

## **Module 2: Diagnostic Considerations for Substance-Related Disorders**

*Duration: 75 minutes*

### ***Goal:***

- ♦ To provide a guide for establishing an accurate diagnosis of substance-related psychiatric disorders.

### ***Objectives***

Following this module the participant will be able to:

- ♦ Articulate the DSM-IV criteria for Substance Dependence.
- ♦ Name the classes of drugs most likely to produce psychiatric disorders.
- ♦ Differentiate between substance-induced psychiatric disorders and independent major psychiatric disorders.
- ♦ Discuss how substance abuse can exacerbate pre-existing major psychiatric disorders.

### ***Teaching Activities***

|   |            |
|---|------------|
| Introduction                              | 5 minutes  |
| History of the diagnosis of alcohol abuse | 5 minutes  |
| DSM-IV criteria                           | 15 minutes |
| Defining substance abuse                  | 20 minutes |
| Substance-Induced Disorders               | 20 minutes |
| Summary and Final Questions               | 10 minutes |

### ***Teaching Format***

This training is designed for a medical school classroom style delivery.

***Suggested Readings***

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed., pp. 175-272). Washington, DC: Author.

Brown, S.A., Irwin, M., & Schuckit, M.A. (1991). Changes in anxiety among abstinent male alcoholics. Journal of Studies on Alcohol, *52*, 55-61.

Edwards G., & Gross, M. M. (1976). Alcohol dependence: Provisional description of a clinical syndrome. British Medical Journal, *1*, 1058-1061.

Jellinek, E. M. (1960). The disease concept of alcoholism. New Brunswick: Hillhouse.

Schuckit, M. A. (1992). Anxiety disorders and substance abuse. In A. Tasman & B. R. Riba (Eds.), APA annual review of psychiatry (Vol. 11, pp. 402-417). New York: American Psychiatric Press.

Schuckit, M. A. (1994). Substance-related disorders. In T. A. Widiger, A. J. Frances, H. A. Pincus, M. B. First, R. Ross, & W. Davis (Eds.), The DSM-IV sourcebook (Vol. 1, pp. 5-19). Washington, DC: American Psychiatric Association.

Schuckit, M. A. (1994). The relationship between alcohol problems, substance abuse, and psychiatric syndromes. In T. A. Widiger, A. J. Frances, H. A. Pincus, M. B. First, R. Ross, & W. Davis (Eds.), The DSM-IV sourcebook (Vol. 1, pp. 45-66). Washington, DC: American Psychiatric Association.

Schuckit, M. A. (1995). Drug and alcohol abuse: A clinical guide to diagnosis and treatment (4th ed.). New York: Plenum

## Teaching Outline

### Module 2: Diagnostic Considerations for Substance-Related Disorders

#### *Note to Instructors:*

*Before starting to teach you may want to review the goals 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.
- C. Let's start by looking at the reasons why it is essential to have reliable diagnostic criteria.

*OHD/Slide 2.1 on screen.*

*Refer HO2.1.*

- D. 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.
  - ♦ To enhance resource allocation, including decision making by the government, HMOs, and insurance companies regarding reimbursement.

#### E. Criteria for Substance Use Disorders

1. For the substance use disorders, especially for alcohol abuse or dependence or "alcoholism," there has been great variability in diagnostic approaches until recent years.
2. Between the 1700's and the early 1900's the emphasis on diagnosis was solely from the standpoint of medical and withdrawal problems.

*OHD/Slide 2.2 on screen.*

3. Beginning in the early 1930's and reaching its major impact during the 1940's, Jellinek introduced a concept of "alcoholism" that focused on a predictable course of a disease, with potential subtypes based on the clinical course, hypothesized causes, and evidence of physiological damage.

*Ask students:*

- ♦ What major impact did this event have on medicine?

*Look for discussion around the relief of moral blame for what is now known to be a medical issue.*

- ♦ What residual impact do we see evidence of today?

*Less shame involved, growth and acceptance of treatment, recognition as a disability. A brief discussion of current attitudes should occur.*

4. The official diagnostic manuals, including the first two versions of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-I and DSM-II):
  - ♦ Described alcoholism in general terms
  - ♦ Listed it as a part of neuroses, sexual, and personality deviations
5. In the early 1970's the National Council on Alcoholism attempted to establish more independent criteria for alcoholism.

