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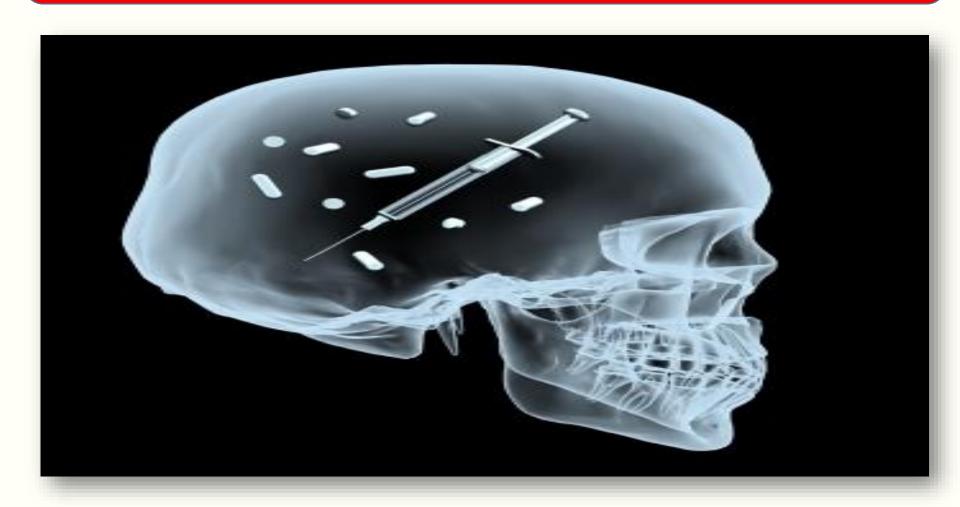
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#### SUBSTANCE (DRUGS) USE ,ABUSE AND DEPENDENCE





# INTERNATIONAL DAY AGAINST DRUG ABUSE AND ILLICIT TRAFFICKING



- 1 ) The International Day against Drug Abuse and illicit Trafficking is also referred to as 'World Drug Day'.
- 2) This day is world wide on the 26th of June every year.
- 3 ) This day aims to attain global support to get rid of drug abuse from the whole world.
- 4 ) Programs like lectures , seminars , and speeches are arranged by all countries to make people understand drug abuse .
- 5) This day is celebrated every year with a unique theme.

#### 26 June 2021

This year the theme is "Share Facts on Drug, Shave Lives" Sharing of credible data along with factual information is the only way to fight miss information about usage of drugs

- 1) DRUG ABUSE IS THE USE OF CERTAIN CHEMICALS FOR THE PURPOSE OF CREATING PLEASURABLE EFFECTS IN BRAIN.
- 2) DRUG ABUSE IS WHEN YOU USE LEGAL OR ILLEGAL SUBSTANCES IN WAY YOU SHOULDN'T
- 3) ADDICTION IS WHEN YOU CAN'T STOP.
- 4) DRUG ADDICTION ISN'T JUST ABOUT COCAINE OR OTHER ILLEGAL DRUG

ONE CAN GET ADDICT TO ALCOHOL, OPIOID, Cannabis Cocain AND OTHER LEGAL SUBSTANCES TOO.

# FIRST NATIONAL SURVEY ON EXTENT AND PATTERN OF SUBSTANCE USE

200 MILLION PEOPLE ARE ALCOHOL & CANNABIS USERS IN INDIA

MORE THAN 50 MILLION PEOPLE NEED HELP FOR ALCOHOL ADDICTION

**ABOUT 2.5 MILLION SUFFER FROM CANNABIS DEPENDENCE** 

**ABOUT 7.7 MILLION NEED TREATMENT FOR OPIOID USE** 

Epidemiology –

10 % of Indian people - substance related disorder.



#### **Commonly Abused Substances**

Designated classes of pharmacological agents (i.e. Substance)

- 1. Alcohol
- 2. Nicotine
- 3. Cannabis
- 4. Opioids heroine / brown Sugar / morphine
- 5. Cocaine
- 6. Amphetamines / Methamphetamines(Ice) / Methylene dioxy methamphetamine MDMA
- 7. Hallucinogens LSD, Phencyclidine / 8. Inhalants / Solvents
- 9. Drugs Sedatives, Hypnotics and anxiolytics
- 10. Legal highs e.g. Mephadrone
- 11. Caffeine Epidemiology:-
- 12. Betel nut 10% Indian People Substance Related
- 13. Khat Disorder
- 14. Anabolic steroids & nitrous oxide

#### PHYSICAL DEPENDENCE -

Refers to the physical (physiological) effects of multiple episodes of substance use. i.e. Ideas of tolerance or withdrawal appears in criteria for dependence.

