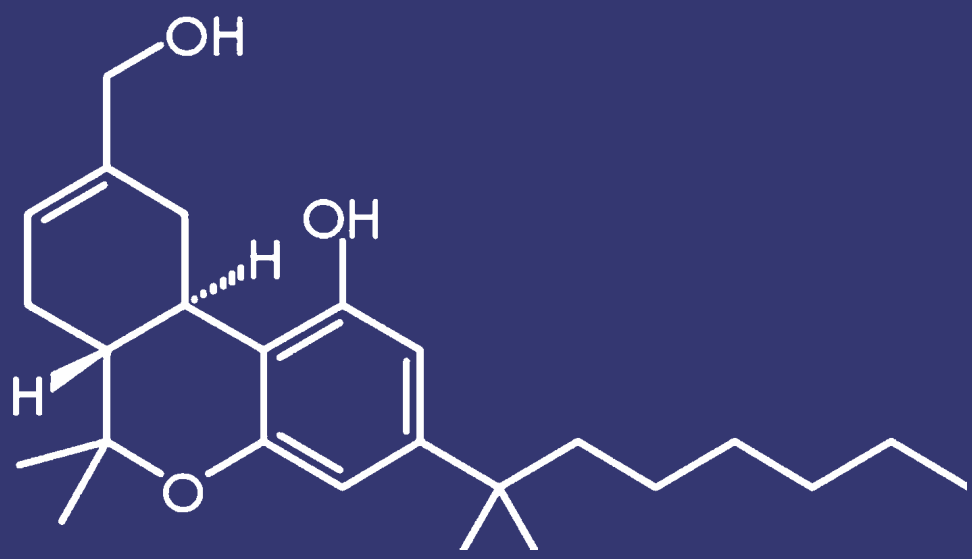
Global Initiative on Substance Abuse

RAPID ASSESSMENT OF KNOWLEDGE, ATTITUDES AND PRACTICES RELATING TO SYNTHETIC DRUGS IN NIGERIA



2024

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PREFACE

Synthetic drugs have become a significant global public health concern, and particularly in Nigeria. More worrisome is the level of ingenuity associated with synthetic drugs, the speed of production, difficulties in identification and the limited information on their health and social consequences for clinical and policy interventions. This project aimed at contributing to efforts towards mitigating synthetic drugs threat in Nigeria by enhancing knowledge, local capacities and fostering collaborative knowledge-sharing among key stakeholders. The primary objectives were to conduct a rapid assessment on the knowledge, attitudes and practices relating to synthetic drugs to help understand the current trends in synthetic drugs use, production and trafficking in Nigeria to develop evidence-based interventions. In addition, raise awareness, engage key stakeholders through educational and outreach activities, including webinars, media discussions and the dissemination of findings through policy briefs.

Strong national early warning systems on synthetic drugs through regular data gathering will continue to play a pivotal role in the early identification, detection of harms and help to ensure timely public health responses. It is our sincere hope and expectation that the results from this rapid assessment will be used by the government, public, policymakers, researchers and non-governmental organisations (NGOs)/ civil societies to develop prevention and policy interventions.

This project was funded by the Institute of International Education (IIE), United States as part of a Hubert H. Humphrey Fellowship Program Collaborative Alumni Project in three African countries. Our gratitude to IIE for the support.

Thank you.

Martin O. Agwogie, PhD, ICAP 11

Founder / Executive Director. GISA

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Acronyms and Abbreviations

EMCDDA – European Monitoring Centre for Drug and Drug Addiction

EWA – Early Warning Advisory

FCT – Federal Capital Territory

GISA – Global Initiative on Substance Abuse

LASUTH – Lagos State University Teaching Hospital

LEP – Law Enforcement Personnel

NGO – Non-Governmental Organisation

NPS – New Psychoactive Substances

PCP – Phencyclidine

PHP – Public Health Professionals

PWUD – People Who Use Drugs

SDU – Synthetic Drugs Use

SUD – Substance Use Disorders

UNODC – United Nations Office on Drugs and Crime

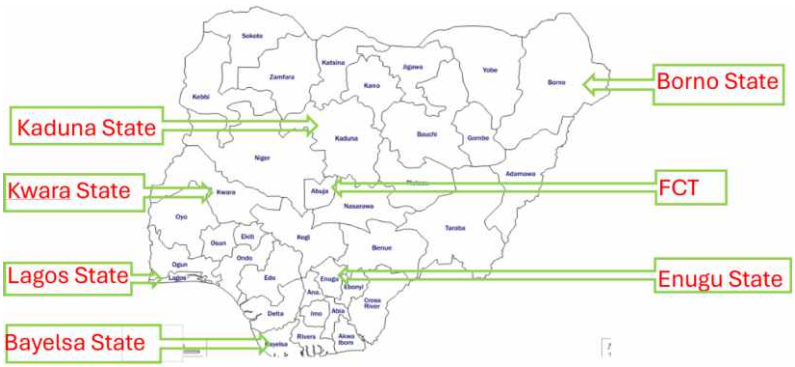
Executive Summary

This study aimed to assess the knowledge, attitudes, and practices of people who use drugs (PWUD), law enforcement personnel (LEP) and public health professionals (PHP) regarding synthetic drugs use (SDU) in Nigeria and sources. The study was conducted in 6 randomly selected states across the six geopolitical zones in Nigeria and the Federal Capital Territory (FCT). The primary target population for the study included PWUD, LEP and PHP who were 18 years and older. Gaps in knowledge about SDU in Nigeria and sources were anticipated; therefore, identifying the gaps will help in developing prevention interventions and policy directions.

A total of 210 participants were sampled comprising of 70 respondents each of PWUD, LEP and PHP. Results showed that there is a high prevalence of SDU (87.1%) among PWUD, 83% of whom reported poly drug use. The four most common synthetic drugs used in their order of prevalence among PWUD were methamphetamine (37%), Colorado (spice) (36%), Tramadol (29%), and benzodiazepines (19%). Sources of the synthetic drug supply varied. Methamphetamine primarily was produced within Nigeria, while Colorado was trafficked into the country. Tramadol and benzodiazepines were both locally and externally sourced. Even though these were the most common synthetic drugs used as reported by PWUD, the LEP and the PHP included cough syrup containing codeine as a commonly used substance. SDU was commonly initiated between the ages of 16 and 30 years. More than 80% of PWUD reported that they have suffered consequences from SDU. Despite this, only half of the respondents have sought treatment intervention. More than half of PWUD (54%) reported that synthetic drugs are easily accessible with dealers, friends and the streets as the most common access to synthetic drugs. About half of PWUD reported working, either full-time or part-time (47%) with over 50% possessing a higher education certificate.

