



# Substance Abuse and Dependence

<http://www.samhsa.gov/>

<http://www.intnsa.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



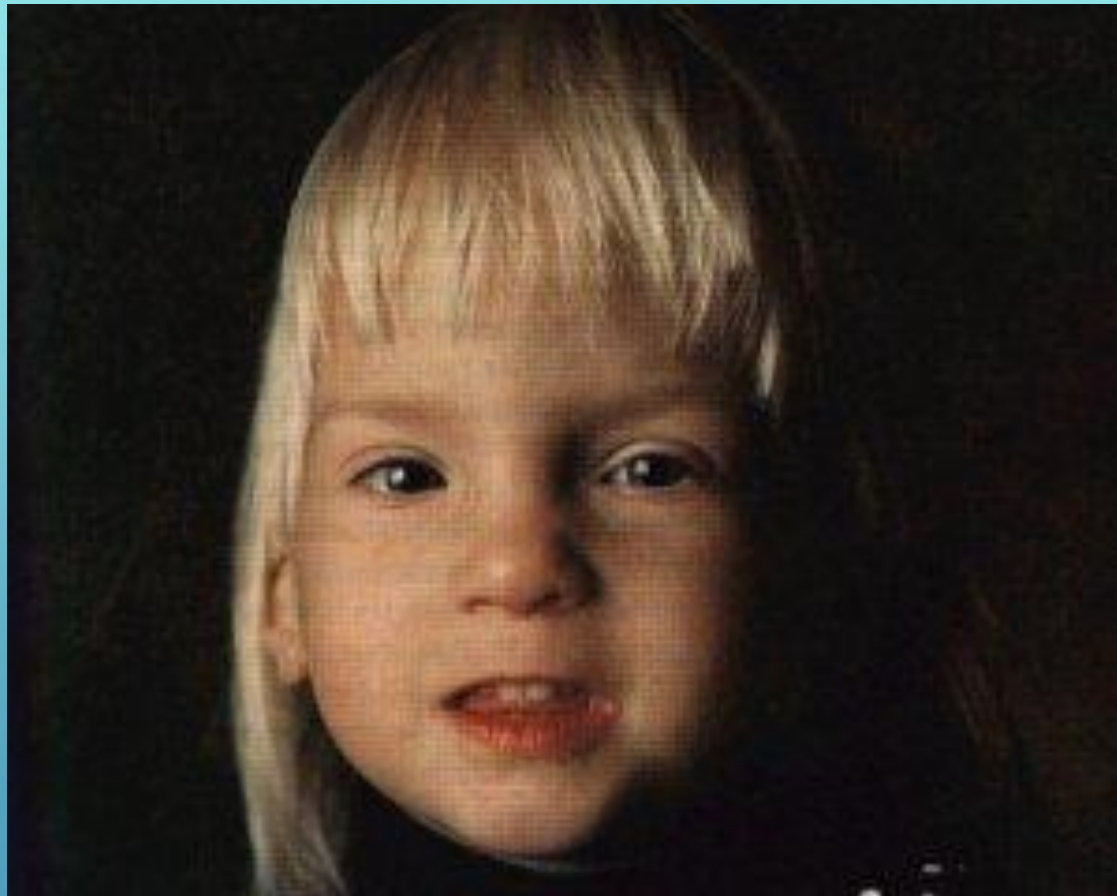


# Physiological Effects

- Alcohol has a direct or indirect effect on every organ and system in the body.
- Women/children- Fetal Alcohol Syndrome