#### INTOIXICATION -

Term is used for a reversible nondependent experience with a substance that produces impairment.

#### **PSYCHOLOGICAL DEPENDENCE -**

also reffered to as habituation, is characterized by a continuous or intermittent craving for the substance to avoid a dysphoric state.

#### SUBSTANCE WITHDRAWAL—

development of substance specific syndrome due to the cessation or reduction in substance use.

#### **DSM IV Diagnostic criteria for substance Dependence**

**How to Diagnose Dependence?** 

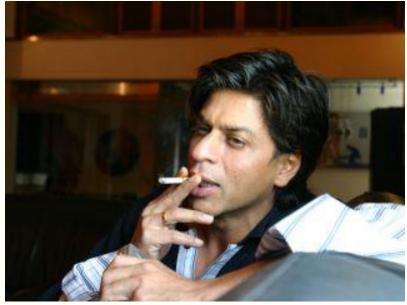
Manifested by three or more of the following occurring in any time in 12 months period

- 1. Tolerance Markedly diminished effect with continued use of the same amount of substance a need for markedly increased amounts of substance to achieve intoxication or desired effect.
- 2. Withdrawal Symptoms These symptoms are variable depending upon the substance.
- 3. Substance is often taken in larger amounts or over a longer period.

- 4. There is a persistent desire or unsuccessful efforts to cut down or control substance use.
- 5. Great deal of time is spent in activities necessary to obtain. The substances e.g. driving long distances.
- 6. Important social, occupational or recreational activities are given up or reduced because of a substance use.
- 7. Substance use is continued despite knowledge of having persistent or recurrent physical or psychological problem.

1) Imitation of Parents, Friends Relatives, Film Star, Actress Behavior.





#### 2) Peer Pressure of Friends Can Cause Initiation





3) Curiosity – young students are always curious about various substances, about their content action feeling.





#### 4) A) Learning and Conditioning Theory

 Drugs can reinforce antecedent behaviors by terminating some noxious or aversive state such as pain, anxiety or depression.

**Use of these drugs Increases level of Dopamine** 

Long term use modulate receptor systems in the brain so that the presence of the exogenous substance is needed to maintain homeostasis.

#### 5) Genetic factors -

Some evidence of studies of twins, adoptees and siblings - shows alcohol has a genetic component.

#### 6) Psychodynamic factors -

recent theory -

As a form of self medication, alcohol may be used to control panic, opioids to diminish anger

## **Comorbidity**

Almost 50 % of addicts are suffering from some psychiatric disorder.

Antisocial personality disorder - 35-60% of patients are having personality disorders.

**Depression - 30-40 % of addicts are suffering from Depressive disorder.** 

**Anxiety Disorders - 25-50 % cases** 

Can be BMD, Schizophrenia also



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#### **ALCOHOL**

**Epidemiology** 

**Prevalence is 20-25%** 



#### Diagnostic criteria for alcohol Intoxication

- 1) Recent ingestion of alcohol
- 2) One (or more) signs slurred speech Incoordination Unsteady gait Nystagmus

(antengrade grade amnesia) - Impairment in attention or memory Stupor or coma

3) Significant maladaptive behavioral or psychological changes.

(i.e. inappropriate sexual or aggressive behaviour mood, liability, impaired judgement, impaired social or occupational functioning)

#### Diagnostic criteria for alcohol withdrawal

- A) Cessation or reduction in alcohol use
- B) Two or more of the following symptoms are seen -
- 1) Automatic hyperactivity (e.g. sweating or pulse rate greater than 100)
- 2) Increased hand tremor develops 6-8 brs after cessation of drink
- 3) Insomnia
- 4) Nausea or vomiting
- 5) Transient visual, tacfile or auditory hallucinations or illusions in 8-12 hrs
- 6) Psychomotor agitation
- 7) Anxiety
- 8) Grand mal seizures begin in 12 24 hrs

#### **CANNABIS**





Derived from female plant- cannabis sativa

Primary psychoactive component-D-9 Tetrahydrocanabinol(D-9-THC)

