

# Tramadol and other Opioid Use among Individuals with Substance Use Disorders in Lagos, Nigeria

Simone Udeh, M.S<sup>1</sup>, Chinenye Umeche B.Pharm<sup>2</sup>, GIWA Winifred Damilola B.Pharm<sup>2</sup>, Oluribigbe Deborah Moyinoluwa B.Pharm<sup>2</sup>, Ogbonna Jude Ebuka B.Pharm<sup>2</sup>, OTUJO Ifeoluwasubomi Victoria B.Pharm<sup>2</sup>

1 Drexel University College of Medicine

2 Federal Neuropsychiatric Hospital, Lagos, Nigeria

### **Abstract**

Using a drug misuse questionnaire, participants at the Federal Neuropsychiatric Hospital in Lagos were surveyed for their pattern of drug use. A total of 88 responses were received with 62 respondents reporting use of opioid-containing products (70.5%). Of the 62 respondents, tramadol use was reported among 35 (56.5%) participants. 7 (11.3%) respondents also reported using pentazocine for recreational purposes, while 49 (79%) respondents reported using codeine-containing products.

In all, 14 (22.6%) respondents reported getting the opioids from a retail pharmacy, 11 (17.7%) from family/friends, 29 (46.8%) from a drug dealer, 3 (4.8%) from the hospital pharmacy and 6 (9.7%) from a patent medicine store.

#### Introduction

In Nigeria, opioids are commonly misused in large quantities and are of major concern to physicians due to the debilitating effects on the user's health.

A drug use survey by the United Nations Office on Drugs and Crime (UNODC) in 2018 found that 14.4% of Nigerians between ages 15-64 abuse drugs- a percentage that is more than two times higher than the global average of 5.6%, with cannabis being the most abused followed by opioids with a 6.0% prevalence in men and 3.3% prevalence in women (mainly Tramadol followed by codeine and heroin) (United Nations 2019).

The mean age of initiation of non-medical use of opioids was 21 years (Cynthia, 2018). While the use of drugs is observed among all age groups in Nigeria, the use of most drug use types is high among young people within age brackets of 25 and 39 years (UNODC,2018). Nearly 90% of the high-risk drug users had been regularly using opioids, while the remaining had either used cocaine or amphetamines; and over 20% of the high-risk drug users were injecting drugs (IBBSS,2014).

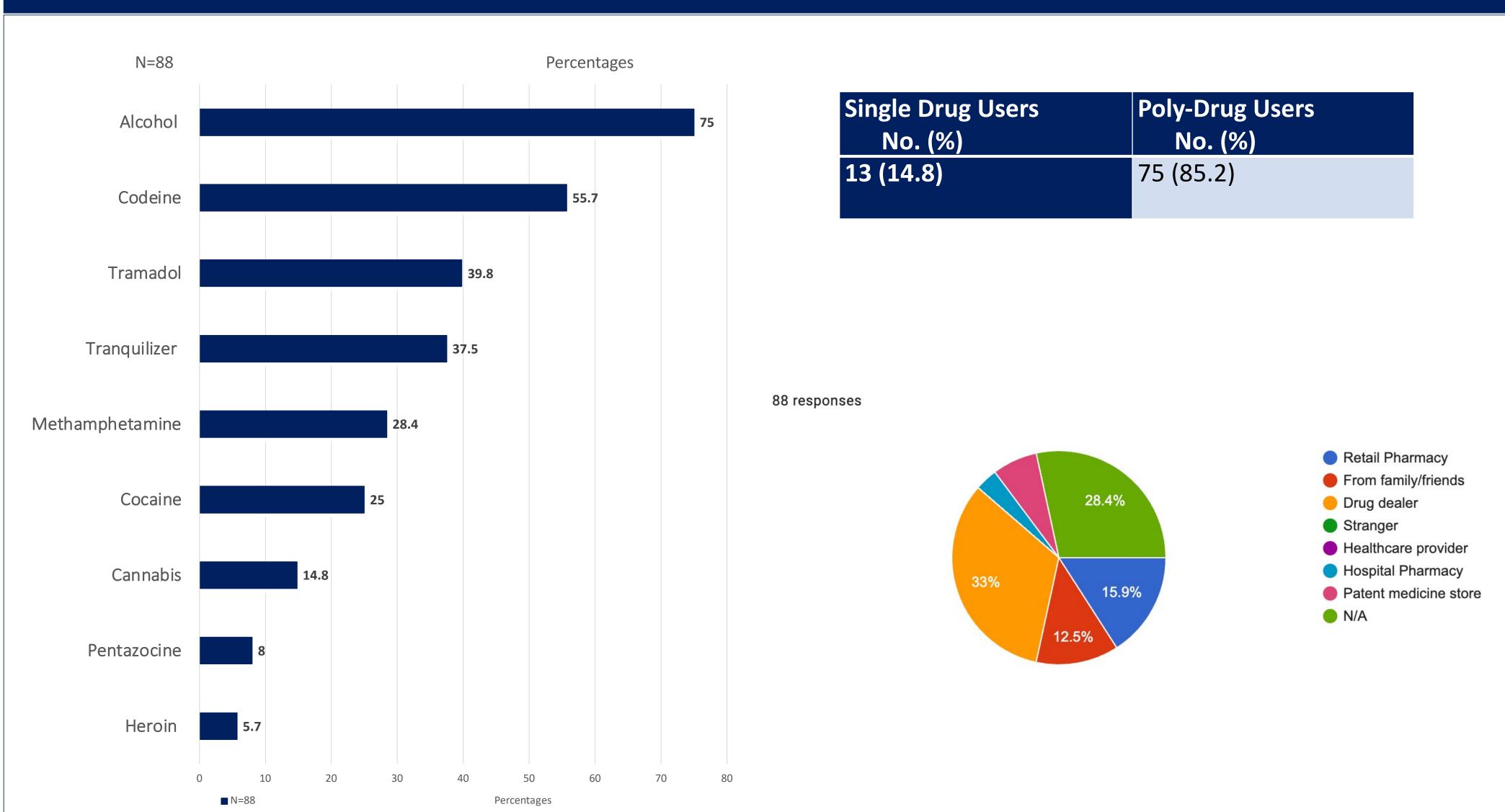
This study seeks to assess the patterns of opioid misuse among individuals with substance use disorders, in Lagos, Nigeria using a drug misuse questionnaire.

