$See \ discussions, stats, and author \ profiles \ for \ this \ publication \ at: \ https://www.researchgate.net/publication/370638215$

Information Deficit on Injection of Drugs: Implications for Social and Behaviour Change Communication Intervention for Illicit Drugs Use in Lagos State

Article · May 2023

DOI: 10.5281/zenodo.789294	6
----------------------------	---

CITATIONS	S	READS		
0		182		
4 authors:				
	Charity Ben-Enukora		Ebele Chux-Onyekwere	
	Landmark University		Lagos State University	
	27 PUBLICATIONS 77 CITATIONS		1 PUBLICATION 0 CITATIONS	
	SEE PROFILE		SEE PROFILE	
	Agwu A. Ejem		Josephine C Odorwike	
	Landmark University		Lagos State University	
	30 PUBLICATIONS 25 CITATIONS		1 PUBLICATION 0 CITATIONS	
	SEE PROFILE		SEE PROFILE	

Information Deficit on Injection of Drugs: Implications for Social and Behaviour Change Communication Intervention for Illicit Drugs Use in Lagos State

Charity A. Ben-Enukora Department of Mass Communication, Landmark University, Nigeria ben-enukora.charity@lmu.edu.ng

Ebele Chux-Onyekwere

UCS Global Resources, Department of Mass Communication, Lagos State University, Nigeria ebelechuxonyekwere@gmail.com

Agwu A. Ejem Department of Mass Communication, Landmark University, Nigeria ejem.agwu@lmu.edu.ng

Josephine C. Odorwike Department of Mass Communication, Lagos State University, Nigeria obimfemi@gmail.com

Abstract

This study investigated the strategies and channels used by NGOs and NDLEA in the campaign against the injection of illicit drugs and the knowledge of People Who Inject Drugs (PWIDs) regarding the harm associated with drug injection before they engaged in act. The study participants include officials from NGOs (three) and NDLEA (one), and four PWIDs selected from Ikeja and Agege Local Government Areas in Lagos state. This study adopted a qualitative approach, using the in-depth interview method. The study was guided by five research questions which informed the development of the interview guide used in data collection. Constant comparative analysis was used to sort the data gathered while the thematic method was employed in data analysis. The findings of this study suggest that interpersonal communication channels in form of peer education and community outreach/engagement are the major communication strategies used by NGOs and NDLEA in the campaign against the injection of illicit drugs in Lagos state. The sampled PWIDs had no prior awareness and knowledge of harm related to the injection of illicit drugs. The NGOs and NDLEA perceived that the communication strategies and channels used in the campaign against the injection of drugs were effective but stimulating positive behaviour changes and inadequate resources were the major challenges encountered in the treatment and rehabilitation of PWIDs. The selected PWIDs were struggling to abstain from drugs but expressed positive intentions toward community-based campaigns against illicit drugs. Based on the study findings, we recommended; more preventive campaigns on drugs abuse highlighting injection of illicit drugs and their consequences, adoption of the seven Cs of effective communication and communication interventions based on Social and Behaviour Change Communication (SBCC) strategies, adequate funding of NDLEA and NGOs as well as engagement of fully rehabilitated and stable PWIDs in community-based campaigns against injection of illicit drugs.

Keywords: Communication strategies, Illicit drugs, Persons Who Inject Drugs (PWIDs), Social and behaviour change communication, SDG3: Target 3.5, Stages of Change Model (SCM)

Introduction

The United Nations Office on Drugs and Crime (UNODC, 2007) world data on illicit drug use and substance abuse show that nearly all nations report one or more drug and substance abused by citizens, especially young people. Put succinctly, the UNODC (2022) show that approximately 284 million people (5.6% of the global population), which translates to 1 in every 18 persons aged 15–64 worldwide had used a drug in 2020, of which about 35 million persons contend with drug use disorders, but only 1 in 7 individuals obtain treatment (UNODC, 2019). These statistics signify that illicit drug use and other substances have become a serious social problem across the globe and a huge challenge to sustainable development.

Additionally, the consequences of illicit drug use on diverse spheres of the society, including economic, environmental, social, and physical well-being among persons, households, and communities are rife. To the community, national and world economy, illicit drug use results in

socio-economic problems such as violence and crimes, loss in productivity, and increased healthcare expenditures due to the high cost of treatment of drug use disorder and rehabilitation which may result in the collapse of the social structure (Nyaga et al., 2019). From the standpoint of health, illicit drug use and substance abuse have a bearing on the global burden of disease. Research has observed that health implications of illicit drug use include; Cardio Vascular Diseases (CVD), lung cancer, seizures, strokes, migraines, high temperatures, cardiac failure, short-term ischemic attacks, anxiety, mood swings, and other obstetric complications such as spontaneous abortions, abruption placenta, teratogenic effects, delayed foetal growth, and premature births (National Institute on Drug Abuse, 2020). Persistent drug use can result in headache, persistent hoarseness, nervousness, depression, insomnia, inexplicable nasal haemorrhage, other related diseases, and untimely death. Consequently, about 11.8 million deaths per annum have been linked to opioid, cocaine, amphetamine, and other illicit drug use (Ritchie & Roser, 2019).

More so, illicit drug use and substance abuse "threaten the security of every nation, tearing apart our societies, spawning crime, spreading diseases such as aids, and killing our youths and our future" (Giade, 2011). Adolescents and youths who are frequently involved in illicit drug use and substance abuse become morally bankrupt, corrupt, and indifferent to societal values and ideals (Mamman et al., 2014).

Besides, sudden withdrawal from drugs usually induces strong desires, sleep disorders, lassitude, eating disorder, severe depression, and suicidal tendencies (Lerner & Klein, 2019, Gupta et al., 2022). Dependence and addiction to drugs and other simulating substances are the primary effects of illicit drug use. The compulsive desire for drugs persists despite the users' awareness of the negative consequences. This maladaptive and inappropriate behaviour predisposes the individual to high-risk of harm, engaging in sexual expeditions such as rape, homosexual and lesbian activities, commercial sex work, etc. These high-risk behaviours expose illicit drug users to Hepatitis B and C viruses, among other Sexually Transmitted Diseases (STDs), and the Human Immune Virus (HIV) infection. Furthermore, low self-esteem resulting from illicit drug use causes more damage to young people (Okafor, 2020). Hence, the United Nations resolution to improve the prevention and treatment of drug misuse, including drug addiction and harmful consumption of alcohol, is stipulated in the Sustainable Development Goal 3, Target 3.5.

