

## ALL INDIA INSTITUTE OF MEDICAL SCIENCES, RAJKOT

DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY

E-MAGAZINE

**JULY 2022** 

VOL. 1 ISSUE 2

## DRUG (SUBSTANCE) ABUSE

Drugs cure diseases but sometimes drug itself causes disease!!!



1,99,716

cases reported under NDPS Act

within 3 years

8.7 Lac People inject drugs in India

Say No to Drug Abuse !!!

# What is Drug (Substance) Abuse?

Substance abuse refers to a maladaptive pattern of substance use that results in recurrent and significant adverse consequences related to the repeated use of substances [DSM-IV-TR]. While substance abuse is an official term used in DSM-IV-TR, in day-to-day communication, the term drug abuse is used synonymously.

## **CHARACTERISTICS**

- 1. repeated failure to fulfil major role obligations [i.e. role of a good parent, son etc],
- 2. repeated use in situations in which it is physically hazardous [e.g. during car driving],
- 3. multiple legal problems, and 4. recurrent social and interpersonal problems.



**GLOSSARY** 

Speedball: the intravenous use of cocaine with heroin or morphine in the same syringe

Liquid Gold: slang for the urine of amphetamine addicts sold on the streets Ecstasy: use of amphetamine with 'designer' amphetamines like MDMA

Hippy flipping: it is a combination of ecstasy with psilocybin mushroom

Date Rape Drugs: any substance that is administered to lower sexual inhibition and enhances the possibility of unwanted sexual intercourse and renders the individual vulnerable to sexual assault. Knockout drops or Micky Finn: A solution of chloral hydrate and alcohol.

Turkey skin: Linear needle track scars are usually found in an overlying venous area of the antecubital fossa. Punctate areas of black discolouration are caused by the deposition of carbonaceous material along the track of the needle.

Drug dependence: is a compulsion to take a drug to produce the desired effect or to prevent unpleasant effects when the drug is withheld, i.e. it is necessary for either physical or psychological well-being.

Mainlining: to inject a narcotic, especially heroin, directly into a vein to use it without restriction. Illicit trafficking: Drug trafficking is a globally illicit commercial activity involving the cultivation, manufacture, distribution and sale of substances subject to prohibitive drug laws.

### Compulsion Present

**FEATURE** 

## Dependence

Dose

Withdrawal symptoms

Harm

**DRUG ADDICTION** 

**Psychological & Physical** 

**Characteristics symptoms** 

**Tendency to increase** 

Both individual and society

**DRUG HABITUATION** 

Desire, but no compulsion

Psychological but no physical

No tendency to increase

**Individual only** 

None or mild

RAVE PARTY DRUGS

enhances the possibility of unwanted sexual intercourse and renders the individual vulnerable to sexual assault. Knockout drops or Micky Finn: A solution of

chloral hydrate and alcohol.

Date Rape Drugs: any substance that is

administered to lower sexual inhibition and



## sexual desire, arousal, behaviour, performance, or pleasure. Aphrodisiacs have a long history of use both as sexual

sexual debility. Numerous herbs from many cultures are ascribed with the ability to improve sexual function. Few of these have significant research or clinical trials behind them. Their activity is variously attributed to stimulating activities, especially the warming, spicy and fragrant herbs; kidney tonic function, improved strength of the reproductive/sexual activities; nervine relaxation activity, improved vaginal tissue tone and lubrication; and increased pelvic circulation. rugs used & its magnitude in India INDIA AND STATES: PREVALENCE OF ALCOHOL USE DISORDERS BEVERAGE BY CURRENT (10-75 YEARS), IN % ALCOHOL USERS

