

**THE DRUGS OF ABUSE
&
THEIR CLASSIFICATION,
PROPERTIES
&
DRUG TRAFFICKING SCENARIO**

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This presentation would provide basic information about

- **drugs of abuse**
- **their classification and properties**
- **problem of drug abuse and addiction**

THE DRUGS OF ABUSE

- global and Indian drug trafficking scenario
- drug law enforcement



THE DRUGS OF ABUSE



DRUGS

Drugs are chemical substances with a capacity to affect the Central Nervous System by producing a state of intoxication or a similar change in mental functions.

Drugs encompass a Large Number of Preparations

1. Narcotic Drugs
2. Psychotropic Substances
3. Medicinal Drugs
4. General Anaesthetics

THE DRUGS OF ABUSE

5. Volatile solvents
6. Doping agents
7. Alcohol & tobacco



Narcotic Drugs

Narcotic drugs are internationally defined as chemical substances under control of the United Nations Single Convention on Narcotic Drugs (1961)



This would include -

- Cannabis & Cannabis resin
- Opium
- Morphine (MORPHINE, CODEINE, PETHIDINE)
- Natural and synthetic opiates
- Coca leaves & Cocaine

Psychotropic Substances

Psychotropic Substances are internationally defined as substances under control of the UN Convention on Psychotropic Substances (1971).

This would include

- **Amphetamine : Stimulants**
- **Depressants : Barbiturates,**
- **Benzodiazepines, Mandrax**
- **Barbiturates : Hallucinogens**
- **Benzodiazepines : Ecstasy**

THE DRUGS OF ABUSE



**PHARMACOLOGICAL
CLASSIFICATION
OF DRUGS OF
ABUSE**

THE DRUGS OF ABUSE

- **Narcotics** - pain killing, numbing, produce a sense of well being
- **Stimulants** - speed up working of the CNS
- **Depressants** - slow down working of CNS
- **Hallucinogens** - may put the brain machinery completely out of gear

THE DRUGS OF ABUSE



Cannabis



Amphetamines



Opium



Cocaine



Ketamine



MDMA (Ecstasy)



Benzodiazepines

OPIUM

Opium production is concentrated in notified areas in the states of Madhya Pradesh, Uttar Pradesh and Rajasthan under stringent licensing regime monitored by Narcotics Commissioner of India, Gwalior.

THE DRUGS OF ABUSE



OPIUM And its Derivatives

- opium or “afeem” or “afoo”-
the king of narcotics
- coagulated juice of the poppy
plant

THE DRUGS OF ABUSE

- **derivatives - morphine, heroin, codeine and thebaine**
- **single poppy plant bears about 5-8 poppy capsules**

THE DRUGS OF ABUSE

- **incising (lancing) the unripe poppy pods**
- **the latex, a milky white sap, oozes out and is scraped off with a knife**

