

Chapter Eight: Recognizing and Avoiding Addiction and Drug Abuse

13th edition, pp. 209-237

**12th edition, pp. 203-230
(chapter seven)**



understanding addictions

13th edition, pp. 210-211; 12th edition pp. 204-207

Addictus: *Roman for those imprisoned for not paying gambling debts*

Current definition: *continued involvement with a substance or activity despite its ongoing negative consequences*

- In order to be addictive the substance or behavior must have the potential to provide positive mood changes such as euphoria, anxiety, or pain reduction.
- The danger comes when an individual needs the substance or behavior to feel 'normal' to function.



understanding addictions

13th edition, pp. 210-211; 12th edition pp. 204-207

Costs us all in every corner of society:

- Societal and cultural cohesiveness
- Family dysfunction and development of co-dependence, or behavior controlled by addiction
 - *25% of children under 18 live with a parent who is addicted to alcohol, 7% other illegal-legal drug dependencies.*
- Accidents and associated costs
- Crime, and it's associated costs
- increased taxes
- increased insurance premiums.



types of behavior addictions

13th edition, pp. 211-214; 12th edition pp. 205-207

Process addictions are mood altering which medicate the need for nurturance, intimacy, self-worth, self-esteem, loneliness

- **Gambling**
- **Technology**
(phones, social media, games, internet)
- **Compulsive shopping**
- **Exercise**
- **Work**

A habit is repeated behavior that can be stopped without too much discomfort. Addiction also involves depletion, though results in discomfort if stopped.



signs of work addiction

13th edition, pp 213-214 (figure 8.2)



Time urgency

Work binges

Need to control

Irritability

Perfectionism

Memory loss due to mental preoccupation with work

Difficulty with relationships

Low self-esteem

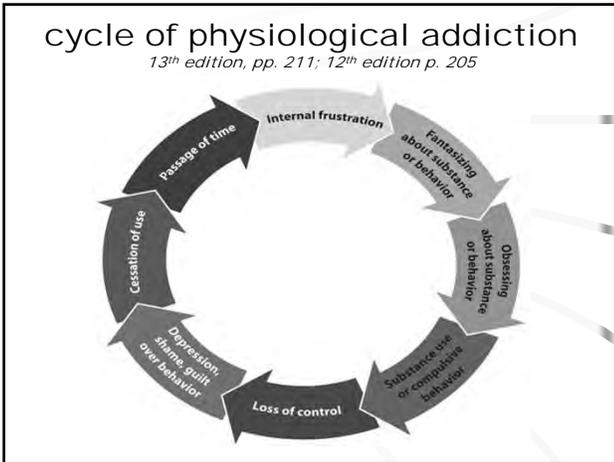
Difficulty relaxing and having fun

Health problems

warning signs of addiction

13th edition, pp. 210-212; 12th edition pp. 204-205

- **Compulsion:** characterized by an obsession, or excessive preoccupation with a behavior or activity
- **Loss of control:** the inability to control the behavior
- **Negative consequences:** as the addiction becomes more overwhelming, negative consequence such as physical damage, legal trouble, financial problems, academic failure, or family break-up increase
- **Denial:** The inability to understand that the behavior is destructive, and denial to self, family, others that the addict has a problem.



dealing with addictions

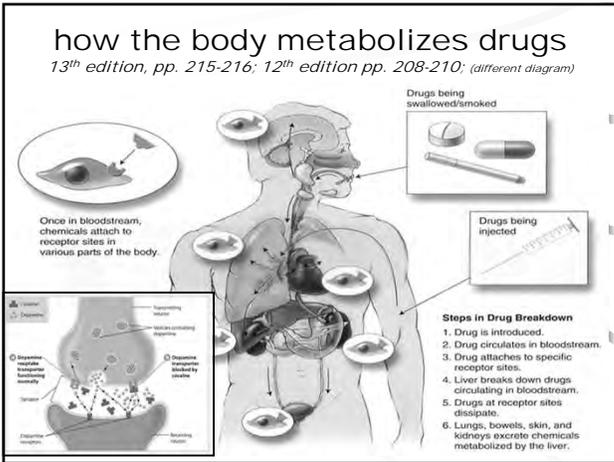
not in books

- **first step is the person has to acknowledge their addiction**
- **resident or out-patient clinics use cognitive or chemical therapy to break the cycle of addiction**
- **family members and friends must:**
 - *Be patient*
 - *Remain supportive and encourage*
 - *Remove the stimulant*
 - *Demonstrate through being role models of alternatives to the addiction.*