#### **CANNABIS PREPARATION AND METHOD OF USE**

PREPARATION	PREPARED FROM	METHOD OF USE
Bhang < 0.5%	Leaves and stems of plant	By oral route
Ganja ( Marijuana) 0.5-5 %	Dried flowering tops and leaves of plant	Smoked in a pipe wiyh or without tobacco
Charas(Hashish) 2-8 %	Dried cannabis resin	Smoked with or without tobacco.  May be cooked in food and eaten
Charas( Hashish oil) 15-20 %	Dried cannabis resin	Few drops are applied to Cigarette,pipe or joint Oil can be heated and vapors inhaled

## **Bhang**



## Ganja



**Charas** 



#### **CANNABIS**

- Bhang is an edible mixture made from the buds, leaves, and flowers of the female cannabis, or marijuana, plant.
- Euphoric effects appear within minutes of smoking, cannabis peak in about 30 minutes and lasts for 2 to 4 hours.



#### **Cannabis**

Causes dilatation of conjunctival blood vessels red eye, mild tachycardia. Increased appetite and dry mouth common

Heitened sensitivity to external stimuli, altered perception of sensations, depersonalisation derealisation, impaired motor skills for 8-12 hours

Acute intoxication cause anxiety mild paranoid ideation . toxic confusional states and occasionally psychosis can occur

#### **CANNABIS**

Long term use is associated with cerebral atrophy, seizure susceptibility, chromosomal damage, birth defects, impaired immune reactivity, alterations in testosterone concentrations, dysregulation of menstrual cycles.

Flashbacks have been reported.

Tolerance and dependence can occur.



#### **CANABBIS WITHDRAWAL**

- No specific withdrawal symptoms.
- Symptoms and signs include-
- Anxiety
- Irritability,
- Tremors, sweating and bodyache.

Cannabis does not cause Physical Dependence It can cause only Psychological Dependence



#### Cannabis and mental illness -

Psychotic episode are common.

2.5 times higher risk for schizophrenia but 6 times higher risk in heavy users

Chronic use leads to a state of apathy and incoordination (Amotivational State)

Rx Treatment is mainly psychological and education.

Hospitalization may be required for achieving abstinence



## **Heroin / Opioid / Brown Sugar**





- The term opium derives from the Greek word for 'juice' and refers to juice from the poppy plant Papaver somniferum.
- Heroin, a highly addictive drug.
- 2 to 3 times more potent than morphine.

## Heroin / Opioid / Brown Sugar

It is usually injected, smoked or snorted (sniffed) up the nose.
7.7 million people are using opioids









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Common street names of Brown Sugar

China White Smack Big H Black
Tar Chiva Skag, Junk Brown Sugar Skunk
White Horse Thunder

Most illicit heroin is sold as a white or brownish powder and is usually "cut" with other drugs or with substances such as sugar, starch, powdered milk, or quinine.

## **Heroin / OPIOIDS**

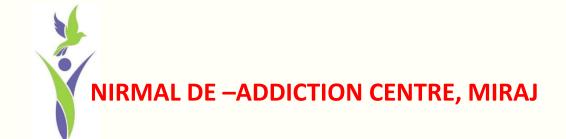
#### **Opioid Classification**

#### A) Narcotic agonist:

Natural opium alkaloids (e.g.. Morphine, Codeine), Semi-synthetic and synthetic compounds (e.g.. Meperidine, levorphanol, Methadone, Sulfentanil, alfentanil, fentanyl, remifentanil, and levomethadyl.)

- B) Mixed agonist: antagonist drugs (e.g., Nalbuphine, pentazocine, butorphanol buprenorphine).
- C) Narcotic antagonists: Narcotic antagonists (e.g., Naloxone)

- After an injection, the user reports feeling a surge of euphoria (the "rush") accompanied by a warm flushing of the skin, a dry mouth, heavy extremities, alternately wakeful and drowsy state.
- Mental functioning becomes clouded due to the depression of the central nervous system.



## **Heroin / Opioid**

Clinical effects: Euphoria, analgesia, respiratory depression, constipation, reduced appetite, low libido.

Tolerance develops rapidly and diminishes rapidly."

Associated with criminal activities and prostitution.

90 % of people with opioid dependence have comorbid psychiatric disorder, MDD ADS ASPD, Anxiety.