More than 80% of the LEP and PHP rejected legalisation of SDU in Nigeria. However, more than half of the respondents believed that synthetic drugs have medicinal and recreational values. More than 77% of LEP and 69% of PHP supported the use of naloxone for opioid overdose reversal suggesting access by mainly the medical personnel and public health practitioners.

Sampled States and FCT



More than 70% of both the LEP and PHP acknowledged that they know the provisions of the laws on synthetic drugs, and more than half reported that they know what synthetic drugs are used for and the difference between synthetic and the conventional drugs. Five most common risk factors for SDU use as identified by the LEP and PHP were peer pressure, unemployment, euphoria, easy accessibility and frustration.

Approximately 90% of the LEP and PHP identified youth as the common users of synthetic drugs in Nigeria, and thus recommended public enlightenment, prevention strategies, stringent drug control policies, more effective enforcement of drug laws and education to address the burden of SDU in Nigeria. More than 95% of LEP and PHP indicated interest in receiving training on synthetic drugs.

Key findings

1. Based on the survey, the most commonly used synthetic drugs in Nigeria are methamphetamine, Colorado (spice), tramadol and benzodiazepines.

2. Methamphetamine is the leading synthetic drug used, ahead of opioids (e.g., tramadol) and synthetic cannabinoids (e.g., Colorado).
3. Based on the 2017 National Drug Use Survey (United Nations Office on Drugs and Crime [UNODC], 2018a), among PWUD there is significant increase in the use of methamphetamine from 0.6% in 2017 to 38% in 2024; tramadol from 32% in 2017 to 37%, benzodiazepines from 3.4% to 19% with the introduction of Colorado from 0% in 2017 to 27% in 2024.
4. Methamphetamines is primarily produced locally in Nigeria, tramadol and benzodiazepines are both locally produced and through trafficking, but mostly through trafficking from outside the country while Colorado is through trafficking.
5. Synthetic drugs are easily obtained for use from the dealers, streets and friends.
6. Most of the users of synthetic drugs are young adults between the ages of 18 and 30 years, literate, regular and poly drug users with close to half working, eighter as full time or part time.
7. There is limited knowledge about synthetic drugs by the LEP and PHP.
8. Though not among the commonly used synthetic drugs, the report of availability and use of fentanyl, oxycodone and Vicodin by the LEP and PHP and the confirmation of use of fentanyl by PWUD may be an early warning sign of increases in problems associated with SDU.

Background

Nigeria is faced with the challenges of drug/substance misuse which has become a significant threat to public health, national stability, peace, security and economic development. According to the first comprehensive national drug use survey conducted in Nigeria, 14.3 million individuals aged 15-64 (14.4%) used at least one psychoactive substance (excluding alcohol and tobacco) in the previous year (UNODC, 2018a). This figure is considerably higher than the 2016 global annual prevalence rate (5.6%) of all substances used among the adult population. In addition, among this 14.3 million people, 20% have substance use disorders (SUDs), a figure that exceeds the global average by 11%. One in five persons who use psychoactive substances injects them, using needles and syringes; pharmaceutical opioids account for the most injected substance with 4.7% opioid use prevalence (UNODC, 2018a). Nigeria accounts for 14% of the world's population who misuses pharmaceutical opioids making it one of the countries in the world with the highest number of people who misuse tramadol and cough syrups containing codeine or dextromethorphan (Agwogie, 2021). Reports have shown that Nigeria has the highest level of ingenuity in substance use in the world with the use of complex mixture and unimaginable substances which has become a major challenge in drug use prevention and treatment (Agwogie, 2016; 2022).

As of 2013, Nigeria was one of the countries in the world that had not officially reported the emergence of synthetic drugs (UNODC, 2013). However, in 2017 and 2018, Nigeria reported the largest annual quantities of tramadol seizures worldwide with 96 and 22.6 tons, respectively due to high demand and non-medical use of tramadol capsules with dosages of up to 500mg (UNODC, 2020). Survey among construction workers in Adamawa State reported a 85% prevalence of non-medical use tramadol during work (Adole et al., 2017). A similar study also reported the non-medical use of tramadol (UNODC, 2019).

Reports have also shown that since 2016, Nigeria is one of two countries in Africa where methamphetamine clandestine laboratories have been dismantled and major destination markets (UNODC, 2020) with increased availability for local consumption. The prevalence of methamphetamine use in 2017 was estimated at 0.6% (UNODC, 2018a). Other synthetic drugs that have been reportedly used includes cough syrup containing codeine (2.4%), tranquilizers and sedatives (0.05%) (UNODC, 2018a).

Synthetic Drugs

Synthetic drugs, also known as, new psychoactive substances (NPS) have become major threats in the global drug production, marketing and consumption arenas (Hagan & Smith, 2017). Data from law enforcement activities across the globe confirms this growing threat. For example, between 2008 and 2013, there was a significant increase in the number of seizures of synthetic drugs reported across Europe (European Monitoring Centre for Drug and Drug Addiction [EMCDDA], 2015). Similarly, between 2009 and 2016, 106 countries and regions reported the discovery of 739 different synthetic drugs to the UNODC (UNODC, 2018b).

