

## **Module 2: Screening and Assessment of Substance Abuse**

*Duration: 2 hours*

### **Goal**

- To recognize and understand the importance of screening, assessment, and diagnosis of substance dependence and abuse in women.

### **Objectives**

Following this module the participant will be able to:

- Differentiate between substance abuse and substance dependence.
- Articulate the DSM-IV criteria for substance abuse and substance dependence.
- Recognize the importance of screening for substance abuse in women.
- Describe the "telescoping" phenomenon and its role in addictions in women.
- Describe the long-term health consequences of substance abuse in women.
- Identify risk factors that predispose women to substance use.
- Describe psychiatric comorbidity in women with substance use problems.
- Name the classes of drugs of abuse and their effects on women.
- Describe the role of history-taking, physical exam, and laboratory data in diagnosing substance abuse problems in women.
- In a simulated or actual patient interview, perform the following:
  - demonstrate the use of appropriate screening tools in detecting substance use problems
  - present the diagnosis of an alcohol, tobacco, and other drug (ATOD)-use disorder

**Teaching Activities**

Introduction	5 minutes
Criteria for substance abuse (DSM-IV)	5 minutes
Criteria for substance dependence (DSM-IV)	5 minutes
Definition simplification	5 minutes
Why screen for substance abuse in women?	10 minutes
"Telescoping" phenomenon	5 minutes
Long-term health consequences	15 Minutes
Risk factors for substance abuse	5 minutes
Psychiatric comorbidity	5 minutes
Drugs of abuse	10 minutes
Prescription drugs	5 minutes
Polysubstance abuse	5 minutes
Presentation to health care provider	5 minutes
History-taking	5 minutes
Screening tests	10 minutes
Role of physical exam in identifying possible substance abuse	5 minutes
Role of laboratory data	5 minutes
Making and presenting the diagnosis	5 minutes

*Optional Exercises*

*If additional time is available, or a second session can be scheduled, consider including the following:*

Practice role plays	15 minutes each;
<i>Participants practice skills in role play in small groups</i>	allot 20 minutes additional time if reviewing role plays with video.

Discussion	15 minutes
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***Teaching Format***

This module will incorporate a lecture format and small group work. Screening techniques will be presented by the instructor.

***Role Play Format***

The role play is best conducted in a small group teaching setting. Ideally each participant will have the opportunity to play both the provider and patient roles. This will provide the maximum benefit- both for skills practice and for developing a better understanding of, and empathy for, the patient's experience.

For use as a demonstration, select a patient from the role plays provided. Identify an individual to play the patient ahead of time. When demonstrating the skills, keep the health care provider sheet accessible and refer to it as needed. You may stop the demonstration role play at any time to comment or ask for feedback. For practice role plays, select a case to copy and distribute to participants. Health Care Providers should refer only to the "Health Care Provider Sheet" and patients to the "Patient Information" only.

It is important that participants get an opportunity to practice intervention skills and experience some success in their role play. To optimize practice opportunities, pair participants in diads - one playing the health care provider, one playing the patient.

Each role play can last up to 15 minutes. If you use video to record and review the role play, you are encouraged to stop the video frequently to analyze and comment on the interaction. Review of the role play will take at least 20 minutes.

Patient Information

This information is intended for use by the participant playing the patient. It provides information about the patient's symptoms and instructions about how the patient is to respond to screening questions.

Health Care Provider Sheet

This information provides the participant playing the health care provider with introductory information about the patient.

***Suggested Readings***

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

Blume, S. B., Counts, S. J., & Turnbull, J. M. (1992). Women and substance abuse. Patient Care, 141-155.

Quinby, P. M., & Graham A.V. (1993). Substance abuse among women. Primary Care, 20, 131-140.

Schorling, **J. B.**, & Buchsbaum, D. G. (1997). Screening for alcohol and drug abuse. Medical Clinics of North America, 81, 845-865.

Stein, M. D., & Cyr, M. G. (1997). Women and substance abuse. Medical Clinics of North America, 81, 979-998.

