

The Use and Abuse of Psychoactive Drugs

Major Psychoactive Drugs

- Opioids
- Central Nervous System Depressants
- Central Nervous System Stimulants
- Marijuana
- Hallucinogens
- Inhalants

Opioids

- Also known as narcotics
- Opioids are natural or synthetic drugs designed to relieve pain , cause drowsiness, and induce euphoria
- Reduce anxiety
- Can be injected, absorbed through the digestive tract, or inhaled
- Abuse often results in dependence
- Example = Heroin

Central Nervous System Depressants

- CNS depressants slow the activity of the CNS
- Effects range from mild sedation to death
- Eg. Alcohol, Barbiturates, & other sedatives
- Barbiturates can be taken orally or injected
 - Eg. Valium & Xanax
 - Usually addiction starts with a prescription

Central Nervous System Stimulants

- Speeds up activity of the nervous system
 - Heart rate increases
 - Blood pressure rises
 - Pupils dilate
 - Blood vessels constrict
 - Wakefulness
 - Eg. cocaine, amphetamines, nicotine, ephedrine, & caffeine
- Cocaine

- Inhaled or injected for the most intensive effects
- When processed with baking soda and water = crack
- Crack is a ready to smoke form of cocaine
- Cocaine provides immediate, intense, short lived effects including 5 to 20 minutes of euphoria, followed by irritability, anxiety, and depression

Cocaine

- Larger the dose and how rapidly it is absorbed depends on how great the effects
- Sudden death is the most common result of CNS stimulation
 - Convulsions
- Long term use causes paranoia and aggressiveness
- Must be taken frequently to produce desired effects and to counter withdrawal
- Causes very serious pregnancy complications

Amphetamines

- Synthetic chemicals that are CNS stimulants
- Eg. Speed, Crank, Ice
- Small doses increase alertness and decrease fatigue
 - Increase motor activity
 - Suppress the diet
- Abuse leads to bad judgment and sudden exhaustion
- Paranoia and unprovoked violence
- Severe pregnancy complications
- Hazards = malnutrition, weight loss, cardiovascular damage

Other CNS Stimulants

- Ritalin has similar effects of an amphetamine
- Ephedrine has amphetamine qualities
- Caffeine – most popular stimulant
 - Produces alertness
 - High doses – nervousness, irritability, headache, sleeplessness, peptic ulcers, hyperactivity
 - Does produce a dependence
 - Caffeine withdrawal – irritability, headache, or mild depression

Marijuana

- Most widely used drug in the U.S.
- 71 million Americans have tried it
- 30 % of college students have used it
- Can be smoked or ingested
- Short term effects
 - Low doses – euphoria, heightened experiences, slowed sense of time, relaxation
 - Moderate doses – impaired memory function, lapses of attention, mind seems separated from the body
 - High doses – change in body image, sensory distortion, anxious, panic
- Long term use
 - Heavy users experience subtle impairments of attention and memory
 - Decreases testosterone levels and sperm count
 - Severe pregnancy complications
- Dependence does not develop in the same manner as with other drugs
- However, marijuana may become the focus of the user's life to the exclusion of everything else

Hallucinogens

- Drugs that alter the user's perception of feelings, and thoughts
- Eg. LSD, PCP (Angeldust), Mushrooms
- Effects of Hallucinogens
 - Altered sense of time, visual disturbances, improved hearing, changes in mood, distorted body perception, dilated pupils, dizziness, weakness, nausea
 - Alter the users perceived relationship between self and external reality
- Hallucinogens induce tolerance very quickly
- Hallucinogens do not produce drug-seeking behavior, physical dependence, or withdrawal symptoms
- Users are always subject to a panic reaction or "bad trip"
- Spontaneous flashbacks, perceptual distortions, and bizarre thoughts can occur long after the drug is eliminated from the body

Inhalants

- Inhaling certain chemicals can produce effects ranging from heightened pleasure to delirium
- 3 major groups of inhalants

- Volatile solvents
- Nitrates
- Anesthetics
- Methods of use
 - Sniffing, snorting, bagging, huffing
- Slow bodily functions
- Can lead to loss of consciousness, heart failure, nervous system impairment, hearing loss, damage to the liver, kidney, bone marrow, and death

Psychoactive Drugs

- Those drugs designed to alter:
 - A person's experiences or consciousness
 - Their short and long-term effects
 - Have a potential for abuse and addiction
- Addictive Behavior – Habits that are out of control and negatively affect a person's health

Abuse vs. Dependence

- A person may abuse a substance even if he or she is not physically dependent on it

Substance Dependence

- Diagnosed when an individual experiences a cluster of 3 or more of the following symptoms
 - Developing a tolerance to the substance
 - Experiencing withdrawal syndrome
 - Taking the substance in a larger amount or over a longer period than the substance was intended
 - Expressing a persistent desire to cut down substance use
 - Most time is spent getting, using, & recovering
 - Changing things due to substance use
 - Continuing use when knowing that it is a problem

Drug Users

- Risk factors associated with using drugs
 - Age
 - Gender
 - Personality
 - Peer group
 - Family Background

Characteristics of Non Drug Users

- High self esteem
- Strong family
- Open communication with parents

Reasons for Drug Use

- Curiosity, rebellious, vulnerable
- Appear daring
- Imitate role models
- Experimentation
- Escape boredom
- Psychological problems
- Anxiety

Risk Factors Associated With Substance Dependence

- Physical
 - Genetic
 - Prenatal exposure
 - Chronic Pain
- Psychological
 - Need for excitement
 - Immediate gratification
 - Feelings of rejection
 - Depression
 - Blot out emotional pain
 - Mental Illness
- Social risk factors
 - Drug abuse in the family
 - Poverty
 - Peer use
 - Health care professionals

3 Determinants of How a Drug Will Effect the Body

- Drug Factors – properties of the drug and how it is used
- User Factors
- Social Factors

Drug Factors

- Pharmacological Properties
- Dose-response function
- Time-action function
- Drug-use history
- Method of use

User Factors

- Pregnancy
- User expectations
- Body mass
- Biochemical states
- Genetic factors

Social Factors

- Setting
- Physical and social environment