The definition of synthetic drugs differs across countries based on national legislation and political interest as against chemical compositions and classifications (Shafi et al., 2020). However, synthetic drugs refer to a group of complex and varied substances that are usually described as synthetic, designer drugs or legal highs (Luethi & Liechti, 2020; Peacock et al., 2019; Shafi et al., 2020). UNODC defines synthetic drugs or NPS as pure or prepared narcotic or psychotropic substances that are not covered by either the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances but may pose a risk to public health (UNODC, 2016). Though defined as substances designed to reproduce the effects of conventional drugs

such as cannabis, cocaine, heroin, ecstasy and amphetamines, synthetic drugs are usually more potent than their counterparts with more significant effects (Hagan & Smith, 2017). For example, synthetic cannabinoids are associated with respiratory and cardiovascular complications, renal injury, haemodynamic embarrassment and cerebrovascular accidents including strokes (Graya et al., 2021; Shafi et al., 2020; Winstock et al., 2015; Zimmer et al., 2019). A self-reported survey of PWUD revealed that those who used synthetic cannabinoids, for example, were 30 times more likely to end up in an emergency department than users of traditional cannabis (Winstock et al., 2015). Similarly, there is the increasing practice in the use of synthetic stimulants to enhance sexual drive, with multiple partners and the combination of gamma-hydroxybutyrate (GHB) and mephedrone (Trouiller et al., 2020). The effects of Lysergic acid diethylamide (LSD) have been identified to include inability of the body to maintain normal body temperature, cardiovascular irregularities, difficulties in concentration and exhaustion (Dolder et al., 2016). Also, synthetic opioids are associated with mild impairment including itchy skin, nausea, vomiting, constipation and dizziness to more severe health conditions such as respiratory and central nervous system depression (Helander et al., 2017; Siddiqi et al., 2015). Laboratory testing for synthetic drugs in clinical and forensic settings can be a complex task and the validity and reliability of test kits varies considerably in detecting the various compounds (Shafi et al., 2020).

Synthetic drugs are not currently controlled under the International Drug Control Conventions. However, the Commission on Narcotic Drugs has placed 68 NPS under international monitoring (UNODC, 2021). Therefore, countries use generic and chemical similarities to conventional drugs to legislate or regulate the use of synthetic drugs (UNODC, 2021). Countries also rely on information provided by the UNODC in the identification and reporting of synthetic drugs under the UNODC Early Warning Advisory (EWA) on synthetic

drugs (UNODC, 2016). EWA helps countries to have better understanding of synthetic drugs, their distribution, and harm, and as a platform for the provision of technical assistance to nations (UNODC, 2016, 2021). The scheduling of synthetic drugs by convention may require resolving some of the peculiarities of synthetic drugs. Different from the cultivation of poppy plants and coca leaves for heroin and cocaine respectively, the manufacturing of synthetic drugs is not defined by land space and the process is different from extraction of active constituents from plants.

Operationally, synthetic drugs may be grouped under cannabinoids, depressants, stimulants, and hallucinogens, with some intersecting functional groups linked to their chemical structures, psychological and pharmacological preferences (Miliano et al., 2016; Shafi et al., 2020; Tracy et al., 2017). In Nigeria, synthetic drugs may be more complex beyond the classifications and categories due to the high level of ingenuity (Agwogie, 2016) and the "non-classical packaging" (Dumbili et al., 2021). Therefore, not much is known about the evolving synthetic drugs, nor the attitudes and practices of PWUD, LEP and PHP. Similarly, there has been a challenge sampling major stakeholders for better insight into SDU due to stigma and the cost of conducting large scale surveys. Regrettably, studies on synthetic drugs mostly have excluded the African region, including Nigeria (Dumbili, et al., 2021). One of the few studies that have included Africa identified Khat and Mandrake as some of the commonly used non-conventional mind-altering substances in Northern and Eastern African countries (Feng et al., 2017). Thus, there is a dire need to advance knowledge on the attitudes and practices relating to synthetic drugs in Nigeria towards its prevention and policy development.

Methodology

Study design

This was a cross-sectional study aimed at assessing the knowledge, attitudes, and practices of PWUD, LEP and PHP regarding SDU in Nigeria and sources. A structured questionnaire was administered to PWUD, LEP and PHP. Respondents were sampled from six states (Lagos, Enugu, Kaduna, Borno, Bayelsa and Kwara) representing each of the six geo-political zones. The FCT also was included. Random sampling procedures were used to select the 6 states out of the 36 states in Nigeria. Thus, six distinct regions were included in the sampling plan. Ten respondents were sampled from each of the three groups (PWUD, LEP, PHP) bringing the total sample size to 210. Convenience sampling was used to select the 210 respondents. All participants were adults, 18 years and older, residing in any of the six regions included in the study. Participation was voluntary. For PWUD, respondents were eligible to participate if they reported using any psychoactive substances. For the LEP, participants were eligible if they worked in a law enforcement agency. Similarly for the PHP, participants were eligible if they worked in the field of drug demand reduction in a health-related discipline.

Survey administrators were recruited from each of the six regions and trained to ensure understanding of the research study and the questionnaire. They also were trained to be consistent in the questionnaire administration process, to provide prompts and interaction with the respondents and to make clarifications where required. Each interviewer was calibrated during the training to ensure inter examiner reliability. The survey administrators underwent training from the investigator. Sessions included obtaining informed consent, questionnaire administration, and basics of substance use services. Ethical approval was obtained from the Ethics Committee of the Lagos State University Teaching Hospital (LASUTH).

The questionnaires were first piloted with PWUD, LEP and PHP outside the sampled states for simplicity, clarity, validity and reliability. They were also subjected to review by experts before they were fully administered. Necessary modifications were made based on the outcome of pilot study and experts' reviews.

The questionnaires were self-administered. Those who could not read or write in English language were assisted by the survey administrators who were selected based on their ability to read, write and interpret in local languages -- Yoruba, Ibo, Hausa, Ijaw and Kanuri. The process started with self-introductions and a brief description of the purpose of the survey. The respondents were then asked if they fully understood or required further clarifications. Completed questionnaires were collected and submitted by the interviewers to the investigator. Data cleaning, sorting and data coding of the quantitative survey was carried out weekly to check for completeness in order to ascertain good quality data. Data was analysed using SPSS version 23 and reported in the form of frequency tables and charts.

Results

A total of 210 respondents -- 70 each of PWUD, LEP and PHP -- completed the survey instrument. On average, two-thirds of the participants were male, although the gender distribution differed across the three groups. The mean age of the participants ranged from 31 to 41. From the law enforcement category, more than half of the respondents studied guidance counselling, sociology/social work and education. Psychiatrists, sociologists/social workers, psychologists and guidance counsellors constituted the majority of the PHP. More than 95% of the LEP and PHP worked full time with about 87% working in an urban setting and more than half of the respondents had a minimum of a first degree (see Table 1).

