Substance Abuse and Dependence

http://www.samhsa.gov/
http://www.intnssa.org/
Substance Related Disorders

- Psychiatric Co-morbidity
- Prevalence of use
- Medical Co-morbidity
- Tolerance
- Withdrawal
- Flashbacks - transitory re: hallucinogenic drugs
Substance related concepts

- **Synergistic effects** - combinations of similar drugs to increase/prolong effects
- **Antagonistic effects** - combinations of opposing drugs to minimize effects
- **Co-dependence** - cluster of behaviors identified thru research
- **Addiction** - loss of control, substance use despite problems, tendency to relapse
4 sets of criteria for substance related disorders

• Substance dependence
  – tolerance/increased amounts
  – withdrawal
  – unsuccessful at cutting down
  – time spent in getting, using, recovering
  – reduced normal activity/use despite problems

• Substance abuse
  – failure of role obligations
  – use in physically hazardous situations
  – recurrent legal problems
  – use despite problems

• Polysubstance abuse/dependence
Substance disorders criteria

- Substance intoxication
  - unique to each drug
  - is reversible

- Substance withdrawal
  - unique to each drug
  - due to cessation of drug
  - impairment of functioning
Substance use/other disorders

- Substance induced anxiety disorder
- Substance induced mood disorder
Substance Dependence Disorders

• Core concept
  – adverse social, behavioral, psychological, and physiological effects caused by seeking or using one or more substances from the 12 classes of abused substances
  – alcohol, inhalants, amphetamines, nicotine, caffeine, opioids, cannabis, phencyclidine, cocaine, sedative-hypnotics or anxiolytics, hallucinogens or other unknown substances.
Alcohol

• Alcoholism
  – A primary chronic disease
  – Progressive and fatal
  – Continuous or episodic
  – Absence of control
  – Preoccupied with alcohol
  – Drink despite consequences
  – Distortions in thinking - denial

• Natural substance
  • ethyl alcohol, ETOH
  • food, calories/no nutritional value
  • ETOH content varies by beverage
  • 5-20 minutes absorbed - all tissues
  • Blood alcohol level - BAL in 15 to 20 minutes
Alcohol

- Irritant to body tissues
- Depressant effect
- Cross tolerance with barbiturates, benzodiazepines
- Synergistic effect with other CNS depressants
Theories

• Biological
  – Appears to run in families
  – Acts on GABA
  – Activates dopamine

• Sociocultural
  – Asian cultures-reduced incidence
  – Effect of socioeconomic stress
  – Women are underdiagnosed

• Psychological
  – depressive personality organization
  – Low frustration/pain tolerance
  – lack of success
  – low self-esteem
  – takes risks
  – developmental
    • dependency issues
Physiological Effects

• Alcohol has a direct or indirect effect on every organ and system in the body.
• Women/children- Fetal Alcohol Syndrome
Fetal alcohol child
Fetal alcohol syndrome
Nursing Process

• Assessment
  – history of ETOH, other drugs
  – last use
  – CAGE questionnaire
    • Cut down?
    • Annoyed?
    • Guilty?
    • Eye-opener?
  – MAST

• Coping style
  – defense mechanisms
    • denial, etc.
  – thought processes
    – all or nothing
    – selective attention
    – nonanalytic thinking
    – obsesssional focusing
  – behaviors
    – conflict minimization
    – passivity
    – manipulation
Alcohol withdrawal syndrome

- Alcohol withdrawal
- most common
  - develop within a few hours after stopping
  - overactivity of ANS
  - mild to severe
  - 3% have seizures
  - severity affected by amount of use and length of drinking period

- Signs/symptoms
  - anxiety, anorexia, insomnia, tremor
  - nausea, vomiting
  - sleep disturbance
  - increase pulse, BP
  - transient hallucinations/illusion
  - should peak after 24-48 hours
  - Seizures
Alcohol withdrawal delirium

- Occurs in 5%
- 5-10% mortality rate
- 48-72 hours after withdrawal starts
- Hyperactivity of ANS
- Fever 100-103
- Sensorium, LOC, perceptions impaired
- Delusions (paranoid)
- Hallucinations
Nursing process

• Assessment
  – q 4-6 hours
  – after 48 hours may be critical time
  – 4-7 days average
  – nursing diagnoses

• plan
  – safe, effective, no progression
  – see sobriety

• Interventions
  – supportive nonjudgmental
  – expect anger, denial
  – medications
    • Librium, Valium, Serax, Ativan
    • Phenobarbital thiamin, folic acid, multi-vits, magnesium sulfate; clonidine
Treatments and therapies

