient services) also exist [22, 23]. The financial implications of accessing these privately-owned NGO treatment centres are beyond the reach of most potential service users so there is a huge gap as regards meeting drug-use disorder treatment needs. The national survey of the UNODC in Nigeria identified other barriers to treatment to include high cost of treatment, unavailability of suitable treatment and perceived stigma [6]. Another barrier to service utilisation, also traceable to inadequate facilities, is lack of awareness and/or insufficient information regarding drug treatment facilities [17, 24].

Drug use is largely perceived from a criminological perspective in Nigeria. The approach to drug control in Nigeria is supply suppression rather than demand reduction; the focus is on preventing or reducing illicit drugs in circulation, rather than discouraging individuals from getting involved in illicit drug use and offering affordable treatment to people that are already hooked. Consistent with this approach, possession of an illicit substance is a criminal offence and it is punishable by imprisonment of various durations [25, 26]. Drug users are routinely arrested, prosecuted and incarcerated. This approach, instead of curbing illicit drug use and trafficking, has engendered a networks of powerful and highly organised drug syndicates that have not only ensured availability of all types of psychoactive drugs but have also devised ingenious means of dealing with interference of law enforcement agents [27]. Obviously, this drug-control approach constitutes a huge barrier

to treatment utilisation as potential service users fear arrest [15, 17, 28].

The 2015 World Drug Report highlights a global shortage of treatment centres and limited resources for drug addiction rehabilitation [29]. Globally, it is estimated that approximately one in six problem drug users accesses treatment each year [30]. However, there are huge regional disparities, with approximately one in eighteen problem drug users receiving treatment in Africa, compared to one in five receiving treatment in Western and Central Europe, one in four in Oceania and one in three in North America [31]. Health professionals in Nigeria have described drug addiction treatment as inadequate, expensive and hard to access, while users have commonly complained of unsuccessful attempts to overcome their addiction either because treatment facilities are not available or not accessible [15]. Unfortunately, these concerns have neither been sufficiently documented not properly addressed. Given the myriad of physical, psychological, social and economic sequalae of drug use and addiction, there is need for more evidence-based efforts aimed at mitigating the problem because, as pointed out by O'Neil [32], the cost of leaving drug users untreated is often much higher than that of providing access to treatment.

Studies on treatment need and availability of facilities for people with drug use/addiction problems in Nigeria are very scant. Researchers have reported that factors such as perceived discrimination and stigma, high cost of service, centralised facility, referral practices and help-seeking preferences are crucial to utilisation and effectiveness of mental health services [33-35]. However, Abikoye [15] in a qualitative study of selected service users in Bayelsa State, Nigeria, found that perceived high costs of service, accessibility and its associated costs, unavailability of specialised centres and facilities to manage substance use disorders, manpower shortage occasioning unnecessarily long waiting time, attitudinal problems, cultural issues resulting in relapse, perceived stigma, shame and discrimination were factors responsible for service users' apathy toward seeking help for drug-related problems. The centralised system of healthcare in most parts of Nigeria could also be a reason for perception of unavailability of facilities. For instance, there is no government psychiatric hospital in Uyo, and the only facility

for treatment of drug addiction is the Psychiatric Department of the University of Uyo Teaching Hospital. Although there are few drop-in centres (DICs) in the city and a counselling unit in the National Drug Law Enforcement Agency (NDLEA), these are non-residential and only provide counselling services.

Bunk patrons represent a special group of drug users. Bunks are hostel-like facilities, established by drug barons in many urban centres in Nigeria. Apart from the ease of obtaining drugs, patrons need not worry about interference of law enforcement agents as there seems to be some implicit understanding between bunk owners and law enforcement officer. The bunks seem to enjoy 'immunity' from arrest as patrons are hardly arrested. The bunk, is therefore, seen as not just a safe haven for obtaining and using drugs of all kinds, it also provides an atmosphere of acceptance, common experience and normality without fear of stigmatisation. In fact, many patrons sleep in the bunks because they feel safe and more accepted there. Given this scenario and despite the social dynamics of life in the bunk being as yet not fully understood, drug use in the bunks is generally considered to be more excessive and more dangerous compared to that beyond the bunks. A comprehensive understanding of the problem from the perspectives of bunk patrons as well as their motivation to access treatment and availability of these treatment facilities can help shape a more robust policy and evidence-based future research direction.

