

Misuse of Addictive Substances

Misuse of addictive substances often leads to dependence or addiction. The addiction is chronic and relapsing leading to compulsive drug seeking and use regardless of the harmful effect to the addicted person and people around them. The brain changes that take place over time, challenge a person's self control and ability to resist intense impulses urging them to take drugs.[1]

Substances known to cause addiction can be:-

- **STIMULANTS**-amphetamine and methamphetamines, caffeine, cocaine
- **SEDATIVES & HYPNOTICS**- alcohol, barbiturates, benzodiazepines
- **HALLUCINOGENS**:-Psychedelic drugs (e.g. LSD), Dissociatives (e.g. ketamine), Deliriants e.g. diphenhydramine (benadryl)
- **OPIATES**- morphine, codeine, heroin, oxycodone, methadone
- **NICOTINE**

ALCOHOL:

depresses the CNS. Enhances the effects of major inhibitory neurotransmitter GABA. Causes sedation, slurred speech, ataxia and impaired judgement. These effects are seen in doses of 0.5g/l approximately equivalent to two glasses of wine (in an average 70kg male).

Higher concentrations-3-5g/l, 3-5 promile (1promile=1g/l blood) can lead to marked intoxication or coma in a non-tolerant individual and mild intoxication in a chronic alcoholic. In most countries, the maximum quantity per week falls between 140 g-210 g for men and 84g-140g for women, with total abstinence during breastfeeding and pregnancy. Alcohol abuse /misuse can lead to anaemia, increased risk of certain cancers such as oral, laryngeal, oesophageal, liver, breast carcinomas etc., cardiovascular diseases, liver cirrhosis, alcoholic neuropathy, Wernicke-Korsakoff syndrome (alcoholic encephalopathy), dementia, seizures etc

TREATMENT AND PREVENTION: combination of detoxification and psychosocial therapy. For detoxification, a long-acting sedative-hypnotic drug is substituted for alcohol and then its dose is gradually reduced. This prevents symptoms of alcohol withdrawal. Benzodiazepines are preferred. Drugs that help prevent alcohol abuse: Naltrexone, an opioid receptor antagonist that blocks the effects at μ opioid receptors of exogenous and endogenous opioids. Has been shown to reduce craving for alcohol and rate of relapse to alcohol dependence. Potentially toxic to the liver.

Related articles

- Alcoholism

External links

- A Guide on Anxiety and Substance Misuse (<http://oceanrecoverycentre.com/mental-health/anxiety-and-addiction-guide/>)