



THE USE OF METHAMPHETAMINES IN NIGERIA

TREND AND THREAT ANALYSIS

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OUTLINE

- WHAT IS METHAMPHETAMINE
- HISTORY
- FACTORS INFLUENCING USE
- HARMFUL EFFECTS OF USE
- BRAIN RESPONSE TO USE
- STAGES OF METH USE
- NIDA PRINCIPLES FOR EFFECTIVE DRUG TREATMENT



OUTLINE



- NON-PHARMACOLOGICAL & PHARMACOLOGICAL TREATMENTS
- GLOBAL TRENDS
- TRENDS IN NIGERIA
- THREATS
- CONCLUSION
- REFERENCES

WHAT IS METH?

A potent central nervous system (CNS) stimulant used as a recreational drug

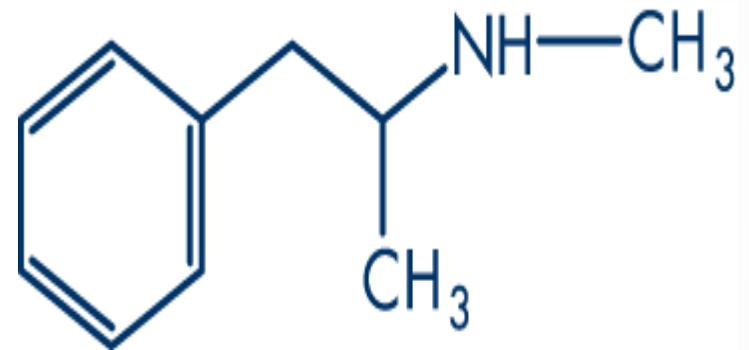
- Categorized as a Schedule II drug
- It has a high potential for abuse and can lead to severe psychological or physical dependence
- When abused it creates an intense rush of energy and euphoria





- Methamphetamine- an amphetamine derivative and most widely manufactured amphetamine-type stimulant.
- In the powder form, it can be ingested orally, snorted, smoked, injected, insufflated, or inserted into the rectum. In the crystalline form, it can be injected or smoked.
- Street names include speed, ice, crystal meth, crank, tina, mkpuru mmiri, glass, shank, etc
- The production of meth(one pot, shake and bake method or 2-liter bottle), leads to serious burns and fire incidences, while also producing potentially dangerous toxic waste. Hence a public health hazard.

- It is very lipophilic because of addition of a methyl group, hence making it penetrate into the CNS easily.
- It has a half life of ≈ 12 hrs, compared to that of cocaine which is ≈ 2 hrs. Its euphoric effect is short lived, disappearing before significant changes its concentration in the bloodstream. Hence the 'binge and crash' use pattern.
- Its longer half life and lower cost has earned it the name 'poor man's cocaine'.

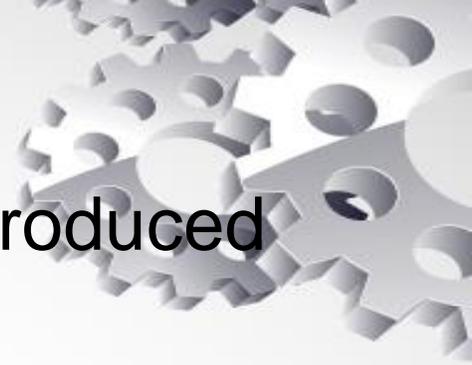


- $C_{10}H_{15}N$



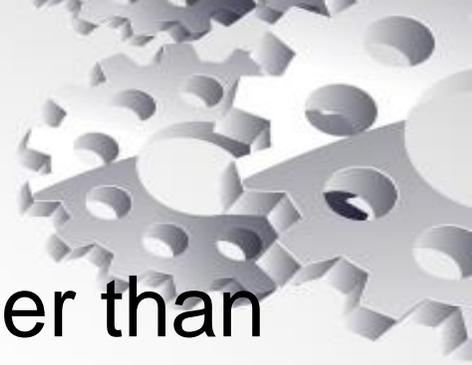
HISTORY

- First discovered in 1800s; synthesized from ephedrine. Produced by chemically adjusting its parent drug, amphetamine.
- Originally produced in Japan, for medical purposes, as a nasal decongestant medications and bronchial inhalers
- Further synthesized into crystal form in 1919
- Popularized during World War 2(WW2); used by the military to enhance performance of the soldiers to keep them awake and alert and to fight fatigue and depression.
- Went mainstream post WW2 when, the meth stored for military use became available to the public and people began to use it recreationally'. A Japanese organized crime syndicate took advantage of meth surplus and began the distribution of meth.