There is a need, therefore, for an empirical investigation of drug use dynamics, treatment needs and availability of treatment facility of this hardto-reach but high-risk drug-user group. Considering the large number of bunks scattered across Nigerian urban centres and the wide patronage that the bunks seem to be enjoying, findings of the study would be useful to key stakeholders in driving evidence-based interventions. Findings of the study should also be useful for the policy makers on possible ways of dealing with drug abuse and treatment needs among drug users, especially those with elevated risk for drug addiction. Additionally, findings of the study should enrich the body of scientific literature on the subject matter. This study, therefore, aims to explore drug use among patrons of selected bunks in Uyo. The study is also aimed at investigating participants' treatment needs and availability of treatment facility.

■ MATERIAL AND METHODS

Setting and participants

One hundred and eighty-nine (189) respondents selected from three bunks located within Uyo metropolis participated in this descriptive cross-sectional survey using the snowball technique. Uyo, the capital of Akwa Ibom State, is located in the south of Nigeria. Uyo is a rapidly developing city with an estimated population of 1,143,689 people [36]. The three bunks are located within the metropolis and each has an average of 90 patrons. Participants' mean age was 26.54 (SD = 5.81). In terms of gender, 135 (71.4%) of participants were males while 54 (28.6%) were females. With regards to marital status, 142 (75.1%) were single, 27 (14.3%) were married, 11 (5.8%) were separated and 8 (4.2%) were divorced. One third of participants (64, 33.9%) had completed high school, 58 (30.7%) had a national diploma, 56 (29.6%) had a bachelor degree or its equivalent, 6 (3.1%) had postgraduate qualifications while only 1 respondent (0.5%) had no formal education.

Measures

Relevant data were collected using a structured questionnaire. Background information on age, gender, education and duration of patronage were collected in the first section of the questionnaire.

Drug use was assessed using the Drug Use Disorders Identification Test (DUDIT) [37] which consists of 11 items. Items 1-9 are scored 0, 1, 2, 3 and 4; while items 10-11 are scored 0, 2 and 4. The minimum scorable points on DUDIT is 0 and maximum score is 44. When the DUDIT is used in a group where one does not expect to find many drug users, a cut-off point of 6 or more for men with drug-related problems and a cut-off point of 2 or more for women are stipulated [37]. Considerable evidence supports the psychometric adequacy of DUDIT [18, 37]. In the present study, a high internal consistency (α 0.93) was obtained for DUDIT.

Treatment need of participants was measured by adapting the 20-item Vermont Treatment Needs Questionnaire (VTNQ) [38]. The questionnaire is indicated for assessing treatment needs of individuals with drug-use problems. According to the manual of the scale, levels of treatment need are categorised depending on scores obtained as follows: 0-5 indicates low treatment needs, 6-10 indicates moderate treatment needs, 11-15 indicates high treatment needs

and 16 and above indicates urgent treatment needs. An additional one item adapted from the UNODC Drug Users Questionnaire [2] assessing the current extent of treatment need for drug use problem was also employed. The treatment need was categorised into 3: 'urgent need', 'some need' and 'no need'.

Availability of treatment facility was assessed using the adapted version of UNODC Drug Users Questionnaire [2] comprising of 8 structured statement of the availability of different drug treatment and rehabilitation services in the respondent's area. The types of facilities include private hospital/clinic, psychiatric hospital, other governmental hospitals, NGO/treatment centre, home-based treatment, faith-based treatment centre, NDLEA counselling centre and traditional medical centre. Participants are required to respond on a 3-point forced-choice format: 'yes', 'no' or 'don't know'

Procedure

Purposive sampling technique was used to select three of the five bunks identified in Uyo metropolis. After obtaining permission from the bunk owners, data was personally collected through the snowball technique. A patron (focal person) was initially identified in each bunk and after necessary rapports have been established, the focal person completed the questionnaire and then invited others to be interviewed. The chain process went on simultaneously in the three bunks for two weeks after which saturation was deemed to have been reasonably attained. At the end of the two-week period, 207 copies of questionnaire were administered across the three bunks out of which 189 were returned with usable data representing a 91.30% response rate. Participation in the study was voluntary and all participants signed a consent form. Participants were informed that they were at liberty to opt out of the interview or not answer any question if they so chose. Confidentiality and anonymity were also guaranteed. Each participant received refreshments and a toilet soap upon completion of the questionnaire. The study protocol was approved by the Research Ethics Review Committee of the Ministry of Health, Akwa Ibom State, Nigeria.