Table 1

Demographic Information on the Study Sample ($N = 210$)

	Law Enforcement Personnel ($n = 70$)	Public Health Professionals ($n = 70$)	People Who Use Drugs ($n = 70$)
Gender (% male)	60.0	65.7	77.1
Age			
Mean (SD)(Years)	36.7 (9.0)	40.7 (9.5)	31.2 (7.2)
Range (Years)	25 - 55	18 – 57	18 – 48
Highest Education Completed			
No formal education	0	0	2.7
Secondary school	1.4	1.4	42.9
Higher education certificate or first degree	81.4	44.3	50.0
Master's degree or equivalent	17.1	41.4	4.3
PhD	0	12.9	0
Discipline or Field of Study (%)			
General medical practitioner	2.9	5.7	
Psychologist	7.1	27.1	
Guidance counsellor	17.1	14.3	
Sociologist/Social Worker	20.0	11.4	
Educationist	21.4	21.4	
Pharmacist	0	7.1	
Nurse	0	8.6	
Others	31.4	4.3	
Employment Status (%)			
Full-time	95.7	88.6	22.9
Part-time	2.9	2.9	24.3
Not employed	0	1.4	24.3
Apprentice or learning a trade	0	0	5.7
Student	0	0	18.6
Other	1.4	7.1	2.9
Employment Setting (% urban)	87.1	78.6	

All the LEP and PHP reported that that they had heard of synthetic drugs. Sources were mainly from law enforcement activities and treatment facilities (Table 2). Other major sources were social media and friends. The LEP identified law enforcement activities and social medial as the common sources where they first heard about synthetic drugs while the PHP identified treatment centres and school as their first sources (Table 3).

More than 75% of LEP and PHP reported that they knew the difference between synthetic drugs and conventional drugs (Fig. 1). More than 70% of the LEP and PHP rated tramadol, cough syrup containing codeine and codeine as readily available and commonly used with tramadol having the highest rating of above 90% of both indices (Table 4). Fentanyl, Oxycodone, Vicodin, and Carfentanil had less than 5% rating both in terms of availability and use. 47% and 48% of LEP and PHP respectively reported that naloxone is available for opioid overdose reversal while 40% and 37% of LEP and PHP, respectively, reported that naloxone is not available. However, over 70% of both LEP and PHP recommended naloxone for use in Nigeria (Fig. 2). Professionals recommended to have access to naloxone were public health practitioners (31.4%) and medical personnel (58.6%) (Fig. 3). Close to 80% of the LEP and about 50% of PHP believed that synthetic drugs are covered by the most recent drug control laws in Nigeria and over 80% do not want SDU to be legalised (Fig. 4).

Table 2: Most sources of information about synthetic drugs

Options	**Law Enforcement Personnel – N (%)**	**Public Health Professionals – N (%)**
Internet	12 (17.1)	19 (27.1)
Health professionals for (PHP) and Law Enforcement for (LEP)	36 (51.4)	29 (41.4)
Education programme (training)	16 (22.4)	17 (24.3)
Missing	6 (9)	5 (7.1)

Table 3: Sources of who/where first heard about synthetic drugs

Sources	Law Enforcement Personnel – N (%)	Public Health Professionals– N (%)
Friends	10 (14.3)	4 (5.7)
At school	6 (8.6)	16 (22.9)
Social media	17 (24.3)	8 (11.4)
In the news	9 (12.9)	4 (5.7)
Law enforcement	39 (55.7)	7 (10.0)
At drug treatment facilities	13 (18.6)	29 (41.4)

Note: Total is greater than 100% because some respondents identified more than one source.

Fig. 1: Knowledge about synthetic drugs by LEP & PHP

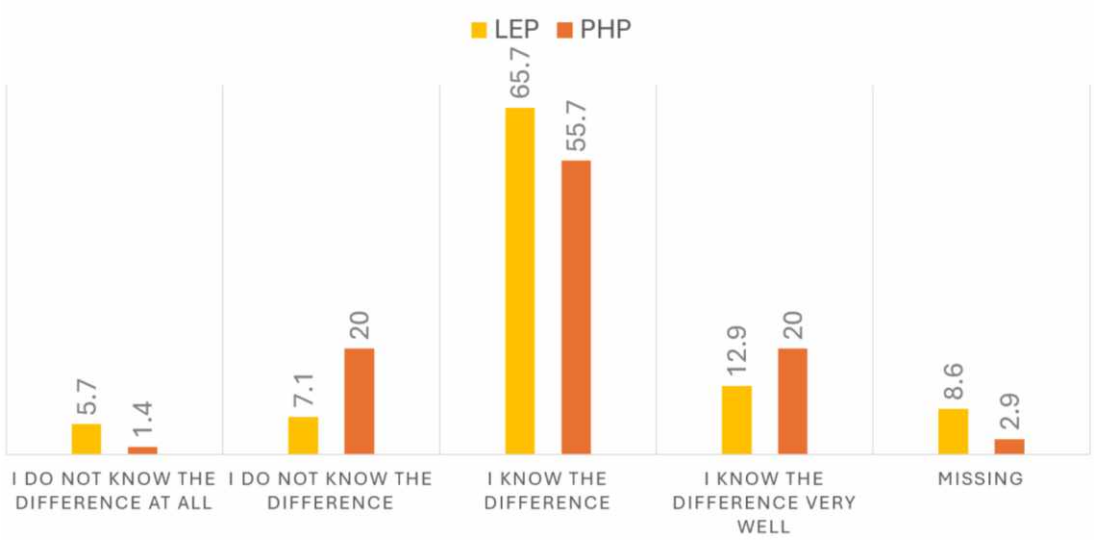


Table 4: Knowledge about commonly available and used opioids in Nigeria

Opioids	Law Enforcement Personnel		Public Health Professionals	
	% available	% used	% available	% used
Heroin	22.9	25.7	67.1	62.9
Cough syrup containing codeine	87.1	90	90.0	91.4
Tramadol	92.9	95.7	95.7	94.3
Fentanyl	2.9	4.3	11.4	11.4
Oxycodone	2.9	1.4	12.9	8.6
Vicodin	2.9	1.4	5.7	4.3
Codeine	72.9	77.1	82.9	74.3
Morphine	25.7	25.7	45.7	40.0
Carfentanil	0	1.4	1.4	4.3