Aphrodisiacs are any substance or food that increases

stimulants for pleasure's sake and for the treatment of





### **ANY OTHER** ILLICIT LIQUOR

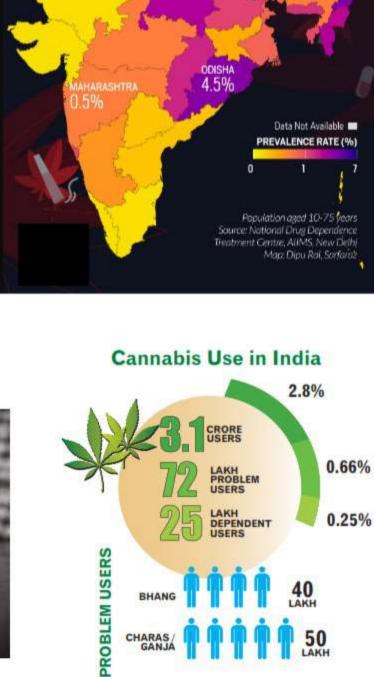




STRONG BEER 12%

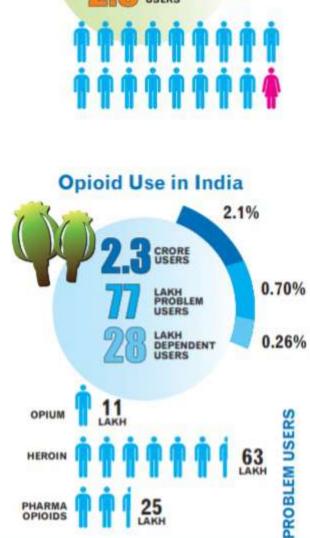
HOME BREWED ALCOHOL 1156

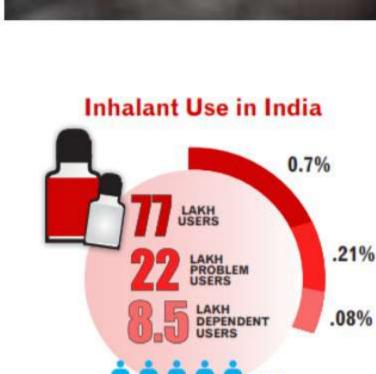
WINE 4%

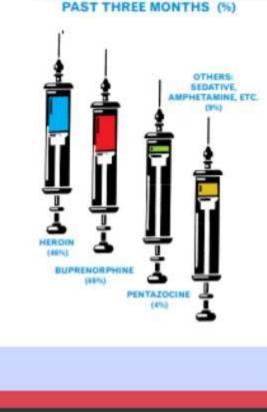


STATE-WISE PREVALENCE OF

CHARAS/GANJA CONSUMPTION







PREDOMINANT DRUG INJECTED IN

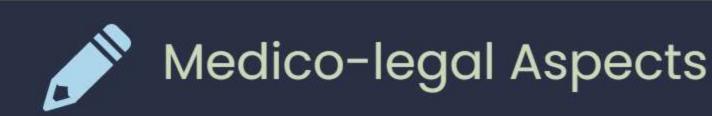
Hard & Soft Drugs

## **Hard Drugs:**

Hard drugs lead to severe physical addiction, e.g. heroin, methamphetamine, alcohol and nicotine.

Soft drugs do not cause physical addiction but may lead to psychological dependence, e.g. cannabis,

## **Soft Drugs:** mescaline, psilocybin and LSD.



### The National Institute on Drug Abuse indicates the following risk factors for developing drug abuse problems:

- · Poor relationship with parents
- · Inadequate supervision over adolescent's activities
- · Use of drugs by friends/peers
- · Permissive attitude towards their own drug use and the drug use of the adolescent · Behavioural problems combined with poor parenting

· Unstable home environment, often due to drug abuse or mental illness of the parent

- · Poor achievement in school
- · Apparent ambivalence or approval of drug use in the school, peer group or community
- · Availability of drugs in the community, peer group or home

Narcotic Drugs and Psychotropic Substances Act:

