



Drugs and Alcohol

Psychology 472: Pharmacology of
Psychoactive Drugs

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Effects

- Can be additive
- Can be synergistic
- Can reduce effectiveness of drugs
- Can increase risk of other diseases
- Can cause overdoses when used with other drugs



Additive Effects

- **Benzodiazepines**
 - Alcohol binds on different BZ sites than traditional BZ drugs
 - Get an additive effect
 - 5mg Alcohol + 5mg Valium = 10mg of drug in the body
- Can be dangerous but usually not fatal



Flunitrazepam Rohypnol



- (Row-hip-nole) or (Flun i traz a pan)
- La roche , R2 , Rib , Roach , Roofenol , Roofies , Rope , Rophies , Ruffies ,
- Is a short – intermediate term BZ agonist
 - Effects can last 8-10 hours
- Is very good hypnotic for insomniacs, also used as anticonvulsants, anxiolytic, amnesic, and a muscle relaxant
- Is odorless and colorless – can be put into ANY drink (water, alcohol, soda's)



Alcohol and Rohypnol

- Creates a synergistic effect
- Produces disinhibition and amnesia
 - Shuts down the hippocampus and prefrontal cortex
- Classic date rape drug
- With alcohol effects can last up to 36 hours



Synergistic Effects

- Barbiturates
- Is an old combination
 - Mickey Finn
 - Combine alcohol and Phenobarbital
 - Causes unconsciousness
- Drugs create a multiplicative effect
 - 5mg Alcohol X 5mg of Barb. = 25mg



DRINKING ALCOHOL AND TAKING BARBITURATES EQUALS DEATH



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GHB

- **Gamma HydroxyButyrate**
 - scoop, scoop her liquid X, Grievous Bodily Harm (GBH), liquid ecstasy, liquid E, fantasy, blue nitro, beauty, liquid, easy lay, EZ lay, clear X, liquid dream.
- Used in medicine as a presurgical anesthetic, sleep aid, amnesic, other
- Is a CNS depressant
- Binds on GHB receptor (G-Protein type) and GABA b receptor (metabotropic K type)

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Ethanol and GHB

- **Very dangerous**
 - Difficult to calculate the dose
 - Get synergistic effects
 - Causes CNS depression and death
- Amnesic properties make it prime drug for date rapes.
 - Shuts down the hippocampus.

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Alcohol and Stimulants

- Examples
 - Cocaine, amphetamine, caffeine, etc
- Masks the effects of alcohol but do not overcome the effects.
 - Creates a wide awake drunk
- Increases the risk for overdose of other drug
- Increases BP, etc.

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Alcohol and Smoking

- Increases risk for multiple types of cancer
 - Mouth, tongue, throat, etc.
- Similar or even greater risks with marijuana.
- All create irritation

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Alcohol and Antibiotics

- Slows the response time of the antibiotic and antivirals
- Reduces the effectiveness
 - Is bad news.
- Don't drink when you are sick
 - Decreases your immune system

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Alcohol and Opiates

- Vicodin, Oxycontin, Codeine, Hydrocodone, Morphine, etc.
- Further increases depressive effects on Mu receptors
 - Decreased respiration
 - Decreased BP, etc
- Combinations can kill you

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Alcohol and OTC Drugs

- Aspirin, Tylenol, Advil, etc
 - Can cause stomach irritation, influence metabolism, etc
- Cough Syrup
 - Many contain alcohol
- OTC Vitamins
 - Reduces effectiveness
- Antihistamines
- Sudafed, Benadryl
 - Increases drowsiness, slows reaction time

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Conclusion

- Ethanol impacts all other drugs
- Causes multiple types of effects

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