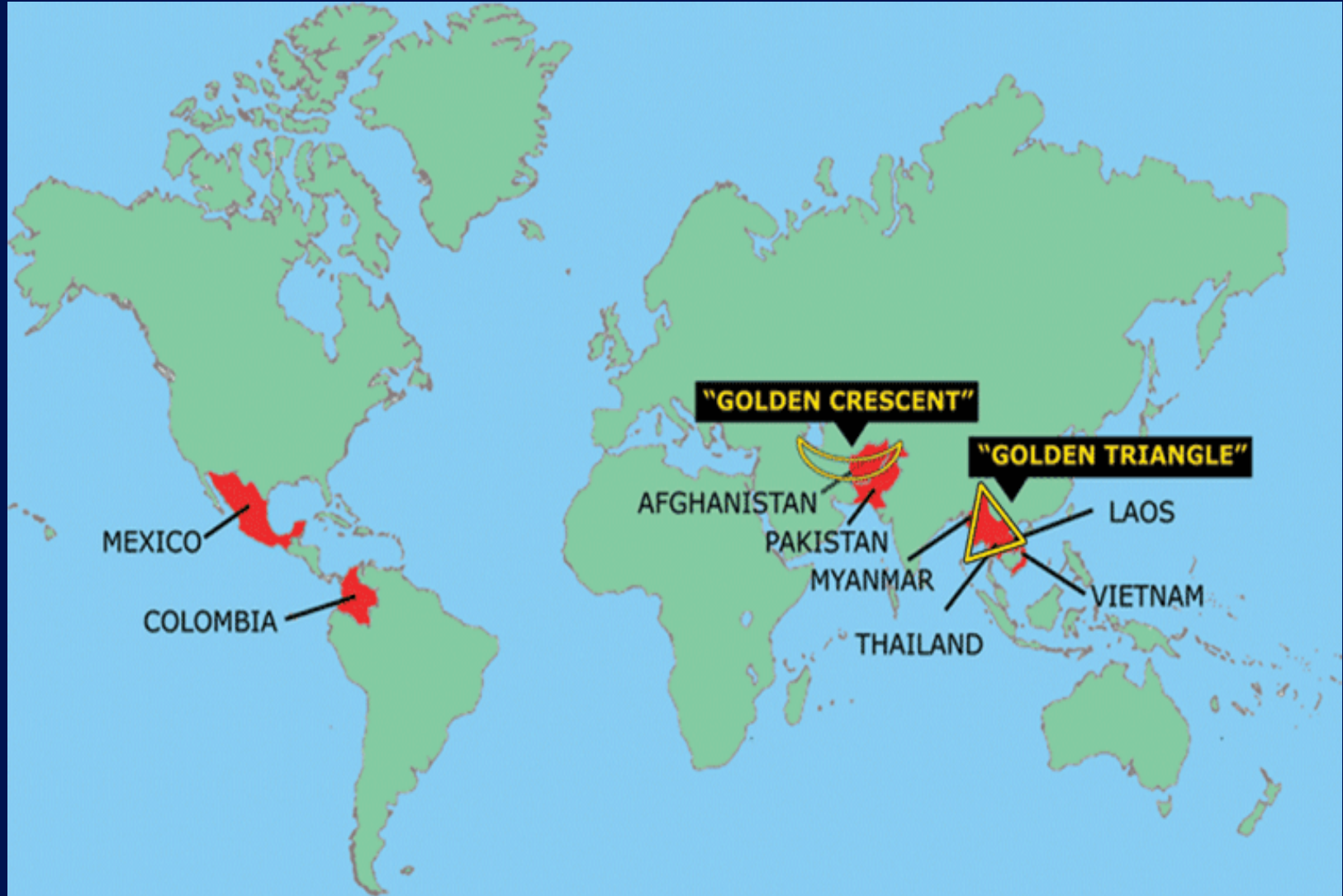
THE DRUGS OF ABUSE

- **Illicit poppy cultivated in the Golden Crescent and the Golden Triangle**
- **licit poppy is cultivated Turkey, Greece Australia and India**

THE DRUGS OF ABUSE

- **In India, licit poppy in M.P. , UP and Rajasthan**
- **63,000 licensed farmers**
- **Supervised by CBN**

THE DRUGS OF ABUSE



MAJOR POPPY PRODUCING REGIONS OF THE WORLD

THE DRUGS OF ABUSE

OPIUM POD IN FULL BLOOM



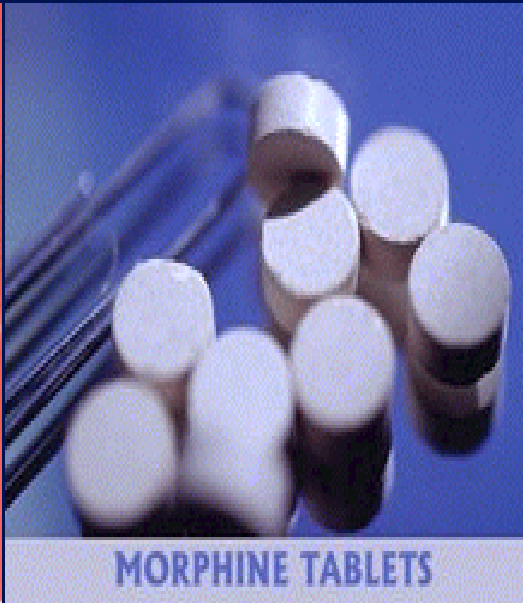
MORPHINE

- **highly potent opiate analgesic drug**
- **isolated chemically in 1804**

THE DRUGS OF ABUSE

- prepared by dissolving opium in boiling water
- best reliever of acute pain
- carried by US Army soldiers on operations as auto-injector