#### **Opioid withdrawal state**

Any three of the following signs must be present:

Withdrawal usually starts 6 hrs after the last dose

- Craving for an opioid drug
- Rhinorrhoea or sneezing/Lacrimation/ Diarrhoea
- Muscle aches or cramps
- Abdominal cramps
- Nausea or vomitting
- Pupillary dilatation
- Piloerection or recurrent chills
- Tachycardia or hypertension
- Yawning
- Fever ,Restless sleep



#### **Cocaine - Drug**





- Cocaine is a tropane alkaloid and stimulant drug obtained primarily from the leaves of two coca species, Erythroxylum coca and Erythroxylum novogranatense.
- It is most commonly used as a recreational drug and euphoriant.
- Street dealers often mix it with things like cornstarch, talcum powder, or flour to increase profits.

# **Stimulants Cocaine**

**Street Names:** 

Coke, Powder, Snow, Crack, Stone, Rock

Can be snorted, smoked or injected (Speedballing")

Causes excitement, increased energy, euphoria, grandiose thinking, impaired judgment sexual disinhibition

Higher doses cause visual and auditory hallucinations. Paranoid ideation may lead to aggression.

Causes paranoid psychosis

**Cocaine Bugs / Formication** 



# **Cocaine bugs / formication**





These are a from of tactile hallucinations experienced by some cocaine users. They feel as bugs or worms are crawling on or under the skin.

Coke bug hallucinations cause people to dig, Scratch, itch, pick and even cut their skin in an attempt to get rid of bugs

# Cocaine

Causes increased BP, pulse, dilated pupils

Severe adverse effects can lead to cardiac arrhythmias, myocardial infarction, myocarditis and cardiomyopathy, also CVAs, Seizures and respiratory arrest can also occur.

Following intoxication - 'Crash', consisting of dysphoria, anhedonia, anxiety, irritability, fatigue, hypersomnolence. Relatively mild but can be severe leading to suicidal ideation.

Treatment is sedation with benzodiazepines and supportive like Psychotherapy

# **Amphetamine Drug**





Amphetamine is a central nervous system stimulant that is used in the treatment of attention deficit hyperactivity disorder, narcolepsy, and obesity.

Amphetamines are used for recreational purposes. They are addictive.

# **Stimulants - Amphetamines Also**

Also known as 'Speed 'or 'Whizz, Up, Uppers, Loyee, Goey, M rack

Can be taken orally. Intravenously or snorted.

Causes over talkativeness over - activity, insomnia, dryness of mouth anorexia increased pulse and BP

Higher doses couse cardiac arrhythmia severe hypertension cerebrovascular accident, Seizures and coma

May cause paranoid psychosis – drug induced psychosis.

Treatment is sedation and supportive.

# Ice - Crystal methamphetamine



What is ice?

Crystal methamphetamine ('ice', ice drug) is a stimulant drug, It's stronger, more addictive than the powder form of methamphetamine known as speed.

Other names

Crystal meth, Shabu, Crystal, Glass

It can be Smoked /Injected / Swallowed / Snorted

# **Hallucinogens - LSD**





- LSD (lysergic acid diethylamide), first synthesized in 1938, is an extremely potent hallucinogen.
- It is synthetically made from lysergic acid, which is found in ergot, a fungus that grows on rye and other grains.
- It is so potent its doses tend to be in the microgram (mcg) range.
- It's effects, often called a "trip", can be stimulating, pleasurable, and mindaltering or it can lead to an unpleasant, sometimes terrifying experience called a "bad trip."

Flashback's can occur

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# **Hallucinogens - LSD**

- Effects typically include altered thoughts, feelings, and awareness of one's surroundings.
- Many users have visual or auditory hallucinations. Dilated pupils, increased blood pressure, and increased body temperature are typical.

#### **Street Names**

Acid, Blotter, acid, Doses, Dots, Trips, Mellow Yellow, Window Pane, as well as names that reflect the designs on sheets of blotter paper (for example, "purple dragon").

# LSD is usually found on the streets in various forms, for example: -

- blotter paper (LSD soaked onto sheets of absorbent paper with colorful designs; cut into small, individual dosage units) - the most common form
- thin squares of gelatin (commonly referred to as window panes)
- tablet form (usually small tablets known as Microdots) or capsules
- liquid on sugar cubes

# Other hallucinogens include:

- Psilocybin (Magic Mushrooms, Shrooms)
- Mescaline (Peyote, Buttons, Cactus)
- Phencyclidine (PCP, Angel Dust)
- Ayahuasca (DMT)
- Salvia divinorum (salvia)



# Mephedrone





 Mephedrone is classed among New Psychoactive Substances (NPS), It was originally marketed online as a plant fertiliser or 'research chemical'.