Fig. 2: Knowledge about naloxone availability and recommendation for use

Fig 3: Recommended professional access to naloxone

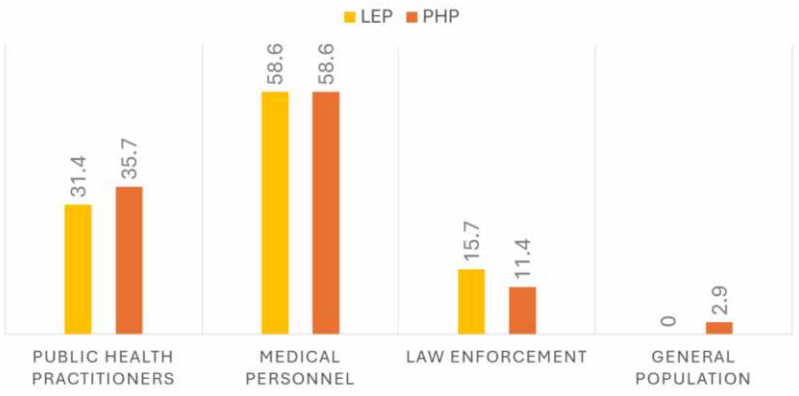
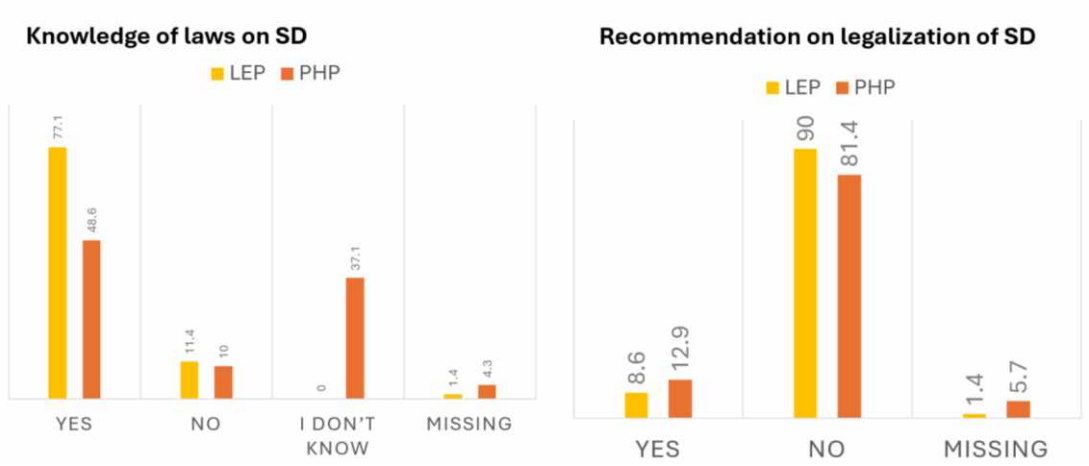


Fig. 4: Knowledge of laws on synthetic drugs and legalisation



Close to half of the respondents either did not know or were not sure whether synthetic drugs have medical or recreational values, but close to 80% believed that synthetic drugs are extremely risky (Fig. 5). Among people who use drugs, 87% use synthetic drugs (Fig. 6). The four most used synthetic drugs are methamphetamine, Colorado (spice), tramadol and benzodiazepines (Table 5) and they are either trafficked from outside the country or locally produced (Table 6). More than 80% of the people who use synthetic drugs are poly drug users (Fig. 7) and about half of them (51%) are regular users (Fig. 8). Drug use initiation most commonly occurred between ages 16 and 30 (Fig. 9).

Over 80% have experienced adverse effects from SDU but only about 50% have ever sought treatment (Fig. 10). Dealers, streets and friends were the common local sources of synthetic drugs and close to 80% of the users reported that it was either very easy or fairly easy to access synthetic drugs (Fig. 11).

More than 90% of the LEP and PHP expressed a desire to receive training or education on how to prevent the use of synthetic drugs (Fig. 12) with more than 95% indicating interest in joining a network and participating in activities/programs aimed at educating people about the dangers of synthetic drugs (Table 7). Only half of the LEP and PHP had knowledge of local resources or support systems available for individuals struggling with SDU (Fig. 13).

