



**19th Annual U.S.  
Psychiatric & Mental Health Congress**  
November 16-19, 2006 New Orleans

[Learn More >>](#)



**Psychiatric Times**

## Alcohol and Drug Abuse Intervention in the Emergency Department

By Marcello A. Maviglia, MD, MPH, Psychiatric Times

URL: <http://www.psychiatrictimes.com/article/showArticle.jhtml?articleId=193400963>

October 2006, Vol. XXIII, No. 11

If done properly, the assessment of alcohol and substance use disorders in the emergency department (ED) or psychiatric emergency service can be the first step toward recovery. A proper assessment, however, can be extremely taxing for both the clinician and the patient. This article offers a paradigm for performing a rapid and comprehensive evaluation in the ED of medically stable adults with alcohol and substance use disorders.

Intoxication from alcohol and illicit substances is a frequently cited reason for ED visits. Data from the Drug Abuse Warning Network (DAWN), a national public health surveillance system that monitors trends in drug-related ED visits and medical examiner or coroner deaths, showed that there were about 627,923 drug-related ED visits in the United States in the third and fourth quarters of 2003.<sup>1</sup>

Cocaine and marijuana each were involved in about 20% of those visits; heroin, 8%; "other opioids" (some of which may have been heroin), 4%; stimulants, 7%; and benzodiazepines (nonmedical use), 17%.<sup>1</sup> At about 0% to 2%, phencyclidine (PCP), 3,4-methylenedioxymethamphetamine (MDMA, or Ecstasy), and gamma hydroxybutyrate (GHB) were less frequently involved in ED visits.

About 23% of all drug-related ED visits also involved alcohol; because DAWN does not record events that are alcohol-related only, the actual number of alcohol-related visits is probably higher. Although it is not possible to compare the 2003 DAWN data with those of previous years because of changes in the classification criteria, a crude analysis shows that since 1995, there has been about a 40% increase in drug- and alcohol-related ED visits.<sup>1-4</sup>

Comorbidity of substance use disorders and other mental illnesses is common. About 30% of patients with a mental illness abuse either alcohol or drugs. More than 35% of alcohol abusers and 59% of drug abusers have 1 or more serious mental health disorders: mood disorders, anxiety disorders, personality disorders, and schizo-phrenia are the most common.<sup>5-9</sup> Thus, a proper evaluation for substance use disorders and mental illness in the ED is warranted. However, evaluation of patients for these conditions is frequently fraught with difficulties and obstacles.<sup>10,11</sup>

### CLINICAL FEATURES OF ACUTE DRUG INTOXICATION

Although this article does not focus on the clinical management of drug intoxication and withdrawal, some basic knowledge of their clinical picture helps in identifying the specific nature of the substance use disorder. A brief review of the main signs and symptoms of pathologic drug use is therefore appropriate. However, the clinician should remember that symptoms of drug intoxication or withdrawal may present in atypical ways because of several factors, including modality of use, combination of drugs used, purity of the substance used, and characteristics of individual drugs used.<sup>12-14</sup>

### **Benzodiazepines**

This drug class includes lorazepam, alprazolam, diazepam, clonazepam, temazepam, flurazepam, and others. A conscious person who presents to the ED with benzodiazepine intoxication usually is drowsy, unsteady, confused, disoriented, less alert, and impaired in judgment. In reality, the symptoms are not that different from those in patients with acute alcohol intoxication.

When benzodiazepine intoxication is caused by a long-acting compound (eg, clonazepam), the clinical signs of intoxication can continue for 24 hours. Abrupt discontinuation may result in tremors, anxiety, psychosis, confusion, and symptoms similar to those of delirium tremens. Discontinuation of short-acting benzodiazepines generates withdrawal symptoms within a few hours; sudden cessation of the long-acting compounds, however, may result in withdrawal effects that are delayed until the following day or even later.<sup>15,16</sup>

### **Alcohol intoxication and withdrawal**

The effects of alcohol vary according to the level of consumption: low doses promote mild euphoria and uninhibited behavior, while substantial consumption may trigger irrational thinking, problematic behavior, psychomotor difficulties, and in rare cases, coma. The first step in evaluating a patient with a drinking problem is to identify possible predisposing factors for an episode of withdrawal.<sup>17,18</sup> These factors include high blood alcohol levels, history of withdrawal or seizure, concurrent use of sedating agents, and co-occurrence of acute or chronic medical problems.