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- In the 1960s, IV meth use spread through the subcultures, leading to more violent and erratic behaviour and more emergency presentations in the ER prompting attention by the medical authorities to call for close regulation in its use.
 - In 1970s, the U.S. government made legislation that restricts legal production and use.
 - In 1980s, A purer and smokable form of meth appeared in Hawaii
 - Between 1990s and 2000s, explosion in number of meth labs.
 - By 2005, “The Combat Methamphetamine Epidemic Act” was set up to limit the sale of certain meth ingredients and required purchase to be recorded.
 - Till date seizure data continue to report increase in meth production, trafficking and abuse globally.

FACTORS INFLUENCING USE



- Alertness and Euphoria from use tend to last longer than that gotten from stimulants like cocaine
- Improves sexual pleasure and performance
- Enhances sexual exploration
- Enhanced concentration; this particularly in students
- Improves energy for work performance
- Relieves chronic pain and emotional problems
- Promotes weight loss; anecdotal reports

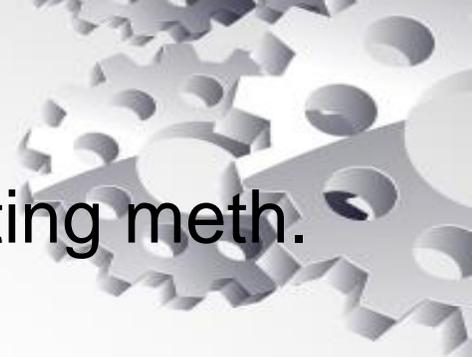
how the brain responds to methamphetamine

- <https://youtu.be/TTMNXzL4O4s>



Stages Of Meth Use

- The Rush(Flash); initial response felt when smoking or injecting meth. Last for about 30mins
- The High; Can last between 4-16hrs, the user feels aggressive, smarter, argumentative and have the delusional effect of becoming intensely focused on an insignificant item e.g. packing and repacking clothes for hours.
- The Binge; uncontrolled use, to try to maintain the high. Can last 3-15days. User is hyperactive mentally and physically. For every smoke or injection, the rush is smaller till no rush and on high occurs.
- Tweaking; most dangerous stage. This is the end of the binge as the meth no longer provides a rush or high, user loses sense of identity, intense itching, can't sleep, may become psychotic and may eventually become a danger to self and others.



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- The Crash; body shuts down, can no longer cope with overwhelming effect of the drug, hence long period of sleep. Can last 1-3days.
 - Meth Hangover; after the crash, user is in a deteriorated state, starved, dehydrated and physically, mentally and emotionally exhausted. At this stage the addiction kicks in as the only way to stop feeling this way is to use meth again. Last from 2-14days
 - Withdrawal; often 30-90days can elapse before user realizes that he/she is in withdrawal. There is depression, low energy, anhedonia, Then craving for more meth sets in and user often becomes suicidal. Meth withdrawal is painful and difficult so most meth users continue to use.

HARMFUL EFFECTS



BIOLOGICAL

- Raised blood pressure
- Cardiac arrhythmias
- Dental problems
- Stroke
- Parkinsonism
- Seizures

PHYSICAL SYMPTOMS OF METH USE



INCREASED PHYSICAL ACTIVITY

DECREASED APPETITE

FASTER BREATHING

RAPID HEART RATE

INCREASED BODY TEMPERATURE

SLEEPLESSNESS

Over the long-term, these effects compound. Long-term damage to nerves in the brain, the central nervous system, and to neural pathways also begins to result in other side effects.