Statement of the problem

With less than a decade remaining before the actualisation of the SDGs in the year 2030, illicit drug use and other substance abuse still constitute a major high-risk behaviour in Nigeria. The most recent UNODC comprehensive data on drug use in Nigeria indicate that one in seven persons aged 15-64 years had used a drug (other than tobacco and alcohol), and about 14.3 million people aged 15-64 years had used a psychoactive substance for non-medical reasons (UNODC Nigeria, 2018). Geographically, southern geopolitical zones had the highest prevalence rate compared to the northern geopolitical zones. The data further show that Lagos state is the main driver of illicit drug use in southern Nigeria, with 33% of the drug users in the whole of the southwest.

Furthermore, the data show that 21% of the high-risk drug consumers had injected drugs in the past (UNODC Nigeria 2018). Thus, a significant percentage of high-risk drug users in Nigeria, are People Who Inject Drugs (PWIDs). Injectable drug use is linked to a great deal of injection-related harms, including overdose fatalities, bacterial infections, and the spread of HIV and viral hepatitis (Phillips & Stein, 2010). More importantly, 1 in 5 persons who used drugs in the previous year experience drug-related illnesses and require treatment, but accessibility to medical assistance in Lagos state is more difficult (UNODC Nigeria, 2018), due to the number of persons in need of treatment. This suggests an obvious deficit in medical assistance and therapy for people with drug-related challenges.

Illicit drug use is a significant risk to social security, family life stability, and national development (Adigun, 2014; Akinpelu, 2021; Saladino et al., 2021). Therefore, it requires drastic

Adeleke University Journal of Business and Social Sciences (AUJBSS) PRINT 1SSN – 2971-6969 ONLINE ISSN – 2971-6977

development approaches such as the implementation of evidence-based communication interventions targeted at vulnerable populations to mitigate the burden of treatment and rehabilitation of drug users on the healthcare system and foster more social individuals and families. Past studies have examined the prevalence of blood-borne infections such as HIV, Hepatitis B and C, and Tuberculosis among People Who Inject Drugs but empirical evidence on awareness and knowledge of harm related to the injection of drugs before involvement is sparse in literature. Therefore, the objectives of the study are to:

- i. determine the communication strategies and channels used by NDLEA and NGOs in the campaign against illicit drug use in Lagos state;
- ii. assess NDLEA and NGOs' perceived effectiveness of the communication strategies and channels they have used in promoting literacy about the injection of drugs in Lagos state;
- iii. identify the challenges (if any) encountered by NDLEA and NGOs in the Treatment and Rehabilitation of PWIDs in selected rehabilitation centres in Lagos state;
- iv. examine the PWIDs awareness and knowledge of any harm related to drug injection before their involvement in drug injection; and
- v. determine the intention of the PWIDs towards total abstinence from the injection of drugs and participation in the preventive public enlightening campaign against illicit drug use after treatment and rehabilitation.

Research questions

- i. What are the communication strategies and channels used by NDLEA and NGOs in the campaign against illicit drug use and abuse in Lagos state?
- ii. What is NDLEA and NGOs' perception regarding the effectiveness of the communication strategies and channels employed in promoting literacy regarding the injection of drugs in Lagos state?
- iii. What are the challenges (if any) encountered by NDLEA and NGOs in the Treatment and Rehabilitation of PWIDs in selected rehabilitation centres in Lagos state?
- iv. Are PWIDs aware and knowledgeable of any harm related to drug injection before their involvement in drug injection?
- v. What is the intention of PWIDs towards total abstinence from the injection of drugs and participation in preventive communication campaigns against illicit drug use after treatment and rehabilitation?

Literature review

Conceptual Clarification

Illicit drugs

Drugs are substances that, when consumed, can affect one's mental processes, thoughts, attitude, conduct, and general well-being, which are frequently prescribed to treat or relieve pain or discomfort, and other ailments, and are perceived as a common practice in society (Okafor, 2020). Drug abuse may be defined as the "arbitrary" overuse, abuse, or obsession with a single drug, whether or not accompanied by a previous professional medical evaluation (Oluremi, 2012). It also refers to the undesirable use of psychoactive substances and/or unsafe use of legal prescription drugs for self-medication. Therefore, any individual controlled by a psychoactive drug, taken orally, by sniffing or injection is a 'drug abuser'.

Illicit drug use refers unapproved consumption of substances that may alter one or more of the human body functions, may reduce a person's capacity for effective performance, and may cause social, physiological, or emotional damage. Thus, illicit drug use constitutes significant threats to individual users' well-being as well as the family, community, and societal welfare. *Persons who inject drugs*

Persons who Injection of Drugs (PWIDs) refers to individuals who use subcutaneous, intravenous, intramuscular, or other routes to administer substances that are psychoactive, such as opioids,

stimulants similar to amphetamines, cocaine, sedatives, and hallucinogenic, without the approval of a certified medical practitioner (NACA, 2020). Hence, people who use medically approved selfinjection or "therapeutic injection, and body enhancement injection for athletic performance with non-psychoactive substances like steroids or other hormones are not regarded as PWIDs. Persons who Injection of Drugs are categorised based on gender (male or female), sexual orientation (heterosexual, lesbian, gay, bisexual, transgender, queer, or intersex), sexual behaviour (unprotected anal sex and transactional sex), and socioeconomic status (high, middle or low) (National Agency for the Control of AIDS (NACA), 2020).

Various studies indicate that PWIDs are a medically and socially vulnerable population. PWIDs are highly vulnerable to HIV, hepatitis, and other viral diseases (Mabuie, 2020; Iseselo et al., 2022). Access to preventive services is inadequate and many PWIDs depend on expensive emergency healthcare (Motavalli et al., 2021). Stigma constitutes a barrier to the treatment and rehabilitation of PWIDs even in healthcare settings (Muncan et al., 2020). Therefore, harm reduction programmes such as safe syringe services programmes remain the safest and most cost-effective approach to reducing blood-borne disease transmission among the PWIDS (Centre for Disease Control and Prevention (CDC), 2018; Dumchev et al., 2020; Mabuie, 2020).

Past studies have identified that psychoactive drugs may result in dependence syndrome, a collection of cognitive, behavioural, and physiological symptoms and withdrawal syndrome (Lawal & Aliyu, 2020), mental disorder, unsafe sex, disengagement from school, unproductiveness in school or work, heinous crimes like armed robbery and larceny, cultism, violence, gangsterism, and lawlessness, and death amongst others (The Recovery Village, 2022).