*OHD/Slide 2.3 on screen.*

*Refer to HO2.2.*

6. It was the publication in the mid-1970's of the description of a dependence syndrome by Edwards and Gross, along with subsequent research in the field, that is responsible for the modern day criteria.
7. The central feature of Edwards and Gross' dependence syndrome is evidence of loss of control over substance use.
8. The elements of the syndrome include:
  - ♦ Narrowing of the substance use repertoire so that substance consumption becomes regimented to specific times and places
  - ♦ Increasing importance or salience of the substance to daily life

- ♦ Evidence of tolerance
  - ♦ Evidence of an abstinence syndrome
  - ♦ Behaviors that involve use of the drug to relieve or avoid withdrawal
  - ♦ A feeling of compulsion to take the drug
  - ♦ A rapid reinstatement of problems once the drug is taken again
9. The current most widely recognized diagnostic manual in the United States is the DSM-IV.
  10. The background just given describes the manner in which they established the approach to substance use disorders.
  11. The lecture will cover the substance use disorders of abuse and dependence.
  12. We will continue by looking at the group of syndromes that can be induced by substances, including:
    - ♦ Anxiety
    - ♦ Mood
    - ♦ Psychosis

## **II. *Criteria for Dependence***

1. Dependence is the most clearly defined syndrome and probably most closely correlates with what has been called “alcoholism” over the years.
2. In 1978 the Ninth Version of the International Classification of Diseases (ICD-9) introduced a distinction between an alcohol dependence syndrome (or an identically defined drug dependence category) and a second type of substance-related problem called non-dependent abuse.
3. In 1980, the Third Edition of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-III) also distinguished between abuse and dependence, but paid little direct attention to a global dependence syndrome (i.e., the physiological symptoms of tolerance and withdrawal formed the core of the DSM-III dependence diagnosis).

4. In 1987, the third, revised edition of the DSM (DSM-III-R) incorporated elements of the dependence syndrome for both alcohol and other drugs, as did ICD-10 in 1992.

*OHD/Slide 2.4 on screen.*

*Refer to HO2.3.*

5. Here we have the DSM-IV criteria for substance dependence, published in 1994.
6. The criteria include:
  - ♦ Tolerance\*
  - ♦ Withdrawal\*
  - ♦ Larger amounts / Longer period than intended
  - ♦ Inability to / persistent desire to cut down or control
  - ♦ 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”)
7. While this criteria set is not identical to the dependence syndrome, it does closely approximate that conceptualization.
8. The DSM-IV criteria are not identical to those listed in ICD-10, but they are very similar.
9. 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.

*Emphasize the next statement as a reference to the asterisk on OHD/Slide 2.4.*

10. In contrast with prior diagnostic schemes, while tolerance and withdrawal symptoms are criteria items, they are neither necessary nor sufficient for a dependence diagnosis in DSM-IV.

11. Over the years there have been quite a number of diverse definitions of alcohol and other drug dependence.
12. In recent years, with the publication of ICD-10 and DSM-IV, the more serious of the substance use disorders are now defined in a similar way in the major diagnostic criteria systems in the world.

### ***III. Definition of Abuse***

*Begin this section with a brainstorming activity:*

*At one end of the chalk board write the word “Dependence”.*

*Ask participants:*

- ♦ Can you tell me signs or symptoms of substance dependence?

*Write the responses on the board.*

*When a fair amount of ideas have been shared move to the other end of the chalk board and write the word “Abuse”.*

*Ask participants:*

- ♦ Can you tell me signs and symptoms of substance abuse?

*Write the responses on the board in the same manner as before.*

*When a fair response has been given ask:*

- ♦ Does anyone think anything on the “abuse” list belongs on the “dependence” list?

*Repeat, asking:*

- ♦ Does anyone think anything on the “dependence” list belongs on the “abuse” list?

