



ALCOHOL USE DISORDERS

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Alcohol Use Disorder

Alcohol Abuse:
Maladaptive pattern of
use leading to
impairment in one of
several sociobehavioral
domains for a 1 year
period

Alcohol Dependence:
Maladaptive pattern of
use, resulting in
substantial distress or
dysfunction,
characterized by at
least three symptoms:

- *Tolerance, withdrawal, unsuccessful attempts at cutting down, preoccupation with use, recurrent use despite adverse consequences*

IF NOT ABSTINENT:



Healthy Drinking Limits:

- ▶ Healthy men < 65 y/o:
 - ▶ < 4/day and <14/week
- ▶ Healthy women and healthy men > 65 y/o:
 - ▶ <3/day and <7/week
- ▶ **Abstinence** for :
 - ▶ Pregnant
 - ▶ Medication interactions
 - ▶ Health conditions with contraindications
 - ▶ Less than 18 y/o



EPIDEMIOLOGY

ETOH:

- ▶ 2010: ETOH > 88,000 DEATHS/YEAR
- ▶ #3 LEADING CAUSE OF LIFE-STYLE PREVENTABLE DEATH
- ▶ 223.5 BILLION/ANNUALLY
 - ▶ Loss in workplace productivity, healthcare expense, criminal justice, MVA
- ▶ STATE COSTS APPROX. = SMOKING AND MEDICAID
- ▶ 1 IN 6 U.S. ADULTS BINGE DRINK

Epidemiology of Alcohol **Dependence** (CDC, Nov 2014)

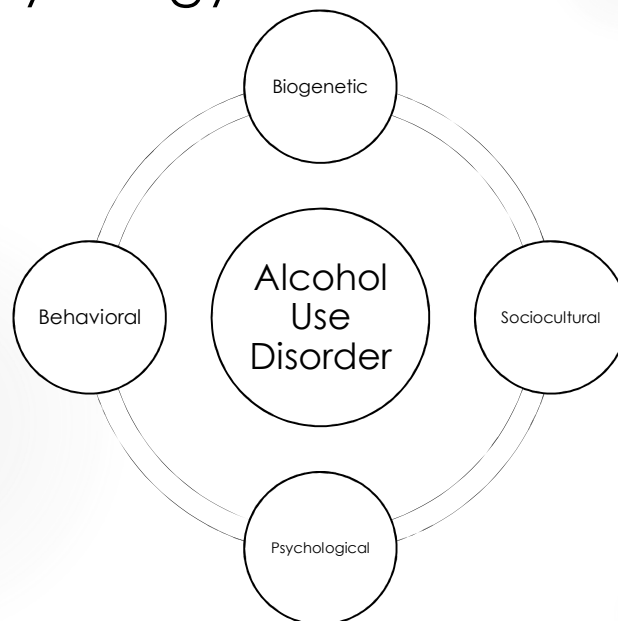
Data from 2009-2011

- ▶ Men > women
- ▶ Men age 18-24
- ▶ Binge drinking most common with incomes >\$75,000
- ▶ Dependence most common with income <\$25,000
- ▶ *Most excessive drinkers do not meet criteria for dependence*

IMPLICATIONS FOR PRIMARY CARE:

- ▶ Estimated 20% of persons seen in family practice have a substance use/abuse disorder
 - ▶ Only ~ 9% diagnosed
- ▶ About 17% of men and about 8% of women will meet criteria for alcohol dependence at some point in their lives
- ▶ Teens in grades 9-12 (2011)
 - ▶ 22% had 5+ drinks one occasion/last 30 days

Pathophysiology



FACTORS

- ▶ Biogenetic:
 - ▶ Affect metabolism and effects on neurotransmitters, receptors, cell membranes
 - ▶ Many alcohol responsive genes involved
 - ▶ If parent is alcohol dependent, child more likely to develop alcohol disorder within 10 years
- ▶ Sociocultural:
 - ▶ Poverty
 - ▶ Cultural influences
 - ▶ Parental/peer values/attitudes
 - ▶ Availability



Factors (cont)

- ▶ Psychological:
 - ▶ Underlying disorders ~ "self-medicating"
 - ▶ Anxiety, depression, bipolar disorder
 - ▶ Trauma history
 - ▶ Gender identification
 - ▶ Thrill seeking
- ▶ Behavioral:
 - ▶ Emotional stress
 - ▶ Negative thoughts
 - ▶ Social interactions



CLINICAL COURSE

- ▶ HIGHLY VARIABLE
- ▶ EARLY AGE = INCREASED RISK
- ▶ PSYCHOSOCIAL PROBLEMS FIRST, PHYSICAL PROBLEMS MUCH LATER
- ▶ MAY BE PERIODS OF ABSTINENCE

- ▶ DETECTION IS KEY!!



COMPLICATIONS OF ETOH:

- ▶ Hypertension
- ▶ Cardiomyopathy
- ▶ Fatty liver
- ▶ Alcoholic hepatitis
- ▶ Anemia
- ▶ Cirrhosis
- ▶ Neuropathy
- ▶ Osteoporosis
- ▶ Impotence, loss of libido

Women and excessive ETOH

- ▶ Liver Disease: Risk > than for men
- ▶ Impact on the Brain: women are more vulnerable than men to the brain damaging effects of excessive alcohol use
- ▶ Impact on the Heart: Increased risk for damage to the heart muscle than men
- ▶ Cancer: Increased risk > mouth, throat, esophagus, liver, colon, and breast
- ▶ Sexual Assault: Binge drinking is a risk factor for sexual assault, especially among young women in college settings.
- ▶ Pregnancy: Increased risk of SIDS and miscarriage with ETOH in first trimester. Risk of Fetal Alcohol Syndrome (FAS)