how drugs work

13th edition, pp. 214-215; 12th edition pp. 207-209

- Drugs have an effect on the body because they are designed to resemble chemicals produced naturally in the body
- Drugs possess an electrical charge and effect the body depending on their structure or electrical charge
- The drug travels to the body's receptor site for that particular function, where the drug attaches itself and effects a reaction, often a release or inhibit the release of neurotransmitters for a period of time
- Drugs elicit a relief or pleasant reaction initially, though if misused or abused over time create a behavior or chemical addiction and dependence while damaging the body.



routes of administration of meds.

13th edition, pp. 216; 12th edition pp. 209-210

- **Oral ingestion:** (*most common*) do not reach the blood stream, sometimes as long as 30 min. 
- **Inhalation:** absorbs the med. though the nostrils or the mouth, effects are almost immediate
- **Injection:** by a hypodermic needle in a vein for direct access to the blood stream 
- **Transdermal:** patches placed on the skin which has a very slow absorption rate
- **Suppositories:** inserted in the anus and absorbed usually within 15 minutes as the region is engaged with blood vessels.

types of medications or drugs

13th edition, pp. 216-217; 12th edition pp. 210-212

- **Prescription drugs:** there are over 10,000 types of prescription drugs available only with a written prescription from a physician. Over 47% of Americans report using prescription drugs each year.
- **Over the counter (OTC) drugs:** there are more than 300,000 OTC products available without a prescription
- **Recreational drugs:** generally help people relax or socialize Alcohol, tobacco, caffeine, tea and chocolate are examples
- **Herbal preparations:** over 750 products make this the fastest growing market
- **Illicit or illegal drugs:** mind altering or psychoactive drugs such as stimulants (*Cocaine, amphetamines, methamphetamine*); marijuana; opiates (*heroin, opium*); hallucinogens (*LSD, PCP, mescaline*); designer drugs (*ecstasy*); steroids
- **Commercial drugs:** over 1000 chemical substances having a drug reaction. Examples range from perfumes to glues, cleansers, or paints.

types of prescription drugs

13th edition, pp. 216-217; 12th edition pp. 214-216

- **Antibiotics:** designed to fight bacterial infection, there are nearly 100 types
- **Sedatives:** depresses the central nervous system to induce sleep and relieve anxiety (*Valium, Ativan, Xanax*)
- **Anti-depressants:** used to treat depression that is resistant to clinical therapy, increase of nearly 48% in adults, and 124% in children over the past decade, (*Prozac, Zoloft, Paxil*)
- Over prescribing of pain meds such as Opioids (*OxyContin*) have risen 900% in last decade often resulting in dependence/addiction to prescription drugs or gateway to illicit drugs such as heroin.
- Deaths from prescription drug overdoses now surpasses deaths from car accidents annually in the US.

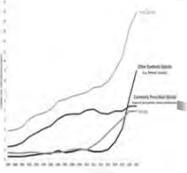


the opioid epidemic

not in books

In October '18 President Trump declared a 'National Public Health Emergency' in acknowledgement of the opioid epidemic