**Other names** 

Meph meow meow-meow mm-cat plant food drone bubbles kitty cat.

# Mephedrone

- Mephedrone comes in different forms, including:
- white powder with a yellowish tinge
- crystals
- capsules
- pills 2
- How is mephedrone used? Mephedrone powder is usually sniffed/snorted or swallowed or rarely injected
- Swallowing is the most common way of taking the drug.
- It is usually mixed with liquid to drink or wrapped in a cigarette paper (known as 'bombing').

#### **Stimulants - MDMA**

3.4 methylenedioxymethamphetamine ( MDMA ) is Synthetic Psychoactive drug / stimulation

- Ecstasy
- XTC
- Moly
- it s powder from is known as mandy or
- MD
- Superman Drug (as Drug pill has Superman logo)

Produces positive mood state, with euphoria sociability, Intimacy, heightened perceptions loss of appetite tachycardia, bruxism, and sweating

Tolerance develops quickly with crash

Severe adverse effects cause hyperthermia and death. Cardiac arrhythmia and vertebral hemorrhage can occur can cause acute and chronic paronold psychosis Flashbacks

#### Solvent abuse / ' Glue sniffing (Whitner / Oil Paint Sniffing)





Solvents are volatile hydrocarbons.

Euphoria and excitement appear within 5 minutes, can last up to 30 minutes to several hours –

Intoxication causes euphoria, bluring of vision. slurring of speech, apathy diminished social occupational functioning mpaired judgment, Impulsive or aggressive behaviour nausea, anorexia nystagmus reduced reflexes diplopia, High doses can lead to stupor and unconsciousness.

can lead to delirium dementia psychotic disorder

# BENZODIAZEPINE AND BARBITURATE DEPENDENCE



BENZODIAZEPINES	BARBITURATES
ALPRAZOLAM	AMOBARBITAL
CHLORDIAZOPOXIDE	PHENOBARBITONE
CLONAZEPAM	SECOBARBITOL
DIAZEPAM	OTHERS
LORAZEPAM	CHLORAL HYDRATE
MIDAZOLAM	ZALEPLON
NITRAZEPAM	Etc.

#### WHAT IS SPEEDBALLING?







Typically a "speedball" involves a combination of an opioid (a depressant) and a stimulant (e.g., cocaine, methamphetamine).

**SPEEDBALL DEFINED -**

In a speedball, the cocaine (or other stimulant) may be:

Injected in a mixture with heroin

"Piggy-backed': injected immediately before or after the heroin (sometimes without removal of the syringe),2 the drug being 'back-loaded' directly in the same syringe.3

## What is khat?



- Khat is a stimulant drug Chewing khat is part of some social traditions in some parts
- The buds and leaves of the khat plant (Catha edulis) are chewed for stimulant and euphoric effects, and traditionally have been used for medicinal purposes as well as recreationally.' Khat contains cathinone and cathine, which
- Other names Qatkat chat qaad

# **Caffeine**





What is caffeine?
Caffeine is a stimulant drug

It's found in the seeds, nuts and leaves of a number of different plants, including:

**Coffea Arabica (used for coffee)** 

Thea sinensis (used for tea)

Cola acuminata (used as a nut, tea or in soft drinks)

Theobroma cacao (used in cocoa and chocolate)

Paullinia cupana (used as guarana in snack bars and energy drinks). 12

#### **Betel nut**





#### What is betel nut?

Betel nut is the seed of the fruit of the areca palm. It is also known as areca nut. Betel nut is a stimulant drug, which means it speeds up the messages travelling between the brain and the body.

#### How is it used?

The seed is separated from the outer layer of the fruit and may be used fresh, dried, boiled, baked, roasted.