HISTORY

- ▶ SCREEN EVERYONE, ESP 18 Y/O+
- ▶ “DO YOU SOMETIMES DRINK BEER, WINE OR LIQUOR?”
 - ▶ If yes, assess further
- ▶ Identify coexisting conditions (depression/anxiety)
- ▶ Identify potentially harmful situations (family history, med interactions, <age 21)
- ▶ Screen for other substance use/abuse

Single Item Screening Tool:

Alcohol

- ▶ “How many times in the past year have you had 5 (4 in women) or more drinks in a day?”
 - ▶ Positive = any answer >0 or difficulty identifying how often
 - ▶ Sensitivity 82%, Specificity 79%
 - ▶ EASY and QUICK



CAGE Questionnaire:

>2 = **clinically significant**

- ▶ 1. Have you ever felt you should **cut** down on your drinking?
- ▶ 2. Have people **annoyed** you by criticizing your drinking?
- ▶ 3. Have you ever felt bad or **guilty** about your drinking?
- ▶ 4. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (**eye-opener**)?

TEENAGE Screener:

1. *"In the past year, on how many days have you had more than a few sips of beer, wine, or any drink containing alcohol?"*
2. *"If your friends drink, how many drinks do they usually drink on one occasion?"*



TEENS

- ▶ Difficult to detect
 - ▶ "Typical" adolescent behavior
 - ▶ Parents: Watch for subtle signs
 - ▶ Use your nose
 - ▶ Watch for mood changes
 - ▶ Monitor the car
 - ▶ Loss of interest in sports, activities, hobbies
 - ▶ Decline in school performance

ERR ON THE SIDE OF CAUTION

SCREEN IS ++.....NOW WHAT?

DRINKING PROFILE

- Setting
- Social network
- Consumption
- Pressures
- Perceived benefits
- Perceived negative consequences
- Other associated risky behaviors

PHYSICAL EXAMINATION

LIKELY NORMAL EXCEPT IN SEVERE DISEASE

- ▶ GENERAL APPEARANCE
- ▶ SKIN – FACIAL VASCULARIZATION
- ▶ ABDOMEN – HEPATOMEGALY, RUQ TENDERNESS
- ▶ MALE – GYNECOMASTIA, HAIR LOSS, TESTICULAR ATROPHY
- ▶ CARDIOVASCULAR, PULMONARY, NEURO EXAMS



DIAGNOSTIC TESTING:

NOT DIAGNOSTICOFFERS CLUES

- ▶ *MCV: mild macrocytosis (>100 fL)*
- ▶ *AST > ALT: usually 1-2X*

STEPS TO TAKE:

1. ASK
2. ADVISE
3. ASSESS
4. ASSIST
5. ARRANGE

Source: U.S. Preventive Services Task Force

Ask/Assess

Advise

Assess/Agree

Assist

Arrange

MANAGEMENT IN PRIMARY CARE

- ▶ PREVENTING MORBIDITY:
 - ▶ PNEUMOCOCCAL VACCINE
 - ▶ MVI w/folate + Thiamine 100mg/day
 - ▶ SAFETY
 - ▶ SURVEILLANCE FOR ASSOCIATED MEDICAL CONDITIONS

RISKY DRINKING/ALCOHOL USE DISORDER MANAGEMENT

- ▶ *TREAT OR REFER FOR PSYCHIATRIC CO-MORBIDITIES*
- ▶ *IF MULTI-SUBSTANCE USE, REFER TO SPECIALTY CARE*
- ▶ *COMMUNITY RESOURCES: SELF/MUTUAL HELP GROUPS*

▶ **BRIEF INTERVENTION**

- ▶ **Assess, Advise, Agree, Assist, Arrange**



ALCOHOL DEPENDENCE MANAGEMENT

~DO THEY NEED DETOXIFICATION???

- > *history of severe withdrawal*
- > *medical co-morbidities*
- > *18+ drinks/day*

***Dependence usually requires psychotherapy +
pharmacotherapy***

Pharmacotherapy

- ▶ Disulfiram (Antabuse)
 - ▶ aversion therapy
 - ▶ Palpitations, flushing, shortness of breath, diaphoresis, N/V, headache
 - ▶ High relapse rate
- ▶ Naltrexone (ReVia...)
 - ▶ Opioid agonist
 - ▶ 3-6 months
 - ▶ **Hepatotoxicity risk – black box warning**
 - ▶ 50mg one po QD X 12 weeks
 - ▶ Use: prevent relapse to heavy drinking

More Meds.....

- ▶ Acamprosate (Campral)
 - ▶ Works better to maintain abstinence than Naltrexone
 - ▶ Start asap after withdrawal, continue even if relapse
 - ▶ 666 mg po tid
- ▶ **OFF-LABEL**
 - ▶ Topiramate (Topamax)
 - ▶ Varenicline (Chantix)
 - ▶ Baclofen

Psychosocial therapy

ANY therapy is better than NO therapy

- ▶ *individual or group*
- ▶ *CBT, psychotherapy....*



- ▶ Need to address maladaptive processes/behaviors

Follow-up

- ▶ AT RISK DRINKING:
 - ▶ 3-6 MONTHS – DEPENDING ON SEVERITY
 - ▶ Labs?
- ▶ Alcohol Use Disorder:
 - ▶ Supportive

PATIENT RESOURCES:

- ▶ National Directory of Drug and Alcohol Treatment Programs
 - ▶ 1-877-726-4727
- ▶ Mutual Help Groups
 - ▶ Alcoholics Anonymous www.aa.org
 - ▶ Al-Anon www.al-anon.org
 - ▶ Alateen www.alateen.org
 - ▶ Celebrate Recovery