Most persons with alcohol dependence will experience mild signs and symptoms of withdrawal within 24 hours after the last drinking episode. These usually include restlessness, anxiety, tremors, tachycardia, GI discomfort, and insomnia. Symptoms may last for about a day and usually remit without major consequences. More rarely--but especially when predisposing factors are present--a mild withdrawal state may develop into (1) an episode of generalized seizure, typically within 24 to 72 hours or (2) delirium tremens, usually within 5 days of the last drink. Delirium tremens is characterized by a magnification of the symptoms of withdrawal and by the development of disorientation, visual hallucinations, high blood pressure, and in some cases, fever.<sup>17,18</sup>

### **Stimulants: cocaine and amphetamines**

Initial signs of cocaine intoxication are restlessness, anxiety, hyperactivity, euphoria, dysphoria, elevated blood pressure levels, and increased heart rate. If the patient has taken high doses of cocaine, hallucinations and paranoid delusions may predominate the clinical picture. Overdose may lead to cardiac arrhythmias and extremely elevated blood pressure levels, which may be life-threatening. The euphoria related to cocaine use is sometimes followed by feelings of discomfort and depression and a craving that is usually defined as withdrawal.<sup>19,20</sup>

Classified under "amphetamines" are stimulant drugs, such as methamphetamine and methylphenidate. Symptoms of acute amphetamine-related intoxication include decreased appetite, increased stamina and physical energy, irritability, aggressiveness, psychotic features, increased sexual drive, involuntary bodily movements, increased perspiration, hyperactivity, jitteriness, nausea, increased and irregular heart rate, and rarely, seizure. Withdrawal from amphetamines is usually characterized by depression, fatigue, withdrawn behavior, lack of motivation, and possibly, abdominal discomfort and headache, all of which can continue for several days.<sup>21,22</sup>

### **Opioids**

The euphoric effects of opioids contribute to their widespread abuse. Heroin, morphine, codeine, oxycodone, and fentanyl are among the most commonly abused opioids. The most salient signs of intoxication include sedation, psychomotor difficulties, confusion, pinpoint pupils and, in more extreme cases, respiratory depression. If the opioid is discontinued, the withdrawal usually appears within a few hours for most of the drugs in this class and may last up to 1 week. The only exception is methadone, the withdrawal from which may appear the day after its discontinuation and tends to be milder and longer-lasting. Generally, the

withdrawal for short-acting opioids peaks on about the second or third day. The most common signs and symptoms of opioid withdrawal include diarrhea, abdominal cramping, generalized pain, piloerection, and rhinorrhea. Although opioid withdrawal is usually very uncomfortable, it is not life-threatening.<sup>23,24</sup>

### "Club drugs"

These agents are among a loosely defined category of recreational drugs popular at dance clubs, parties, and rock concerts. They may have stimulating or psychedelic properties and include MDMA, GHB, ketamine, and lysergic acid diethylamide (LSD).<sup>25-28</sup>

**MDMA.** Commonly known as Ecstasy, this drug produces effects similar to those of amphetamines and hallucinogens. The major effect is usually described as a state of pleasant euphoria characterized by sensory-altering experiences. Intoxication typically causes anxiety, depression, and a mild form of paranoia; increased blood pressure and heart rate; and muscle tension with teeth clenching. Chills and sweating, when present, result from a sustained increase in body temperature.

**GHB.** Known as liquid Ecstasy, GHB simultaneously produces effects of euphoria and sedation. High doses can cause a rapid deep sleep and in rare cases, coma.

**Ketamine.** Nicknamed vitamin K, ketamine produces pleasure through inducing dreamlike states, altered perceptions, and at times, hallucinations. Intoxication can also cause symptoms varying from mild confusion to impairment of motor functions, mood swings, increased blood pressure, and difficulty in breathing.

**LSD.** Commonly referred to as acid, LSD is a hallucinogen used for its abnormal perception-inducing properties. Psychosis and flashbacks (recurrent disorder of perception)--although rare--may occur. The most commonly reported adverse effects are tremors, nausea, and sweating. Blood pressure and heart rate may be elevated. Usually, no withdrawal symptoms are reported after this drug or other hallucinogens are discontinued.

### DIFFICULTY IN CONDUCTING AN EFFECTIVE EVALUATION IN THE ED

Proper evaluation of a drug problem in the ED includes the blending and coordination of 3 disciplines: emergency medicine, general psychiatry, and addiction psychiatry. This is difficult to achieve in the frantic ED atmosphere. Moreover, the provider may not know how to evaluate patients for substance use disorders. Providers frequently struggle with issues and obstacles peculiar to their clinical training and with their own views and values.<sup>29-31</sup>