- 135 Americans die per day from the epidemic
- 61 pills per person per year are prescribed
- US has 5% of world's population 80% of prescriptions of pain drugs
- Began in 1990's with drug companies pushing opioids such as OxyContin to relieve pain, suppressing addictive nature of the drugs
- Resulted in over prescribing by doctors with patients once addicted turning to heroin or black market opioids once prescriptions ended Drug overdoses have double in last decade...68% due to opioids
- Natural or synthetic opioids attach to the receptor sites that relieve pain, simulate pleasure centers
Synthetic opioids include morphine, codeine, Vicodin, OxyContin



the opioid epidemic, continued

not in books

- Though helped improved quality of life for cancer patients and those in chronic pain, trend has caused widespread abuse especially in Mid-west, Appalachia and Southwest
- 2000's saw the wider use of Fentanyl, 50 times more powerful than heroin, and easily available on-line and on the street
- **Way out:** greater control of distribution, better education of doctors and patients of addictive quality and alternatives, increased power of government agencies to regulate traffickers inking drug companies and doctors.
- Recent billion dollar settlements against drug makers will provide funds for education/recovery programs.

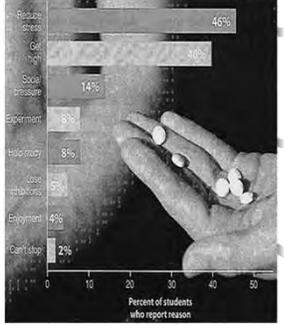


prescription drug abuse

13th edition, pp. 217-218; 12th edition pp. 210-211

Prescription drug abuse is at an all-time high time in US. Only alcohol and marijuana is more widely abused.

- 6.4 million 18-25 yrs. old reported in 2017 abusing prescription drugs
- 12% of college students reported in 2016 abusing prescription drugs
- Because these drugs are available by prescription, they are perceived as being a 'safer high' than illicit drugs... **NOT TRUE**



reasons why college students use prescription or illicit drugs

Reason	Percent of students who report reason
Reduce stress	46%
Get high	30%
Social pressure	14%
Experiment	8%
Relaxation	8%
Classmate	5%
Enjoyment	4%
Can't stop	2%

types of over the counter drugs

13th edition, pp. 216-217; 12th edition pp. 210-211

There are over 26 types of OTC drugs, the most common are:

- **Analgesics:** pain relievers, with most common being aspirin
- **Prostaglandin inhibitors:** inhibit the release of prostaglandins, or hormone like substances associated with arthritis or menstrual pain...aspirin also falls into this category
- **Cold, Cough, Allergy and Asthmas Relievers:** medications that relieve symptoms associated with maladies of the upper respiratory tract
- **Stimulants:** most OTC meds contain large doses of caffeine
- **Sleeping aids:** nearly 50% of Americans suffer from insomnia at least 5 nights a month. These OTC meds induce a drowsy feeling which induces sleep
- **Dieting Aids:** meds that reduce appetites. Some also use laxatives to induce evacuation, or diuretics to lessen the body's water content.



prevalence for use of various drugs in 2017:

13th edition, pp. 218-219; 12th edition p. 212 (table 8.1)

Drug	Full-Time College (%)	Others (%)
Any illicit drug	23.4	28.2
Any illicit drug other than marijuana	9.2	9.2
Marijuana	21.1	25.4
Inhalants	0.2	-
Hallucinogens	1.4	1.6
LSD	0.7	1.2
Hallucinogens other than LSD	0.9	0.4
Ecstasy (methylene-dioxymethamphetamine, MDMA)	0.7	1.5
Cocaine	1.5	1.2
Crack	-	0.2
Other cocaine	1.4	1.3
Heroin	-	0.2
Narcotics other than heroin	1.3	2.1
Amphetamines, adulterated	4.2	3.3
Crystal methamphetamine	-	0.6
Sedatives (barbiturates)	1.0	1.7
Tranquilizers	1.6	2.0
Alcohol	63.2	51.1
Beer drunk	36.4	24.9
Flavored alcoholic beverage	30.5	26.3
Cigarettes	11.3	23.4