Illicit drug use and its control measures in Nigeria

The latest UNODC data on drug abuse in Nigeria shows that 14.3 million persons aged 15 to 64 reported using drugs in 2017, besides tobacco and alcohol (UNODC Nigeria, 2018). Most abused drugs in Nigeria include; alcohol, tobacco, Indian commonly hemp. heroin. cocaine, caffeine, glue, madras, amphetamines, benzodiazepines, ephedrine, morphine, barbiturates, and pharmaceutical opioids (mostly tramadol, and codeine or morphine to a somewhat lesser degree), as well as cough suppressants with codeine or dextromethorphan (Mamman et al., 2014; Jatau et al., 2018). Illicit drugs and other substances are used to satisfy curiosity and learn their effectiveness in stimulating happiness, relieving stress, or inducing a feeling of maturity (Mamman et al., 2014).

Past research shows that illicit drug use prevalence spans all age categories, gender, and regions but youths, teenagers, and students are the most frequently involved (Jatau et al., 2018; Okafor, 2020; Ajayi & Somefun, 2020; Durowade et al., 2021). Studies also show that peer pressure, unemployment, environment, curiosity to experiment with the unknown, self-medication, low level of formal education, ignorance of the risks associated with using illicit drugs, desire for enjoyment, dysfunctional family history as well as chaotic drug distribution are some of the factors contributing to illicit drug use among Nigerian youths (Jatau et al., 2018; Lawal & Aliyu, 2020).

Illicit drug control falls within the ambits of the National Drug Law Enforcement Agency (NDLEA). The government parastatal is saddled with the crosscutting task of combating illicit drug trafficking, production and use in Nigeria, using the conservative or traditional approach of law enforcement. The agency in collaboration with the Federal Ministry of Health also oversees evidence-based drug treatment and counselling methodologies under the Drug Demand Reduction Unit (Kato, 2019).

The federal government has embarked on various projects for illicit drugs control. In 2013 for instance, the Nigerian government in collaboration with the European Union embarked on the "Response to Drugs and Related Organised Crime in Nigeria" scheme to enhance law enforcement and legislative capability for drug control, reduce organised drug-associated criminal activity by curbing the production and trafficking of drugs, and enhance drug prevention, treatment, and care services provided by various actors (UNODC Nigeria, 2023). Over the years, government had also

promulgated various National Drug Control Master Plans (NDCMP). The first of its kind was implemented in 1999, followed by second edition executed from 2008-2013, the third phase 2015-2020, and the fourth (current) phase from 2021-2025. These projects are aimed at achieving four cardinal objectives including; access to prescription medications for health-related and scientific use, drug demand diminution, administration, and coordination (UNDOC Nigeria, 2023).

However, the illicit drugs business has continued to thrive, particularly, due to several intricate challenges associated with illicit drug trafficking in Nigeria, which include the porosity of the national borders (Lawal & Aliyu, 2020), huge profit and fortune that accrue from illegal drug business (Jatau et al., 2018), corruption, inadequate expertise intelligence, as well as low capital and human resources investment in combating drug trafficking and other related problems.

In line with the UNODC (2007) declaration of the punitive approach of drug control as counterproductive and detrimental to drug users' rehabilitation, Olajire (2019) submits that Nigerian drug control policy is reactionary, punitive, stigmatises, marginalises, and socially excludes drug users. He maintained that the system has not been an effective remedial approach and should be reversed. The International Drug Control Conventions demands that all states must take reasonable steps to avert drug use and to identify, treat, educate, care for, rehabilitate, and integrate drug users back into society, regardless of whether they have encountered the legal system, as substitutes to imprisonment and punishment (UNODC, nd). Hence, experts propose the integration of evidence-based, age-appropriate communication programmes that discourages drug-use behaviours for combating illicit drugs in Nigeria's context.

Social and behaviour change communication (SBCC) intervention

SBCC is a socio-ecological model that consistently employs participatory, theory, and researchdriven communication techniques to guide decision-making and influence personal, community, and societal changes in socially undesirable conditions (Ministry of Health and Family Welfare Government of India, 2013; Ngwu, 2017; John, 2020). The constituents of SBCC intervention are; Advocacy, Social Mobilisation, and Behaviour Change Communication (BCC) strategies. These strategies are often mixed and concurrently employed to address "unacceptable" belief systems, myths, attitudes, and unhealthy cultural practices which constitute threats to societal development (Ngwu, 2017).

i. Advocacy

Advocacy strategy refers to the use of composite media channels and resources from social and political authorities to promote public enlightenment of a social problem as well as. Thus, advocacy could be targeted at decision-makers, lawmakers, opinion leaders, and the general public.

ii. Social Mobilisation

SBCC's Social mobilisation strategy aims at the mobilisation of local intelligence and community efforts for wider participation, coalition building, and ownership in solving a social problem. Social mobilisation relies on the use of participatory approaches in bringing about solutions to development challenges.

iii. Behaviour change communication (BCC)

BCC refers to the promotion of personal level changes in knowledge, undesirable attitudes, and behaviours among certain populations, using the mass media, social media, and interpersonal communication channels such as community engagement. BCC interventions are often embedded in change theories such as the Trans-Theoretical Model (TTM).

Theoretical framework

This study is anchored on the Social Learning Theory and Trans-Theoretical Model (TTM) otherwise known as the Stages of Change Model (SCM). The Social Learning hypothesis developed by Albert Bandura (1986) assumes that most behaviour patterns are learned through observation, imitation, and modelling. Thus, an individual observes other people and uses their behaviour as a

model for future behaviour. The theorist explained that interactions with other people (such as friends, peers, parents, guardians, mentors, or role models) in the social context stimulate learning. However, learning may occur without a change in behaviour (Bandura, 2006). Therefore, there is no guarantee that learning would automatically result in a behaviour change.

The theorist posits that the learning process consists of four interrelated activities; attention, retention, imitation, and motivation. An observer must focus on the prototype to recall the action observed. Imitation is the actual reproduction of observed motor activities. There could be a problem to replicate the behaviour demonstrated by a model where an observer is not ready to replicate the action. This is where motivation comes in.

Motivation is a driving force for modelling to occur. Motivation determines the magnitude to which a person demonstrates the behaviour learnt. However, these factors are not constant as various individuals tend to imitate similar behaviour distinctively. Thus, usage or dependence on drugs could result from social learning. Therefore, being close friends with people who use drugs and other substances is a risk factor for illicit drugs use and substances abuse (Unaogu, et al., 2017; Wubetu et al., 2020), even in the emerging adult population (Keyzers et al., 2020). Some persons may test, quit, or rarely use drugs without experiencing serious consequences, whereas others may become addicted and progress to more perilous drugs with severe harm to the individual, their families, communities, and society as a whole.