## Teaching Outline

### Module 2: Screening and Assessment of Substance Abuse

#### *Note to Instructors:*

*Before starting to teach you may want to review the goal and objectives of this module.*

#### **I. Introduction**

- A. Accurate diagnosis is critical in all cases in medicine.
- B. Accurate diagnosis is fed by reliable diagnostic criteria.

*OHD 2.1 on screen.*

*Refer to H02.1.*

- C. The development of reliable diagnostic criteria is essential for a number of reasons:
  - to improve clinical and research communication
  - for the optimal assignment of treatment approaches, giving the patient the greatest opportunity for benefit and the least potential harm
  - to facilitate research on prevalence, natural history, and etiology
- D. The current most widely recognized diagnostic manual in the United States is the DSM-IV.

#### **II. Criteria for Substance Abuse (DSM-IV)**

*OHD 2.2 on screen.*

- A. 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:
  - 1. Recurrent substance use resulting in a failure to fulfill major role obligations at work, school or home
    - Repeat absences or poor work performance related to substance use
    - Substance-related absences, suspensions, or expulsions from school
    - Neglect of children or household

2. Recurrent substance use in situations in which it is physically hazardous
  - driving an automobile or operating a machine when impaired by substance use
  - supervising or caring for children
3. Recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct)
4. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance
  - arguments with spouse about consequences of intoxication
  - physical fights

## ***II. Criteria for Substance Dependence (DSM-IV)***

*OHD 2.3 on screen.*

*Refer to H02.2.*

- A. 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:
  1. 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
  2. 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
  3. The substance is often taken in larger amounts or over a longer period than was intended.

4. There is a persistent desire or unsuccessful effort to cut down or control substance use.
5. A great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple physicians or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects.
6. Important social, occupational, or recreational activities are given up or reduced because of substance use.
7. The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that was likely caused or exacerbated by the substance. For example:
  - current cocaine use despite recognition of cocaine-induced depression
  - continued drinking despite recognition that an ulcer was made worse by alcohol consumption

### ***III. Definition Simplification***

*OHD 2.4 on screen.*

- A. The essence of the DSM-IV criteria is evidence from at least three different areas that the person's substance use (with the same criteria used for alcohol and other drugs) is regularly and repeatedly interfering with his or her life functioning.
  - use occurs in physically hazardous situations or leads to recurrent legal problems
    - operating machinery
    - driving automobile or recreational vehicles
    - possession of a controlled substance
- B. Substance Abuse (DSM-IV)
  - Failure to fulfill major role obligations
    - missing work
    - child care responsibilities
    - not paying bills

- use continues despite persistent social or interpersonal problems
  - not associating problems with substance use

C. Substance Dependence - at least 3 of the following:

- Tolerance
- withdrawal symptoms
- impaired control
- preoccupation with acquisition and/or use
- persistent desire or unsuccessful efforts to quit
- sustains social, occupation, or recreational disability
- use continues despite adverse consequences

*Note: For this module, the term "substance abuse " will be used to refer to all substance use disorders, including substance abuse and substance dependence.*

**IV. Why Screen for Substance Abuse in Women?**

*OHD 2.5 on screen.*

*Refer to H02.3.*

A. General principles that apply to screening for substance abuse

1. The disease is prevalent-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, while 3-5% of women experience alcohol abuse and/or dependence during their lifetime.
2. Screening tests make substance abuse easy to detect-screening tests are sensitive, inexpensive, easy to administer and accurate predictors of substance abuse problems (this is especially true of the well-studied screening tools for detection of alcohol problems).
3. The disease has serious consequences-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.

4. Treatment for the disease is effective-identification of alcohol and substance abuse problems can lead to abstinence and avoidance of health consequences.