Fig. 5: Benefits and risks of synthetic drugs

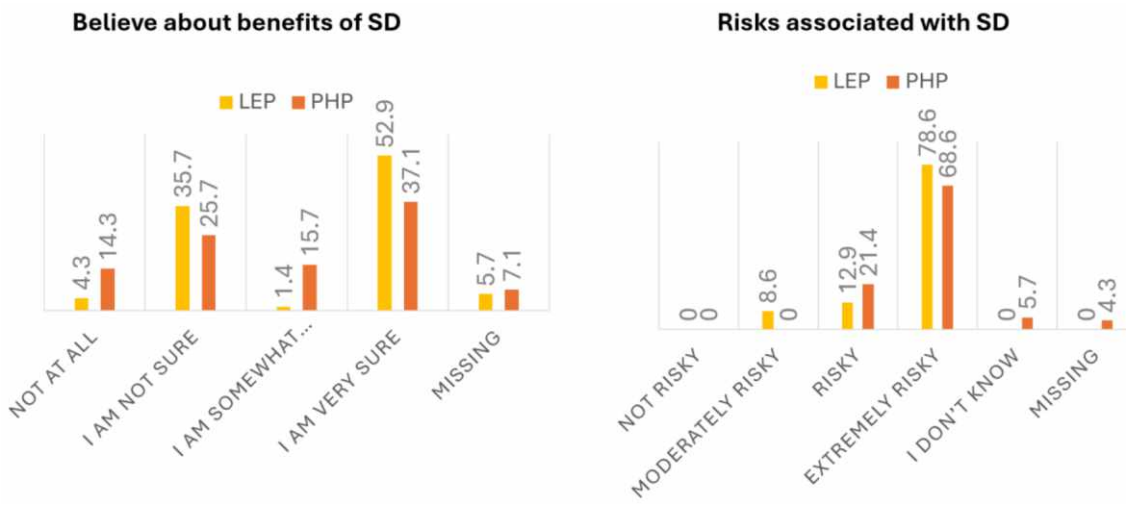


Fig. 6: Prevalence of synthetic drugs use

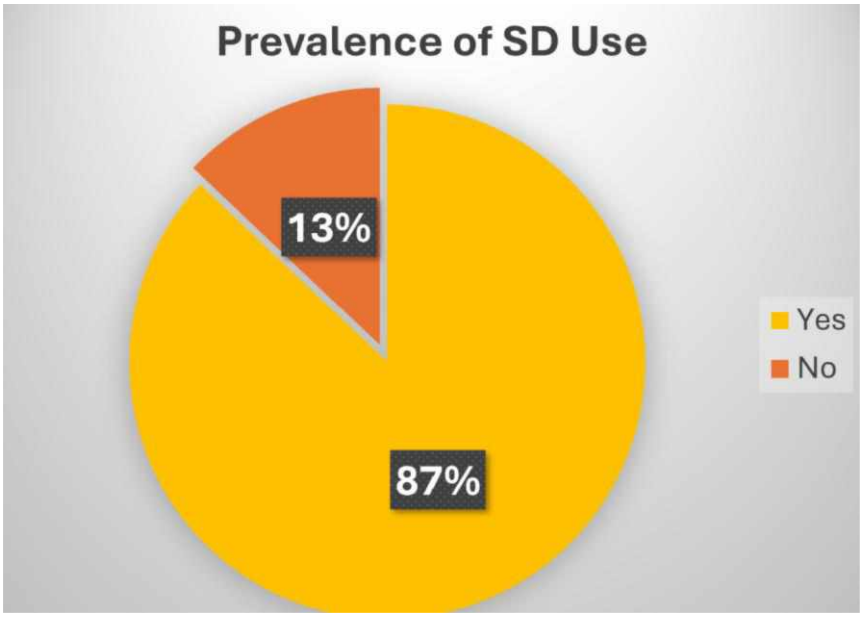


Table 5: Synthetic drugs used

Synthetic Drugs	N (%)
Methamphetamine	26 (37)
Colorado (spice)	25 (36)
Tramadol	20 (29)
Benzodiazepines	13 (19)
Totalin	4 (6)
Phencyclidine	3 (4)
Extol	2 (3)
Codeine cough syrup	2 (3)
Fentanyl	1 (1)
Pethidine	1 (1)
Flakka	1 (1)
K2	1 (1)
Ketamine	1 (1)
Pyrazole	1 (1)
Pentazocine	1 (1)
Adderall	1 (1)

Table 6: Sources of synthetic drugs

Synthetic Drugs	Sources
Methamphetamine	Mostly local (produced in the country)
Colorado (spice)	Through trafficking (from outside the country)
Tramadol	Local and trafficking (mostly through trafficking)
Benzodiazepines	Local and trafficking
Totalin	Trafficking
Phencyclidine	Trafficking
Extol	Local and trafficking
Codeine cough syrup	Local and trafficking
Fentanyl	Trafficking
Pethidine	Local and trafficking
Flakka	Trafficking
K2	Trafficking
Ketamine	Trafficking
Pyrazole	Local and trafficking
Pentazocine	Local and trafficking
Adderall	Trafficking