The Trans-Theoretical Model (TTM) or Stages of Change Model (SCM) as originally conceived by Prochaska and Diclemente (1983) explains that behaviour change occurs in a five-step process which includes pre-contemplation, contemplation, determination/preparation, action, and maintenance. The theory has been modified to accommodate two more stages; relapse/recycle and transcendence (Ben-Enukora, 2022). Thus, the TTM/SCM illustrates that the process of decision-making in behaviour change involves seven stages that may be cyclical (rather than linear) for individuals who experience a relapse. TTM-based behaviour change interventions have been successfully applied in illicit drug use, drug addiction, and drug disorder programmes. For PWIDs, therefore, behaviour-change communication interventions that suit the specific information needs of individuals at each stage are required to drive them through the stages until they have transcended to a new life and integrated into society.

Methodology

The study was conducted in Lagos state, the epicentre of drug trafficking activities and illicit drug use in Nigeria (Vanguard, 2021). Lagos is the second-largest state in Nigeria, with approximately 6.4 million residents aged 15-64. Lagos state has the highest rate of illicit drug use in southwest, Nigeria (UNODC, 2018). This study adopted a qualitative approach, using the in-depth interview method to elicit information from the government agency responsible for drug control (NDLEA), Non-governmental organisations in charge of the rehabilitation of illicit drug users as well as People Who Inject Drugs (PWIDs).

Purposive sampling was employed in selecting the representatives of the three NGOs who are part of the intervention programmes for PWIDs in Ikeja and Agege local government areas and the NDLEA official who is the spokesperson of the drug law enforcement agency. Due to the absence of comprehensive data on the population of PWIDs in the selected local government areas and the difficulty in eliciting responses from random drug users, purposive sampling was employed in selecting four PWIDs (two females) and (two males) out of the six PWIDs who are enrolled into rehabilitation intervention programme in the study areas as at the time of this study. The PWIDs were selected based on the absence of obvious signs of psychosis at the time of this study.

Data were collected from the PWIDs through a face-to-face in-depth interview method, using a self-designed interview guide and responses were tape-recorded, whereas interviews for the NGO representatives and the NDLEA official were conducted via the WhatsApp platform. Data

collected were transcribed, coded according to relevant themes, and descriptively analysed in relation to the research questions.

Ethical consideration

All participants were informed about the objectives of the study, the confidentiality of their responses, the freedom to decline their response to any perceived uncomfortable questions, and to quit the study at any time without consequence. Oral consent was obtained from all participants before the interview and all personal identifiers were eliminated to ensure the anonymity of the data source.

Data presentation/analysis

Peer education and community outreach as major communication strategies in the campaign against injections of drugs

It is not a matter of how often we engage in the campaign against illicit drug use. It is a routine. The Agency has a bifocal mandate of suppressing the supply of drugs and equally reducing drug demand. So as we arrest offenders and seize the drugs, we also sensitized the public to the inherent dangers and consequences. We also help people who are hooked on drugs to come out of it (NDLEA official).

Our outreach targets are properly delineated into the general populace, schools and out-of-school, workplaces, motor parks, worship centres and what have you. They are reached through general sensitization, public lectures, distribution of information and education materials, counselling, etc. (NDLEA official).

We visit the communities where they practice the injection of drugs and talk to them. The message is for them to stop taking drugs and practice injections safety where they cannot stop it instantly (NGO 1).

We conduct daily peer education through a trained PWID community member in their bunks thus sensitise the community on drug abuse and misuse; the organisation links them to KP-friendly psychological services in or outside the state thus they commence the rehab processes (NGO 2).

The organisation does harm-reduction interventions for drug users. They use two models: peer-level model and fixed model site. At the peer-level model we do overdose education, and we distribute clean syringes. We also do peer education and injections safety. We exchange and share IEC (information, education, and communication) materials during community-based education and Gender-Based Violence (GBV) education (NGO 3).

The results as presented above indicate that NDLEA generally sensitises the public through interpersonal communication channels whereas the NGOs engage in peer education and injection safety campaign targeting the PWID. This implies that NGOs engage more in reactive response rather than preventive communication campaigns. Therefore, there is a need for an aggressive communication campaign by the NGOs to supplement the drug agency's efforts in ensuring that young people know more about the dangers of illicit drug use. Catching them young should be the utmost concern.

Perceived effectiveness of the communication strategies and channels used by NDLEA and NGOs in the campaign against the injection of drugs

Yes, for the fact that people are getting aware of the dangers and consequences and the harm drug is doing to humanity. Drug has been returned to the burner as a pandemic to the extent of a state of emergency. It is no longer business as usual! (NDLEA official).

The sensitisation through peer sessions has helped the PWID in our community not to share needles and syringes even with their best friend (NGO 1).

Yes, the sensitisation through peer education has been effective, because some of the community members now practice injection safety, (they now have a popular slang "one man, one niddle"). This has helped in harm reduction amongst the PWID community (NGO 2).

The intervention has been effective. At least we have succeeded in making a good number of them use clean needles and syringes (NGO 3).

The results presented above show that the interventions by NGOs and NDLEA have only succeeded in promoting injection safety among the PWID. Hence, more needs to be done in the area of the preventive campaign and overdose education for the PWID.

PWIDs with special needs are referred to special centres for treatment

All the Agency formations across the nation undertake counselling services. People continue to receive help from our offices across the country in their thousands. Some visit our centres voluntarily for help, some are referred to the centres and we get some from the scene of operation. We work with those that require psycho-therapy and refer those that require medical therapy to appropriate centres. We do visit and call them as follow-up and for data collection (NDLEA official).

Sometimes we refer the clients to special rehabilitation centres for PWID, but we attend to clients with immediate medical needs. For instance, if the PWID has an injury on the body which is common among PWID, we treat and counsel the patients. We, also test them for HIV. Then, we enrol positive patients into care and start management (NGO 1).

The organisation links the PWID to KP-friendly psychological services in or outside the state to commence the rehab processes (NGO 2).

We do referrals and linkages for other services such as mental health and other psychosocial services; we give them PREP (Pre Exposure Prophylaxis). This is medication to prevent someone from getting HIV. We also do hepatitis screening we also do Post-GBV care and give medication to those who already have HIV. For those that have abscesses as a result of injecting drugs, we do abscess management for them at the clinic (NGO 3).

The results presented above indicate that both the NGOs and NDLEA engage in the rehabilitation of the PWID whereas patients with special needs are referred to special centres for treatment. Stimulating positive behaviour changes and inadequate resources are the major challenges encountered in the Treatment and Rehabilitation of PWIDs.

Asking whether the agency encounters any challenge is an understatement. We face a lot of challenges. Our centres are not adequate given the demand and they are also not adequately equipped due to lack of funding. We need to accommodate more affected persons, hence the call to public-spirited individuals to partner with the Agency. We need the support of Governmental and Non-Governmental and Civil Society Organisations (NDLEA official).