## Methods

The study was a pilot prospective cohort study on adult and pediatric populations. In this study, participants completed a series of questions regarding their opioid use. The questionnaire is brief and designed to be completed in under 15 minutes to prevent participant burnout.

Participants included patients in both in-patient and out-patient units of the Psychiatric Hospital in Lagos. The questionnaire was in paper form and administered by the study team. In administering the questionnaire, each question will be read out along with its responses and the participant will select the response that applies to them.

# Results



Opioia Misusea	# of patients misusing opioid	Once a day (%)	More than once a day (%)	Once a week (%)	Several times a week (	%) Other (%)
Codeine	49	10 (20)	10 (20)	7 (14.6)	3 (6.3)	11 (22.9)
Tramadol	35	5 (14.7)	7 (20.6)	3 (8.8)	4 (11.8)	8 (23.5)
Pentazocine	7	3 (42.9)	2 (28.6)	0 (0)	1 (14.3)	1 (14.3)

## Type of Substance Misused

Type of substance	Men No. (%)	Women	Total No. (%)
Alcohol	59 (67)	7 (7.9)	66 (75)
Codeine	46 (52.2)	3 (3.4)	49 (55.7)
Tramadol	33 (37.5)	2 (2.3)	35 (39.8)
Tranquilizer	33 (37.5)	0 (0)	33 (37.5)
Methamphetamine	23 (26.1)	2 (2.3)	25 (28.4)
Cocaine	18 (20.5)	4 (4.5)	22 (25)
Cannabis	70 (79.5)	5 (5.7)	75 (85.2)
Pentazocine	3 (3.4)	4 (4.5)	7 (7.9)
Heroin	5 (5.7)	0	5 (5.7)

Completed responses were obtained from 88 patients consisting of 78 males and 10 females. The substance most commonly misused was alcohol with a prevalence of 75% followed by codeine and tramadol. Approximately 15% of the patients were single drug users while 85% were poly drug users. Of the 63 patients misusing opioids, about 16% purchased it from a retail pharmacy, 33% from a drug dealer, 12.5% from family and friends, 6.8% from a patent medical store and 3.4% from a hospital pharmacy. Male misusers (78%) exceeded female misusers (11.4%). Codeine, tramadol and pentazocine were the opioids reported by this sample size. Codeine was the opioid most misused by this sample with a frequency of once a day or more than once a day. There was no report of fentanyl use in this study as fentanyl is not a popular substance of choice in Nigeria.

## Discussion

The average age of participants in this sample was 28.3. The most commonly misused substances were alcohol, codeine and tramadol in that order. Opioids like tramadol and codeine rank high on the list due to easy availability with no requirements of prescription for purchase.

Additionally, medications like tramadol are not regulated and can be sold by patent medical stores (also known as chemists). Patent medicine store are stores owned/run by a person without a formal training in pharmacy and are therefore not well versed with the guidelines and regulations involving different medications. In addition to the high frequency of opioid use among the sample, the low staffed rehabilitation centers and lack of a public health response have led to a public health crisis that is becoming increasingly difficult to tackle.

The staggering numbers show a pressing need to identify risk factors for opioid misuse in order to tackle them and reduce the incidence of opioid use disorders. Additionally, steps need to be taken to implement harm reduction interventions. Follow up plans to this study include a partnership with the Drug Harm Reduction Advocacy Network Nigeria to advocate for implement community-led harm reduction services. To make this feasible, we will also ensure that the healthcare providers do not have any negative perceptions or biases towards drug users or harm reduction intervention. To ensure this, we will do a pre/post survey of healthcare providers attitudes before/after a brief 15minute presentation on harm reduction to see if there are any changes in attitudes/perceptions. This will be essential to helping us ensure that the members of the healthcare team providing these harm reduction services are well trained to perform them without any biases.

## **Future Prospects**

More research needs to be done on the epidemiology of drug abuse in Nigeria as well as the difference in patterns of drug abuse across different communities in Nigeria.

Additionally, more research should be done not only on the socioeconomic factors that lead to drug misuse, but also the socioeconomic consequences of such misuse, Additionally, the effect of family support on drug relapse rates in such communities in Nigeria could make a strong case for family support as drug misused is still seen as a moral failing.

Lastly, more research needs to be done on the impact that harm reduction services on communities in Nigeria as everyone stands to benefit from addressing this public health crisis.

## Acknowledgements

The Federal Neuropsychiatric Hospital in Lagos, Nigeria, Onyinlade Kehinde, B.Pharm MS, Dr. Vincent Ubochi MBBS