- . NDPS act has been enacted in 1985 to consolidate and amended in 2015, the law relating to narcotic drugs, to make stringent provisions for regulation of Narcotic drugs and psychotropic substances, to provide for forfeiture of property derived from narcotic drug trafficking, and to implement the provisions of the International Convention on Narcotic Drugs and Psychotropic substances
  - 'Narcotic drug' means coca leaf, cannabis (hemp), opium, poppy and all drugs manufactured from them.
  - · 'Psychotropic substance' means any substance, natural or synthetic, or any salt or preparation of such substance or material included in the list of psychotropic substances specified in the Schedule (76 drugs and their derivatives are listed), e.g. amphetamine, pentobarbital, psilocybin and diazepam.
  - Punishment:
  - If any person produces, possesses, transports, imports, sells, purchases or uses any narcotic drug/psychotropic substance (except 'ganja'), he shall be punished with rigorous imprisonment (RI) for ≥ 10 years (which may extend to 20 years), and a fine  $\geq 1$  lakh (which may extend to 2 lakh). Punishment for a repeat offence is a RI for  $\geq 15$ years (which may extend to 30 years) and a fine of  $\geq$  1.5 lakh (which may extend to 3 lakh).
  - Punishment for ganja handling is a RI for 5 years and/ or a fine of 0.5 lakh. For a repeat offence, the imprisonment may extend to 10 years and the fine to 1 lakh. · However, if a person is carrying 'small quantities (e.g. 250 mg of heroin, 5 g of charas, 5 g of opium, 125 mg of
  - cocaine), then the punishment is simple imprisonment which may extend to 1 year or fine (unspecified) or both. For ganja (< 500 g), imprisonment is up to 6 months. • In a later enactment, the Prevention of Illicit Traffic in NDPS Act, 1988, there is a provision for preventive detention
  - and seizure of property. The maximum punishment is the death penalty if a person is found to be trafficking, for example, ≥ 1 kg of pure heroin, twice (despite conviction and warning on the first attempt).



# Duties of a doctor

### **Medical:**

Medication-assisted therapies is given to control cravings and to relieve withdrawal symptoms. Medication-assisted treatments

Detoxification: patient advised to discontinue consuming drugs and observe for withdrawal symptoms

- are available for Opioids, Alcohol, Tobacco etc. · Behavioral therapies: Cognitive behavioral therapy and psychotherapy are useful in building self-esteem and developing coping
- skills.

### Legal:

- It is advised to register such cases as a Medico-legal nature Inform concerned police station officer for further investigation
- Obtain consent for examination and collection of samples following guidelines for
- obtaining consent • Preservation of material i.e. vomitus, lavage material, remnants of substance use, etc.
- and forwarding these for Forensic Investigations.





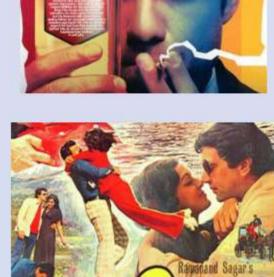
## Movies featuring Drug abuse Movies featuring issues with regards to drug (substance) abuse.

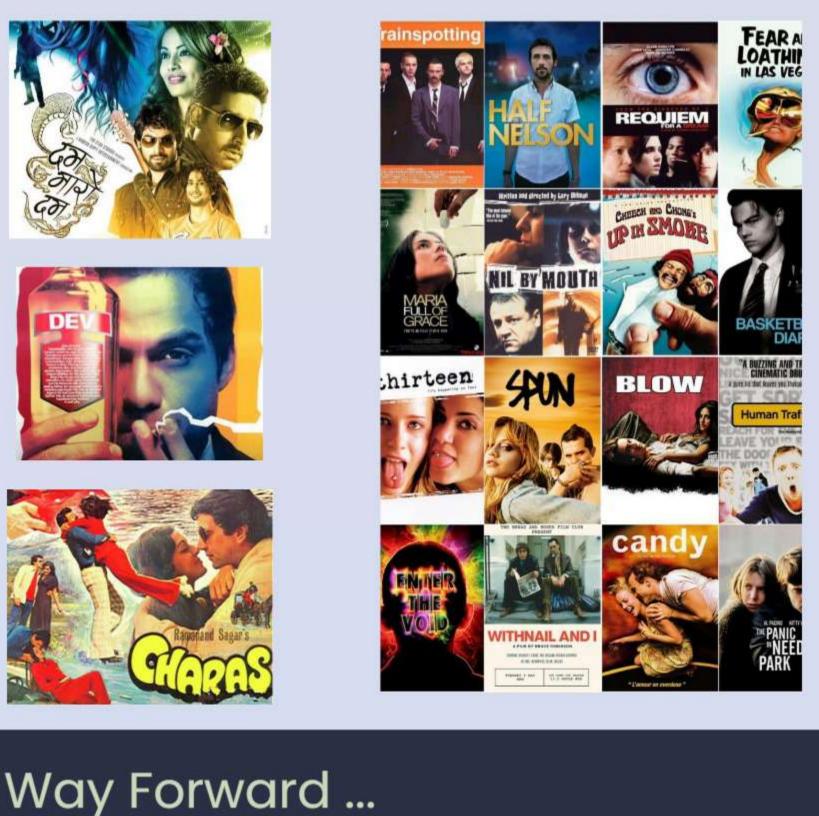
In these movies, issues about the consumption of drugs and illicit trafficking have been highlighted and social awareness is conveyed to prevent misuse. In some movies, law related to drug abuse is also highlighted.