■ RESULTS

Drug use

Results showed that mean score on DUDIT was 32.72 (SD = 10.55). This is considerably higher

Table I. Participant's responses Drug Use Disorder Identification Test (DUDIT) items

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DUDIT Items/Responses	n	%			
How often do you use drugs other than a	alcohol?	•			
Never	16	8.5			
Once a month or less	58	30.7			
2-4 times a month	33	17.5			
2-3 times a week	35	18.5			
4 times a week/more	47	24.9			
Do you use more than 1 type of drug on the same occasion?					
Never	31	16.4			
Once a month or less	46	24.3			
2-4 times a month	51	27.0			
2-3 times a week	28	14.8			
4 times a week/more	33	17.5			
How many times do you take drugs on a typical day when you use drugs?					
0 times	14	7.4			
1-2 times	64	33.9			
3-4 times	51	27.0			
5-6 times	28	14.8			
7 or more times	32	16.9			
How often are you influenced heavily by	drugs?				
Never	25	13.2			
Less than once a month	41	21.7			
Every month	46	24.3			
Every week	35	18.5			
Daily/almost every day	42	22.2			
Over the past year, have you felt that your longing for drugs was so strong that you could not resist it?					
Never	23	12.2			
Less than once a month	31	16.4			
Every month	45	23.8			
Every week	51	27.0			
Daily/almost every day	39	20.6			
Has it happened, over the past year, have that you have not been able to stop take once you started?					
Never	23	12.2			
Less than once a month	33	17.5			
Every month	38	20.1			
Every week	40	21.2			
Daily/almost every day	55	29.1			
<u> </u>					

Table I. Cont.

DUDIT Items/Responses	n	%
How often over the past year have you tand then neglected to do something you done?	aken dr u should	ugs I have
Never	24	12.7
Less than once a month	33	17.5
Every month	45	23.8
Every week	34	18.0
Daily/almost every day	53	28.0
How often over the past year have you take a drug the morning after heavy drubefore?		
Never	24	12.7
Less than once a month	40	21.2
Every month	32	16.9
Every week	49	25.9
Daily/almost every day	44	23.3
How often over the past year have you I feelings or a bad conscience because yo	nad guil u used (t drugs?
Never	40	21.2
Less than once a month	30	15.9
Every month	40	21.2
Eveny week	27	443
Every week		14.3
Daily/almost every day	52	27.5
	52	27.5
Daily/almost every day Have you or anyone else been hurt (mer	52	27.5
Daily/almost every day Have you or anyone else been hurt (mer physically) because you used drugs?	52 ntally or	27.5
Daily/almost every day Have you or anyone else been hurt (mer physically) because you used drugs? No	52 ntally or	27.5
Daily/almost every day Have you or anyone else been hurt (mer physically) because you used drugs? No Yes, but not over the past year	52 ntally or 70 71 48 nurse, or	27.5 37.0 37.6 25.4
Daily/almost every day Have you or anyone else been hurt (mer physically) because you used drugs? No Yes, but not over the past year Yes, over the past year Has a relative or a friend, a doctor or a ranyone else, been worried about your description.	52 ntally or 70 71 48 nurse, or	27.5 37.0 37.6 25.4
Daily/almost every day Have you or anyone else been hurt (mer physically) because you used drugs? No Yes, but not over the past year Yes, over the past year Has a relative or a friend, a doctor or a ranyone else, been worried about your desaid to you that you should stop using or	52 htally or 70 71 48 hurse, or rug use lrugs?	27.5 37.0 37.6 25.4