*Facilitate a brief discussion of the difficulty involved in determining diagnosis even with reliable diagnostic criteria.*

*End the discussion after a few minutes and move into the following information.*

1. It is important to remember that until the late 1970’s few diagnostic systems recognized that there might be different levels of impairment with substances, and consequently a need for separate diagnostic categories based on the severity of the substance problems.

2. The major modern diagnostic systems (DSM-IV and ICD-10) both recognized that some criteria needed to be developed for individuals who do not appear to qualify for a diagnosis of substance dependence, but who do have some level of impairment in life functioning related to their substance use.

*OHD/Slide 2.5 on screen.*

*Refer to HO2.4.*

3. DSM-IV outlines four criteria items to be considered in the diagnosis of non-dependent abuse of a substance.
4. These items are independent of the criteria listed for substance dependence.

*For emphasis:*

5. The diagnosis of substance abuse can only be made with the absence of the diagnosis of substance dependence.

*Instructor will review the list on OHD/Slide 2.5 and give examples or ask participants to give examples.*

6. Substance Abuse (DSM-IV)
  - ♦ Failure to fulfill major role obligations
    - missing work
    - child care responsibilities
    - not paying bills
  - ♦ Use in hazardous situations
    - operating machinery
    - driving automobile or recreational vehicles
    - drinking on boats or other recreational activities
  - ♦ Legal problems
    - driving under the influence
    - possession of a controlled substance
    - fights or domestic violence

- ♦ Use despite problems
  - not associating problems with substance use
- 7. The area of substance abuse is a critical one.
- 8. Studies indicate that perhaps 20% or so of individuals who meet criteria for abuse of a substance are likely to maintain that diagnosis over the years.
- 9. A substantial number of individuals with abuse do move on to meet criteria for dependence in the future, and an equal number appear to carry no active substance use disorder on follow-up.
- 10. Identifying substance abuse as soon as possible offers the chance to intervene sooner and move the individual into a treatment method.
- 11. The criteria for abuse in DSM-IV are quite different from the criteria for what is called harmful use in ICD-10, even though each of those two labels attempts to outline a clinically relevant syndrome related to substances.

*The lecturer might choose to develop information regarding ICD-10 dependence and harmful use.*

*However, for a clinically oriented audience such as medical students and psychiatric residents, it is probably best to stick to the most clinically relevant material for use in the United States.*

- 12. With these definitions in mind, let us now discuss the usually temporary but potentially severe substance-induced disorders.

#### **IV. Importance of Substance-Induced Disorders**

*OHD/Slide 2.6 on screen.*

*Refer to HO2.5.*

*Deliver the following information.*

- 1. Intoxication and withdrawal from substances of abuse can cause intense but usually temporary psychiatric symptoms that resemble major Axis I Psychiatric Disorders.
- 2. These symptoms are initiated during intoxication or withdrawal.

3. While this can be seen for all substances of abuse, this is especially true for:
  - ♦ stimulants (all forms of amphetamines and all forms of cocaine)
  - ♦ depressants (alcohol, benzodiazepines, barbiturates, and carbamates such as meprobamate)
4. When substance-induced states of anxiety, depression, psychosis, sexual impairment, and sleep impairment develop, these syndromes can look identical to independent major psychiatric disorders, but the symptoms are likely to markedly improve within a month or so of abstinence.
5. Some symptoms induced by substances are likely to persist for several months or more at a low level of intensity as a protracted withdrawal syndrome.
6. These symptoms no longer meet criteria for the major disorders (i.e. major depressive disorder, panic disorder, schizophrenia) after a month or so of abstinence.

*OHD/Slide 2.7 on screen.*

*Refer to HO2.6.*

7. To use major anxiety type symptoms as an example, we see that among recently detoxified male alcoholics, 40% reported significantly elevated levels of anxiety upon admission to an inpatient treatment program (after about one week of abstinence).
8. The levels of anxiety returned to normal within two to four weeks without active intervention.

*OHD/Slide 2.8 on screen.*

*Refer to HO2.7.*

9. The information on this overhead forms the basis for the approach to substance-induced disorders in DSM-IV.
10. A substance-induced disorder involves the development of a substance-specific syndrome due to the recent ingestion of a substance.
11. These substance-induced disorders are usually reversible.
12. Some substance-induced disorders are not reversible (e.g. alcohol dementia).

