

SUBSTANCE ABUSE **DISORDERS**



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OBJECTIVES



Definitions

Classifications

Current pattern of drugs used

Stages of substance use

Alcohol related disorders

Substance related disorders

DEFINITIONS



DRUG

- ⌘ Any chemical substance or a mixture of substance which when introduced in to the living organism may **modify one or more of its functions.**

DRUG ABUSE



- ⌘ Drug abuse is **persistence** and/or **excessive** use of a drug inconsistent with or **unrelated to medical practice**, resulting to **harmful effects**.
- ⌘ This harmful effects may be physical, mental social or otherwise

DRUG MISUSE.



⌘ **Unsanctioned** or illegal use of drug i.e. the society or group within the society does not sanction the use of the drugs.

DEPENDENCE.

⌘ Drug dependence is an **emotional** and sometimes a **physical need** experienced by a drug abuser. The drug abuser feels a **compulsion** to take the drug on a **regular basis** to feel its effect to avoid the discomfort of its absence

TOLERANCE.

- ⌘ The repeated use of a drug leads to changes in the brain and nervous system so that the user needs more of the drug in order to get expected results.
- ⌘ Tolerance develops when the person has been taking the drugs regularly and in sufficient doses over a period of time.
- ⌘ Once the person stops taking the drug the tolerance is lost. Cross-tolerance can occur between drugs with similar mechanisms of action.

CLASSIFICATION OF DRUGS



⌘ Depressants

⌘ Stimulants

⌘ Hallucinogens

⌘ Inhalants

⌘ Depressants/Stimulants

DEPRESSANTS

⌘ These are substances that suppress the central nervous system.

⌘ This includes:

☑ Alcohol

☑ Opiates (Pethidine, Morphine and Heroine)

☑ Tranquillizers

STIMULANTS

⌘ These are substances that stimulate the CNS and they include:

- ☒ Caffeine
- ☒ Amphetamines
- ☒ Khat
- ☒ Tobacco
- ☒ Cocaine
- ☒ Methylphenidate(Ritalin)

HALLUCINOGENS

- ⌘ These are substances that have the ability to cause hallucinations. They include:
 - ☑ Lysergic Acid Diethyl amine (LSD)
 - ☑ Phencyclidine
 - ☑ Ecstasy
 - ☑ Mescalidine.

DEPRESSANT/STIMULANT

Cannabis

- ⌘ This is derived from **marijuana** plant
- ⌘ It produces a **combination of effects** to the central nervous system.
- ⌘ It has a **depressant** and **stimulant** effect as well as **hallucinogenic** properties

FACTORS THAT CONTRIBUTE TO USE AND ABUSE OF DRUGS

⌘ Easy accessibility

☑ When the drug is accessible then the person is more likely to abuse the drugs.

⌘ Peer pressure

☑ Most of the people using drugs receive the first dose free of charge from the peer group.

☑ Peer pressure is an important factor not only leading individual to begin use of drug but also in sustaining use of drug.

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⌘ **Poor parentage**

- ☑ Learning through modeling occurs in children where they do as their parents do.

⌘ **Media influence**

- ☑ Advertisement of drugs portrays it as a drug worth trying.
- ☑ Among the youth media influence their use alcohol.

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Gender

- ☑ The cultural setup is more permissive when it comes to men drinking and using drugs.
- ☑ Men also have more leisure time than women who have various scores to keep them busy.
- ☑ Until recently African man handled all financial matters.
- ☑ Due to this financial ability males abuse alcohol more than females.

STAGES OF SUBSTANCE USE

1. No Use

- ⌘ The person does not use any mood altering substances.
- ⌘ This is either by **choice** due to never having the chance to use;
- ⌘ Having a **belief or value against using**, OR
- ⌘ Having a **previously bad experience** with drugs or alcohol and deciding that this is not a good thing for the person to be doing.
- ⌘ **Majorities of Kenyans are in this category**

2. EXPERIMENTAL USE

- ⌘ This the **Novel (new) Experience**
- ⌘ The person **tries the drug once or twice to experience the effects.**
- ⌘ The decision to continue using the drug or not depends upon the person's subjective experience.
- ⌘ they may use because they are **curious**, their friends are using, or it is available to them.

3. SOCIAL USE

- ⌘ Substance use '**Adds to Life**'
- ⌘ The person uses the drug occasionally, and **can readily control the use of the drug.**
- ⌘ Their **Major Life Areas** are not affected. **No emotional pain** results from the drug use.
- ⌘ **The drug use patterns, and reactions and consequences of drug use are known and predictable.**

CONT.

- ⌘ During this stage, the person's **tolerance to the drug begins to increase**, and they may develop a **pattern of using** such as every weekend, or every day after school.
- ⌘ The reason for the social gatherings (friends getting together) starts to revolve around the substance use.
- ⌘ At this point, the person has begun to experience **a few negative consequences** from using such as a hangover, or missing an appointment, school or work, and **tries to set a few self-imposed rules** for using such as only using on weekends, only using at certain times, or only using a certain amount.