THE DRUGS OF ABUSE



CODEINE

- **alkaloid of opium poppy is a CNS depressant**
- **synthesized from morphine**

THE DRUGS OF ABUSE

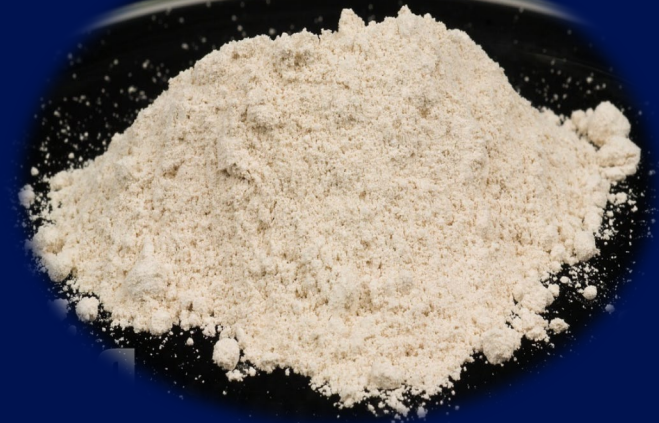
- **used commonly as cough suppressant, analgesic, anti-diarrhoeal drug**
- **smuggled into north-east India and Bangladesh where it is abused**

CODEINE

- used in combination with a paracetamol to enhance effect



**HEROIN – CURSE OF
THE 20TH CENTURY**



THE DRUGS OF ABUSE

- a powerful addictive depressant
- It is more addictive than morphine
- pure heroin is a white powder bitter in taste

THE DRUGS OF ABUSE

- **illicit heroin color varies from white to dark brown to black**
- **street names : boy, H, harry, horse, joy powder, white lady, brown sugar, junk, pudia, saman, gard, smack.**

THE DRUGS OF ABUSE

➤ abuse pattern – injected by skin popping or main-lining, inhaled (chasing the dragon), sniffed/snorted, smoked

WHAT HEROIN DOES

- **causes drowsiness, inability to concentrate, apathy and loss of sex drive**
- **malnutrition and extreme weight loss**

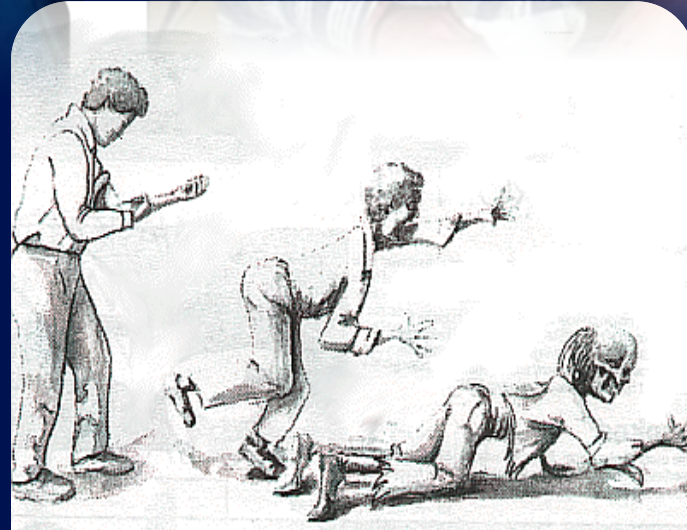
THE DRUGS OF ABUSE

- risk of overdose is high resulting in death due to respiratory suppression
- sharing of contaminated injecting needle and likelihood HIV/AIDS

THE DRUGS OF ABUSE

- **unavailability of the drug causes withdrawal symptoms**
- **addict may resort to serious crimes or compromise to obtain required dose**