B. Outcomes for pregnant substance-abusing women

*Note: It is often difficult to establish which fetal effects and obstetric complications of maternal alcohol and drug abuse are directly related to alcohol and/or drugs and which effects may be due to other maternal psychosocial factors (e.g., inadequate access to proper nutrition).*

*OHD 2.6 on screen.*

*Refer again to H02.3.*

1. 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

*OHD 2.7 on screen.*

2. 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
    - learning disabilities and behavior problems
    - failure to thrive

- fetal alcohol syndrome (affects about 1/3 of children born to women who drink more than six alcoholic drinks per day)
  - congenital malformations
  - facial abnormalities, including eye and ear abnormalities
  - genitourinary defects
  - growth retardation
  - CNS abnormalities leading to mental retardation and learning disabilities
- risk of HIV transmission

*OHD 2.8 on screen.*

C. The current state of detection

1. There is a marked underrecognition of substance abuse in women.
2. Women are far less likely than men to be recognized as having alcohol or drug-related problems.
3. Health care providers fail to diagnose 50-90% of alcoholics and substance users, both men and women.
4. Health care providers do not ask appropriate questions about alcohol or drug use of either men or women.
5. Lack of understanding by health care providers discourages patients from disclosing drug use history

***V. "Telescoping" Phenomenon***

*OHD 2.9 on screen.*

*Refer to H02.4.*

- A. In comparison to men, women who occasionally use alcohol and other substances become addicted and experience consequences in less time.

1. Study by von Ashley: women seeking alcohol treatment presented with alcohol-related diseases after a shorter duration of drinking as compared to men
  - found that for the diagnoses of fatty liver, malnutrition, GI bleeding, hypertension, and anemia, women had a significantly shorter duration of heavy drinking than did men
  - average number of years of heavy drinking for women in treatment was 14 versus 20 for men
2. These findings have been confirmed in many more recent studies as well.
3. For health care providers, there may be less time to intervene with women to avoid social and health consequences of substance abuse.

**B. Thresholds of dangerous drinking**

1. Women have increased susceptibility to toxicity as compared to men.
2. 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.

**C. Possible biological basis:**

1. Women have higher blood alcohol levels after consuming the same amount of alcohol as men.
2. Differences in blood alcohol levels has been attributed to:
  - 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

***VI. Long- Term Health Consequences***

*OHD 2.10 on screen.*

*Refer to H02.5.*

A. Alcohol

1. Effects on life expectancy:
  - female alcoholics have death rates 50-100% higher than male alcoholics
  - female alcoholics lose an average of 15 years in life expectancy (cirrhosis, circulatory disorders, suicide, homicide, alcohol-related accidents)
2. Liver disease-higher risk with less consumption than men due to increased susceptibility.
3. 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)
  - higher relative risks are seen in those women who consume the equivalent of two or more drinks per day
  - not clear whether the association is causal
4. Osteoporosis
  - heavy alcohol use has been shown to inhibit bone remodeling in men (not yet demonstrated in women)
  - Felson noted an increase risk of hip fracture for women under 65 years old who consumed 2 to 6 ounces of alcohol per week
  - both osteopenia induced by alcohol and increased risk of falls may be responsible
5. Cardiomyopathy-women have a similar risk as men, but with smaller amounts of alcohol consumed.
6. Gynecological consequences
  - amenorrhea
  - dysfunctional uterine bleeding
  - infertility

- sexual dysfunction
- early menopause
- 7. Obstetric consequences
  - spontaneous abortion
  - premature labor
  - low birth weight infants
  - fetal alcohol syndrome
- 8. Suicidality
  - among alcoholics, females have more attempts than males
  - female alcoholics have four times the frequency of attempts as compared to nonalcoholic females

B. Other substance abuse

*OHD 2.11 on screen.*

*Refer to H02.6.*

1. There are no large surveys documenting the natural history of opiate or cocaine use in women or men-difficult to do since there are no standard doses, reliable histories are difficult to obtain, multisubstance abuse is common.
2. There is no clear evidence that the long-term effects from opiates and cocaine differ for women and men.
3. 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

*Note: It is unclear whether these complications are direct effects of the drug or effects of lack of prenatal care, poor nutrition, and multiple infections.*

*OHD 2.12 on screen.*

4. Suicidality-suicide attempts among heroin addicts are 5 to 20 times greater than for general population.
5. 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
  - persistent crack use also increases the likelihood of HIV infection, due in part to the practice of trading unsafe sex for crack
6. Injection drug use also predisposes one to endocarditis, skin abscesses, bacteremia, and renal disease in both men and women
7. 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; toxicity most likely related to its primary physiologic effect of vasospasm

## **VII. Risk Factors for Substance Abuse**

*OHD 2.13 on screen.*

*Refer to H02.7.*

### **A. Family history**

1. Having one or more alcoholic or substance-abusing parents increases risk of substance abuse in both men and women.
2. Prevalence of alcoholism in fathers of alcoholic women may be as high as 50%.