Everything we do is voluntary. The client must give consent before testing and management. So, where the client refuses to give consent there is nothing we can do about it (NGO 1).

Yes, you know behaviour change is a process. Some PWID often time have a relapse due to withdrawal and some often time tend to go back to drugs even during the rehabilitation process of after it (NGO 2).

For now, we do have the approval to use the medicine for overdose management in drug users which is Naloxone. Once approval is given, Naloxone for overdose management and therapy will be provided (NGO 3).

The results show that both the NGOs and the NDLEA encounter challenges in the course of treating and rehabilitating the PWID. Prominent among these challenges are stimulating positive behaviour changes among the PWID and inadequate resources at their disposal.

PWIDs had no exposure to public awareness campaigns against the injection of drugs.

I didn't know about it. I started taking it more than 15 years now. I saw my friends taking it. So, I just join them to catch fun. From then, I continued using it (PWID 1, female)

Me, I no dey aware ooo. Na the time wey we dey secondary school I start am. When we go school, if teacher no come out, some of our friends from outside go carry am come. Na through my friends. You know they say na idle mind na devil workshop. When we dey together, if one person take am, another person go like take. Na wetin person take im hand dey do. Nobody force me (PWID 2, Male).

I never knew that drug has serious implications before I started taking it. I started using it at a tender age (PWID 3, Male).

I no hear any bad thing about drug before. I just follow my friends take the thing. No body tell me say the thing bad before I start taking it (PWID 4, Female).

The results show that all the respondents were not exposed to public awareness campaigns against drug abuse before embarking on illicit drug use. The drug users started engaging in illicit drug use at a tender age due to peer influence. This implies that lack of awareness about drug abuse is one of the factors that hamper progress in the prevention of illicit drug use.

PWIDs had no prior knowledge about the dangers of illicit drug injection.

I didn't know of any implication oooo! For my mind, I see it as normal thing to be doing. I didn't know that it has implications (PWID 1, female). I no dey aware before. But now, as we don grow to know things, I know that sometimes e fit kill, sometimes e fit make person mad and some kind many things wey fit come out of it (PWID 2, Male). I didn't have any knowledge about the dangers of drug before I started using it (PWID 3, Male). Like I said before, no body tell me anything about it before. Na when the thing come affect me, I come know say e no good for body (PWID 4, Female).

The results show that all the selected PWIDs had poor knowledge of the associated harm from illicit drug use prior to involvement in the injection of drugs. This implies that ignorance about the consequences of illicit drug use is a major factor militating against the prevention of illicit drug injection. The data suggests the need for a massive preventive campaign aimed at educating the youths about injection of drugs and its related harms.

Quitting drugs is not easy

I am trying to stop taking it. It is a gradual process (PWID 1, female).

Eeeeh! I believe say I go fit with the help of God. But no be when person rehab the person go still dey idle. If person go rehab finish, come dey busy, all those things fit comot for im mind (PWID 2, Male). Change of behaviour takes time. Some of us after agreeing to stop drug sometimes still go back to drugs, even the ones that have been to rehab before (PWID 3, Male).

E no dey easy at all but I dey try. As I dey go through rehab now, I dey improve small but sometimes I go take small if I no get myself (PWID 4, female).

The results illustrate that venturing into illicit drug use is easy but abstaining from it is difficult as sudden withdrawal can lead to craving, lassitude, depression, sleep disorder, and suicidal tendency amongst others. Hence, prevention is better than cure. Therefore, a preventive campaign against illicit drugs should be the focal point towards the actualisation of the SD Goal.

Willingness to join in community-based campaigns against drug:

I will join in the campaign because it has done a lot of danger to my life. I have even started my own campaign within the PWID community here. I am encouraging young children and adults like me to quit drugs. So, I am telling them both men and women to stop drug intake, because I know where I suppose to be today but drugs shit me back from being there. I do outreach to stop taking it because it has a lot of damage (PWID 1, female).

Yes, I go give 100% support for the campaign. I go like join so that my people go know how the thing take be. I go talk to them well. When they see changes we dey with me, them too go understand (PWID 2, Male).

We have started conducting daily PWID peer sessions and periodic review meetings with our community members to inform them about the risks and dangers of drugs (PWID 3, Male).

I go like to support any campaign wey go spread information about drugs. I no pray for my pikin or even anybody pikin to dey like me. I no like my condition at all. I go help to tell people how the thing take bad reach (PWID 4, Female).

Also, the results demonstrate that all the respondents expressed willingness to join in communitybased campaigns against illicit drugs and have already started doing so within their PWID communities. This result shows that the PWID having understood that illicit drug use threatens good health and well-being, are willing to use themselves as examples to educate their community members about the dangers of illicit drug use and abuse.

Discussion of findings

This study sought to find out the communication strategies and channels used by NDLEA and NGOs in the campaign for illicit drug use in Lagos state. The findings indicate that the NDLEA engages in public awareness via interpersonal communication channels. The selected NGOs engage more in peer education and injection safety campaign targeting the PWIDs. Research has demonstrated that peer education positively influences the norms, attitudes, and believes and promotes the reduction of harm and the spread of HIV among PWIDs (Mabuie, 2020). Interventions for drug abuse do not only imply averting the development of harmful use and drug use disorders for those who have already started using drugs but also the preventive campaigns that aim at avoidance or delay of the use of psychoactive substances among young persons. Effective prevention involves the positive engagement of children, youth, and adults with their families, schools, workplaces, and community. The findings established that the communication strategies and channels used by NDLEA and NGOs in the campaign against illicit drug use and abuse in Lagos state have succeeded in promoting injection safety among the PWIDs. This is a step in the right direction. Unsafe injection behaviours like sharing infected needles increase the transmission of blood-borne diseases including hepatitis B, C, and HIV. Access to intervention schemes like needle and syringe services and opiate replacement therapy, reduce harm and lower morbidity and mortality among this vulnerable population (UNODC, 2018). Therefore, understanding injection practices and behaviours of PWIDs is an important first step to effectively target such interventions.

