

An Overview of Substance Abuse

By

Dr. Ashish Jindal

House Surgeon

Dept. of Psychiatry



Definition

- Self administration of a substance , for non medical reasons in Quantity's & Frequency's which may impair an individuals to function effectively & which may result in social , physical or “emotional” harm.

- Worldwide issue with variations in terms of content, material and method of use.
- In regions like India major substance abuse includes the following,
 - Bhang,
 - Tobacco,
 - Alcohol,
 - Opiates,
 - other cannabinoids

Problem statement

- Approx 12-20% individuals have some or other substance abuse problem.
- Age group between 12 to 20 years are target population .
- Such individuals are a susceptible population.

Present scenario

- Presently the estimated drug use and abuse population among the age of 12-25 is 14%.
- Rapid expansion seen in the past 6 years in developing countries like India & Pakistan.
- Rates of prevalence higher among men especially unmarried individuals.



Commonly used Substances

- 1) Alcohol.
- 2) Opioids.
- 3) Cannabinoids (Marijuana, Hashish).
- 4) Sedatives or hypnotics.
- 5) Cocaine .
- 6) Other Stimulants including Caffeine.
- 7) Hallucinogens.
- 8) Tobacco.
- 9) Volatile Solvents.
- 10) Prescribed Drugs
- 11) Other Psychoactive substances and drugs from different class used in combination.





Alcohol

- 1) By Pharmacological definition, Alcohol is a Drug and may be Classified as sedative, tranquillizer, hypnotic and anesthetic, depending upon the quantity.
- 2) Its rapidly absorbed in stomach and in small intestine. Within 2-3 minutes of consumption it can be detected in the blood.
- 3) For last 30-40 years young people are started drinking it more as compare to older peoples so the liver failure and road side accidents are common
- 4) Alcohol has a slowing effect on CNS. It is not stimulant as longed believed.
- 5) According to current concept alcoholism is considered a disease, which causes failure of the liver, toxic psychosis, gastritis, pancreatitis, heart disease and nerve disorders.
- 6) It can cause cancer of mouth, wind pipe , vocal cord , and food pipe.
- 7) It is an important cause factor in suicide, RTA, violence, family disorganization, crime and loss of productivity.

Alcohol



Cannabinoides

- 1) Most widely used drug today.
- 2) Obtained from Hemp plants-Cannabis Sativa , C-indica and C-Americana.
- 3) The Resinous exudate from the tops of flowers contains most of the active ingredient called hashish or Charas.
- 4) The dried leaves are called Bhang.
- 5) The resinous mass from the small leaves and the brackets of flowers is called Ganja.
- 6) It causes dreamy state of altered Consciousness, relaxation, euphoria and tendency to laugh. Greater awareness of colours and sounds, Interference of both time and space and Paranoia(fear) are the Psychological effects.
- 7) Human deaths appears a rare Phenomenon.







Sedatives & Hypnotics

- 1) They are sedative drugs.
- 2) Major ingredients of sleeping pills
- 3) Mainly used in anesthesia department.
- 4) Causes both physical and psychic dependence.
- 5) Addiction seen in high society individuals and in urban areas.
- 6) The examples of these are barbiturates, and benzo di azepenes.

Cocaine

- 1) Synthetic drug, just like adrenaline.
- 2) Used for obesity, mild depression, and narcolepsy (type of epilepsy)
- 3) Common names are Benzedrine, Dexedrine, methedrine
- 4) Produces mood elevation, feeling of well being and increased alertness.
- 5) Increases self-confidence and energy so called superman drugs.
- 6) Derives from leaves of coca plant and formally used as local anesthetics.
- 7) It is CNS stimulant.
- 8) Very notorious for Psychic dependence with large doses and rapid and strong.



Caffeine

1. Most commonly used drug world wide.
2. About 10 billion pounds of Coffee are consumed yearly throughout the world
3. It causes anxiety, agitation, and restlessness.
4. Withdrawal from Caffeine can produced headache, irritability, lethargy and nausea.
5. Hugely popular among young adults is “energy drinks” containing large concentrated dose of caffeine.



Hallucinogens

1. LSD was synthesized in 1938 by Hoff Mann in the Sandoz Laboratories in Switzerland.
2. Its Psychic properties were notice in 1943 accidentally.
3. It oral dose range is 100-250 Micro gram.
4. Its side effects are disturbance in color perception and auditory acuity body image distortion, visual illusions, and Pseudo hallucinations are common.
5. Colors are “heard” and music become “palpable”.
6. Subjective time is deranged so that seconds to be minutes and minutes passed slowly as hours
7. Physical dependence does not developed with LSD, hence there is no addiction liability.



Tobacco

1. Its legal use is every where in the world
2. About 3 million premature death occurred every where.
3. It causes 30% of all cancer death.
4. It causes stroke, MI, Aortic aneurysm, Peptic ulcer, and Bronchitis, Emphysema and Lung Cancer.
5. Addiction occurs due to chemical called nicotine.
6. “Some commit suicide by hanging, others do it by smoking”
7. Used as cigar, bidi, pan , gutkha etc.



Volatile Substances

1. These are substances, which are sniffed.
They include glue, petrol, diethyl ether, and type writer correction fluid.
2. These substances are CNS depressant its side effects are confusion, disorientation and Ataxia.
3. Sudden death may occur even on the first occasion. Its consumption is rising in developing countries both in men and women.
6. The withdrawal symptoms include irritability, anxiety, Graving, sleep problems, headache, tremors and lethargy.

Trigger Factors

- Peer pressure
- Stress
- Desire to “be cool”
- Movies
- Parents
- Psychiatric Illness

Features of Addiction

- An addict is an individual whose physically & psychologically dependent on a non biological substance.
- General features are, anxiety , lethargy, decreased performance at work or school, aloofness, untidy appearance etc
- Some individuals may show physical signs like reddened eyes, drunken behavior, needle marks, etc

What Can Help?

- The first step in helping an addict is to make sure he is motivated enough to quit.
- Counseling , therapy with psychiatrist and adequate family support are essential.
- Addiction must be seen as any other disease, no victimization must occur in society.
- Awareness through mass media about addiction.
- Group therapy i.e. Alcoholics Anonymous etc.

Treatment

- Immediate hospitalization.
- Treatment of withdrawal symptoms.
- Use of a proper anti-narcotic agent to counter the effect of addiction.
- Continued psychiatric counseling.
- Occupational therapy.
- “Big brother” program .

Impact on the Future

- If there is inadequate control and management,
- “Drug Epidemic” shall rise .
- Youth are the future and they are highly susceptible.
- Rise in rate of crimes, unemployment.
- Loss to the nation as a whole.

Conclusion

- Major addictive substances are tobacco , alcohol , cannabinoids , caffeine etc.
- Most affected population is adolescents.
- Glamorization of substance abuse a major cause.
- Adequate knowledge and awareness among youth regarding drug abuse must be conducted.
- Treatment and rehabilitation must be encouraged.

Thank You



Dr. Ashish Jindal
House Surgeon
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