### **B. Psychosocial history**

1. Childhood sexual abuse
2. Frequent heavy drinking during college years is a strong predictor of later problem drinking in women.
3. Younger age of first intoxication and early smoking also predict later alcohol problems in women.
4. 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
5. Substance-abusing spouse or partner

## **VIII. Psychiatric Comorbidity**

*OHD 2.14 on screen.*

*Refer to H02.8.*

- A. All psychiatric diagnoses are more prevalent in female alcoholics than in female nonalcoholics.
- B. Rates of depression are 19% in women alcoholics versus 7% in nonalcoholic women.

- C. Almost 2/3 of female alcoholics have multiple mental health problems- prevalence of comorbid psychiatric disorders may be somewhat higher in women than in men.
- D. Women differ from men in the prevalence of specific psychiatric disorders; results of a large multisite community study conclude:
1. 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
  2. Only antisocial personality disorder was more prevalent in men.
  3. Other 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.

*OHD 2.15 on screen.*

*Refer to H02.9.*

- E. Dual diagnoses: Refers to primary psychopathology (occurring first) and secondary chemical dependence (occurring later), although chemical dependence can certainly result in secondary psychopathology.
1. It is estimated that 10 to 15% of women with alcoholism have a primary affective disorder that predated their chemical dependence.
  2. Epidemiologic Catchment Area Study:
    - in 66% of women depression was primary and alcoholism secondary
    - in 78% of men alcoholism was primary and depression was secondary

3. 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.
4. A woman who has never received treatment for an existing primary psychiatric illness may be at great risk for continued substance abuse.

*OHD 2.16 on screen.*

#### F. Eating disorders including anorexia nervosa and bulimia

1. 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.
2. Rates are particularly high among alcoholic women under age 30; 72% were found to have a lifetime history of comorbid eating disorders.
3. Alcohol is the most common drug use reported, amphetamines and cocaine use also reported.
4. 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

### ***IX. Drugs of Abuse***

*OHD 2.17 on screen.*

*Refer to H02.10.*

#### A. Alcohol

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

2. There is greater social stigma attached to drinking by women as compared to men; women react with shame, attempt to hide it.
3. 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
4. There is some evidence that women may drink to relieve anxiety or depression, to "self-medicate."
5. 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.
6. Women are more likely than men to have other substance abuse problems (31 % of female alcoholics versus 19% of male alcoholics).
7. Women are more likely to have a second psychiatric diagnosis than are men (66% of female alcoholics versus 44% of male alcoholics).

#### B. Cocaine

1. Cocaine cuts across all socioeconomic classes.
2. 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

*Refer to H02.11.*

### C. Marijuana

1. Most commonly used illicit drug among women.
2. Women's marijuana use appears to reflect social influences whereas men's use is often influenced by drug availability.

### D. Opiates

1. Use of illegal narcotics, while most common in urban areas, is not exclusively a problem of poor women.
2. Women vs. Men in terms of narcotic use
  - 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

3. 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.

E. Hallucinogens

1. There is scant literature on the use of hallucinogens by women.
2. Lifetime prevalence of use is nearly twice as high among young and middle-aged men compared to women.