However, bearing in mind, the health implications of illicit drug use and its potential harm to the safety and development of society, preventing drug use is more important. Since the UNODC document shows that there is an increase in the prevalence rate of illicit drug use in the state, it suffices to say that the communication strategies and channels have not yielded success in preventing illicit drug use. Therefore, the Seven Cs of effective communication intervention as recommended by de Fossard (1998 as in The Communication Initiative Network, 2003) could be integrated into the communication activities for drug intervention. Thus, future communication interventions must: command attention using attractive messages, fascinating characters, and exciting plots; cater to the heart and the head of the target audiences using appropriate tone and appeals to the emotions as well as the reasoning of the audience; use simple and direct messages with the strongest points are given at the beginning of the message to ensure clarity; communicate the benefits of abstinence from the injection of drugs while illustrating the consequences; create trust by using credible and reliable information sources; call the target audience to action by stating clearly what they must do after exposure to the communication activities. This may include seeking counselling, adopting a positive behaviour, and advocating the same to their family members, friends, and community people; appropriate use of key messages to ensure consistency and support for all the programme materials.

Furthermore, the PWIDs did not remember being exposed to public awareness campaigns against drug use prior to engagement in illicit drug use. Peer influence was reported as the major factor that induced the injection of drugs among the selected PWIDs. This result corroborates previous findings which reported having friends that abuse drugs and substance risk factors for drug and substance use (Unaogu et al., 2017; Wubetu et al., 2020). However, pain or depression, availability of drugs, unemployment, poverty, and rapid social and economic change are identifiable socio-demographic factors contributing to drug use (International Centre for Research on Women, 2016). The study established poor knowledge of harm relating to illicit drug use before engagement

in the injection of drugs. More so, abstinence from the injection of drugs is difficult, even though there is a positive attitude towards engagement in community-level preventive campaigns against illicit drug use. First-hand risk information may allure stronger reactions than information that has been filtered by numerous individuals (Ben-Enukora et al., 2022).

Conclusion

This study established that peer education and community outreach/engagement are the major communication strategies used by NGOs and NDLEA in the campaign against the injection of illicit drugs in Lagos state. The communication strategies were perceived to be effective by the selected NGOs and NDLEA, but difficulties in stimulating positive behaviour changes and inadequate resources constitute hindrances to the treatment and rehabilitation of PWIDs. The sampled PWIDs had no prior awareness and knowledge of harm related to the injection of illicit drugs before engaging in the act. More so, the PWIDs expressed positive intentions towards community-based campaigns against illicit drugs even though they are struggling to abstain from the injection of drugs.

Recommendations

Based on the findings of this study, we recommend:

- i. NDLEA and NGOs should go beyond interpersonal communication to communication interventions that are based on Social and Behaviour Change Communication (SBCC) strategies using integrated media channels including community radio magazine programmes, community-wide events such as community/participatory theatre, community dialogue, traditional ceremonies, religious and social gatherings, TV game show, radio and TV serial drama, youth-friendly graphic materials, social media, and SMS messaging along capacity building (training of community agents and volunteers) and communication impact assessment.
- ii. Adoption of the Seven Cs of effective communication intervention.
- iii. Adequate funding of NDLEA and NGOs for large-scale preventive intervention campaigns, rehabilitation, and treatment of persons who inject drugs.
- iv. More preventive campaigns on drug abuse with a highlight on injections of drugs and their consequences.
- v. Behaviour Change Communication interventions based on the TTM/SCM are desirable for sustainable behaviour change among the PWIDs under rehabilitation. Drawing from Ben-Enukora's (2023) TTM/SCM's case study on substance abuse, the PWIDs at the pre-contemplation stage, interventionists are required to increase awareness about the consequences of drugs and the benefits of abstinence through interpersonal communication channels. Motivation and encouragement are required to stimulate behaviour change for those at the contemplation stage. Communication efforts should be geared towards reinforcing the benefits of behaviour change at the preparation stage. Follow-up communication would reinforce consistent action for those in the action stage. Communicating the alternatives to drugs and engaging in physical activities would bring about a stable lifestyle for those in the maintenance stage. Finally, support for those in relapse and community engagement for those at the transcendence stage would help to discourage stigmatisation.
- vi. Engaging fully rehabilitated and stable PWIDs who have transcended to a new life and are willing to participate in community-based campaigns against illicit drug injection.

References

Abasiubong, F., Udobang, J. A., Idung A. U., Udoh S. R., & Jombo H. E. (2014). Pattern of psychoactive substance use in the Northern region of Nigeria. *African Journal of Drug and Alcohol Studies*, 13(2), 107-115

- Abdu-Raheem, B. O. (2013). Sociological factors to drug abuse and the effects on secondary school students' academic performance in Ekiti and Ondo States, Nigeria. *Contemporary Issues in Education Research*, 6(2), 233-240.
- Adesina, E., Omojola, O., Imhonopi, D., Adeyeye, B., Ben-Enukora, C. & Aneke, S. (2021). Information sources and practices towards Hiv/Hepatitis B co-infection in Lagos, Nigeria. *International Journal of Biology and Biomedical Engineering*, 15, 285-297.
- Adigun, A. A. (2014). Prevalence of and motivation for drug abuse among students of tertiary institutions in Kwara State. Unpublished M.Ed Project, Department of Counsellor Education, University of Ilorin, Ilorin, Nigeria
- Ajayi, A. I. & Somefun, O. D. (2020). Recreational drug use among Nigerian university students: Prevalence, correlates and frequency of use. *PLoS ONE*, 15(5), e0232964. https://doi.org/10.1371/journal.pone.0232964
- Akoja, M. & Adefarasin, T. (2019). Effect of Communication Intervention Strategies on Awareness, Knowledge and Perception of Teachers' on Substance Abuse among Adolescents in Yaba/Shomolu Local Government. New Media and Mass Communication, 83, 36-50.
- Akinpelu, I. L. (2021). Drug Abuse, Youths and National Security Implications for Nigeria. International Journal of Research and Innovation in Social Science, V (Issue XII), 234-244.
- Ben-Enukora, C. A., Adeyeye, B. K., Adesina, E., Ajakaiye, O. O. P. & Adekanye, O. (2022). Risk communication sources and knowledge of Lassa fever in Nigeria: An impact analysis. *Heliyon*, 8, 11, e11335. https://doi.org/10.1016/j.heliyon.2022.e11335
- Ben-Enukora, C.A. (2023). Health Communication Models, Theories and their Applications in Africa. In: Okorie, N., Ojebuyi, B.R., Okpara, N. (eds.), *Media and Communication Theory* in Africa (pp. 257-294). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-14717-3_12
- Centers for Disease Control and Prevention. (2018). Persons Who Inject Drugs (PWID) Retrieved from https://www.cdc.gov/pwid/index.html
- Giade, A. (2011, June 30). *How Nigeria's latest drug abuse defies legislation*. Daily Trust. Retrieved from http://www.dailytrust.com.ng/daily/old/index.php/feature/42852-hownigerias-latest-drug-abusedefies-legislation.
- Dumchev, K., Sazonova, Y., Smyrnov, P., Cheshun, O., Pashchuk, O., Saliuk, T. & Varetska, O. (2020). Operationalizing the HIV prevention cascade for PWID using the integrated biobehavioural survey data from Ukraine. *Journal of the International AIDS Society*, (Suppl 3), e25509. doi: 10.1002/jia2.25509.
- Durowade, K. A., Elegbede, O. E., Pius-Imue, G. B., Omeiza, A., Bello, M., Mark-Uchendu, C., Adedipe, A., Aluko, O., Adeyeye, O., Akinola, O. M., Famuyiwa, O., Money, R., Ogbonna, T. (2021). Substance Use: Prevalence, Pattern and Risk Factors among Undergraduate Students in a Tertiary Institution in Southwest Nigeria. *Journal of Community Medicine and Primary Health Care*, 33(2), 83-99. https://dx.doi.org/10.4314/jcmphc.v33i2.6
- Federal Republic of Nigeria (2013). NDLEA Annual report, Lagos, Nigeria. NJ: Erlbaum.
- Gupta, M., Gokarakonda, S. B. & Attia, F. N. (2022). Withdrawal Syndromes. National Library of Medicine. https://www.ncbi.nlm.nih.gov/books/NBK459239/
- International Center for Research on Women (2016). Fact Sheet on Drug Addiction and HIV. Retrieved from https://www.icrw.org/wp-content/uploads/2016/10/Fact-Sheet-on-Drug-Addiction-and-HIV.pdf
- Iseselo, M. K., Tarimo, E. A. M, Sandstrom, E. & Kulane, A. (2022). Awareness and willingness to use HIV oral pre-exposure prophylaxis among people who inject drugs in Dar es Salaam, Tanzania: A cross-sectional survey. *PLOS Glob Public Health*, 2(11), e0000776. https://doi.org/10.1371/journal.pgph.0000776