4. HARMFUL USE

⌘ Substance use "**Becomes Life**" - Compulsive use

⌘ The person:

☑ **Uses the drug regularly and frequently.**

☑ **Uses more of the drug** over a longer period of time.

☑ Makes **attempts to control use** of the drug but has difficulty doing so.

⌘ **Some Major Life Areas are affected, drug use continues** despite the appearance of negative drug use patterns & consequences.

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- ⌘ Emotional pain starts to result from the use of the drug, experiences withdrawal symptoms, tolerance begins to increase, minimizes or rationalizes drug use.
- ⌘ The person may deny that the drug is causing problems and begins to make promises to self and others about quitting or cutting down.
- ⌘ The person is beginning to **feel that they have less control** over their substance use.

5. DEPENDENCE



- ⌘ The person (uses the drug very regularly and very frequently, feels they have lost control over the use of the drug.

SUBSTANCE USE DISORDER



⌘ The following disorders are related to substance use for every substance of abuse (Substance-related disorders):

☒ Substance use disorder

☒ Substance dependence

☒ Substance intoxication

☒ Substance withdrawal delirium

☒ Substance induced persisting dementia

SUBSTANCE RELATED **DISORDERS**



⌘ Substance induced:

- Amnestic disorder
- Psychotic disorder
- Mood disorder
- Anxiety disorder
- Sexual disorders
- Sleep disorders
- Substance related disorder not otherwise specified

ALCOHOL-RELATED **DISORDERS**

⌘ **Alcohol use disorder**

- ☒ Alcohol dependence
- ☒ Alcohol abuse

⌘ **Alcohol induced disorder**

- ☒ Alcohol intoxication
- ☒ Alcohol withdrawal delirium

⌘ **Alcohol intoxication delirium**

⌘ **Alcohol-induced persisting dementia**

⌘ **Alcohol-induced persisting amnestic disorder**

⌘ **Alcohol induced psychotic disorder with delusions**

⌘ **Alcohol induced psychotic disorder hallucinations**

⌘ **Alcohol-induced mood disorder**

⌘ **Alcohol induced anxiety disorder**

⌘ **Alcohol induced sleep disorder**

⌘ **Alcohol induced sexual dysfunction**

⌘ **Alcohol-related disorder not otherwise specified.**

INTRODUCTION



- ⌘ Alcohol is a **mind and mood altering** substance that has an effect on our brain functioning and ultimately on our body and behavior
- ⌘ Alcohol is a drug with a **depressant** effect to the brain

ALCOHOL ABUSE



- ⌘ Persistence and/or excessive use of a drug inconsistent with or **unrelated to medical practice**, resulting to **harmful effects**.
- ⌘ These harmful effects may be physical, mental, social or otherwise.

ALCOHOL DEPENDENCE

⌘ A cluster of physiological behavior and cognitive phenomena in which the use of a substance or class of substances takes on a much higher priority for a given individual than other behavior that once had greater value.

7 SIGNS OF ALCOHOL DEPENDENCE ACCORDING TO DSM IV

- 1. Tolerance:** The person requires an **increasing amount** of alcohol **to produce the same effect** as previously used doses of alcohol.
- 2. Withdrawal syndrome:** The person develops symptoms when he has not taken alcohol.
- 3. Primacy:** Alcohol takes primacy over other activities including, employment, business, and family education etc.

CONT.

4. **Stereotyped pattern of use:** There is a **regular pattern** of use of the drug to avoid withdrawal syndrome.
 5. **Relieve drinking: The** person takes alcohol to relief the withdrawal symptoms.
 6. **Reinstatement after period of abstinence:** There is a quick reinstatement to full drinking once the person resumes drinking.
 7. The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological complications.
- ⌘ Treatment of alcohol dependence involves:
- ⊠ **Detoxification**
 - ⊠ **Rehabilitation**

ALCOHOL INTOXICATION



The diagnosis of Intoxication emphasizes:

- ✓ A sufficient alcohol consumption
- ✓ Specific maladaptive behavioral changes
- ✓ Signs of neurological impairment
- ✓ Absence of other confounding diagnoses or conditions

CONT.



Alcohol intoxication may cause:

- ✓ Coma
- ✓ Respiratory depression
- ✓ Death

Treatment may include:

- ✓ ICU admission to support respiration
- ✓ Balancing electrolytes and controlling temperature

ALCOHOL WITHDRAWAL



⌘ The classic sign of alcohol withdrawal is **tremor**.

⌘ Others symptoms include:

☑ Hallucinations & delusions

☑ Irritability

☑ Gastrointestinal symptoms (nausea/vomiting)

☑ Sympathetic hyperactivity (sweating, anxiety, flushing, tachycardia and mild hypertension)

☑ Alcohol withdrawal delirium/Delirium tremens

CONT.