than the expected average score of 6 and 2 for males and females respectively in normal populations. Results also showed that while 8.5% of respondents never used drugs other than alcohol, 30.7% had used drugs other than alcohol, 17.5% had used drugs between 2-4 times in a month, 18.5% between 2-3 times a week and 24.9% at least 4 times a week. Results also indicated that 83.6% of respondents were polydrug users. Number of times that used drugs on a typical day varied from none (7.4%), 1-2 times (33.9%), 3-4 times (27.0%), 5-6

times (14.8%) to 7 or more times (16.9%). These and other results, including influence of drug use, craving for drugs, how drug use has affected other activities, guilt feelings as a result of drug use, harm to others resulting from drug use, as well as concerns by significant others about drug use, are presented in Table I.

Extents of treatment needs

We used the Vermont's Treatment Needs Questionnaire (VTNQ) to explore the extent of treatment needs among participants. A mean treatment need score of 11.05 obtained for participants in the present study indicated, according to the VTNQ norms, a need for professional treatment. Results in percent are presented in Table II. The majority of participants (64.02%) had used drugs intravenously. Only 1.59% had ever been on medication-assisted treatment and none had been successful, 42.86% had used cocaine, 38.10% had psychiatric co-morbidity and, interestingly, almost 52% were motivated for treatment although only about 11% were currently going for counselling.

Availability of drug abuse/addiction treatment facilities

Furthermore, we explored availability of treatment facilities around the residential areas of participants. Using the UNODC (2018) template, eight possible drug abuse/addiction treatment facilities were identified. Results are presented in Table III.

Results presented in Table III showed that most facilities were not available/accessible to majority of the respondents. While less than 5% reported availability of psychiatric hospital, less than 1% for NGO treatment centre, about 18% for other government hospitals and 31.69% for private hospitals/clinics. Availability was 0%, 13.23%, 4.23% and 13.23% for home-based treatment, faith-based treatment centre, NDLEA counselling centre and traditional medical centre respectively.

We performed a series of bivariate analyses in order to understand the relationships among variables in the study. Results of the bivariate analyses showed a positive association between drug use and treatment needs (r = 0.32, p < 0.01). Male gender is associated with more drug use (r = -0.47, p < 0.01) and having less treatment needs (r = 0.28, p < 0.05). Years of patronage is positively related to drug use (r = 0.41, p < 0.01) and treatment needs

Table II. Participants' responses to Vermont Treatment Needs Questionnaire items

Items indicative of treatment needs	Yes (%)	No (%)
Have you ever used a drug intravenously?	121 (64.02)	68 (35.98)
If you have ever been on medication-assisted treatment (e.g. methadone, buprenorphine) before?	3 (1.59)	186 (98.41)
If yes, were you successful? (If never in treatment before, leave answer blank.)	0	3 (100)
Do you have a chronic pain issue that needs treatment?	66 (34.92)	123 (65.08)
Do you have any significant medical problems (e.g. hepatitis, HIV, diabetes)?	37 (19.58)	152 (80.42)
Do you ever use cocaine even occasionally?	81 (42.86)	108 (57.14)
Do you ever use benzodiazepines, even occasionally?	121 (64.02)	68 (35.98)
Do you have problem with alcohol?	24 (12.70)	165 (87.30)
Do you have any psychiatric problems?	72 (38.10)	117 (61.90)
Are you currently going for any counseling?	21 (11.11)	168 (88.88)
Are you motivated for treatment?	98 (51.85)	91 (48.15)
Do you have a partner that uses drugs or alcohol?	62 (32.80)	127 (67.20)
Do you have 2 or more close friends or family members who do not use alcohol or drugs?	157 (83.07)	32 (16.93)
Is your housing stable?	71 (37.57)	118 (62.43)
Do you have access to reliable transportation?	85 (44.97)	104 (55.03)
Do you have a reliable phone number?	179 (94.71)	10 (5.29)
Did you receive a high school diploma or equivalent (e.g. did you complete > 12 years of education)?	184 (97.35)	5 (2.65)
Are you employed?	39 (20.63)	150 (79.37)
Do you have any legal issues (e.g. charges pending, probation/parole)?	7 (03.70)	182 (96.30)
Are you currently on probation?	0	189 (100)
Have you ever been charged (not necessarily convicted) with drug dealing?	78 (41.27)	111 (58.73)