13. The associated maladaptive changes are:
  - ♦ belligerence
  - ♦ mood swings
  - ♦ cognitive impairment
  - ♦ impaired judgment
  - ♦ impaired social or occupational functioning
14. These changes are due to the direct physiological effects of the substance on the CNS and develop during or shortly after the use of the substance.
15. The symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.
16. Evidence of recent intake can be gathered from patient history, physical exam (i.e. smell of alcohol on the breath), or toxicologic analysis of the body fluids (urine, blood).
17. For all major psychiatric syndromes, the clinician is warned that he or she must not count symptoms only observed in the context of intoxication or withdrawal from substances in establishing a diagnosis of an independent psychiatric disorder.
18. In the DSM-IV, all of the substance-induced disorders are now listed within the relevant diagnostic section.
19. Substance-induced mood disorders are listed in the mood disorders section, substance-induced anxiety disorders are described in the section of DSM-IV on anxiety, etc
20. At the same time, heavy intake of abused substances is likely to exacerbate pre-existing major psychiatric disorders.

*OHD/Slide 2.9 on screen.*

21. Drugs of Abuse are known to exacerbate prior psychiatric disorders by increasing
  - ♦ Mood swings
  - ♦ Anxiety

- ♦ Paranoia
  - ♦ Hallucinations
  - ♦ Confusion
22. There also appear to be a limited number of psychiatric disorders that increase the risk for subsequent substance use disorders.
23. The three most common are:
- ♦ Anti-Social Personality Disorder (ASPD)
  - ♦ Schizophrenia
  - ♦ Mania (Manic episodes in Bi-Polar Disorder)
24. The best data on this phenomenon relate to increased risks for substance use diagnoses among schizophrenics, individuals with manic-depressive illness during the manic phase, and those with antisocial personality disorder.
25. It is important to be able to distinguish between substance-induced disorders (with temporary major psychiatric symptoms) and independent major psychiatric disorders (with a more severe longer-term prognosis and the usual requirement for treatment with psychotropic medications).
26. This can be accomplished using a time line approach.

*OHD/Slide 2.10 on screen.*

*Refer to HO2.8.*

27. For individuals who present with what appear to be both symptoms of major psychiatric disorders and a substance use disorder (especially dependence), the first step in the time line approach is to establish the age at which major problems related to substances began to cluster together.
28. A shorthand approach for this approximate age of onset of dependence is to use the age at which the third of the seven DSM-IV dependence criteria was observed.
29. The second step in this time line approach is to establish any periods of several months or more (i.e., three months or more) since the onset of dependence where abstinence (or close to total abstinence) was observed.

30. The next step in the time line method is to establish whether the major psychiatric disorder (e.g., major depressive disorder) was observed prior to the onset of dependence or if criteria for the major psychiatric disorder were met during periods of extended abstinence.
31. If the individual has demonstrated a psychiatric syndrome that operates independently of severe problems with substances, it becomes less likely that the present similar psychiatric syndrome will disappear with abstinence.
32. If, however, the individual only demonstrates the major psychiatric syndrome in the context of substance use problems, it is highly likely that the psychiatric symptoms will rapidly diminish within a month or so.
33. An important check on this diagnosis is to observe the patient prospectively, monitoring the person's abstinence to the best of the clinician's ability, in order to determine whether the major psychiatric syndrome (not all syndromes) disappears within the subsequent month.

#### **V. Summary**

*Refer to HO2.9.*

1. Reliable criteria for dependence have been developed in the DSM-IV and ICD-10.
2. As will be discussed in additional lectures, these criteria outline syndromes with relatively predictable prognoses.
3. Diagnostic criteria for a substance-related syndrome that does not fulfill criteria for dependence (i.e., abuse) have been developed for DSM-IV.
4. These diagnoses will require further testing before their full clinical meaning is understood.
5. The possibility of a temporary (but potentially severe) substance-induced psychiatric syndrome must be part of the differential diagnosis of all major psychiatric disorders.
6. This is true especially for individuals who are abusing stimulants or depressants, and relates most closely to substance-induced conditions of mood, anxiety, psychosis, sleep, and sexual dysfunction.