

ALCOHOLISM Definition

- **Alcohol** In chemical terminology, alcohols are a large group of organic compounds " derived from hydrocarbons and containing one or more hydroxyl (-OH) groups.
- Ethanol (C₂H₅OH, ethyl alcohol) is one of this class of compounds, and is the main psychoactive ingredient in alcoholic beverages.
- Clear color liquid with burning taste
- Absorption is rapid than elimination but slower when food is present
- Excreted through urine and small amt.is exhaled

- Dependence :-

it refers to physiological and psychological phenomena induced by the repeated taking of a substance.

- Alcoholism refers to the use of alcoholic beverages to the point of causing damage to the individual, society or both
- **alcoholism** (F10.2) A term of long-standing use and variable meaning, generally taken to refer to chronic continual drinking or periodic consumption of alcohol which is characterized by impaired control over drinking, frequent episodes of intoxication, and preoccupation with alcohol and the use of alcohol despite adverse consequences.
- The term alcoholism was originally coined in 1849 by Magnus Huss
- Intoxication -80-100mg per 100ml
- Toxic- 200-250mg(sleepy confused& alteration in thought process)
- Loss of consciousness-300mg/100ml
- Fatal-500mg/100ml

EPIDEMIOLOGY:-

- Alcohol Dependence-2%
- 10% regular user or excessive user
- Nearly 15-30% of patient are developing alcohol-related problems

ETIOLOGY

1. Biological factors 2. Psychological factors:- 3. Social factors
4. Easy Availability of Drugs 5. Psychiatric disorders

1. Biological factors:-

- Genetic vulnerability- family history
- Biochemical factors- neurotransmitters (dopamine, NA)
- Withdrawal and reinforcing effects of drugs
- Co-morbid medical disorders-chronic pain

2. Psychological factors:-

- General rebelliousness
- Sense of inferiority
- Poor impulse control
- Low self esteem
- Inability to cope with the pressure of living
- Loneliness, unmet needs
- Desire to escape from reality
- Desire to experiment , a sense of adventure
- Pleasure-seeking
- Machoism
- Sexual immaturity

4. Easy Availability of Drugs:-

- Prescribed Drug- benzodiazepine
- Without Prescribed Drug- nicotine
- from illicit source

5. Psychiatric disorders:-

- Depression
- Anxiety
- Social phobia
- Personality disorders- Antisocial personality
- Organic brain disease- schizophrenia

Medical and social complications of alcohol dependence

• Medical 1.GI SYSTEM:-

- ❖ Gastritis
- ❖ Peptic ulcer
- ❖ reflex esophagitis
- ❖ Ca stomach & esophagus
- ❖ Fatty liver, cirrhosis of liver, hepatitis, liver cell carcinoma
- ❖ Ac. & chronic pancreatitis
- ❖ Malabsorption syndrome

2.CVS

- ❖ Alcoholic cardiomyopathy
- ❖ High risk for MI

3.CNS

- ❖ Peripheral neuropathy
- ❖ Epilepsy
- ❖ HI
- ❖ Cerebellar degeneration
- ❖ 4.Miscellaneous
- ❖ Protein malnutrition
- ❖ Vitamin deficiency disorders
- ❖ Peripheral muscle weakness
- ❖ Acne
- ❖ Sexual dysfunction in male & failure

4. Damage to the fetus

- ❖ Fetal alcohol syndrome (low intelligence, low birthweight, facial abnormality)
- ❖ Increased stillbirths
- ❖ MR

5. Social

- ❖ Marital disharmony
- ❖ Occupational problems
- ❖ Financial problems
- ❖ Criminality
- ❖ Accidents

Phases of alcoholism

1. Pre alcoholic phase

- a. use of alcohol to relieve the every day stress & tension
- b. for social motivation

2. Early alcoholic:

- a. Black out :brief period of amnesia(Recent memory)
- b. use denial defence mechanism a does not admit to being dependent on alcohol
- c. seek occasion for drinking

3. Crucial phase:

- a. Person losses control on drinking
- b. Rationalise his behavior
- c. Drop out friends, improper nutrition
- d. Morning drinker
- e . Physiological dependence
- f. Binge drinking episode