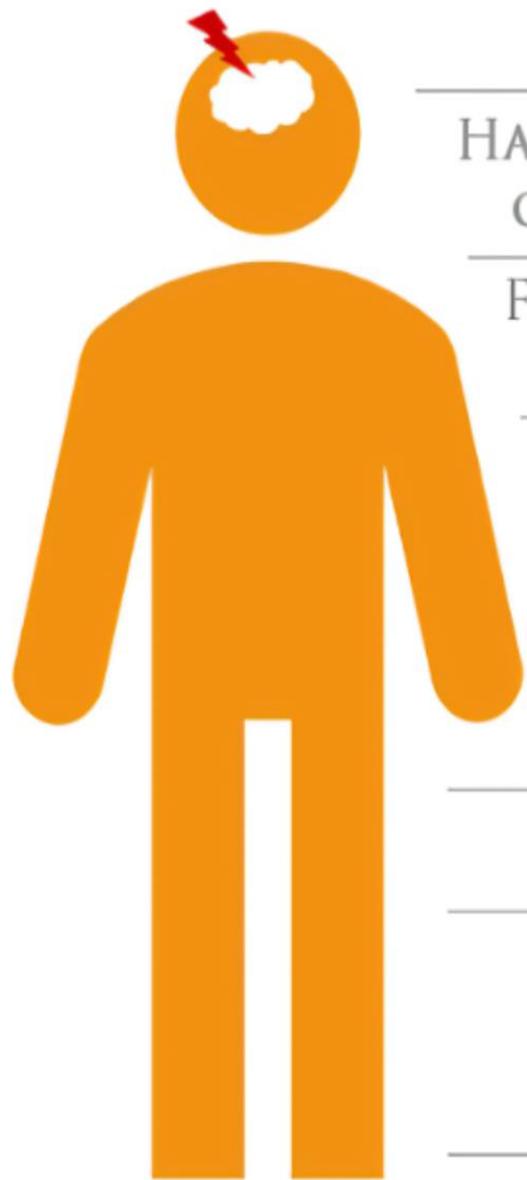
WEIGHT LOSS, OFTEN EXTREME

SEVERE DENTAL PROBLEMS

 goodcenter.org

INTENSE ITCHING OR SKIN CRAWLING

MENTAL SYMPTOMS OF METH USE



PSYCHOSIS

HALLUCINATIONS (ESPECIALLY SENSATIONS OF SOMETHING CRAWLING IN THE SKIN)

