

Diagnostic Considerations for Substance-Related Disorders

Why reliable diagnostic criteria are essential

- ♦ to improve clinical and research communication.
- ♦ for the optimal assignment of treatment approaches
- ♦ Facilitate research on prevalence, natural history, and etiology

Criteria for Substance Abuse (DSM-IV)

A maladaptive pattern of substance use leading to clinically significant impairments or distress, as manifested by 1 (or more) of the following occurring within a 12-month period:

- ♦ failure to fulfill major role obligations
- ♦ use in hazardous situations
- ♦ legal problems
- ♦ use despite problems

Criteria for Substance Dependence (DSM-IV)

A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by 3 (or more) of the following occurring at any time in the same 12-month period:

- ♦ tolerance, as defined by either of the following:
 - a need for markedly increased amounts of the substance to achieve intoxication or desired effect
 - markedly diminished effect with continued use of the same amount of the substance

- ♦ withdrawal as manifested by either of the following:
 - the characteristic withdrawal syndrome for the substance
 - the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms

- ♦ larger amounts/longer period of time

- ♦ unsuccessful effort to cut down or control use

- ♦ great deal of time spent obtaining, using, or recovering

- ♦ important activities given up or reduced

- ♦ Use despite problems caused or exacerbated by use

(*DX: “with Physiological Dependence”)

Why Screen for Substance Abuse in Women?

Alcohol and substance abuse are highly prevalent disorders; it is estimated that substance abuse and dependence affects approximately 2% of women at some point in their lives.

Screening tests make substance abuse easy to detect—screening tests are sensitive, inexpensive, easy to administer, and accurate predictors of substance abuse problems.

Significant morbidity and mortality are associated with alcohol and substance abuse; it is estimated that alcohol use is responsible for 100,000 deaths per year in the US and that other drug use is responsible for 20,000 deaths per year.

Identification of alcohol and substance abuse problems can lead to abstinence and avoidance of health consequences.

Outcomes for Pregnant Substance-Abusing Women

Short-term outcomes

- ◆ higher rate of spontaneous abortions
- ◆ increase in preterm deliveries
- ◆ low birth weight (risk factor for Sudden Infant Death)
- ◆ fetal distress
- ◆ increased risk of breech delivery
- ◆ shortened labor
- ◆ severe neonatal withdrawal complications

Long-term outcomes

- ◆ child abuse and neglect
- ◆ increased risk of out-of-home placement—in some treatment programs as many as 75% of clients had to give up custody of their children
- ◆ disturbances in child's motor and cognitive development
- ◆ fetal alcohol syndrome
- ◆ risk of HIV transmission

“Telescoping” Phenomenon

In comparison to men, women who occasionally use alcohol and other substances become addicted and begin to suffer the social and health consequences in less time.

Thresholds of Dangerous Drinking

- ♦ Women have increased susceptibility to toxicity as compared to men.
- ♦ Based on risk for developing alcoholic liver disease (including cirrhosis, alcoholic hepatitis), heavy drinking for men is considered four or more drinks per day, whereas for women, it is 1 1/2 or more drinks per day.

Possible Biological Basis

Women have higher blood alcohol levels after consuming the same amount of alcohol as men.

Differences in Blood Alcohol Levels

- ♦ women’s lower amount of body fluids
- ♦ lower activity of the alcohol metabolizing enzyme alcohol dehydrogenase in the stomach, causing a larger proportion of alcohol to reach the blood

Long-Term Health Consequences

Alcohol

Effects on life expectancy: female alcoholics lose an average of 15 years in life expectancy

Liver disease—higher risk with less consumption due to increased susceptibility.

Breast cancer: most studies indicate a very weak positive association, with relative risks in the range of 1.2 to 2.0 (comparing groups of women who consume alcohol with women who do not)

Osteoporosis

Cardiomyopathy - women have a similar risk as men

Gynecological consequences

- ♦ amenorrhea
- ♦ dysfunctional uterine bleeding
- ♦ infertility
- ♦ sexual dysfunction
- ♦ early menopause

Obstetric consequences

- ♦ spontaneous abortion
- ♦ premature labor
- ♦ low birth weight infants
- ♦ fetal alcohol syndrome

Suicidality

- ♦ among alcoholics, females have more attempts than males
- ♦ female alcoholics have four times the frequency of attempts as compared to nonalcoholic females

Long-Term Health Consequences

Other Substance Abuse

There is no clear evidence that the long-term effects from opiates and cocaine differ for women and men.