Fig. 7: Number of substances used

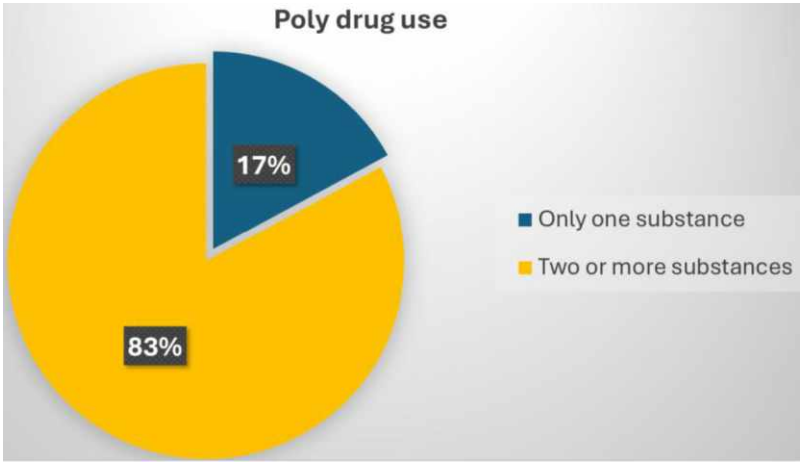


Fig. 8: Frequency of synthetic drugs use

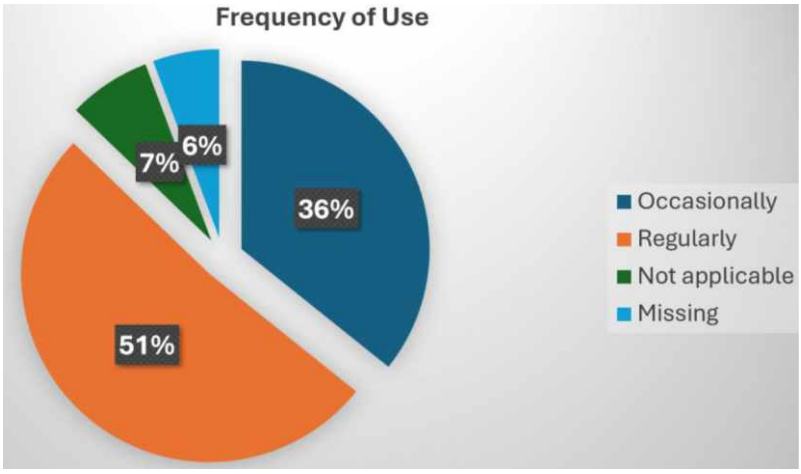


Fig. 9: Age of initiation of synthetic drugs use

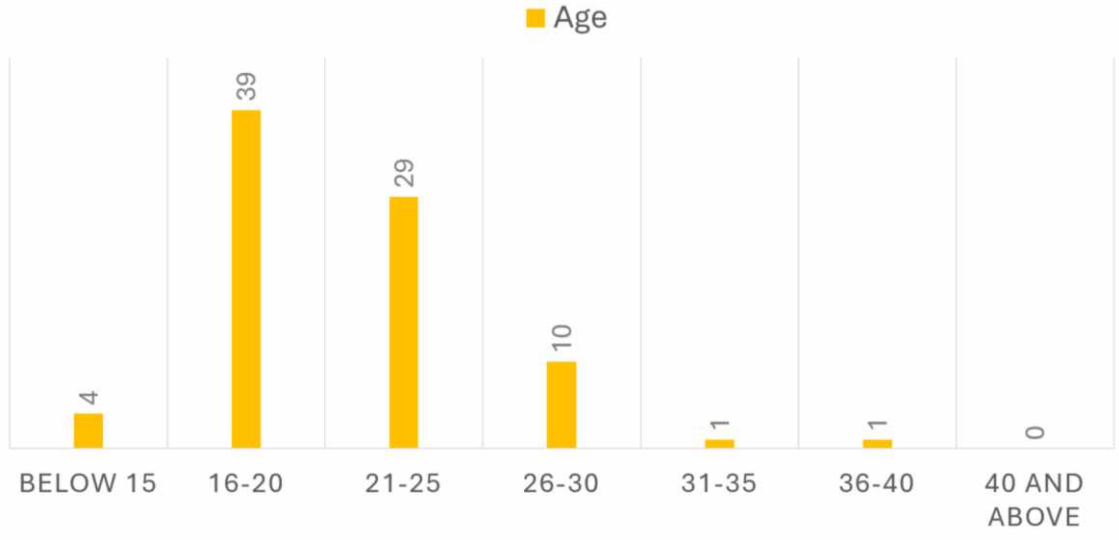


Fig. 10: Experienced adverse effects and treatment

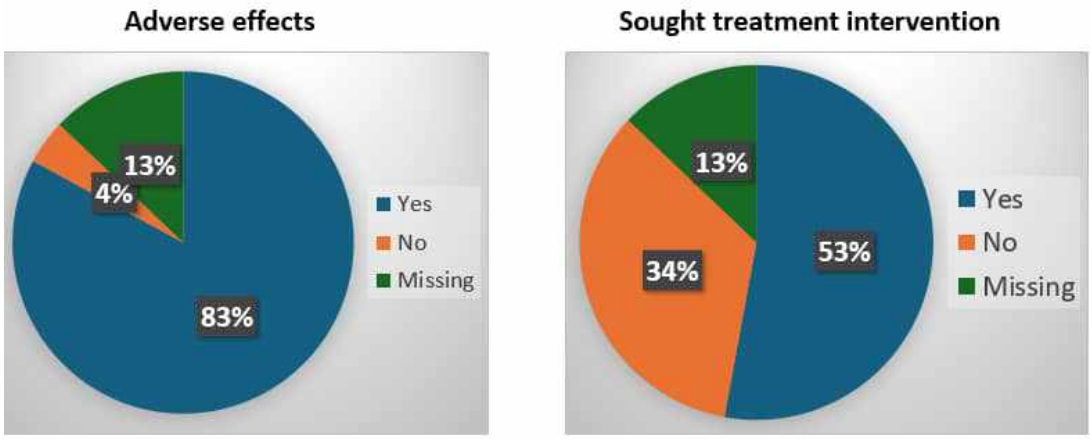


Fig. 11: Local sources of synthetic drugs and ease of accessibility

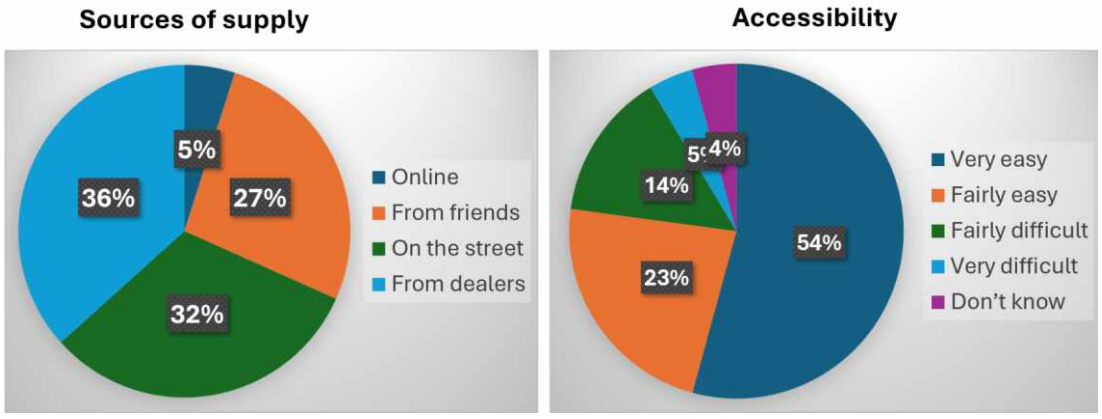


Fig. 12: Desire to receive formal training or education on how to prevent the use of synthetic

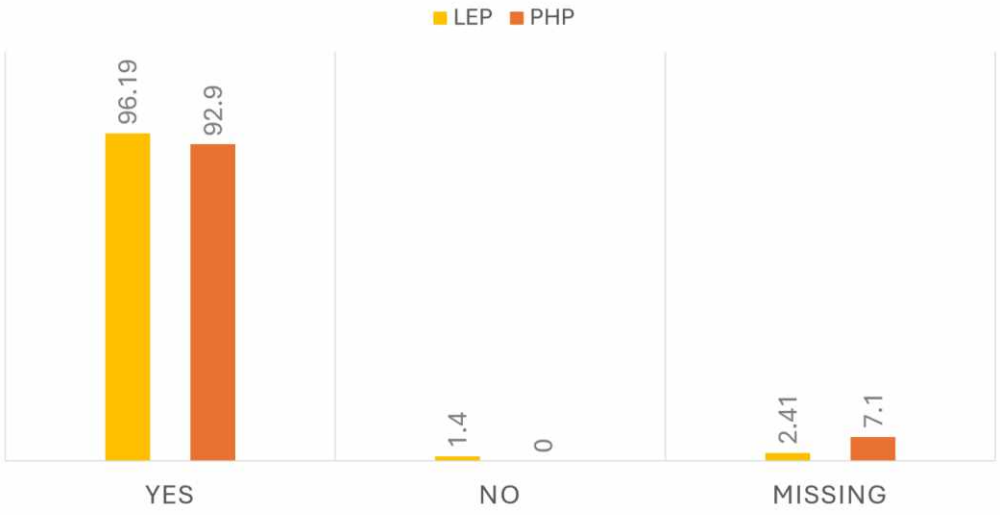
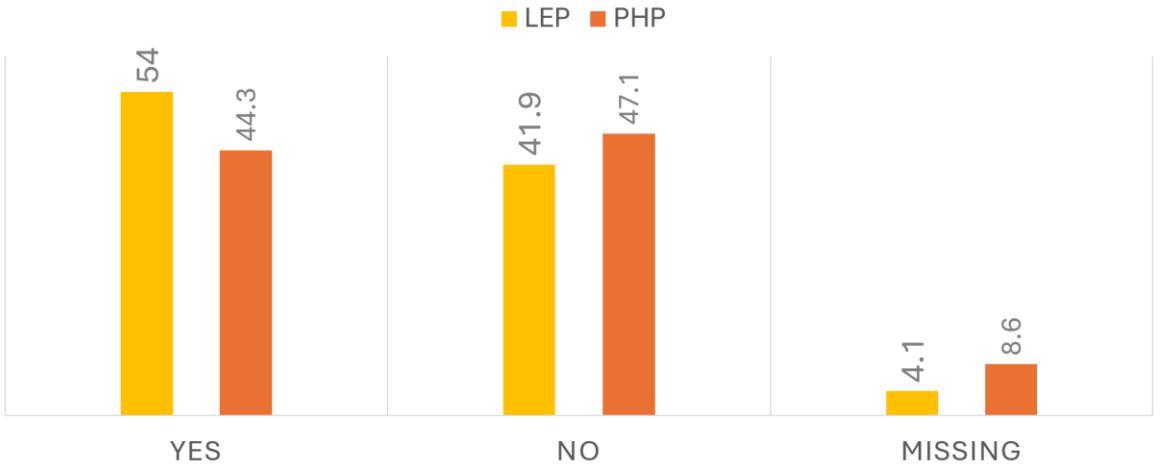