⌘ Alcohol withdrawal may cause the following:

- ✓ The psychotic features & perceptual disorders occur within 8 - 12 hours
- ✓ Withdrawal seizures - this are fits that occurs in 12-24 hours after stopping alcohol
- ✓ Delirium tremens occurs within 72 hours

DELIRIUM TREMENS (ALCOHOL WITHDRAWAL DELIRIUM)

- ✓ This is the **most severe manifestation** of alcohol withdrawal.
- ✓ It occurs **3-10 days (first week)** following alcohol withdrawal.
- ✓ It is characterized by **altered consciousness, hallucinations and disorientation, global confusion, agitation, tachycardia and HTN**
- ✓ It is a medical emergency characterized by altered consciousness, hallucinations (mainly visual) and disorientation, global confusion, agitation, tachycardia and hypertension.
- ✓ Untreated, It results to **morbidity and mortality(20%)**
- ✓ Patient may be suicidal or assaultive
- ✓ Commonly, these patients have co-existing medical, surgical and psychiatric diagnosis.

SYMPTOMS



- ✓ Autonomic hyperactivity
- ✓ Perceptual distortions
- ✓ Hallucinations - visual / tactile
- ✓ Fluctuating levels of psychomotor activity
- ✓ Beware of unexpected DTs in patients admitted for other reasons

TREATMENT of DTs

⌘ Prevent by giving:

- ✓ A **benzodiazepine** (DoC) e.g. diazepam – for the management of all stages of alcohol withdrawal to minimize withdrawal-related problems. It will deal with the tremors, prevent the fits and enable the patient to sleep (by alleviating anxiety)
- ✓ Vitamin B & C (Pabrinex I & II)
- ✓ Rehydration
- ✓ Diet supplementation

ALCOHOL INDUCED PERSISTING AMNESTIC BEHAVIOUR

- ⌘ This is one of the most serious **neuropsychiatric** conditions associated with alcohol misuse and which causes significant morbidity and mortality.
- ⌘ The onset is commonly but not always **associated with alcohol withdrawal** and may occur in patients who do not use alcohol (e.g. in those with gastric carcinoma).
- ⌘ Loss of memory resulting from prolonged alcohol use. it is rare in those <35years of age
- ⌘ There are 2 forms
 - Wernicke's syndrome - acute syndrome; also called **alcoholic encephalopathy**; It is reversible.
 - ✓ Korsakoff syndrome - chronic condition; Only 20% of the patients recover.
- ✓ Early Treatment of Wernicke's encephalopathy with **thiamine** may prevent Korsakoff syndrome.

WERNICKE ENCEPHALOPATHY

⌘ Clinical triad of:

☒ Confusion

☒ Ataxia

☒ Nystagmus/ophthalmoplegia

⌘ When the **persistent learning and memory deficits are present**, the symptom complex is often called **Wernicke-Korsakoff syndrome**.

⌘ Clinically, this term is best conceptualized as 2 distinct syndromes with **acute/sub-acute confusion state and often reversible findings of Wernicke encephalopathy** vs. the **persistent and irreversible findings of Korsakoff dementia**.

⌘ Korsakoff psychosis is characterized by **short-term memory loss**, but with preservation of other intellectual function.

CONT.

- ⌘ Health care providers usually need to treat varying degrees of withdrawal symptoms in any patient who presents with Wernicke Korsakoff syndrome
- ⌘ Heavy long-term alcohol use is the most common etiology for the development of Wernicke-Korsakoff syndrome
- ⌘ A deficiency of thiamine is responsible for the symptom complex manifested in Wernicke-Korsakoff syndrome and any condition resulting in poor nutritional state places patients at risk.
- ⌘ Alcohol interferes with active GI transport and chronic liver disease leads to decreased activation of **thiamine pyrophosphate** from thiamine, as well as a decreased capacity of the liver to store thiamine
- ⌘ The treatment is the replacement of this essential vitamin
- ⌘ The mortality rate of Wernicke encephalopathy is up to 10-15% in severe cases.

ALCOHOL INDUCED **PERSISTING DEMENTIA**



- ⌘ Reduction of brain of cortex in persons who have been taking alcohol for a long time.
- ⌘ Patient loses memory and has deterioration of the personality

ALCOHOL-INDUCED DISORDERS

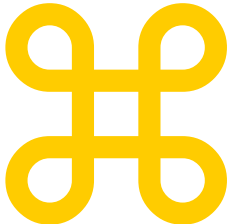
- Psychotic disorders
- Mood disorders
- Anxiety disorders
- Sexual disorders
- Sleep disorders
- Alcohol related disorder not otherwise specified.

- The management of these disorders require patient withdrawing from the alcohol as well as treating the induced disorder i.e. **detoxification and rehabilitation.**

CONCLUSION

- ⌘ Alcohol abuse and dependence are by far the most common substance related disorder.
- ⌘ Alcohol abuse and dependence are commonly referred as alcoholism by the term lacks precise definition and is not a term used by DSMIV.



 **THE END**