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S/N	Type of facility	Yes (%)	No (%)	Don't know (%)
1	Private hospital/clinic	58 (30.69)	131 (69.31)	0
2	Psychiatric hospital	9 (4.76)	180 (95.24)	0
3	Other Government Hospitals	34 (17.99)	155 (82.01)	0
4	Non-governmental organization (NGO) Treatment Centre	1 (0.53)	188 (99.47)	0
5	Home-based treatment	0	189 (100.00)	0
6	Faith Based Treatment Centre	25 (13.23)	161 (85.19)	3 (1.59)
7	National Drug Law Enforcement Agency (NDLEA) Counselling Centre	8 (4.23)	149 (78.84)	32 (16.93)
8	Traditional Medical Centre	25 (13.23)	109 (57.67)	55 (29.10)

Table III. Availability of drug treatment and rehabilitation services in your area

Table IV. Bivariate analysis of relationships among age, sex, years of patronage, drug use and perceived treatment needs

Variable	Age	Sex	Years of patronage	Drug use	Treatment needs	Mean	SD
Age	_					26.53	5.81
Sex+	0.012	_				-	_
Years of patronage	0.28*	-0.14	_			5.65	2.11
Drug use	-0.27*	-0.47**	0.41**	-		32.72	10.55
Treatment needs	0.29*	0.28*	0.35**	0.32**	-	11.05	2.52

^{*}Coding for Sex: male = 1, female = 2

(r = 0.35, p < 0.01). These and other relationships are presented in Table IV.

■ DISCUSSION

This study was aimed at assessing the dynamics of drug use, treatment need and perceived availability of treatment facility among patrons of bunks in Uyo, Nigeria. Respondents revealed very high levels and hazardous patterns of drug use. We also found that majority of respondents were polydrug users. Although we found no prior empirical data on drug use among patrons of bunks in Nigeria, findings of the present study in these regards are consistent with results of studies in other hard-to-reach populations [17, 22, 26]. Findings of the present study also appear to lend credence to commonly-held perceptions regarding excessive and hazardous drug use in the bunks, a finding that could be attributed to availability of these drugs in an atmosphere devoid of apprehension about arrest by law enforcement agents.

Our findings on high levels of treatment needs and low rates of treatment uptake are consistent with similar findings based on other drug users group [15, 17, 22]. These findings, though not unexpected (given what is commonly "known" about bunks as a different world, where patrons engage in reckless drug use), imply serious public health implications considering that almost half of the respondents had used cocaine and many respondents were injecting drug users: cocaine use is associated with poorer treatment outcome [35, 38] while injecting drug use is associated with higher severity of disease and predicts the need for long-term treatment [35, 38].

Findings of the study also indicated that respondents were almost unanimous in their perception that treatment facilities for addiction treatment are not available. Although no previous study had examined availability of treatment facility specifically from the perspectives of bunk patrons, huge shortages of treatment facilities for mental disorders generally [33, 34], and drug addiction problems in particular [15, 22, 23, 34, 35], have been reported. Even where such facilities exist, they are mostly concentrated in the capital cities [15] thereby making accessibility very difficult. Non-utilisation of the available treatment facilities in Nigeria by people with drug use problems is, therefore, not due to lack of motivation for service uptake but rather because of a number

^{*}Correlation significant at 0.05 level

^{**}Correlation significant at 0.01 level

of barriers including fear of arrest, inadequate and urbanised system in which people need to travel long distances to the facility, extended waiting times, high costs of treatment, shame and stigma [2, 15, 17, 27, 28].

■ Conclusions

We conclude that drug use is not just high among bunk patrons, use also indicates hazardous patterns as reflected in high reporting of polysubstance use, injection, types and frequency of drugs commonly used, experience of craving, social and other life domain disruptions and compulsive use as well as harm to self and others. Majority of bunk patrons are willing to access treatment. Although most respondents had never being in treatment before, they are willing to enrol into a treatment facility if such is made available and affordable (free). Most respondents seem oblivious of available and affordable treatment services.