THE DRUGS OF ABUSE



Heroin

THE DRUGS OF ABUSE

BARBITURATES

BARBITURATES

➤ Drugs that act as CNS

depressants

➤ wide range of effect from

sedation to sleep to anesthesia

BENZODIAZEPINES

DIAZEPAM

THE DRUGS OF ABUSE

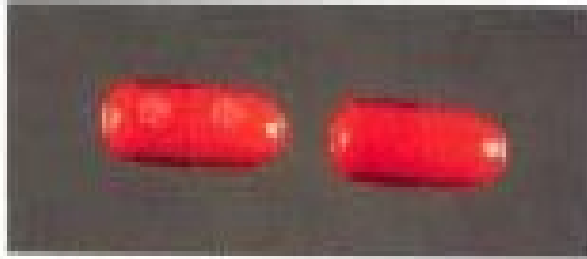
- **intoxication is remarkably similar to alcohol intoxication**
- **short and medium range are prescribed as sedatives and sleeping pills**

THE DRUGS OF ABUSE

➤ in small doses acts as “truth serum”

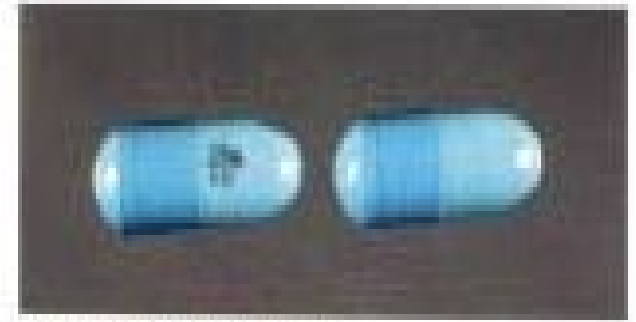
➤ famous users – Adolf Hitler,
Marilyn Monroe

THE DRUGS OF ABUSE



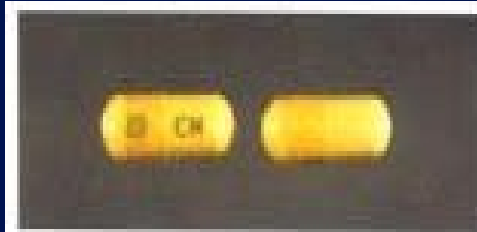
Trade Name: Seconal
Controlled Ingredient: secobarbital sodium,
100 mg

SECONAL



Trade Name: Amytal
Controlled Ingredient: amobarbital, 200 mg

AMYTAL



Trade Name: Nembutal
Controlled Ingredient: pentobarbital 100 mg

NEMBUTAL

THE DRUGS OF ABUSE

➤ Psychoactive drugs, CNS

depressants

➤ Useful in treating anxiety,

insomnia, agitation, seizures and

muscle spasms

THE DRUGS OF ABUSE

- Among the most frequently prescribed medicines world wide
- Have addictive potential and dependence may develop very fast
- Action of duration – alprazolam or lorazepam for ST, rohypnol for MT and diazepam (valium) for LT effects

COCAINE

- **recreational drug of choice of America**
- **use permeates into the powerful and socially prominent circles**

COCAINE

- **white crystalline alkaloid**
- **found in leaves of Coca bush**
- **grown in South America especially**

Peru, Bolivia and Columbia

COCAINE

- **commonly known as Bolivian coca**
- **coca paste made from coca leaves**
- **street names – coke, snow, crack, rocks, charlie**

COCAINE

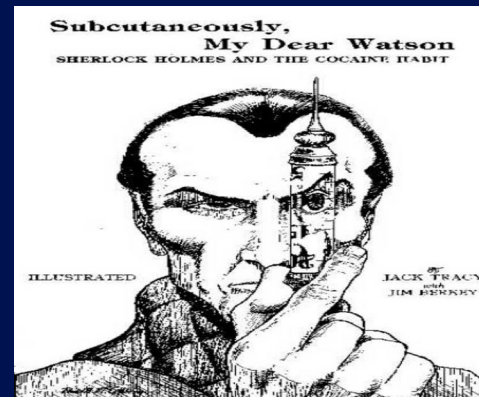
- **very addictive drug**
- **cocaine is a white powder**
- **it is snorted, smoked or injected**

COCAINE



THE DRUGS OF ABUSE

SNORTING COCAINE LINES



SNORTING COCAINE LINES

- cocaine addiction can lead to heart attack, respiratory failure, seizures, anxiety, nervousness and paranoia
- chronic addicts experience “cocaine leaps”