**X. Prescription Drugs**

*OHD 2.18 on screen.*

*Refer to H02.12.*

- A. Historically, women are more likely to use socially acceptable drugs and to perceive their use as a form of coping.
- B. Women still receive more psychoactive drug prescriptions than men.
  1. Most common prescription drugs abused by women are the benzodiazepines, Vicodin (hydrocodone bitartrate and acetaminophen) and Fiorinal (butalbital, a rapid-acting barbiturate), and caffeine and aspirin.
  2. Majority of women who use psychotherapeutic drugs are middle-aged (35-50 years old).
  3. At equivalent levels of anxiety, women are more likely than men to be given a benzodiazepine rather than nonpharmacologic therapy-when men seek help, they are only about half as likely as women to be prescribed a drug.
  4. Women are more likely to take benzodiazepines on a long-term basis.
  5. Women who do not work outside the home may be at higher risk-they take more diet pills, sleeping pills, tranquilizers, and mood elevators than other women.
  6. Psychological and physiologic stressors of middle-age may be at core of this increased risk.
- C. Be aware that in some women with apparent anxiety disorders, symptoms may be caused by abuse of or withdrawal from alcohol, cocaine, or benzodiazepines.

D. Prevention is of critical importance

1. Take careful personal and family drug and alcohol histories to identify any predisposing factors which may put women at increased risk for substance abuse.
2. Do not prescribe benzodiazepines, opiates, other sedatives to alcoholdependent.
3. Warn patients about problems associated with changing dosages. 4. Prescribe on a short-term basis only.

*OHD 2.19 on screen.*

E. "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
- remember that denial of a problem can be powerful in these patients

**XI. Polysubstance Abuse**

*OHD 2.20 on screen.*

- A. Women who abuse alcohol are more likely than men to use and abuse other drugs, either sequentially or simultaneously.
- B. According to a 1991 survey of treatment facilities, 40% of women in treatment programs were being treated for concomitant alcohol and drug abuse.

- C. Multiple drug abuse is a problem especially among women under 35 who have a higher prevalence of marijuana, cocaine, and other drug abuse than do older women.

## **XII. Presentation to Health Care Provider**

*Note: It is rare to have patient identify alcohol or substance abuse as their chief complaint when seeking health care; common for active users to be in denial and not admit to a problem.*

*OHD 2.21 on screen.*

*Refer to H02.13.*

- A. Complaints are often multiple r gastric distress r altered bowel function

- anxiety/depression
- reproductive problems
- low energy level r sexual dysfunction
- insomnia or disrupted sleep patterns
- falls, especially among the elderly

## **XII. History- Taking**

*OHD 2.22 on screen.*

*Refer again to H02.13.*

- A. Because there are often no obvious clues to a substance abuse problem, everyone should be screened on initial visit and regularly on subsequent visits; assessment is a continuous process-patient may develop a problem between visits or the patient may begin to trust the health care provider and reveal more history of alcohol and drug use.

B. Taking a history

1. Develop a relationship with the patient.
2. Explore all issues in a nonjudgmental, empathic manner.
3. 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
  - caffeine
  - tobacco
  - alcohol
  - over-the-counter drugs
  - prescription drugs
  - illicit drugs (marijuana, cocaine, heroin, opioids, hallucinogens, inhalants)

*OHD 2.23 on screen.*

4. Assess quantity, quality, duration, expense, how use was supported and prevented, physical effects, tolerance, withdrawal, history of any prior treatments, and any drug-related complications including physical, vocational and familial consequences.
5. Screening tools should be used as a lead-in for asking further questions and getting as complete a history as possible.
6. Elicit patient's view of her alcohol or drug use; ask about family's/partner's response to her substance use.
7. 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.
8. 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); documentation of use of secondary drugs is important because their continued use predisposes the addict to return to his or her drug of choice.

## *XIV. Screening Tools*

### A. Limitations of screening tools

1. Nearly all of the widely used screening tools were developed on men; little data regarding the performance of these tests among different ethnic groups.
2. Recent studies suggest that tests are applicable to women.
3. Accurate history remains the most valuable means of obtaining screening and diagnostic information.

### B. Screening tools for alcohol

1. Asking how much is essential, but not sufficient
  - may not give you insight into a possible problem
  - active users often underreport levels of use

*OHD 2.24 on screen.*

*Refer to H02.14.*

### 2. 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

*OHD 2.25 on screen.*

*Refer again to H02.14.*

3. T-ACE for pregnant women-developed to remove the "guilty" question in the CAGE; felt not useful because many pregnant women feel guilty about substance use harming the fetus regardless of level of use:
  - 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

*OHD 2.26 on screen.*

*Refer again to H02.15.*

4. TWEAK-consists of five items, shares three of T-ACE
  - How many drinks does it take to make you feel high? (T\_olerance)
  - 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? (Amnesia 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
5. Other screening tools are also available, including Brief MAST and AUDIT, but have not shown to be more sensitive or specific than those outlined above.