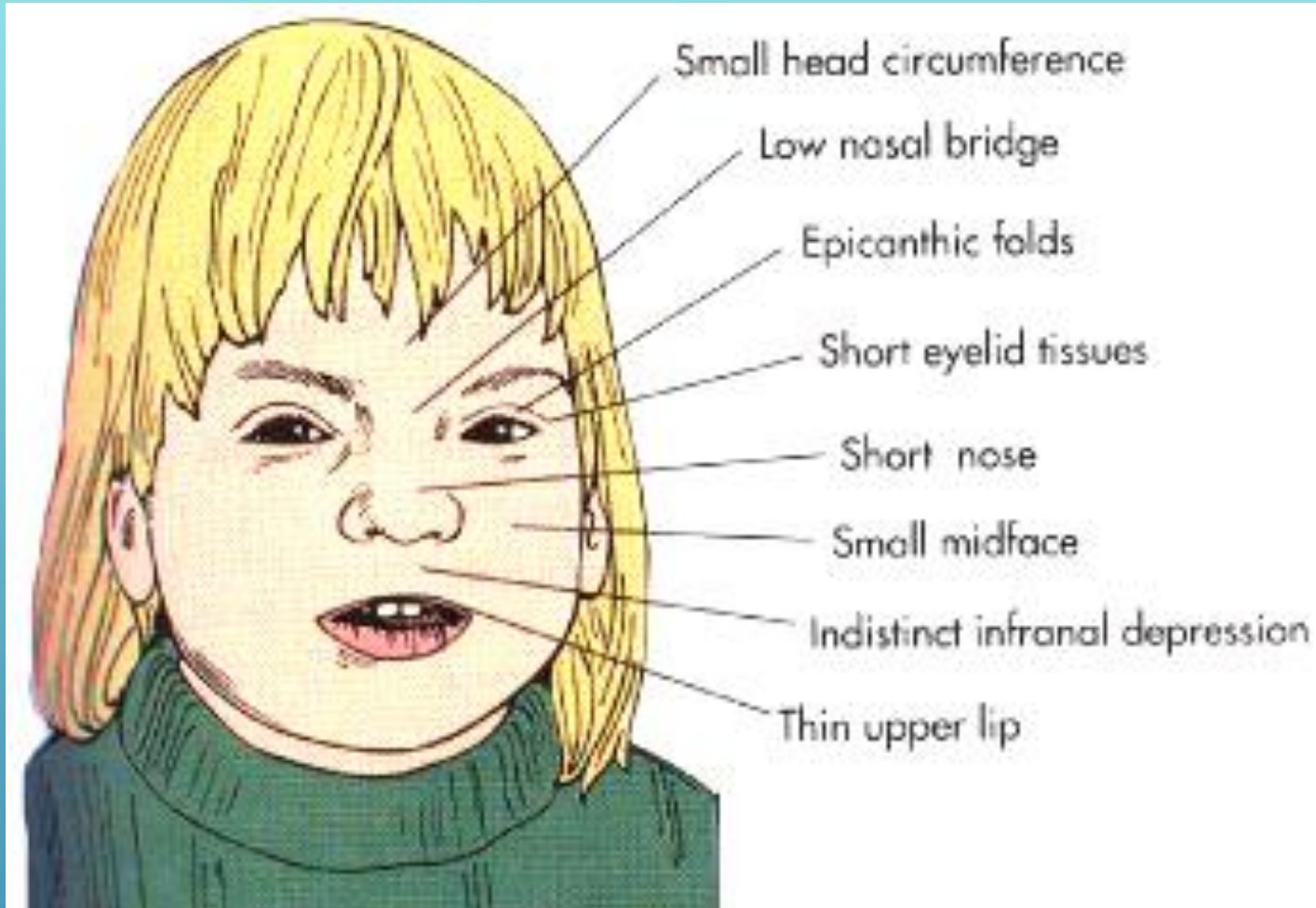


# Fetal alcohol child





# 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
      - obsessional 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 sulfates; 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.

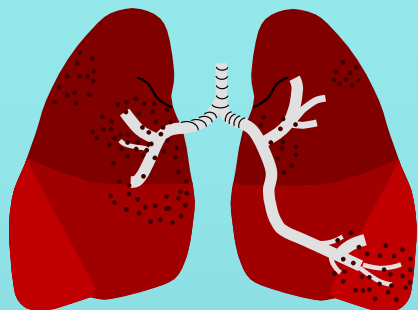
- Clonidine- antihypertensive for somatic effects of withdrawal





# 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 3years as per contract
  - Refusal-Review by State Board of Nursing