THE DRUGS OF ABUSE

- **mixing cocaine/crack with any other drug is extremely dangerous**
- **price upto Rs 2 crore per kg in India and upto Rs 4 crore in USA and Europe**

THE DRUGS OF ABUSE

- **Celebrity addicts – Sigmund Freud, Arthur Conan Doyle**
- **R.L. Stevenson (1885) – wrote Dr. Jekyll and Mr. Hyde in only 6 days and nights on cocaine binge**

CANNABIS

- The most widely abused drug world wide
- It grows in more than 172 countries, in most places as a wild shrub

CANNABIS

- Active ingredient is tetra hydro cannabinol (THC)
- In India too it is the most widely abused drug with about 8.7 million addicts

CNNABIS

➤ Mostly cannabis is cultivated in J&K, H.P., Andhra Pradesh, Orissa and north-eastern states of India



MARIJUANA OR GANJA

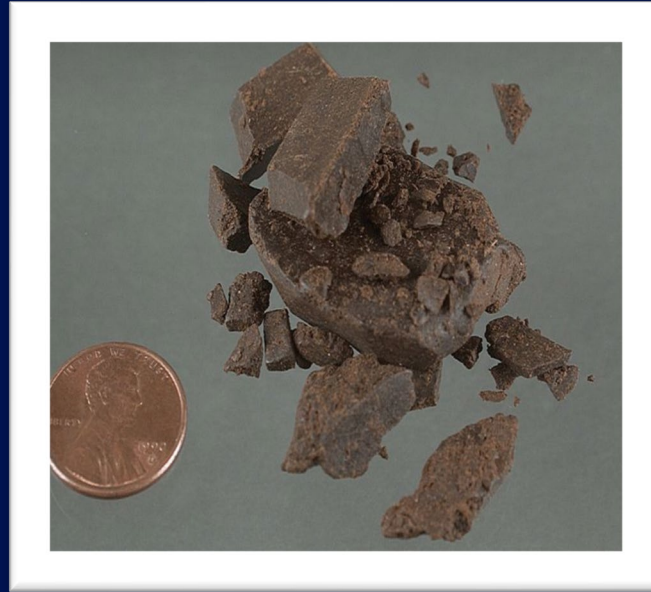
- Flowering tops of female plant contain THC 5%
- Smoked as chilam by sadhus, fakirs, Sufis, labourers

THE DRUGS OF ABUSE

- In cigarettes as “Reefers” or “Joints”
- Also known as Pot in Mexico grown frequently in flower pots
- Street names : Bonbo, Buddha sticks, Ganja, Kif, Hemp, Joint stocks, Pot, Thai Sticks, Grass

THE DRUGS OF ABUSE

HASHISH / CHARAS



HASHISH SEIZED IN USA



CHARAS STICKS AND LADDUS

HASHISH / CHARAS

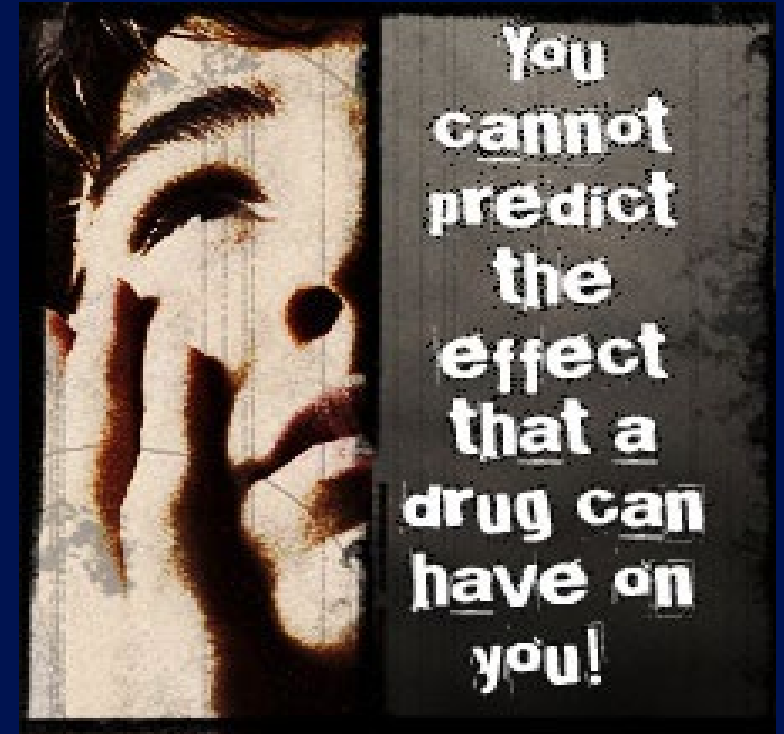
- It is the concentrated resin
- 10 to 15% THC
- Kashmir (laddu)
- HP - Malana cream