FAILURE TO QUIT, DESPITE RECOGNIZING HARMFUL IMPACTS OF THE DRUG

EMOTIONAL OR SENSORY BLUNTING

CONFUSION

ANXIETY

PARANOIA

HIDING USAGE, TAKING DRUGS "JUST IN CASE", OR TAKING DRUGS OUTSIDE OF A PRESCRIPTION

OBSESSION OVER METH

VIOLENT BEHAVIOR

DOCTOR SHOPPING OR LYING TO GET THE DRUG

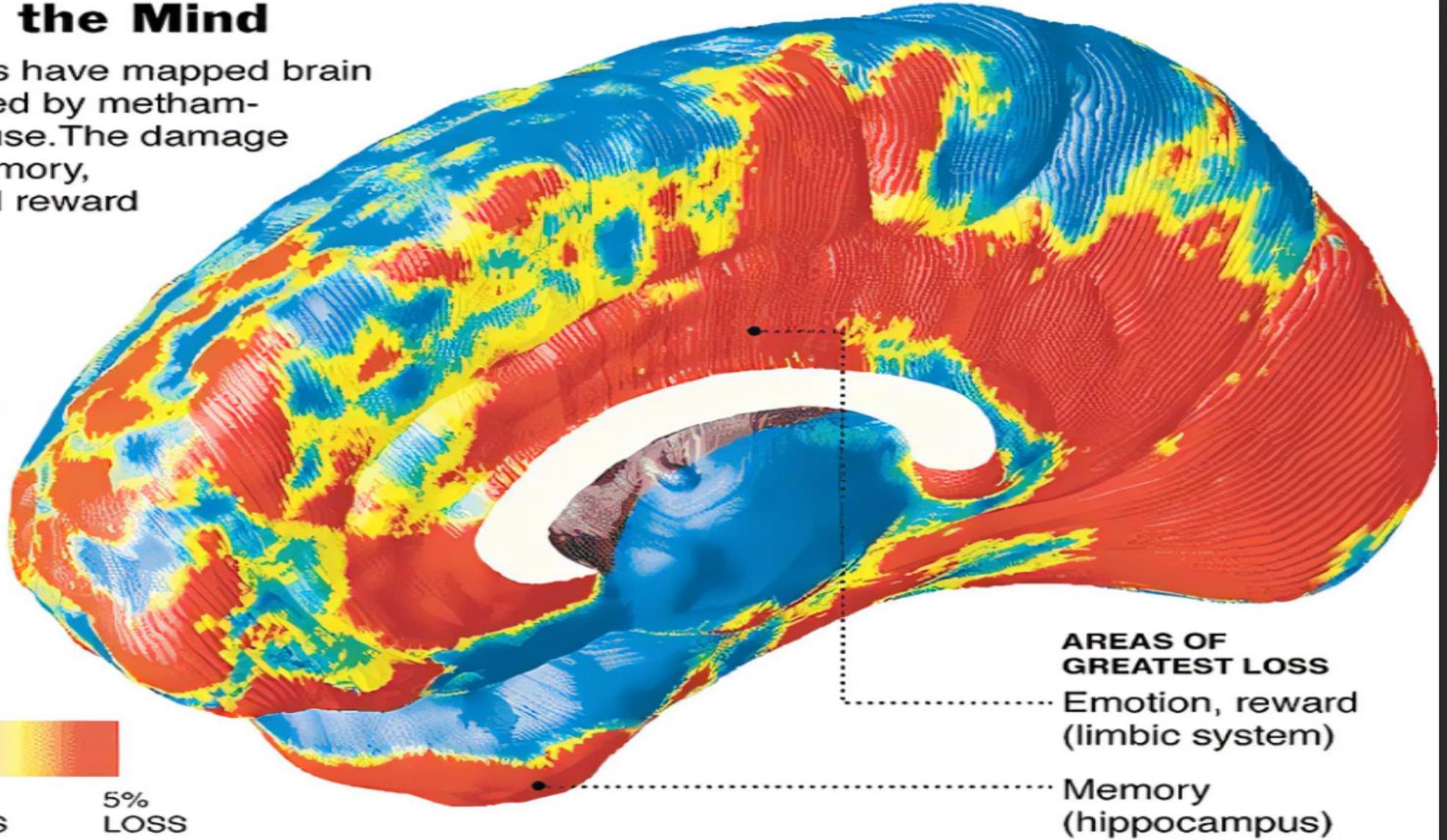
IRRITABILITY

MEMORY LOSS

Eroding the Mind

Researchers have mapped brain decay caused by methamphetamine use. The damage affected memory, emotion and reward systems.

Average difference in brain tissue volume of methamphetamine users, as compared with non-users:



Source: Dr. Paul Thompson, U.C.L.A.



PSYCHOLOGICAL

- Dependence
- Anxiety
- Homicidal and suicidal thoughts/attempts
- Psychosis- delusions, hallucinatory experiences
- Depression
- Insomnia
- Change in personality profile



SOCIAL

- Violent/aggressive behaviour
- Criminal offending
- Financial/ occupational problems
- Marital/relationship problems

A FEW THINGS
to
Look out for
WHEN IT COMES
to Trying
★ TO SPOT ★
AN ADDICTION

Signs of a meth **ADDICTION**

- | A significantly altered physical appearance
- | Anxiety & restlessness
- | Money problems
- | Has a hard time sustaining a job
- | No longer attends social engagements or activities

THE RISK OF RELAPSE & OVERDOSING ON METH

In most instances, overdose occurs when users relapse after having quit

- They tend to go back to their old using habits
- They use the same amount of the drug they were accustomed to
- Their tolerance levels have diminished, causing the person to overdose