- Jackson, K. M., Janssen, T. & Gabrielli, J. (2018). Media/Marketing Influences on Adolescent and Young Adult Substance Abuse. *Current Addiction Reports*, 5(2), 146-157. Doi: 10.1007/s40429-018-0199-6.
- Jatau, A.I., Sha'aban, A., Gulma, K. A., Shittu, Z., Mohammed, K. J., Isah, A., Wada, S.A. & Mohammed, M. (2018). The menace of drug abuse in Nigeria: A clarion call. Book of Abstracts of the 16th National Scientific Conference and Annual General Meeting, Neuroscience Society of Nigeria, Dutse. Retrieved from https://www.researchgate.net/publication/331993786_The_Menace_of_Drug_Abuse_in_Nig eria_A_Clarion_Call
- Jatau, A. I., Sha'aban, A., Gulma, K. A., Shitu, Z., Khalid, G. M., Isa, A., Wada, A. S. & Mustapha, M. (2021). The Burden of Drug Abuse in Nigeria: A Scoping Review of Epidemiological Studies and Drug Laws. *Public Health Review*, 29(42), 1603960. Doi: 10.3389/phrs.2021.1603960.
- John, G. (2020). Social and behaviour change communication (SBCC) strategies and the fight against drug abuse in Ccalabar south local government area, cross river state. *International Journal of Advanced Mass Communication and Journalism*, 1(2), 01-10.
- Kato, M. (2019, February 11). An evolving drug control response in Nigeria. The Guardian. Retrieved from https://guardian.ng/opinion/an-evolving-drug-control-response-in-nigeria/
- Lakhanpal, P. & Agnihotri, A., K. (2007). Drug abuse an international problem: A short review with special reference to African continent. *Journal of Medicine and Toxicology*, 1(1), 1-11.
- Lawal, N. & Aliyu, Al. M. A. (2020). Assessment of Causes and Effects of Drugs and Substances Abuse among Youth: A Case Study of Katsina Metropolis, North West Nigeria. *International Neuropsychiatric Disease Journal*, 14(1), 1-9.
- Lerner, A. & Klein M. (2019). Dependence, withdrawal and rebound of CNS drugs: an update and regulatory considerations for new drugs development. *Brain Communications*, 1(1), fcz025. doi: 10.1093/braincomms/fcz025. PMC7425303.
- Nguyen, T.M.T., Tran, B. X., Fleming, M., Duc Pham, M., Nguyen, L. T., Nguyen, A. L. T, Le, H. T., Nguyen, T. H., Hoang, V. H., Le, X. T. T., Vuong, Q. H., Ho, M. T., Dam, V. N., Vuong, T. T., Nguyen, T., Nguyen, H. L. T., Do, H. P., Doan, P. L., Nguyen, H. H., Latkin, C. A., Ho, C. S. H. &. Ho, R.C. M. (2019). HIV knowledge and risk behaviors among drug users in three Vietnamese mountainous provinces. *Substance Abuse Treatment, Prevention, and Policy*, 14, 3 (2019). https://doi.org/10.1186/s13011-019-0191-8
- Ngwu, U. I (2017). Campaign against Self-Medication Practices in Rural Nigeria: A Social and Behaviour Change Communication (SBCC) Approach. *CRUTECH Journal of Communication*, 1(1), 170-177.
- Nnam, M. U., Onya, V. O., Obi, C. F., Ogbonnaya, C. E. & Arua, M. C. (2021). Towards Noncustodial Harm Reduction in Substance Abuse Amongst Youths: The Need to Incorporate Social Marketing Interventions into the Nigerian Legal Framework. *Scientific African*, 12, e00799. https://doi.org/10.1016/j.sciaf.2021.e00799.
- National Agency for the Control of AIDS (NACA) (2020). National Guidelines for Implementation of HIV Prevention Programmes for People Who Inject Drugs in Nigeria. Retrieved from https://naca.gov.ng/wp-content/uploads/2020/08/PWID-draft-guideline.pdf
- National Drug Control Master Plan 2021-2025 NDCMP. Retrieved from https://www.unodc.org/documents/nigeria/NDCMP_2021-2025.pdf
- National Institute on Drug Abuse (2020). Drugs, Brains, and Behavior: The Science of Addiction Addiction and Health. Retrieved from https://nida.nih.gov/publications/drugs-brainsbehavior-science-addiction/addiction-health
- Nyaga, J., Mwaura P., Mutundu K., Njeru D., Juma, G. & Were T. (2021). Socio-Economic and Health Consequences of Drugs and Substance Use in Gachie, A Peri-Urban Town on the Outskirts of Nairobi. *African Journal of Alcohol & Drug Abuse*, 6, 67-80.