HASHISH / CHARAS

- Nepal (slabs)
- Morocco supplies 70 % of Europe hashish, known as Kif
- also H, hash, pot, shit
- green house cultivation

THE DRUGS OF ABUSE

EFFECTS



EFFECTS

- Impairs STM, concentration, performance in general esp in studies
- Affects heart functions
- Long time use associated with mental illness

EFFECTS

- Impairs respiratory functions
- Cannabis joint contains more cancer causing agents than the strongest tobacco cigarettes
- Cannabis traces in body can be detected upto 30 days after initial use

LSD – PASSPORT TO HEAVEN (OR HELL)

- LSD – Lysergic acid diethylamide
- The most potent hallucinogen known to mankind
- Discovered in 1943 by Dr. Hoffman of Sandoz

THE DRUGS OF ABUSE

- Dr. Hoffman himself took the drug and later felt slight dizziness, unrest, loss of concentration, visual disturbance and marked desire to laugh. After this he was unable to write down his symptoms
- He later recalled, “My field of vision swayed before me and was distorted like the reflections in an amusement park mirror. I had the impression of being unable to move from the spot, although my assistant later told me we cycled at a good pace.”

THE DRUGS OF ABUSE

- Colourless, tasteless, odourless liquid
- Had on a piece of blotting paper and in stamps and stickers, hidden behind them
- Street names are hippie and acid
- Most powerful drug known to man
- 1 gram is enough for 1 lakh users
- Leads to feeling of persecution, violent behavior
- LSD as shortcut to meditation and mystical revelation
- Good and bad trips (bum trips)

THE DRUGS OF ABUSE

LSD – PASSPORT TO HEAVEN (OR HELL)



LSD POWDER



LSD LIQUID



PEYOTE CACTUS



PEYOTE CACTUS

- **Peyote Cactus is also called the divine cactus or mescal buttons**
- **Small spineless cactus which grows in the Chihuahuan desert of Mexico**

PEYOTE CACTUS

- **Mescaline is a hallucinogenic substance found in the cactus in the form of small buttons attached to the stem**
- **Bizarre hallucination to gain access to the spiritual world**

PEYOTE CACTUS

- *“There are things known and there are things unknown, and in between are The Doors of Perception” ... By Aldous Huxley*

THE DRUGS OF ABUSE

PSILOCYBIN MUSHROOMS



PSILOCYBIN MUSHROOMS

- Hallucinogenic mushroom found in southern Mexico
- Effects are extremely close to those of LSD
- Street names are magic mushrooms, divine flesh

THE DRUGS OF ABUSE

ECSTASY (MDMA) OR AGONY



ECSTASY TABLETS

ECSTASY (MDMA) OR AGONY

- Consumption is in tablet or capsule form
- Street names are disco burgers, Dennis the Menace, lovers speed, adam, XTC

THE DRUGS OF ABUSE

- Its effect is euphoric 'rush' with heightened perception of surroundings
- Feeling of emotional closeness to others (empathy)
- Facilitation of communication and increased sociability
- Used at Rave parties and clubs
- Price ranges from Rs.1000-2500 per tablet

AMPHETAMINES- ATS / SPEED

- Synthesized in 1887 to as a cheap substitute to asthma drugs and treat sleep disorder
- After 40 years it was declared to be a powerful stimulant of CNS

THE DRUGS OF ABUSE

- **Widely used by soldiers in World War II to keep going**
- **In 1950's Japan and USA witnessed large scale abuse**
- **It gained popularity in 1950s amongst students and truck drivers**
- **Users are “speed freaks” seeking a thrill from the drug**