• **Antabuse**
  – disulfiram
    • inhibits impulsive drinking
    • avoid all ETOH internally and externally
    • facial flushing, N/V, tachycardia, resp.distress, hypotension

• **Naltrexone (Trexan, ReVia)**
• **Campral**-reduce craving
• **Topamax**-reduce craving
Nursing Diagnoses

• Physiological
• Psychosocial
• Family and Individual
• Recognize codependency: enabling behaviors in client, family
Communication

- Develop warm, accepting relationship
- Recognize personal responses to addiction
- Empathy, focus on feelings
- Offer kindness

- Reinforce disease concept of addiction
- Set limits
  - Recognize manipulative behaviors
  - Indicators of relapse
- Provide information and education
Intervention Guidelines

- Self-responsibility is aim of treatment
- Expect sobriety-everyone can recover
- Set limits on behavior
- Support and redirect defenses

- Recognize that the process of recovery is carried out in stages
- Look for therapeutic leverage-keeping job and family, e.g.
Recovery Issues

• Family symptoms/behaviors
  – controlling drinking
  – covering up
  – excusing the behaviors
  – avoiding friends/family
  – eliciting promises for change
  – Making threats to leave
  – consumed with the drinking person
  – personal growth comes to a halt!
Codependency

• Dysfunctional behaviors in family of addicted person
  – don’t trust
  – don’t talk
  – don’t feel
• core issue is power achieved through self-sacrifice

• Key characteristics
  – self-esteem achieved through control
  – care for others exclusive of own needs
  – enmeshment with addicted person
  – anxiety and boundary distortion around intimacy and separation
Long term treatment

- Inpatient
- Outpatient
- Addictions counselors
- Education about disease concept
- Peer self-help group
  - AA, Alateen
  - 12 step tradition
Substances other than ETOH

• Same criteria for substance related DO
• polysubstance abuse
• toxicological screening

• Route of administration
  – Related complications
characteristics

• Common behaviors
  – dysfunctional anger
  – manipulation
  – impulsivity
  – grandiosity

• Theories of etiology
  – biological
  – sociological factors
    • socioeconomic stress
  – self-medication
CNS depressants

- Cross tolerance with ETOH
- synergistic effect
- initial excitatory response/reduce inhibitions
- depresses arousal
- physical/psych dependence

- Barbiturates
- benzodiazepines
- Meprobamate
- Alcohol
CNS Stimulants

- Stimulation
- psychomotor agitation
- differ widely in structure and mechanism of action
- augment neurotransmitter activity, e.g. dopamine

- Amphetamines
- cocaine/crack
- Caffeine
- nicotine
Cocaine

- Anesthetic and stimulant
- Schedule II- “high abuse potential”
- Smoking, snorting, IV
- Causes imbalance of neurotransmitters dopamine and NE
- Crack- a cheap form of cocaine
- Rapid high followed by deep depression that reinforces drug use.
Narcotics

Reduce pain
Cause respiratory depression
Cause stupor
Includes drugs derived from or similar to chemical structure of opium
Opiates

• Includes opium, morphine, heroin, codeine, OxyContin, methadone, meperidine

• Heroin/methadone - most commonly used narcotics in childbearing population

• Heroin – most commonly used illegal narcotic
  • Inhaled, smoked, injected
  • Methadone - legal substitute
  • Pregnancy issues
Opiate Treatment

- Methadone- synthetic opiate that at certain doses blocks craving for and the effects of heroin
- Longer acting than heroin
- Maintenance programs

- Naltrexone- Revia- pure antagonist, blocks euphoric effects of opioids.
- Clonidine- antihypertensive for somatic effects of withdrawal
Other Drugs of Abuse

- Marijuana
- Hallucinogens- LSD, PCP
- Inhalants- vapors of volatile liquids or gasses

- Ecstasy- a prototype of this class of “Rave” drugs; a substitute for amphetamines, LSD
Solvents/inhalants

• Inhaled as gases or vapors of volatile liquids
• principle effect is CNS disinhibition
• panic attacks
• high doses can cause fatal arrhythmia, liver, kidney damage over time
• Paint thinner
• degreaser (dry cleaning fluids)
• gasoline
• glue
• butane
• aerosols from whipping cream
• hair spray
• nitrous oxide
Treatment Issues

- Intoxication
- Overdose
- Withdrawal
- Recovery Programs

- Narcotics
- Anonymous
- Residential
- Intensive outpatient Program
The Voluntary Recovery Program

- 1-800-554-3428
- Self reporting following an incident
- Supervisor, co-worker written report
- Contact by Program
- Letter addressing evaluation process
- Response and outcome
  - Treatment x 3 years as per contract
  - Refusal-Review by State Board of Nursing