Obstetric and gynecological consequences:

- ✦ low weight gain in pregnancy
- ✦ spontaneous abortion
- ✦ preterm labor
- ✦ abruptio placentae
- ✦ low birth weight infants
- ✦ sudden infant death
- ✦ pre-eclampsia
- ✦ neonatal withdrawal syndromes

Suicidality—suicide attempts among heroin addicts are 5 to 20 times greater than for the general population.

HIV and AIDS

- ✦ in the US, most HIV-infected women become infected either by sharing needles during IV drug use or having sex with men who use IV drugs
- ✦ IV drug use is implicated in 71% of AIDS cases among women

Injection drug use also predisposes one to endocarditis, skin abscesses, bacteremia, and renal disease in both men and women

Consequences of cocaine use in both genders include:

- ✦ cardiac arrhythmias
- ✦ neurologic events including strokes
- ✦ inhalation of cocaine can cause wheezing, pulmonary hypersensitivity reactions, pneumothorax, and nasal perforation

Risk Factors for Substance Abuse

Family History

- ♦ Having one or more alcoholic or substance-abusing parents increases risk of substance abuse in both men and women.

Psychosocial History

- ♦ Childhood sexual abuse
- ♦ Frequent heavy drinking during college years is a strong predictor of later problem drinking in women.
- ♦ Younger age of first intoxication and early smoking also predict later alcohol problems in women.
- ♦ Domestic violence is increased—direction of causality not clear, i.e., whether substance abuse increases likelihood of domestic violence or domestic violence leads to development of substance abuse; likely multifactorial
- ♦ Substance-abusing spouse or partner

Psychiatric Comorbidity

All psychiatric diagnoses are more prevalent in female alcoholics than in female nonalcoholics.

Rates of depression are 19% in women alcoholics versus 7% in nonalcoholic women.

Alcohol-abusing women were more likely than alcohol-abusing men to have secondary diagnoses of:

- ♦ mania
- ♦ somatization
- ♦ major depression
- ♦ phobic disorder
- ♦ panic disorder
- ♦ other drug abuse or dependence

Studies have revealed the co-occurrence of post-traumatic stress disorder and substance abuse; the data suggests that 30–35% of male and female substance abusers have PTSD.

Psychiatric Comorbidity

(continued)

Dual Diagnoses

Refers to primary psychopathology (occurring first) and secondary chemical dependence (occurring later), although chemical dependence can certainly result in secondary psychopathology.

It is estimated that 10 to 15% of women with alcoholism have a primary affective disorder that predated their chemical dependence.

Situations of dual diagnosis, especially anxiety disorders, major depression, or prescribed drug dependency in conjunction with alcoholism, often go unrecognized and are more common in women than men.

A woman who has never received treatment for an existing primary psychiatric illness may be at great risk for continued substance abuse.

Eating Disorders (including anorexia nervosa and bulimia)

Comorbid rates of eating disorders among alcoholic women range from 15% to 32%, significantly higher than in the general population which is estimated at 1.5% for anorexia and 7.0% for bulimia.

Rates are particularly high among alcoholic women under age 30; 72% were found to have a lifetime history of comorbid eating disorders.

Alcohol is the most common drug use reported, amphetamines and cocaine use also reported.

It is an unclear causal relationship between eating disorders and addiction

- ◆ several small studies noted that eating disorders usually precede the onset of alcohol or other drug abuse
- ◆ patients with eating disorders are more likely to have family histories of alcohol and drug use

Drugs of Abuse

Alcohol

In general, women abuse alcohol and other substances at a later age (thirties) than men, except for cocaine use which women tend to use at a younger age, often beginning in their twenties.

Women are more likely to begin problem drinking in response to a specific trauma, even with no prior history of alcohol abuse; traumas often involve losses that threaten sense of self:

- ♦ divorce
- ♦ desertion
- ♦ infidelity
- ♦ death of a family member
- ♦ children leaving home
- ♦ health problems, especially gynecological or menopausal

There is some evidence that women may drink to relieve anxiety or depression, to “self-medicate.”

Use by spouse is an important factor in female drinking patterns; if both drink heavily, there is a tendency to support each other in continued alcoholism.

Cocaine

Cocaine cuts across all socioeconomic classes.

Users fall into three broad categories

- ♦ affluent, well-educated women may start using with colleagues at work to lift mood
- ♦ teenagers may use to increase self-esteem or for its perceived social prestige
 - often have borderline or dependent personality traits
 - popular with young girls for its association with weight loss
- ♦ impoverished, inner-city, poorly educated women; female crack users often have associated problems of poverty, AIDS, or prostitution

Marijuana

Most commonly used illicit drug among women.