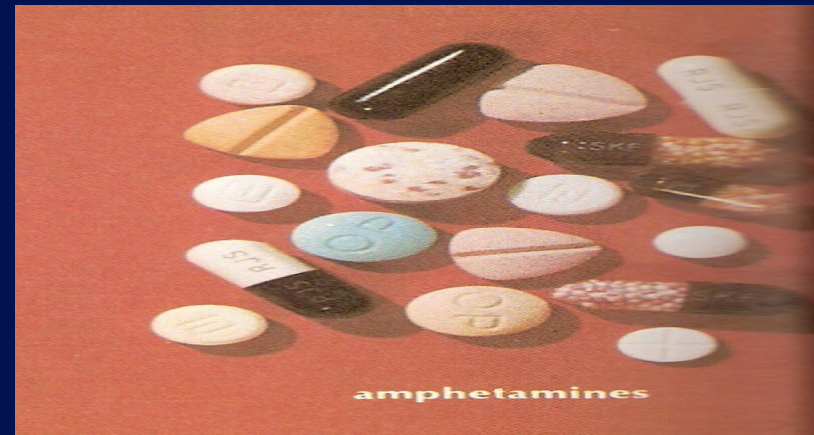
THE DRUGS OF ABUSE

- Initial flash or rush is exhilarating and the prime motive for abuse
- Tolerance develops very fast



THE DRUGS OF ABUSE

- Speed Binge
- Street names are Browns, Hearts, Oranges, Rippers, Wake ups
- They all give effects like hyperactivity, extended wakefulness and loss of appetite



AMPHETAMINE – THE SPEED DRUG

THE DRUGS OF ABUSE



10 Years of Meth Use



KEEP AWAY FROM METHAMPHETAMINES

CLUB DRUGS

- Used at all night dance parties such as raves or trance parties, dance clubs and bars
- To create a feeling of altered mood and a high known as a “trip” and to give energy to keep dancing or to cause sedation



CLUB DRUGS

- Some can be used to assist in the commission of sexual assault and are referred to as date rape drugs
- Easily added to flavoured drink or alcohol without victim's knowledge as they are colourless, odourless and tasteless



THE DRUGS OF ABUSE

- **Ketamine also known as K, special k, vitamin k, cat valium**
- **Rohypnol also known as roofies, roche, forget-me pill**
- **Methamphetamine also known as speed, ice, chalk, meth, crystal, crank, fire, glass**

THE DRUGS OF ABUSE

- LSD also known as acid, boomers, yellow sunshines
- Most victims experience anterograde amnesia
- Effects appear within 15 to 20 minutes and may last upto 10-12 hours
- All traces of the drug leave the body within 72 hours and are not found in routine toxicology screen or blood test

PHARMACEUTICAL PREPARATIONS

- Indian pharmaceutical industry is ranked third in volume terms globally
- There are over six lakh chemists
- Some legitimate pharmaceutical preparations can also be addictive if used without prescription and indiscriminately

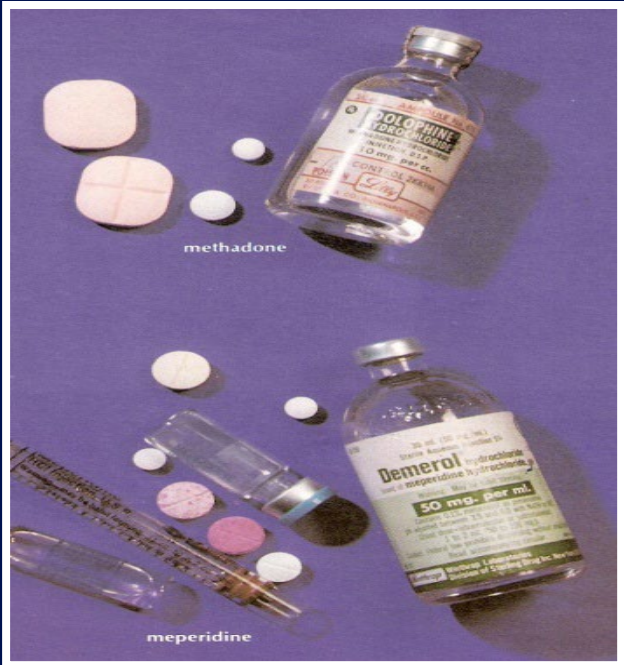
PHARMACEUTICAL PREPARATIONS

- Cough syrups containing codeine such as phensedyl and corex
- Tranquilizers such as alprazolam, rohypnol, diazepam (valium)