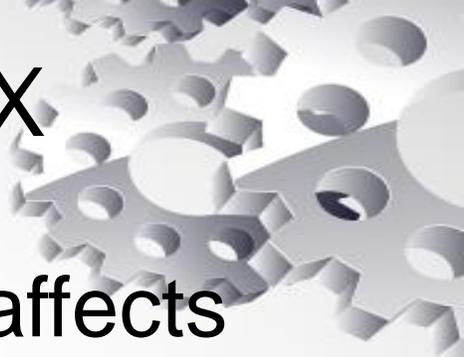


RISK FACTORS FOR USE



- History of heroin/opiate use
- History of smoking/alcohol use
- Risky sexual behaviour
- Some psychiatric disorders
- Family history of drug/ alcohol use
- Family history of crime
- Female sex

NIDA PRINCIPLES OF EFFECTIVE DRUG TX



- Addiction is a complex but treatable disease that affects brain function and behavior
- No single treatment is appropriate for everyone. Treatment varies depending on the type of drug and the characteristics of the patients
- Treatment needs to be readily available.
- Effective treatment attends to multiple needs of the individual, not just his or her drug abuse

- Remaining in treatment for an adequate period is important.
- Behavioral therapies—including individual, family, or group counseling—are the most commonly used forms of drug abuse treatment
- Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies
- An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets his or her changing needs

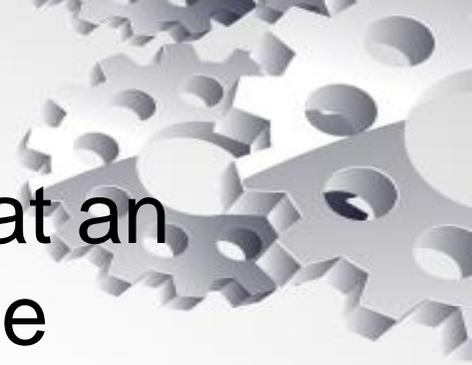




- Many substance use individuals also have other co-morbid physical and mental disorders.
- Medically assisted detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse.
- Treatment does not need to be voluntary to be effective.
- Drug use during treatment must be monitored continuously, as lapses during treatment do occur

PHARMACOLOGICAL TREATMENT

- Development of therapies for methamphetamine at an early stage. No substantial evidence for use of one effective treatment yet.
- Naltrexone shown to significantly mitigate subjective effects of the drug in dependent users; also significantly blocks craving
- Bupropion could be effective in early methamphetamine abstinence to decrease withdrawal symptoms and cognitive deficits
- A clinical trial investigating interactions between bupropion and methamphetamine revealed non exacerbation of meth-induced cardiovascular effects.





- Euphoria and craving significantly reduced with bupropion
- Bupropion + CBT shows promising results with less methamphetamine use in subjects.
- Modafinil, a non-amphetamine stimulant may also be effective in treating meth dependence. It can potentially reduce withdrawal symptoms and produce cognitive benefits leading to improved response to behavioural techniques.
- Other agonist replacement medication, D-amphetamine also show similar promise.

NON-PHARMACOLOGICAL TREATMENT



- Behavioural therapies:
- Cognitive Behavioural Therapy
- Contingency management interventions
- The matrix model
- 12-step facilitation therapy
- Family behavioural therapy

GLOBAL TRENDS

- First country to report misuse of the drug: Japan circa 1945
- According to UNODC there were 27 million users of meth worldwide in 2019
- Between 2005-2009, 79 countries reported seizure of methamphetamine worldwide. By the next decade (2015-2019) this number increased to 111 countries.
- Production and trafficking are continuously evolving. UNODC noted that 1 billion meth tablets seizure were made in East and Southeast Asia in 2021, more than that of crystalline and powder form by 3.2 tonnes and 1.5 tonnes respectively, while the liquid form seizure also dropped from 6.4 tonnes in 2020 to 908 kilogrammes in 2021.
- Most meth consumed is produced and distributed locally.



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- UNODC report points to lack of official check and control of meth and political instability in the so-called 'Golden Triangle' of countries, where meth originates and is moved across porous borders in particular Myanmar, Thailand and Laos
 - It also reports that due to its cheap price, and availability along with high purity, it remains 'the primary drug of concern' to all countries especially in East and Southeast Asia, from China to Japan, and from Indonesia to Singapore.