The strength of this study lies in its novelty and the public health implications of its findings. To our knowledge, no previous study had empirically documented drug use, treatment needs and perceived availability of facilities among patrons of bunks in Nigeria. However, like other non-experimental studies, this research may be susceptible to desirability bias, faking and human tendencies. The exploratory, cross-sectional nature of the study means that it is impossible to infer causation. Nevertheless, having put in place necessary quality control measures, these potential limitations are not strong enough to compromise the study findings and conclusions. Research on drug use among hard-to-reach populations is very scant in Nigeria. The relative dearth of empirical investigation into drug use and other high risk behaviours of these groups mean that undertaking evidence-based interventions is made practically difficult, if not impossible.

■ IMPLICATIONS AND RECOMMENDATION

Given the high level and hazardous patterns of drug use among bunk patrons as well as the danger that these portend for this group of people, their family and the society, it is imperative to consider the treatment needs of high risk groups such as bunk patrons a matter of urgent public

health concern. The high level of reported need for treatment by respondents in the present study makes provision of accessible and affordable treatment a matter of great public health importance. Treatment facilities should be made available and should not be concentrated in the cities or urban areas only. This would make such facilities easier and cheaper to access by potential users that are resident in rural and semi-urban areas. Because people with drug-related problems are usually ambivalent about treatment initiation and possible outcomes, easy access to available services the moment potential users are ready for treatment is critical. When the few available service centres are found mostly in the tertiary health hospitals (many are considered inaccessible in terms of distance and perceived cumbersomeness of procedure as at present in most Nigerian settings) the picture can be discouraging. Potential service users, such as members of the population under consideration and other hard-to-reach populations, may be lost if treatment is not immediately available or readily accessible. As with other chronic conditions, the earlier treatment is offered in the management of drug addiction, the greater the likelihood of positive outcomes. One way of achieving this is by establishing community treatment facilities that can easily be accessed at a subsidised fee.

Currently, drug use problem is largely situated in the criminal justice system in Nigeria. Individuals with a drug use problem are routinely arrested and incarcerated instead of being assisted to access treatment. This has resulted in drug users getting smarter in evading arrests while the drug control issues become more compounded. As obtained in other areas, mainstreaming or domiciling drug use problem in the healthcare system rather than in the criminal justice system has the potentials of making treatment more accessible as well as helping to normalise drug abuse treatment by reducing stigma, fear and discrimination that are commonly associated with drug abuse treatment in settings where drug use is criminalised. Therefore it is recommended that the drug use problem should be considered a health-related problem and mainstreamed in the healthcare system so that problematic users can easily access treatment. Fortunately, major stakeholders in drug control in Nigeria, including the NDLEA, are coming to the realisation that the emphasis on criminalising users and supply suppression has not been effective in

drug control. Therefore focus should be shifted to demand reduction.

The relative dearth of empirical investigation into the drug use behaviour of bunk patrons makes it difficult to understand the issues holistically and precludes evidence-based interventions. The need for more empirical investigation into drug use and other aspects of life in the bunk cannot be overemphasised.

Conflict of interest/Konflikt interesów

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None declared./Nie zadeklarowano.

Ethics/Etyka

The work described in this article has been carried out in accordance with the Code of Ethics of the World Medical Association (Declaration of Helsinki) on medical research involving human subjects, Uniform Requirements for manuscripts submitted to biomedical journals and the ethical principles defined in the Farmington Consensus of 1997.

Treści przedstawione w pracy są zgodne z zasadami Deklaracji Helsińskiej odnoszącymi się do badań z udziałem ludzi, ujednoliconymi wymaganiami dla czasopism biomedycznych oraz z zasadami etycznymi określonymi w Porozumieniu z Farmington w 1997 roku.