THE DRUGS OF ABUSE

- **Barbiturates such as secobarbital, pentobarbital and amobarbital**
- **Pain killers such as Proxyvon, Spasmoproxyvon, Beuprenorphine, Fentanyl**
- **Injections such as Tidigesic, Norphine, Avil.**

THE DRUGS OF ABUSE



PRECURSOR CHEMICALS

- The term precursor is used for chemicals having legitimate uses in industry which can be misused for manufacturing illicit drugs
- India's highly developed chemical industry is a source of Precursor Chemicals

PRECURSOR CHEMICALS

- The UN has identified 23 precursor chemicals
- India has placed controls over 12 such chemicals to prevent diversion

DRUG ABUSE SCENARIO IN INDIA

➤ **National Survey on Drug Abuse in India 2012**

➤ **Major Drugs of abuse –**

Alcohol – 135.5million users

Cannabis – 10 million users

Opiates – 3.5 million users

WHY DO YOUNG PEOPLE TAKE DRUGS

- **Under peer pressure – to be accepted, be popular, fit in and to impress friend**
- **Stress management – to run away from problems and loneliness**

THE DRUGS OF ABUSE

- **Enjoyment, excitement and fun, to feel good and to get energy**
- **Risk taking and rebellion – being urged or challenged by friend**
- **Out of curiosity to experiment**

ADDICTION

- The need for repeated doses of a drug to feel good or to avoid feeling bad is a sign of addiction
- All mind altering drugs are ADDICTIVE in nature

ADDICTION

- After few doses, the body starts DEMANDING them
- Repeated usage of a drug results in reduced effects, or TOLERANCE

ADDICTION

- Unpleasant physical symptoms that result from stopping the drug or its unavailability are known as WITHDRAWAL SYMPTOMS
- Can resort to stealing or even graver crimes

THE DRUGS OF ABUSE



**DRUG TRAFFICKING
SCENARIO-RECENT
TRENDS**

THE DRUGS OF ABUSE

As per UNODC Drug Report 2016

- approx. 300 million drug users
- 2,07,400 of them die from drugs
- 1.6 million people who inject drugs are living with HIV.
- 5.2% of the world population in age-group 15-64 are drug users
 - cannabis - 160 million
 - amphetamines (ATS) - 25 million
 - opium - 5 million
 - cocaine - 13 million
 - heroin – 11 million
 - ecstasy -10 million
- Global production of illicit poppy has shot up to a record 9000 MT
- Afghanistan alone accounts for 90 % of world's poppy and heroin production
- sharp decline in production in the Golden Triangle
- Columbia (54%), Peru (30%) and Bolivia (15%) account for almost entire cocaine production

GLOBAL DRUG ECONOMY

- Present global illicit drug market is worth around US\$ 500 Bn
- Profits alone run into US\$ 75 Bn
- Higher than GDP of 88 % of nations in the world
- Cannabis grown globally
- Drug trafficking and narco-terrorism

NARCO TERRORISM

- **Term coined by former President of Peru Fernando Terry in 1983**
- **Refers to terrorist acts carried out by groups that are directly or indirectly involved in drug trade**

NARCO TERRORISM



ILLICIT LAB IN AFGHANISTAN



US\$ 205 MN SEIZED WITH DRUGS

THE DRUGS OF ABUSE

WHY WOULD TERRORISTS TURN TO DRUG TRAFFICKING?



THE DRUGS OF ABUSE

WHY WOULD TERRORISTS TURN TO DRUG TRAFFICKING?

- Because they need money – for weapons, equipment, training, computers, information systems, transportation, bribes, safe houses, forged passports and payroll
- Drugs are a handy way to get cash – LOTS OF IT
- In the above scenario, Drug Trafficking and Narco Money is a threat to the society and the Nation.

THE DRUGS OF ABUSE

**SAY NO
TO
DRUGS**

THANKS