# **Commonly Abused Substances**

Designated classes of pharmacological agents (i.e. Substance)

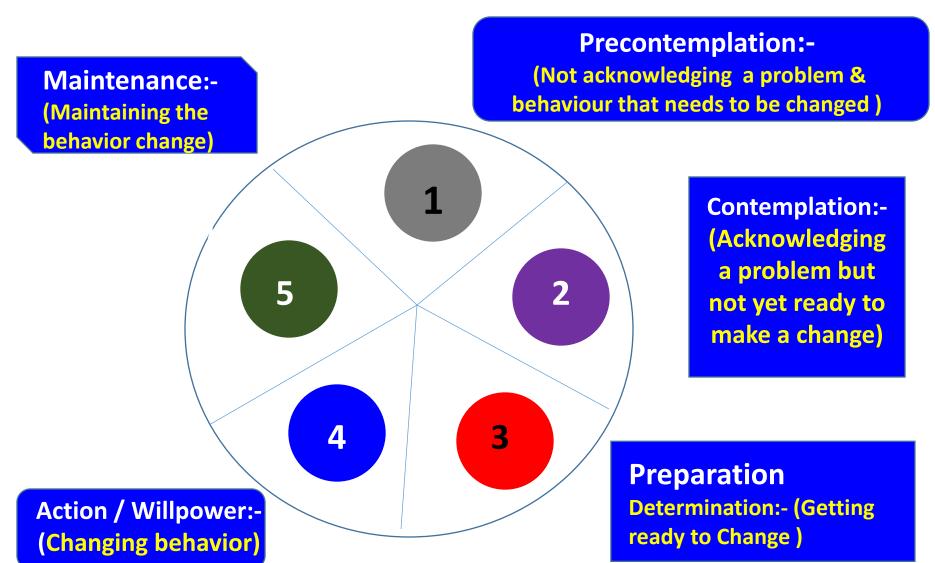
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- 6. Amphetamines / Methamphetamines(Ice) / Methylene dioxy methamphetamine MDMA
- 7. Hallucinogens LSD, Phencyclidine / 8. Inhalants / Solvents
- 9. Drugs Sedatives, Hypnotics and anxiolytics
- 10. Legal highs e.g. Mephadrone
- 11. Caffeine
- 12. Betel nut Epidemiology:-
- 13. Khat 10% Indian People Substance Related Disorder
- 14. Anabolic steroids & nitrous oxide

#### BEFORE STARTING TREATMENT YOU SHOULD LOOK FOR

- 1) Details of substance use onset, duration, average daily consumption, presence of withdrawal symptoms overintoxication with alcohol
- 2) Reasons for initiation and continued drinking.
- 3) Behavioral problems associated with alcohol use depression, memory problems, suspiciousness, interpersonal problems.
- 4) Familial, social and legal consequences of alcohol use.
- 5) Financial and occupational consequences include current financial status and current occupational status.
- 6) Previous treatment attempts reasons for seeking help this time, motivation for getting changed.

#### **Procheskas and Diclamates Model of Motivation**

# "Stages of behavioural changes"



#### **Phases of treatment for Substance Dependence**

#### **Pretreatment:**

- 1. Identification
- 2. Motivational Interviewing
- 3. Role of family members and physicians

#### **Detoxification:**

#### **Intensive Treatment:**

- 1. Brief Intervention / Simple advice
- 2. Disulfiram (only with consent) Anti craving drugs (NTX, Acamprosate)
- 3. Group Therapy
- 4. Family Therapy
- 5. Behaviour Therapy

#### **Posttreatment / Aftercare / Rehabilitation:**

- 1. Treatment contact
- 2. Relapse Prevention
- 3. Social Rehabilitation
- 4. Occupational Rehabilitation
- 5. Continued Supervision

# **Psychological Interventions**

- Final goal is to achieve & maintain stage 5 of motivational cycle.
- Motivational Interview to Determine Stage.
- Use appropriate psychological intervention to deal With Stress



# Pharmacological Interventions Management of Substance Dependence

- \* Several neurotransmitter systems appear to influence the reinforcing or discriminative stimulus effects of Substance
- \* Management.
- \* Involves direct efforts to reduce or stop drinking behavior by producing adverse effects when Substance is consumed.

OR

\* By modifying the neurotransmitter systems that mediate Substance reinforcement.

# **Pharmacological Management of Substance Dependence**

- 1) Management of substance dependence Syndrome.
- 2) Management of medical problems due to substance.
- 3) Management of substance induced psychiatric disorders.
- 4) Management of underlying psychiatric disorders with substance dependence.