Women's marijuana use appears to reflect social influences whereas men's use is often influenced by drug availability.

Opiates

- ♦ women become addicted to narcotics more rapidly than men
- ♦ women are more likely to live with a narcotic-abusing partner than men and to have been introduced to it by that partner
- ♦ women are less likely than men to be employed and more likely to be receiving welfare
- ♦ women are less likely than men to deal drugs
- ♦ women are less likely to have been arrested or incarcerated than men
- ♦ in contrast to male narcotics addicts who often have antisocial personality disorder, female opioid addicts often have associated major depression

Some women also become addicted to oral opiates which have been prescribed for pain; women with chronic pain should always be evaluated for anxiety, depression, and current or past family dysfunction.

Hallucinogens

There is scant literature on the use of hallucinogens by women.

Lifetime prevalence of use is nearly twice as high among young and middle-aged men compared to women.

Prescription Drugs

Historically, women are more likely to use socially acceptable drugs and to perceive their use as a form of coping.

Women still receive more psychoactive drug prescriptions than men.

Most common prescription drugs abused by women are:

- ♦ benzodiazepines
- ♦ Vicodin (hydrocodone bitartrate and acetaminophen)
- ♦ Fiorinal (butalbital, a rapid-acting barbiturate)
- ♦ caffeine
- ♦ aspirin

Majority of women who use psychotherapeutic drugs are middle-aged (35–50 years old).

At equivalent levels of anxiety, women are more likely than men to be given a benzodiazepine rather than nonpharmacologic therapy.

Be aware that in some women with apparent anxiety disorders, symptoms may be caused by abuse of or withdrawal from alcohol, cocaine, or benzodiazepines.

“Red flags” which suggest dependence on or abuse of these agents in either gender:

- ♦ uses the drug chronically
- ♦ asks for dosage increases
- ♦ loses prescriptions or medications, asks to have them refilled sooner than needed, or acquires them from several sources
- ♦ cancels appointments, but phones in for refills
- ♦ reports withdrawal symptoms
- ♦ experiences worsening problems with family, work, social life, or finances that may be related to symptoms of drug intoxication or withdrawal
- ♦ remember that denial of a problem can be powerful in these patients

Presentation to Health Care Provider

Complaints are often multiple

- ◆ gastric distress
- ◆ altered bowel function
- ◆ anxiety/depression
- ◆ reproductive problems
- ◆ low energy level
- ◆ sexual dysfunction
- ◆ insomnia or disrupted sleep patterns
- ◆ falls, especially among the elderly

History-Taking

Everyone should be screened on initial visit and regularly on subsequent visits; assessment is a continuous process.

Substance use history should be a routine part of the entire history; should ask about and assess usage pattern of all possible drugs of abuse; begin history with the more common, less stigmatized substances.

Assess quantity, quality, duration, expense, how use was supported, physical effects, tolerance, withdrawal, history of any prior treatments, and any drug-related complications including physical, vocational and familial consequences.

Elicit patient's view of her alcohol or drug use; ask about family's/partner's response to her substance use.

Important to remember that women with children may be more reluctant to share a drug history out of fear of losing their children or simply due to how they may be perceived by health care providers and others.

Many individuals will minimize the importance of their abuse of a secondary drug that is not their drug of choice (i.e. prescription drug use by alcoholics)

Screening Tools

CAGE Questionnaire

- ♦ Have you ever felt you ought to Cut down on your drinking?
- ♦ Have people Annoyed you by criticizing your drinking?
- ♦ Have you ever felt bad or Guilty about your drinking?
- ♦ Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover? (Eye-opener)
 - single “yes” response suggests further exploration needed
 - two or more “yes” responses predicts alcohol problem with sensitivity of 80–90%
 - adding “Have you ever had a drinking problem?” in one study identified more than 90% of alcoholics who screened positive on any other screening test

T-ACE for Pregnant Women

- ♦ How many drinks does it take to make you feel high? (Tolerance)
- ♦ Have people Annoyed you by criticizing your drinking?
- ♦ Have you ever felt you ought to Cut down on your drinking?
- ♦ Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover? (Eye-opener)
 - a score of two is assigned for a positive answer to the tolerance question (if more than two drinks reported)
 - a score of one is assigned to all other questions
 - a total score of two or more indicates an increased likelihood of dependence

