

● ● ● | PSY 235
Introduction to
Abnormal Psychology

Chapter 10
Substance Related Disorders

● ● ● | Outline/overview

- General statistics
- Conceptual issues
- DSM-IV-TR criteria
- Substances of abuse
- Causes
- Treatments – types & efficacy

● ● ● | Substance Abuse

- economic and public health problem
- approx. 414 billion annual costs, increasing
- many forms of drug use socially accepted
- fairly widely used overall, about 32% of Americans have used an illegal drug, about 22% of H.S. seniors have used an illegal drug in last month
- prohibitions - fairly recent

● ● ● | **Conceptual Models**

- addictions represent failure of self-control
- addict as a victim of a disease
- disease model not universally agreed upon
- many feel it is counterproductive
- excusing excesses by removal from control
- neither explanation alone is sufficient
- holistic approach

● ● ● | **DSM criteria: substance abuse**

- pattern of use leading to significant impairment or distress
- one or more of the following:
 - 1. failing to fulfill obligations
 - 2. dangerousness
 - 3. legal problems
 - 4. use continues despite social and interpersonal problems


● ● ● | **DSM criteria: dependence**

- pattern of use leading to significant impairment or distress
- 3 or more of the following symptoms (during the same 12 month period).
 - 1. tolerance
 - 2. withdrawal
 - 3. takes more of substance/uses for longer period
 - 4. persistent desire (unsuccessful) to control/stop use
 - 5. great investment of time (obtaining or using)
 - 6. activities are given up because of use (social, occupational, recreational)
 - 7. continues use despite clear evidence of problem (physical/psychological)

● ● ● | Substance use/abuse problems - common

- About 9.4% of adults in any year – few receive treatment
- Alcohol, Prescription Drugs, Cocaine, Heroin
- Main classes
 - Depressants
 - Stimulants
 - Hallucinogens
 - Cannabis


● | Depressants - Alcohol



- all depressants reduce CNS activity
- alcohol binds to GABA receptors
 - Initially relaxing (.06), intoxicating (.09), very intoxicated (.20), likely to pass out (.30+), .40=LD₅₀(?)
- alcohol assoc. w/>half of deaths & serious injuries in auto crashes yearly.
- cirrhosis of the liver
- Wernicke Korsakoff Syndrome

● ● ● | Depressants – Sedative Hypnotics

- Barbiturates – phenobarbital, pentobarbital, thiopental
 - not used much
 - very dangerous in large doses
- Benzodiazepines – xanax, valium, librium, ativan
 - often Rx'ed for anxiety
 - high abuse potential



● ● ● | Depressants - Opiates



- formerly legal, freely available
- 1914 Harrison Narcotics act
- since 1975 heroin use has increased slightly overall
- many problems associated with cocaine and heroin abuse - money required to feed drug habit
- criminal/ other unsafe behaviors

Stimulants – Cocaine/Amphetamines



- Cocaine
 - Anesthetic for surgical procedures & in medications for children – Coca Cola
 - increased tremendously from 1975 to mid 80's, sharp drop then gradual increase
 - cheap, readily available, crack
 - complications - heart failure/stroke, psychosis
- Amphetamines
 - benzedrine, dexadrine, methedrine
 - increase energy, euphoria
 - tolerance arises
 - dysregulation of neurotransmitters

● ● ● | Hallucinogens

- LSD, mescaline, ecstasy
- effect serotonin
- ecstasy use destroys serotonin transport mechanisms in neurons. Why would this be a problem?
- profoundly alter perception – some find pleasant, others terrifying

● ● ● | **Marijuana**

- Chinese herbal compendiums 2737 BC
- large epidemiological survey estimates about 1/3 have used
- 14,000,000 use in US in any month, 12% of users almost daily
- effects of use
- efforts to legalize/medical marijuana use
- gateway drug
- Shedler and Block "social users"

● ● ● | **Causes of substance abuse**

- Sociocultural – more stress leading to increased use. substance use is valued in the family or social environment, greater use is likely.
- Psychodynamic – use substances to meet dependency needs.
- Behavioral and Cognitive – conditioning plays an important role.
- Biological – MZ = 54%, DZ = 28%. Adoption studies support biological causation. Abnormal genetic findings consistent in alcohol & cocaine abusers. Biochemical – if reward centers are underactive, may turn to drugs to stimulate pleasure pathways.

● ● ● | **Quitting – As hard as it seems?**

- Schachter, S. (1982). Recidivism and self-cure of smoking and obesity. *American Psychologist*, 37, 436-444.
- In spite of difficulties, most who try to quit and persist in their attempts ultimately succeed.

● ● ● | **Treatments**

- 12 step programs
- psychotherapies, flexible team approaches
- behavioral therapies
- CBT – BCST – learning cues for drinking
- biological treatments – detox, medications (antabuse, naltrexone, methadone, buprenorphine)
- complete abstinence vs. controlled use
- “innovative treatments”

● ● ● | **Treatment Effectiveness?**

- Two yr. CA study – Each \$1.00 spent saves \$7.00 later
- Data from O’Brien & McClellan (1996) Lancet.

Addiction/Illness	Compliance with treatment	Relapse rate
Alcohol	30-50%	50%
Opiate	30-50%	40%
Cocaine	30-50%	45%
Nicotine	30-50%	70%
Insulin Dep Diabetes–meds foot care	< 50%	30-50%
	< 50%	30-50%
HTN – meds diet	< 30%	50-60%
	< 30%	50-60%
Asthma meds	< 30%	60-80%

● ● ● | **Video case**

- Tim : Substance Dependence