#### TREATMENT REGIMENS FOR ALCOHOL WITHDRAWAL / Detoxification

- Fixed-scheduled dosing
- 1) Lorazepam (2mg) 6-8 mg / day oral by or Iv
- 2) Chlordiazopoxide (50-100 mg per dose day
- 3) Diazepam 5-20 mg orally / Iv
- 4) Thimine / vitamine Bi 200 600 mg/day to avoid Wernickes Encephalopathy korsakoft psychosis

# **Treatment of Alcohol Withdrawal Seizures (Rum Fits)**

 Benzodiazepines, carbamazepine, and probably Phenobarbital prevent seizures, but phenytoin is ineffective
 preferably diazepam, chlordiazepoxide, or lorazepam

There is 5-10 % mortality even with treatment.

- It requires immediate hospitalization in untreated cases.
- Treatment of choice is intra venous diazepam
   Or IV lorazepam 2-8 mg

#### **Intensive treatment (After Detoxification starts intensive treatment)**

- Disulfiram Disulfiram effects are observed 3 to 12 hours after its oral administration..
- It is an aversive treatment that enhances motivation for continued abstinence by making the "high" unavailable, thus discouraging impulsive alcohol use.
- Disulfiram does not reduce the craving but prevents response to craving.

#### **MECHANISM OF ACTION OF DISULFIRAM**

**Metabolism of Alcohol** 

**Alcohol** 

**Alcohol Dehydrogenase** 

**Acetaldehyde** 

Aldehyde \_\_\_\_\_ Dehydrogenase

**Disulfiram Irreversibly inhibits** 

Acetyl Coenzyme A (Acetyl CoA)

Toxic levels of acetaldehyde causes Unpleasant side effects

Like Flushing, Rash, Weakness, Nausea, Tachycardia, Hypotension

## Disulfiram other Mechanism of actions

• Disulfiram and its metabolite, diethyldithiocarbamide (DDC) also inhibit the enzyme,

dopamine- b- hydroxylase

Dopamine Norepinephrine and Epinephrine

- Disulfiram also diffuses readily into cells and inhibits enzymes Xanthine oxidase and Succinoxidase concerned with oxidationreduction.
- Disulfiram also possess an antithyroid action presumably reacting with free iodine to form a stable complex substance.



## **Dosage Forms**

- Disulfiram Tablet 250mg, 500mg scored
- Disulfiram Depot- 400mg, 1200mg, 3000mg, 6000mg strengths
- Disulfiram Implants- 1200mg, 2000mg, 4000mg, 6000mg.
   Syringes are available with preloaded tablets.
   Cost- 40000/- to 50000/- per implant.

#### **Implant**

# Disulfiram SR 1200mg Triamcinolone 120mg Batch #150501 Expiry May 2018 Gamma irradiated Store dry stroom temperature

#### **Depot**



#### **Disulfiram**

- Side effects and adverse reactions Drowsiness and gastric irritation. Hepatic, neurological, skin reaction and psychosis.
- Clinical regimen: The usual does is 250 mg/day., however due to metabolic differences.
- some patients may require a higher dose 500-700 mg/day.

# **Treatment for Substance Dependence**

# Anti craving agents –

- 1. Acamprosate 333 mg 2 tab TID
- 2. Naltrexone 50-150 mg/day for 3 months.
- 3. Baclofen 30 mg to 120 mg / Day
- 4. Topiramate Dose is 25 to 300 mg.per day.

#### TREATMENT FOR SUBSTANCE DEPENDANCE

- **Anticraving Drugs Continue...**
- 5. Carbamazepine 300-1000
- 6. Selective Serotonergic Reuptake Inhibitors-Fluoxetine 20 mg, Escitalopram 10,20 mg. Sertraline 25,50 mg Fluoxamine-50 mg
- 7. Ondansetron a selective 5HT3 receptor antagonist.

It reduces urge to intake

8. Combinations of above drugs can be used.

# Management of Opioid Abuse and Dependence Continues

A)Pharmacotherapy

1) Withdrawal Management

2) Anticraving Drugs.

#### **Opioid Dependence Continues**

Opioid Agonist Pharmacotherapy

Methadone: Methadone is a mopioid receptor agonist and Methadone dose is 20-30 mg usual dose of ranges from 30-100 mg.

**Levomethadyl acetate (LAAM) -** is derivative of methadone. Its long duration of action (48-72 hrs) allows dosing at 48-72 hr interval for opioid maintenance treatment.