References/Piśmiennictwo

- 1. United Nations Office on Drugs and Crime. *World Drug Report 2018*. United Nations publication, Sales No. E.18.XI.9. Vienna: UNODC; 2018.
- 2. Atilola O, Ola B, Abiri G. Service and policy implication of substance use disorders among adolescents in juvenile correctional facilities in Lagos, Nigeria. *Global Mental Health* 2016; 3 (e30). DOI: https://doi.org/10.1017/gmh.2016.25.
- 3. Dumbili EW. Cannabis normalization among young adults in a Nigerian city. *J Drug Issues* 2020; 50(3): 286-302. DOI: https://doi.org/10.1177/0022042620912805.
- 4. Gureje O, Degenhardt L, Olley B, Uwakwe R, Udofia O, Wakil A, et al. A descriptive epidemiology of substance use and substance use disorders in Nigeria during the early 21st century. *Drug Alcohol Dep* 2007; 91(1): 1-9. DOI: 10.1016/j.drugalcdep.2007.04.010.
- 5. Mehanović E, Virk HK, Akanidomo I, Pwajok J, Prichard G, van der Kreeft P, et al. Correlates of cannabis and other illicit drugs use among secondary school adolescents in Nigeria. *Drug Alcohol Dep* 2020; 206, 107457. DOI: https://doi.org/10.1016/j.drugal-cdep.2019.04.028.
- 6. United Nations Office on Drugs and Crime. Drug Use in Nigeria. Vienna: UNODC; 2018.
- 7. Patton ON. *Behaviour health. A Handbook of Health Enhancement*. New York: Cambridge University Press; 1998.
- 8. Abayomi O, Ojo TM, Ibrahim N, Adelufosi AO, Obasan A. Prevalence and correlates of substance use among persons with mental disorders in a Nigerian psychiatric hospital. *Afr J Drug Alcohol Stud* 2012; 11(1): 29-35.
- Abiona TC, Aloba OO, Fatoye FO. Patterns of alcohol consumption among commercial road transport workers in a semi-urban community in South Western Nigeria. East Afr Med J 2006; 83(9): 494-9.
- Abikoye GE, Adekoya JA. Predicting Substance Abuse in a Sample of Nigerian Undergraduate Students: The Role of Core Self-Evaluations and Delay of Gratification. *Psychol Stud* 2010; 55(4): 299-307.
- 11. Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: implications for substance abuse prevention. *Psychol Bull* 1992; 12: 64-105.