TREND IN NIGERIA

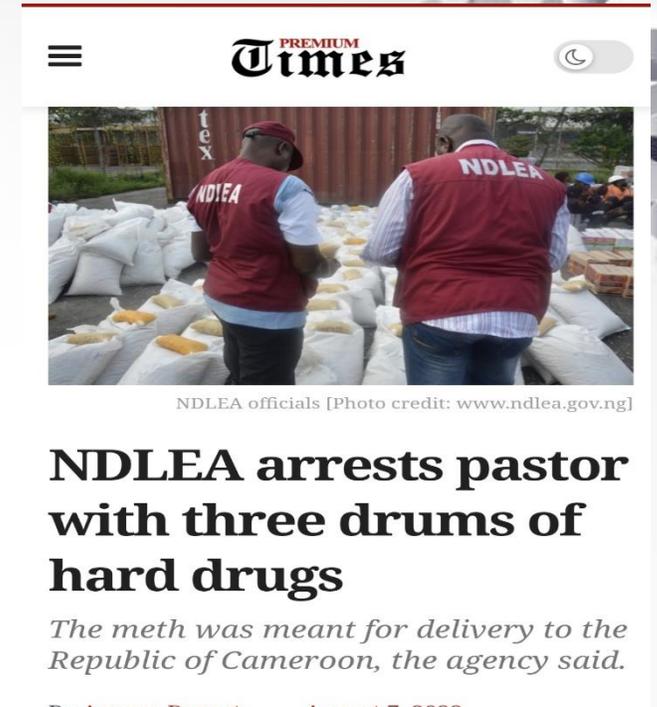
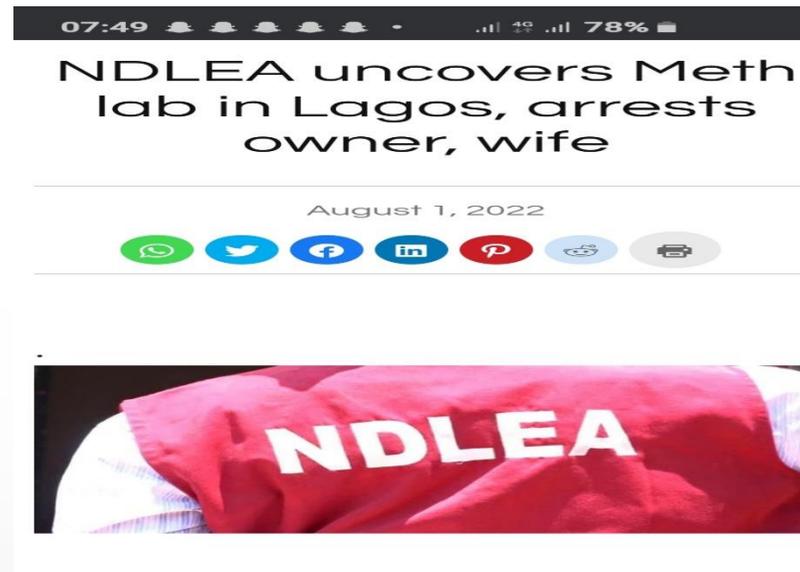


- An exponential increase in both use and production of meth has been documented in Africa
- Nigeria being the second largest producer in Africa after South Africa.
- In the past decade the production of methamphetamine in Nigeria has increased exponentially, with quantity of meth seized increasing from abt 177kg in 2012 to about 1.3tonnes in 2017
- In 2018 UNODC estimated that about 89,000 Nigerians use meth.
- The first meth lab was discovered by the NDLEA in July 2010 in Lagos, South-West Nigeria, with the capacity to manufacture 25-50 kg batches of meth.
- Eight months later, a second facility was discovered in Satellite town, Lagos and three Bolivians and one Nigerian were arrested.