- Mamman, H., Othman, A. T. & Lian, L. H. (2014). Adolescent's and drugs abuse in Nigeria. *Journal of Biology, Agriculture and Healthcare*, 4(1), 5-9. https://core.ac.uk/download/pdf/234659599.pdf
- Mabuie, M. A. (2020). Role of peer educators in behaviour change communication interventions for HIV prevention among People Who Inject Drugs: Systematic review article. *Technium Social Sciences Journal*, 10, 189-200.
- Melchior, M., Chastang, J. F., Goldberg, P. & Fombonne, E. (2008). High prevalence rates of tobacco, alcohol and drug use in adolescents and young adults in France: Results from the GAZEL Youth study. *Addict Behaviour*, 33,122-33.
- Ministry of Health and Family Welfare Government of India (2013). Social and Behavior Change Communication (SBCC): Training for Information, Education, and Communication (IEC) Officers. Retrieved from https://pdf.usaid.gov/pdf_docs/PA00K6VP.pdf
- Motavalli, D., Taylor, J. L., Childs, E., Valente, P. K., Salhaney, P., Olson, J., Biancarelli, D. L., Edeza, A., Earlywine, J. J., Marshall, B. D. L., Drainoni, M-L., Mimiaga, M. J., Biello K. B., & Bazzi, A. R. (2021). "Health Is on the Back Burner": Multilevel Barriers and Facilitators to Primary Care Among People Who Inject Drugs. *Journal of General Internal Medicine*, 36, 129–137.
- Muncan, B., Walters, S.M., Ezell, J. J. & Ompad, D. C. (2020). "They look at us like junkies": influences of drug use stigma on the healthcare engagement of people who inject drugs in New York City. *Harm Reduction Journal*, 17, 53. https://doi.org/10.1186/s12954-020-00399-8
- Ogunsola, S. O., Fajemisin, E. A., Aiyenuro, A. E. & Tunde, A. A. (2020). Experiences and projections for Drug Abuse Sensitization and Eradication among youths in South West, Nigeria. Journal of Alcoholism Drug Abuse & Substance Dependence, DOI:10.24966/ADSD-9594/100018
- Okafor, I P. (2020). Causes and Consequences of Drug Abuse among Youth in Kwara State, Nigeria. *Canadian Journal of Family and Youth*, 12(1), 147-162.
- Olajire, O. O. (2019). Tackling the Illicit Drugs Use in Nigeria: The Need for Policy Appraisal. Journal of Sociology and Social Anthropology, 10(1-3), 101-110. DOI: 10.31901/24566764.2019/10-1-3.295
- Oluremi, D. F. (2012). Drug Abuse among Nigerian Adolescents strategies for counselling. *Journal* of International Social Research, 5(20), 342 347.
- Phillips, K. T. & Stein, M. D. (2010). Risk practices associated with bacterial infections among injection drug users in Denver, Colorado. *American Journal of Drug and Alcohol Abuse*, 36(2), 92-7. doi: 10.3109/00952991003592311.
- Ritchie, A. & Roser, M. (2019). Drug Use. OurWorldInData.org. Retrieved from 'https://ourworldindata.org/drug-use'
- Saladino, V., Mosca, O., Petruccelli, F., Hoelzlhammer, L., Lauriola, M., Verrastro, V. & Cabras, C. (2021). The Vicious Cycle: Problematic Family Relations, Substance Abuse, and Crime in Adolescence: A Narrative Review. *Frontiers in Psychology, Sec. Personality and Social Psychology*, 12, 673954. https://doi.org/10.3389/fpsyg.2021.673954
- The Communication Initiative Network (2003) Radio Dramas: Seven C's of Effective Communication. Retrieved from https://www.comminit.com/content/radio-dramas-seven-cs-effective-communication.
- The Recovery Village (2022, April 20). Consequences of Drug Abuse. Retrieved from https://www.therecoveryvillage.com/drug-addiction/consequences/
- Unaogu, N. N., Onu, J. U., Iteke, O., Tukur, K. & Oka, I. Q. (2017). Pattern of substance abuse at the drug de-addiction unit of a Nigerian Psychiatric Hospital. *African Journal of Drug & Alcohol Studies*, 16(1), 23-31.

- United Nations Office on Drugs and Crime (nd). Treatment and Care of People with Drug Use Disorders in Contact with the Criminal Justice System: Alternatives to Conviction or Punishment. Retrieved from https://www.unodc.org/unodc/en/drug-prevention-and-treatment/treatment-and-care-of-people-with-drug-use-disorders-in-contact-with-the-criminal-justice-system -alternatives-to-conviction-or-punishment.html
- United Nations Office on Drugs and Crime (2007). Drug abuse and drug dependence treatment situation, in Nigeria. Author. Retrieved from http://www.unodc.org/docs/treatment/CoPro/Web Nigeria.pdf
- United Nations Office on Drugs and Crime (2017). World drugs report: Global overview of drug demand and supply latest trends, cross-cutting issues; 2017. Retrieved from https://www.unodc.org/wdr2017/fi eld/ Booklet 2 HEALTH.pdf
- United Nations Office on Drugs and Crime (2018). World Drug Report. Retrieved from https://reliefweb.int/report/world/u nodc-world-drug-report-2018
- United Nations Office on Drugs and Crime, Nigeria (2018). Drug use in Nigeria. Vienna: Author.
- United Nations Office on Drugs and Crime (2022). World Drug Report 2022. Retrieved from https://www.unodc.org/res/wdr2022/MS/WDR22_Booklet_1.pdf
- United Nations Office on Drugs and Crime, Nigeria (2023). Response to Drugs and Related Organized Crime in Nigeria. Retrieved from https://www.unodc.org/nigeria/response-to-drugs-and-related-organized-crime-in-nigeria.html
- United Nations Office on Drugs and Crime, Nigeria (2023). The Government of Nigeria launches the National Drug Control Master Plan 2021-2025. https://www.unodc.org/nigeria/en/the-government-of-nigeria-launches-the-national-drug-control-master-plan-2021-2025.html
- Vanguard (2021, October 7). Lagos-Oyo axis, epicentre of drug abuse in Nigeria-Marwa. Retrieved from https://www.vanguardngr.com/2021/10/lagos-oyo-axis-epicentre-of-drug-abuse-innigeria-marwa/
- World Health Organisation Report (2009). Management of substance abuse: Alcohol. Geneva: Author. Retrieved from http://www.who.org.
- Wubetu, A.D., Getachew, S. & Negash, W. (2020). Substances use and its association with sociodemographic, family, and environment-related factors among technical and vocational education and training college students in Ataye, Ethiopia; An institution-based crosssectional study. *BMC Public Health*, 20, 1691. https://doi.org/10.1186/s12889-020-09797-w