- 12. Santi S, Best J, Brown KS. Social environment and smoking initiation. *Int J Addict* 1990; 25: 881-903.
- 13. Seeman M, Seeman TE. Health behavior and personal autonomy. A longitudinal study of the sense of control in illness. *J Health Soc Behav* 1983; 24: 144-60.
- 14. Nelson E, Abikoye GE. Syringe Sharing and the Risk of Viral Transmission among People who Inject Drugs in Nigeria: Structural, Relational and Subjective Influences on Behaviors. *J Drug Issues* 2019; 49(2): 387-404.
- 15. Abikoye GE. Factors affecting the management of substance use disorders: Evidence from selected service users in Bayelsa State. *Afr J Drug Alcohol Stud* 2015; 14(2): 115-23.
- 16. Agrawal RK, Puliyel JM, Chansoria M, Mukerejee M, Kaul KK. Comparative study of the personality correlates and the nature of drug abuse in schools and colleges. *Indian J Pediatr* 2007; 49(5): 76-85.
- 17. Nelson E, Abikoye GE. Multiple Barriers to Utilization of Drug Abuse Treatment by Female Street Sex Workers in Nigeria. *J Psychoactive Drugs* 2019; 51(4): 383-90.
- 18. Abikoye GE, Awopetu RG. Drug Use and Multidimensional Work Performance in a Sample of Policemen in Akwa Ibom State. *Afr J Drug Alcohol Stud* 2017; 16(2): 59-68.
- 19. Abikoye GE, Sholarin MA, Ineme ME, Abikoye OE, Uso ME, Osinowo HO. Optimistic Bias, Perceived Social Norms and Cannabis Use among Road Transport Workers in Ibadan Metropolis. *Int J Soc Sc* 2017; 11(3): 83-96.
- 20. Abdulmalik J, Omigbodun O, Beida O, Adedokun B. Psychoactive substance use among children in informal religious schools (Almajiris) in northern Nigeria. *Mental Health, Rel Cul* 2009; 12(6): 527-42. DOI: 10.1080/13674670902832813.
- 21. Bah YM. Drug Abuse among Street Children. *J Clin Res HIV/AIDS Prev* 2018; 3(3): 12-44. DOI: 10.14302/issn.2324-7339.jcrhap-18-2291.
- 22. Nelson EE, Dumbili EW, Odeigah OW. Drug use treatment during COVID-19 pandemic: community-based services in Nigeria, *J Subst Use* 2020. DOI: https://doi.org/10.1080/14659891.2020.1838640.
- 23. Onifade PO, Somoye EB, Ogunwobi OO, Ogunwale A, Akinhanmi AO, Adamson TA. A descriptive survey of types, spread and characteristics of substance abuse treatment centres in Nigeria. *Subst Abuse Treat Prev Policy* 2011; 6(1): 25. DOI: https://doi.org/10.1186/1747-597X-6-25.
- 24. Ezenwa M, Orjiakor T, Ukwuma M, Oraetue H, Ude E, Nweze T. Tracking opiate routes in Nigeria: Identifying trafficking routes via dealers and users of tramadol and codeine. *Bull Narc* 2019; 62: 27-47. DOI: https://doi.org/10.17863/CAM.50293.
- 25. Obot IS. The Epidemiology of Tobacco and Alcohol Abuse in Nigeria. In: Obot IS (ed.). *Epidemiology and Control of Substance Abuse in Nigeria*. Jos: Centre for Research and Information on Substance Abuse (CRISA); 1993, p. 67-87.
- 26. Kalunta-Crumpton A (ed.). *Pan-African Issues in Drugs and Drug Control: An International Perspective*. Farnham, Surrey: Ashgate Publishing, Ltd.; 2015.
- 27. Abikoye GE, Edewor DO, Sunday DB, Abayomi O, Obot IS, Nelson EE. Socioeconomic Context of Cannabis Cultivation and Trafficking in Selected Nigerian Communities. *Bull Narc* 2019; 62: 9-26. DOI: https://doi.org/10.17863/CAM.50293.
- 28. Ebigbo PO, Elekwachi CL, Nweze CF. Challenges in the treatment of drug abuse in a Nigerian female health worker: a case study applying the Wawa technique. *J Cont Psychother* 2012; 42(4): 257-64. DOI: https://doi.org/10.1007/s10879-012-9213-9.
- 29. United Nations Office on Drugs and Crime. *World Drug Report 2015*. United Nations publication, Sales No. E.11.X.10. Vienna: UNODC; 2015.
- 30. Wang PS, Aguilar-Gaxiola S, Alonso J, Angermeyer MC. Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO World Mental Health Surveys. *Lancet* 2007; 370: 841-50.
- 31. United Nations Office on Drugs and Crime. *World Drug Report 2011*. United Nations publication, Sales No. E.11.X.10. Vienna: UNODC; 2011.
- 32. O'Neil SK. *Demand side policies in the US war on drugs*. Council on Foreign Relations blog, 6 September 2011, Demand Side Policies in the U.S. War on Drugs | Council on Foreign Relations (cfr.org) (Accessed: 18.07.2021).

- 33. Gureje O, Alem A. Mental Health Policy Development in Africa. *Bull World Health Org* 2000; 78(4): 475-82.
- 34. Gureje O, Lasebikan VO, Ephraim-Oluwanuga O, Olley BO Kola L. Community study of knowledge of and attitude to mental illness in Nigeria. *Br J Psychiatry* 2005; 186: 436-41.
- 35. Patel V, Araya R, Chatterjee S, Chisholm D, Cohen A, De Silva M, et al. Treatment and Prevention of Mental Disorders in Low-income and Middle-income Countries. *Lancet* 2007; 370(9591): 991-1005.
- 36. World Bank. *Population Stat 2017-2020*. Geneva: World Bank; 2020. https://populationstat.com/nigeria/uyo (Accessed: 14.08.2020).
- 37. Berman AH, Bergman H, Palmstierna T, Schlyter F. *Drug Use Disorders Identification Test (DUDIT) Manual.* Stockholm: Karolinska Institutet; 2003.
- 38. Brooklyn JR, Sigmon SC. *Vermont Hub and Spoke Model Treatment Needs Questionnaire*. Burlington, Vermont: University of Vermont; 2015.