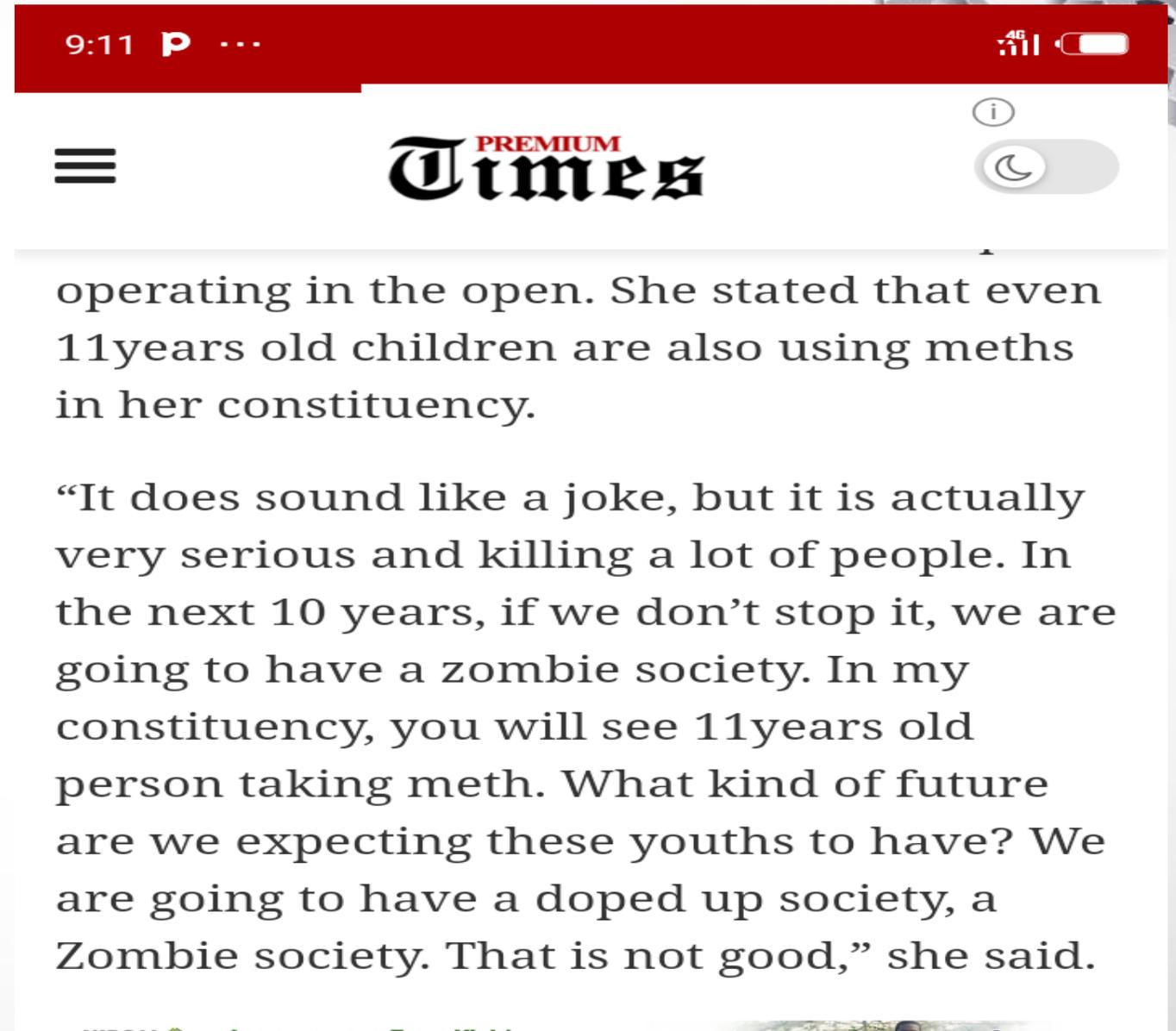
- by 2016 experts from South America were imported to Nigeria by drug syndicates to set up meth labs.
- when a site in a village in South-East Nigeria was raided by NDLEA, 4 Mexicans and 5 Nigerians were arrested
- Between 2011 and 2022 nearly 25 meth labs has been dismantled by the NDLEA



- Recently, on 30th July 2022, two meth labs were busted in Lagos, South-West Nigeria(248.74kg of meth recovered) and Awka, South-East Nigeria and the meth barons arrested by NDLEA.