*OHD 2.27 on screen*

*Refer again to H02.16.*

D. Screening for other substance abuse

1. The social and legal pressures not to disclose are greater than for alcohol.
2. CAGE and MAST for alcohol.
3. 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

4. Drug Abuse Screening Test (DAST)-a 28-item instrument-the length of the questionnaire limits its use in routine screening.

5. CAGE-AID and the SMAST

- substitute "drug use" for alcohol in standard questions
- tested in a family practice clinic
- sensitivity of adapted SMAST was less than 0.50
- sensitivity of adapted CAGE-AID was 0.71 at a cut-off of two or more and a sensitivity of 0.86 at a cut-off of one

6. Diagnosis of drug abuse/dependence is ultimately based on the patient's history.

#### ***XV. Role of Physical Exam in Identifying Possible Substance Abuse***

*OHD 2.28 on screen.*

*Refer again to H02.17.*

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

B. 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

***XVI. Role of Laboratory Data***

*OHD 2.29 on screen.*

*Refer again to H02.18.*

A. Similar role in women and men.

B. Only role is to help confirm diagnosis in context of other data; no test can make diagnosis.

C. Many alcohol and substance dependent patients will have normal values.

D. 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

E. Other substance abuse

1. 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)

***XVII. Making and Presenting the Diagnosis***

*OHD 2.30 on screen.*

*Refer again to H02.19.*

- A. After health care provider becomes aware that the female patient may have an addiction problem, the next step is intervention.
- B. Many studies over the past twenty years have shown the effectiveness of brief interventions for problems related to alcohol use.
  1. In six randomized, controlled trials in primary care or community-based settings with at least 6 months' follow-up, brief interventions proved to be effective when compared to controls.

2. These studies found that groups receiving brief interventions reduced alcohol consumption and/or had positive changes in health behaviors such as reduced sick days (both women and men were included in these studies).

C. FRAMES-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**

1. Can be applied to all substance abuse.
2. Goal is to attempt to provide motivation for the patient to change.

D. Important to convey concern to the patient.

1. Done in an objective, nonjudgmental, supportive fashion.
2. Avoid language that provokes guilt.

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

1. BE EXPLICIT-link the patient's concerns about her health and symptoms with her drinking or substance use.
  - Example, "You tell me that you haven't been sleeping well and that you feel you may have an ulcer. I also noted high blood pressure on exam that was not present last year. I'm concerned that all of these may be related to your use of alcohol."

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

- G. Patient's reactions will be highly variable.
1. Important to assess patient's understanding of your concerns-"What do you think about the concerns I've raised?"
  2. Understanding a patient's thoughts about her substance use will give the provider insight into her readiness to change that behavior.
  3. Denial is a basic component of the disease of addiction, expect to encounter some; may appear as minimization, rationalization, or projection.
  4. 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; a trial of complete abstinence can be suggested with a reassessment after a determined time period.
    - allows health care provider to test hypothesis
    - allows the patient to enter a process of self-assessment
  5. Multiple visits may be needed before patient will accept that a problem exists and accepts treatment.
  6. Important to continue to provide support and advocacy.
- H. Educate regarding long-term health consequences and gender-specific health risks.
- I. Refer for treatment (discussed in detail in subsequent section).
- J. Monitor the patient's progress with follow-up visits or telephone calls which can support her behavior change; need to discuss the patient's feelings and reactions to the change.

***XVIII. Optional Exercises: Practice Role Plays***

*To the Instructor: Skill learning is greatly enhanced by participant role plays. These role plays are designed to allow participants to apply newly learned skills to an interactive practice situation. Use of video equipment to record role plays for review and feedback is encouraged. For further information on role plays, refer to pages 2-4 in the Introduction.*