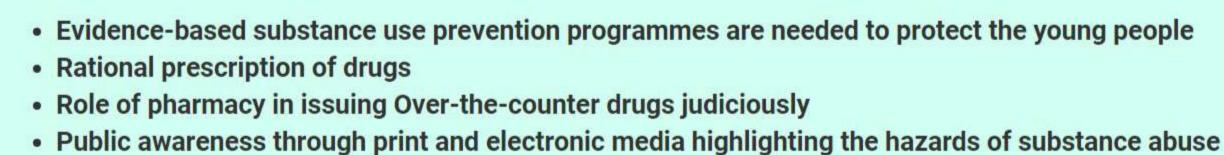




# 26<sup>th</sup> JUNE

**International Day Against** 





### Rational prescription of drugs Role of pharmacy in issuing Over-the-counter drugs judiciously

victimised Training to cope with stress and anxiety, especially among sensitive age groups.

Awareness programs at school and college level to prevent teenagers and adult students to get

**Policy** 

Laid down guidelines and their strict monitoring, especially in permissible public places

 A conducive legal and policy environment is needed to help control drug problems Involvement of non-government agencies, social workers and forensic experts in policy designing

References:

## Periodic review of policies considering the needs of the society

- Law
- Provision of punishment in Indian Penal Code Provision of punishment to teenagers to direct them towards corrective measures Do's and Dont's for drug abuse at all sensitive places

Training of officers responsible for preventing drug abuse and illicit trafficking

Designing of training and awareness module and its trict implementation at school and college

3. https://timesofindia.indiatimes.com/city/bengaluru/actor-siddhanth-kapoor-held-in-bengaluru-for-taking-drugs/articleshow/92190881.cms

level The role of law inforcement agencies needs to be clearly defined

Periodic amendment in NDPS Act and Rules

7. https://legislative.gov.in/sites/default/files/A1985-61.pdf

- 1. Ambekar A, Agrawal A, Rao R, Mishra AK, Khandelwal SK, Chadda RK on behalf of the group of investigators for the National Survey on Extent and Pattern of Substance Use in India (2019). Magnitude of Substance Use in India. New Delhi: Ministry of Social Justice and Empowerment, Government of India. 2. Aggrwal A. Textbook of Forensic Medicine & Toxicology. Avichal Publishing Company: New Delhi. 2020.
- 4. https://timesofindia.indiatimes.com/city/aurangabad/aurangabad-pharmacist-caught-selling-drugs-without-prescription-tocriminal/articleshow/92313206.cms 5. https://www.indiatoday.in/diu/story/all-you-need-to-know-about-drugs-substance-abuse-in-india-1860644-2021-10-04 6. https://www.mha.gov.in/MHA1/Par2017/pdfs/par2021-pdfs/LS-20072021/459.pdf
  - **Message from Executive Director:**

### I heartily congratulate the Department of Forensic Medicine & Toxicology for bringing this informative newsletter. It will certainly be helpful for the community and medical students. My Best Wishes to the entire team...

## **Message from Editors:**

Dr. Utsav Parekh

through this newsletter is to spread awareness among the community and medical students to understand that drug should be used to cure the disease, not be misused so that drug consumption itself becomes a disease. Your suggestions are always welcome. Prof. (Dr.) Sanjay Gupta





We hope you all will enjoy reading this piece of work. Our attempt

Prof. Dr. (Col.) C. D. S. Katoch