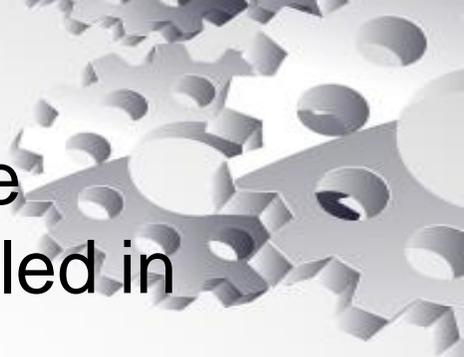


- in 2021, the House of Reps asked the NDLEA to intensify their raids on meth labs in Nigeria.
- Fed. Govt was also urged to develop policies to curb the spread of meth and other narcotics across the country.
- This was particularly due to the fear surrounding the effect of meth on the mental health of its users.
- As one of the lawmakers stated:



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- In 2019 about 309kg of ephedrine was seized by the NDLEA from members of a criminal network in Enugu, South-East and Festac-town, Lagos, South-West Nigeria.
 - A major portion of meth produced in Nigeria is exported to South Africa and South-East Asia where 1kg reportedly sells for up to 50,000 to 130,000 euros/usd 50,000
 - Almost all of the detected trafficking from Nigeria to Asia has involved the use of commercial air couriers.
 - Methods of conveyance include swallowing latex wraps of the drug, concealing on their person or hiding within items like African crafts and souvenirs.

THREATS



- Increased production in Nigeria fueled by the fact that the precursor ephedrine and pseudoephedrine, while controlled in most developed countries, is readily available in Nigeria.
- The alliance between Nigeria and Latin American cartels, has made it easy for the increase in local production and accessibility of the substance.
- This increased local production has also led to a marked rise in availability and consequently consumption
- Relatively cheap and easy synthesizing of the drug; according to the UNODC “.....people who use meth have been known to synthesize meth in their own kitchens using common decongestants.”
- Due to the economic insecurity of the country, the youth use meth as a way to cope with the depressed economic situation.



- Inadequate Funding

One of the greatest challenges faced in the implementation of the drug treatment programme in Nigeria is that of inadequate funding.

- Poor prescription control and drug distribution system, hence increasing availability for production and misuse.
- Availability of treatment centres

About 48% located in the South-West with a majority in urban areas.

- High cost of treatment; paucity of health insurance coverage for substance abuse treatment.

- On account of these, some communities have resorted to devising other means to act as deterrents to the use of the drug in their locality e.g public caning of offenders.



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- Increase in the use of violence by rival gangs to control their drug market has also become a threat.
 - Inadequately trained staff
 - Dearth of internal/external evaluation of treatment process or outcome. One study showed only about half of treatment centres carried out regular audits.
 - Deficient/Excessive Family Support

Dealing with families that are either not supportive, under supportive and over supportive.

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- Political instability, with its attendant rise in unemployment and economic depression
 - High profits from the sale of the substance
 - Low awareness and sensitisation especially among the youth
 - A focus on traditional illicit drugs
 - Inadequate development, implementation, monitoring and evaluation of drug policies.



Other factors driving the growing use of meth include:

- Poor health-seeking behaviour; patronising of religious homes for treatment, spiritual interpretation of drug use problems.
- Little or no substitution/maintenance therapy
- Insufficient syringe exchange programs for injection users
- Not enough and inaccessible structured longer-term and rehabilitation services.

CONCLUSION



- The abuse of methamphetamine in Nigeria has grown exponentially in the past few years, especially with the recent proliferation of production labs in different parts of the country.
- Stricter control by national precursors of chemicals and psychotropic substances and effective regulations of the import of controlled precursors should be looked into by the government.
- While the government and law enforcement agents have made concerted efforts to clamp down on these activities, there remains a lot to be done in order to effectively curb this menace.
- The government, law enforcement and communities will need to work in synergy to contain the spread of this substance, especially among the vulnerable population.

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A vibrant, multi-colored paint splatter background. The splatters are in shades of purple, blue, cyan, green, yellow, orange, and red, radiating from the center. The text 'Thank You!' is written in a large, white, bold, sans-serif font across the middle. The background is white with faint 'iStock by Getty Images' watermarks. In the top right corner, there is a decorative graphic of interlocking grey gears.

Thank You!