Screening Tools

TWEAK

- ♦ How many drinks does it take to make you feel high? (Tolerance)
- ♦ Does your spouse (or parents) ever Worry or complain about your drinking?
- ♦ Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover? (Eye-opener)
- ♦ Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening before? (Amnnesia or blackouts)
- ♦ Have you ever felt you ought to Cut down on your drinking?
 - positive answers to the Tolerance and Worry questions score 2 points each and the last three questions score 1 point each, for a possible total of 7 points
 - score of 2 or more suggests alcohol dependence or abuse
 - preliminary data indicates that TWEAK may be somewhat more sensitive for pregnant women (79% vs. 70% in one study) than T-ACE

Screening Tools

Screening for Other Substances

Drug Abuse/Dependence Screener (developed using data from the Epidemiologic Catchment Area study)

Here is a list of drugs:

- ✦ marijuana, hashish, pot, grass
- ✦ amphetamines, stimulants, uppers, speed
- ✦ barbiturates, sedatives, downers, sleeping pills, seconal, quaaludes
- ✦ tranquilizers, Valium, Librium
- ✦ cocaine, coke, crack
- ✦ heroin
- ✦ opiates, codeine, Demerol, morphine, methadone, Darvon, opium
- ✦ psychedelics, LSD, Mescaline, peyote, psilocybin, DMT, PCP

Question 1: Have you ever used one of these drugs on your own more than 5 times in your life? By “on your own,” I mean to get high or without a prescription or more than was prescribed. (Yes = 1; No = 0—skip questions 2 and 3)

Question 2: Did you ever find you needed larger amounts of these drugs to get an effect or that you could no longer get high on the amount you used to use? (Yes = 1; No = 0)

Question 3: Did you ever have emotional or psychological problems from using drugs—such as feeling crazy or paranoid or depressed or uninterested in things? (Yes = 1; No = 0)

(i) tested in nine sample populations—sensitivity and specificity were greater than 0.9, except in one sample in which sensitivity was 0.57

(ii) needs validation studies

Role of Physical Exam in Identifying Possible Substance Abuse

Often physical exam is entirely normal, especially early on in the disease.

Possible clues:

- ✦ alcohol on the breath
- ✦ weight loss
- ✦ hypertension (due to alcohol)
- ✦ bruises, scratches
- ✦ indications of poor hygiene, self-neglect
- ✦ cocaine use: epistaxis, chronic rhinitis, sinusitis, bronchospasm
- ✦ IVDU—track marks, skin abscesses, scars
- ✦ tachycardia or bradycardia
- ✦ difficulty concentrating
- ✦ irritability or agitation
- ✦ tremors
- ✦ slurred speech
- ✦ dilated or pinpoint pupils

Laboratory Data

Labs suggestive of alcohol abuse

- ♦ elevated gamma-glutamyl transpeptidase level
- ♦ increased MCV
- ♦ in one study, at least one of the two above tests were elevated in 2/3 of female alcoholics who were not otherwise ill
- ♦ macrocytic anemia
- ♦ elevated liver enzymes—AST higher relative to ALT
- ♦ serum potassium may be low
- ♦ fasting triglycerides may be high

Other Substance Abuse

No laboratory tests except for the toxicology screen are sufficiently sensitive or specific enough to predict other substance abuse.

- ♦ toxicology screen
 - should be obtained with patient consent
 - only provides a “snapshot” of possible drug use at one point in time, does not predict chronicity of problem
- ♦ some drugs are eliminated in as little as 12–48 hours after use (e.g. Cocaine), while others can take as long as a month (e.g. marijuana)

Presenting the Diagnosis

After health care provider becomes aware that the female patient may have an addiction problem, the next step is intervention.

Components of Successful Brief Intervention (by Miller and Rollnick)

- F** Provide **Feedback** on drinking behavior
- R** Reinforce patient's **Responsibility** for changing behavior
- A** State your **Advice** about changing behavior
- M** Discuss a **Menu** of options to change behavior
- E** Express **Empathy** for patient
- S** Support patient's **Self-efficacy**

Can be applied to all substance abuse.

Goal is to attempt to provide motivation for the patient to change.

Important to convey concern to the patient.

Discuss the indicators of a drug or alcohol problem based on data from the history, physical exam, and laboratory evaluation.

Try to make recommendations in the form of clear, simple advice—"I think you should cut down on your use of marijuana."

Important to assess patient's understanding of your concerns—"What do you think about the concerns I've raised?"

Denial is a basic component of the disease of addiction, expect to encounter some; may appear as minimization, rationalization, or projection.

If resistant to treatment, some patients may need to demonstrate the ability to abstain from alcohol and drugs "just one time" before they are motivated to accept a program of treatment.

SUGGESTED READINGS

Barnes, H.N., & Samet, J. H. (1997). Brief interventions with substance-abusing patients. Medical Clinics of North America, 81, 867-879.

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