4. Chronic phase:

- a. Emotional disorganization
- b. Impaired thought process
- c. Hallucination ,psychosis, delirium,tremors,
- d. Depression & suicidal idea

Types

- **Alpha alcoholism** :
 - Excessive inappropriate drinking without loss of control or ability to abstinence
- **Beta alcoholism**: Excessive inappropriate drinking without clear psychological or physical dependence but with physical complication
- **Gamma alcoholism**: physical dependence, tolerance & inability to control drinking with progressive course
- **Delta alcoholism**: inability to abstinence with withdrawal
 - symptom but the quantity of consumption can be control
- **Epsilon**: intermittent or spontaneous drink

Psychiatric disorders due to alcohol dependence

1. Acute intoxication
2. Withdrawal syndrome
3. Alcohol induced amnesic disorders
4. Alcohol induced psychiatric disorders

Acute intoxication -Developed during and shortly after ingestion

- Maladaptive behavior & psychological changes- inappropriate sexual or aggressive behavior, impaired judgment, slurred speech, in coordination, unsteady gait, nystagmus, impaired attention and memory finally result in stupor or coma

Withdrawal syndrome:-

1. Simple withdrawal syndrome
2. Delirium tremens

1.Simple withdrawal syndrome:- mild tremors, nausea, vomiting, weakness, irritability, insomnia, anxiety

2.Delirium tremens:-

Occurs usually within 2-4 days of complete or significant abstinence from heavy alcohol drinking

Course –short Recovery in 3-7 days

Dramatic & rapidly changing mental activity with clouding of consciousness and disorientation in time & place

Poor attention span

Vivid hallucination- visual, tactile Severe psychomotor agitation, shouting

Grossly tremulous hands – pick up imaginary object(truncal ataxia)

Autonomic disturbances- sweating, fever, tachycardia, raised BP, Pupillary Dilatation

Dehydration with electrolytes imbalance

Insomnia

Death

Alcohol induced amnesic disorders

Alcohol -induced amnesic
deficiency

disorders:-due to thiamine

1. Wernicke's syndrome: Prominent
cerebellar ataxia
Palsy of 6th cranial nerve Peripheral
neuropathy Confusion

2. f's Syndrome:

Gross memory disturbance

Disorientation Confusion

Impairment of insight

Poor attention span and distractibility

Alcohol induced psychiatric disorders

- Alcohol –induced dementia
- Alcohol –induced mood disorders
- Suicidal behavior
- Alcohol-induced anxiety disorder
- Impaired psychosexual function
- Pathological jealousy
- Alcoholic seizures(rum fits)
- Alcoholic Hallucinosis

Diagnosis

Recognition of alcohol abuse:CAGE Questionnaire

- C: Have you ever felt you ought to CUT down on your drinking?
- A: Have people ANNOYED you by criticizing your drinking?
- G: Have you ever GUILTY about your drinking?
- E: Have you ever had a drink first thing in the morning (an EYE-OPENER) to steady your nerves or get rid of a hangover?

Lab test:

- Raised GGT(Gamma-Glutamyl Transpeptidase)
- Raised mean corpuscular volume
- Blood alcohol concentration
- Urine

Treatment

- Full assessment: social, medical, psychological
- Goal setting: diazepam
- Other –vitamin B supplementation 100mg BD for 3-5 days parentally followed by oral for 6 months
- Anticonvulsant
- Maintaining fluid and electrolytes
- Monitor vital , LOC, orientation
- Close observation for first 5 days

Psychological treatment

- Motivational intervention-feed back on the personal risks that alcohol poses
- Group therapy-enables them to observe their own problems & to work out better ways of coping with them
- Aversive conditioning-based on classical conditioning, the client exposed to chemically induced vomiting or shock when he takes alcohol
- Cognitive therapy-reduce alcohol intake by identifying and modifying maladaptive thinking pattern
- Relapse prevention therapy-to identify high risk relapse factors & develop strategies to deal with them
- Cue exposure technique- repeat exposure to desensitize drug abuser to drug effects
- Other- assertiveness training, behavior counselling, supportive psychotherapy ,individual therapy