Table 7: Desire to participate in a program aimed at educating people about the dangers of synthetic drugs

Options	Law Enforcement Personnel – N (%)	Public Health Professionals – N (%)
Yes	68 (97.2)	67 (95.9)
No	0	(0)
Missing	2 (2.8)	3 (4.1)

Fig. 13: Knowledge of local resources or support systems available for individuals struggling with synthetic drugs use



Conclusion

This rapid assessment was undertaken to assess the knowledge, attitudes and practices relating to SDU and sources in Nigeria so as to develop prevention initiatives in collaboration with relevant stakeholders. From this survey, methamphetamine (37%), Colorado/spice (36%), Tramadol (29%), benzodiazepines (19%) are the four most used synthetic drugs in Nigeria. The use of synthetic cannabinoids (K2), synthetic cathinones (e.g. bath salts) and some synthetic opioids (e.g., fentanyl, oxycodone, Vicodin, carfentanil) are not among the commonly used synthetic drugs in Nigeria. The commonly used synthetic drugs are easily obtained from dealers, the streets and friends. Methamphetamines is mostly locally produced, tramadol and benzodiazepines are both locally produced and externally sourced (trafficked), Colorado is sourced through trafficking.

Among those surveyed, most of the users are young adults between the ages of 18 and 30 years, literate, regular and poly drug users. The five most common consequences associated with SDU are headache, dizziness, hallucinations, paranoia and excessive euphoria. Other consequences include seizures, anxiety, drowsiness, excessive craving, memory loss, daring with tendencies for violence, weight loss, exhaustion, rapid heartbeat, increased sexual urge, passing out, and fevers. One of the respondents reported coughing blood anytime he took PCP.

The five most common risk factors identified for SDU are peer pressure, unemployment, euphoria, easy accessibility and frustration. Other risk factors identified are idleness, curiosity, low self-esteem, poverty, negative community influence, to enhance sexual drive, affordability, availability, stress, trauma, more energy to increase productivity, family issues, cult activities, economic issues, social media, depression and other mental health issues. The motivations for using synthetic drugs do not appear to differ from the motivations for general drug use.

Based on the 2017 National Drug Use Survey (UNODC, 2018a), there is significant increase in the use of methamphetamine in Nigeria from 0.05% prevalence in 2017 to 37% in 2024, tramadol from 4.7% prevalence to 29% in 2024 and benzodiazepines from 0.5% prevalence in 2017 to 14% in 2024, but with a level of stability in the use of cough syrup containing codeine with 2.4% prevalence in 2017 and 3% in 2024.

The high prevalence of SDU among people who use drugs should be of major concern. More worrisome is the complex mixture and ingenuity associated with the use of synthetic drugs. One of the implications of this is that PWUD report consequences that are rarely associated with a specific synthetic drugs. Similarly, there is limited data to ascertain the magnitude of the problem considering that many of those who use synthetic drugs lack access to treatment with limited information on fatality related to use.

Recommendations

With the rise in use of synthetic drugs, particularly methamphetamine, synthetic cannabinoids, tramadol and benzodiazepines, the major challenge for the future of drug control in Nigeria will be more on the synthetic drugs and other non-conventional substances compared with traditional plant-based drugs. Consequently, there is the need to strengthen law enforcement duties across the borders and within the country. This should be complemented by evidence-based prevention strategies through identifying and addressing the risk factors for drug use among the young population. There is the need to engage in workplace substance use prevention, management and policy to address the issue of drug use among PWUD who are in the work setting.

LEP and PHP with the support of other stakeholders need to develop more innovative approaches to catch up with the evolving trends with particular attention to local trends and innovations in SDU. In developing countries, like Nigeria, emerging trends and associated threats of synthetic drugs may be

overlooked if emphasis continued to be placed on uniform, classical or synthetic definitions. The different substances and designation as synthetic drugs require a critical review within national context. Strong national early warning systems will continue to play a pivotal role in the early identification and detection of harms and will help to ensure timely public health responses. There is the need for extensive capacity building for LEP and PHP on synthetic drugs. A more comprehensive survey on SDU and sources is recommended. Drug treatment facilities should be available and accessible to PWUD. The use of naloxone as opioid overdose reversal should be made available and accessible to public health and medical practitioners.

Limitations

One of the major limitations of this study is the inability of the researcher to generalize the findings of this survey to the entire country, considering that the study was limited to 6 states and FCT. Another limitation is that it is a rapid assessment with a small sample size. The researcher recommends that this study be replicated in all the 36 states in Nigeria and FCT with larger sample. Time constraints also was a significant limitation; the entire research was carried out within 3 months. Another limitation is that all of the data collected was self-reported. The validity and reliability of self-report data is often questioned especially with behaviours or feelings that could be judged to be wrong.

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