**Buprenophine:** Buprenorphine, is a partial m opioid agonist and a weak k opioid antagonist.

### 2) Opioid antagonist pharmacotherapy Naltrexone, an opioid antagonist blocks opioid

receptors competitively.

Single daily dose of 50 mg, doses of 100-150 mg



### Management of Medical Problems Due to Substance

I. Liaison Issue.

II. Common: Gastritis, Ulcers, Pancreatitis
ALD – Fatty liver /hepatitis/cirrhosis,
Neuropathy,
Sexual Dysfunctions.

III. Need help from physician.



#### SUBSTANCE RELATED/INDUCED PSYCHIATRIC DISORDERS

- 1. Substance -Induced Mood Disorder.
- 2. Substance -Induced Anxiety Disorder.
- 3. Substance -Induced Psychotic Disorder.
- 4. Substance Induced Sleep Disorder.
- 5. Substance -Induced Sexual Dysfunction.
- 6. Substance -induced Persisting Dementia.
- 7. Substance induced Amnestic Disorder

## Management of independent psychiatric Disorders with Substance Dependence.

ANXIETY DISORDERS- Antidepressants.
 Benzodiazepines
 and other anxiolytics.

- PSYCHOTIC DISORDERS- Antipsychotics.
- MOOD DISORDERS- Antipsychotics ,Antidepressants Mood Stabilisers.
- Other Psychiatric Illness.

### **PSYCHOTHERAPY**















#### Psychosocial treatment for alcohol dependance

 Cognitive and behaviour therapy-Focus should be on thoughts and behaviour.

- Rational Emotive Behaviour Therapy
- SELF Help approach ( Alcohol Anonymous)-

Group of indivisuals with similar problem.

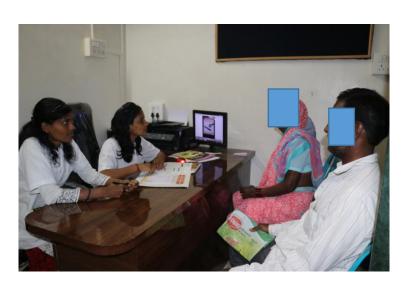
Only requirement for membership is desire to stop drinking.

It follows 12 steps.

GOAL is emotional sobriety rather than mere physical sobriety.



Group Therapy- 5-6 patients.
For
motivation,psychoeducation
and preventing relapse.



Family therapy- Family as a unit.



# Yoga / Meditation / Play Therapy



**Hypnotherapy** 



### **Colour Therapy**



**Music Therapy** 



**Animal Therapy** 

#### Rehabilitation

It includes three major components:

- (1) Continued efforts to increase and maintain high levels of motivation for abstinence:
- (2) Prevention of Relapse
- (3) Work to help the patient to lead alcohol free life

**Here Social Rehabilitation Occupational Rehabilitation & Continued Supervision is Required** 

#### **Commonly Abused Substances**

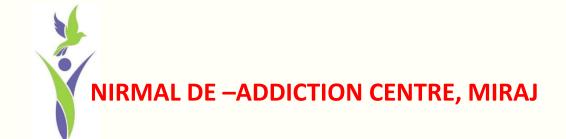
Designated classes of pharmacological agents (i.e. Substance)

- 1. Alcohol
- 2. Nicotine
- 3. Cannabis
- 4. Opioids heroine / brown Sugar / morphine
- 5. Cocaine
- 6. Amphetamines / Methamphetamines(Ice) / Methylene dioxy methamphetamine MDMA
- 7. Hallucinogens LSD, Phencyclidine / 8. Inhalants / Solvents
- 9. Drugs Sedatives, Hypnotics and anxiolytics
- 10. Legal highs e.g. Mephadrone
- 11. Caffeine
- 12. Betel nut Epidemiology:-
- 13. Khat 10% Indian People Substance Related Disorder
- 14. Anabolic steroids & nitrous oxide

"When you can stop, you don't want to.

And when you want to stop, you can't.

That's addiction "



Addiction involves many social and biological factors, but treatment is available.

The recommended way to stop drug abuse is through prevention and education.

Addiction is one type of Psychiatric Illness. Severe dependant patients needs treatment like pharmacotherapy.

Nowadays Newer drugs are available . so treatment is possible, only counselling may not help.



# THANK YOU