Drug deaths in Stanislaus County for 2017:
167 over all: 46 prescription drugs, 37 opioids, 34 Methamphetamine

effects of Amphetamines on the body and mind

13th edition, p. 222; 12th edition pp. 216-217

	Body	Mind
Low Dose	Increased heart rate Increased blood pressure Decreased appetite Increased breathing rate Inability to sleep Sweating Dry mouth	Decreased fatigue Increased confidence Increased feeling of alertness Restlessness, talkativeness Increased irritability Fearfulness, apprehension Distrust of people
High Dose	Muscle twitching Convulsions Fever Chest pain Irregular heartbeat Death due to overdose	Repetitive behaviors Hallucinations Psychosis

before, 18 months later



meth mouth



Marijuana - cannabinoids

13th edition, p. 224-225; 12th edition, pp. 218-219

- Though in use for over 6000 years, 'grass', 'weed', 'pot' became popular in the 1960's with approx. 41% of Americans over 12 yrs. old have tried marijuana at least once.
- THC is the psychoactive ingredient, and is much more potent with 10-27% THC in marijuana than in the 1960's.
- Hashish, derived from the plant's resin can contain up to 300mg of THC
- Effects usually felt within 30min, and effects wear off with-in 3 hours.
- 'Recreational use' legalized in California 1 January'18...1 of five states still illegal federally
- Long term effects: inconclusive as studies difficult to conduct**
 - Marijuana cigs or pipes contains 50-67% more carcinogenic compounds than tobacco smoke
 - Frequent/long term use significantly increases males risk of testicular cancer
 - Increased risk of anxiety, depression, lessened problem solving skills, memory loss
 - Doubled risk of premature births for women.



anabolic steroids and PEDs

13th edition, pp. 230-231; 12th edition, pp. 224-225

- Steroids are often artificial forms of male testosterone that promote muscle growth and enhance recovery
- One type of PED or performance enhancing drugs others include:
 - Erythropoietin (EPO):** a natural protein which stimulates the production of red blood cells, delivering more oxygen to the muscles, forcing the heart to work harder
 - Human Growth Hormone (hgH):** naturally occurring hormone when present in larger quantities in the body allows it to develop and recover more quickly
 - Androstenedione (andro):** helps build lean muscle mass and helps an athlete to recover more quickly
 - Creatine:** widely available non-prescription naturally occurring supplement enables muscles to recover more quickly
- Before better regulation/testing thought 20% of college students, and greater amount of professional athletes used PED's.
- Still an issue with detecting, with many Russian athletes banned from Rio Olympics and potentially Toyoko.

Drug controversy clouds U.S. pride



saying NO

13th edition, p. 219; 12th edition pp. 212-213

Why do college students use drugs?

Positive expectations, family history and genetics, use in high school, to relieve stress and insecurities, depression, sorority and fraternity membership

Why many do not, and ways to avoid drug use:

- Parental attitudes and behavior
- Religion and spirituality
- Engagement in school and extracurricular activities
- Athletics
- Healthy social and support network
- Learned coping skills
- Good table on respond to an offer of drugs, 13th ed. p. 219.



treatment and recovery

13th edition, pp. 231-233; 12th edition pp. 225-26

- 15.2% of Americans needed treatment for drug or alcohol addiction in 2015...only 10% received treatment.**
- Most important step is for the addict to admit they have a problem!**
- Detoxification is the first step:** adjusting to not being under the drug's influence
- Outpatient behavior treatment:**
 - Cognitive therapy which helps to cope without reliance on drug
 - Multi-dimensional family therapy recognizing influences
 - Motivational therapy which helps to enhance intrinsic motivation to be clean
 - Motivational incentive using positive reinforcement to encourage absence
- Residential treatment:** highly structured, normally for 6-12 months
- 12-Step Programs:** Initiated in 1935 has become the most widely used approach with over 200 recovery programs.



solutions and challenges

13th edition, p. 234; 12th edition p. 227

- opiates and illicit drugs began to be outlawed in the early 1900's and alcohol temporarily in the 1920's...both have proven to be ineffective (refer to handout on website)
- promote supportive cultural, social and family units whereby people do have to medicate with addictions or drugs
- development of a person's self-image and self-discipline so to better manage a world with addictive opportunities
- U.S. is moving away from less effective scare tactics and the more recent 'war on drugs' to harm reduction strategies with education and support programs
- Recently 'Angel Initiative' programs set-up in communities where addicts are mentored through detox-rehab by volunteer mentors with great success.