

HUMAN HEALTH AND DISEASES

★ DRUG AND ALCOHOL ABUSE

OPIOIDS

- Receptors → Central Nervous System [CNS] and Gastrointestinal Tract [GIT]
- Heroin → also k/a smack.
 - chemically diacetylmorphine.
 - white, odourless, bitter crystalline comp.
 - obtained by acetylation of Morphine
 - extracted from latex of poppy plant [Papaver somniferum]
- Generally, taken by snorting/injection
- Depressant and slow down body functions
- Morphine = very effective sedative and painkillers, and is very useful in patients who have undergone surgery.

CANNABINOIDS

- Receptors - Brain
- Natural cannabinoids are obtained from the inflorescences of the plant Cannabis sativa
- The flower tops, leaves, and the resin of cannabis plants are used in various combinations to produce - marijuana, hashish, charas, and ganja
- Generally taken by inhalation and oral ingestion.
- Effects seen on Cardiovascular System.
- Also being abused by some sportsperson.

COCA ALKALOID / COCAINE

- obtained from coca plant Erythroxylum coca, native to South America.
- interferes with the transport of neurotransmitter → DOPAMINE.
- commonly k/a coke or crack.
- usually snorted.
- Has potent stimulating action on Central Nervous System [CNS]
- Produce a sense of euphoria and increased energy.
- Excessive dosage of cocaine causes → Hallucinations.

Datura and Atropa belladonna → hallucinogenic properties present.

Drugs, that are used as medicines to help patients cope with mental illness like depression and insomnia, are also often abused.

↳ Barbiturates, Amphetamines, Benzodiazepines.
↓
cause relaxation and temporary euphoria

Tobacco → more than 400 years, risk of cancer in orality.

→ smoked, chewed, or used as a snuff.

→ contains large No. of chemicals including nicotine, an alkaloid.

NICOTINE: → stimulates adrenal gland to release adrenaline and noradrenaline into blood

→ which raises Blood Pressure (BP) and increases Heart rate.

SMOKING: → Cancer = lungs, urinary bladder, throat

→ Bronchitis

→ emphysema

→ coronary heart disease

→ Gastric ulcer.

→ increases carbon monoxide [CO] content in blood and reduces the concentration of haembound oxygen. (causing oxygen deficiency)