Other obstacles that make conducting a proper evaluation for alcohol and substance use disorders difficult are those relating to patients' emotional and cognitive status, those inherent to the ED environment, and those stemming from a provider's outlook. Two main obstacles are intrinsic to the patient: a state of acute emotional and cognitive instability and a low level of awareness regarding problems related to substance use disorders. Other issues that affect the evaluation are problems with the ED system, including the noninclusiveness of routine drug screens, which leave out substances popular within youth subculture, such as MDMA, ketamine, and GHB; the difficulties in obtaining urine and blood samples for a drug screen from uncooperative patients; and the premature discharge--before drug-screen results are available--of patients because of overcrowding.<sup>32</sup>

The health care provider frequently struggles with his or her own views, which may be biased, about substance abuse. These views may be flavored by cultural insensitivity that promotes erroneous beliefs about illicit drug use habits in specific cultures. Without a critical self-appraisal of personal views, health care professionals might assume that those views are based on science and are therefore value-free. However, that is rarely the case.<sup>33</sup> Although thorough education about substance abuse would require extensive reading and attendance of specific courses, reflecting on some basic ideologic and cultural aspects related to it could trigger positive cognitive and behavioral self-awareness in the provider.

### A COMPREHENSIVE SUBSTANCE ABUSE EVALUATION PARADIGM

To properly assess for substance use disorders in the ED, an evaluation paradigm

that includes the following 5 components can be used:

- Clarifying personal views about substance use disorders.
- Understanding specific issues related to cultural norms.
- Screening for substance use disorders and dual diagnosis.
- Enhancing motivation.
- Developing treatment plans that include referrals.

### **Common conceptions about substance use disorders**

The following is a summary of the most common views and beliefs about substance abuse shared by persons, including health care professionals, in our society.<sup>34-37</sup> By reviewing and discussing substance abuse with a colleague, the health care provider could unveil individual beliefs and bias that may affect his or her approach to a patient with a substance use disorder.

**Medical model.** This thought model proposes that addiction problems develop because of biology and genetics. It preaches tolerance, since nobody should be blamed for a physical illness. However, it is also reductive, since it postulates that psychological and social issues play a secondary role.

**Cognitive-behavioral.** According to this view, substance use disorders develop from maladaptive patterns of thinking and behaving (eg, using alcohol to relieve anxiety). Although biologic and socioeconomic issues are not denied importance, they are not considered the primary cause.

**Moral conservative.** Persons who hold this view claim that substance abuse is a consequence of a person's character flaws and lack of principles. Therefore, biologic, social, and psychological issues are not causes; rather, they are ways to rationalize moral and character flaws.

**Libertarian view.** For the libertarian-minded person, drugs would not be a problem once legalized. For example, if heroin addicts had a steady supply of heroin, infectious disorders would not develop in them and they would not face legal problems. Thus, this view depathologizes the individual while pathologizing the philosophy of existent drug laws.

**Radical progressive.** For the radical progressive person, social issues, such as poverty, unemployment, and discrimination, constitute the real reason why drugs are misused. Therefore, focusing on biologic and psychological aspects without including these issues would not generate effective solutions.

**Harm reduction.** This view calls for plans that target the potential damaging effects of drug abuse (eg, distributing clean needles and providing rehabilitation programs). It is essentially a pragmatic approach without a specific ideology.

### **Understanding specific issues related to cultural norms**

Cultural sensitivity and competency are of primary importance, since minority groups account for a sizable portion of drug-related ED visits. The most recent DAWN estimates show that 26% of persons involved in a drug-related ED visit belong to a minority group.<sup>1-3</sup> It is usually agreed that sociocultural context plays a major role in shaping the use and misuse of legal or illegal substances.<sup>37</sup> Although it is impossible to gain comprehensive knowledge about cultural issues from a single article, there are some questions that providers can ask themselves that could generate some level of cultural awareness regarding the assessment of ethnic minorities, as well as gender-related issues (**Table 1**).

**Table 1**

#### **Questions clinicians can ask themselves to improve cultural sensitivity and their approach to treatment**

- What do I know about the patient's culture/subculture?
- What is the level of cultural sensitivity and competency of the facility in which I am employed?
- What are the most common biases toward individuals from the patient's specific cultural group?
- How might these biases affect my clinical evaluation of the

patient?

- How is the illegitimate or legitimate use of substances perceived within the patient's culture/ subculture?
- Is the patient in a relationship characterized by physical, sexual, or other forms of abuse?
- Does the patient's culture favor the involvement of family members in the evaluation?
- What are the obstacles the patient may experience in addressing his or her drug-related problem?

## Screening for substance abuse problems and dual diagnosis

**Substance abuse.** Reliable and consumer-friendly instruments may facilitate screening. The modified version of the 4-item CAGE, which includes screening for substance abuse, is one such instrument (**Table 2**).<sup>38-41</sup> Before administering the CAGE questions, the health care provider may want to ask the patient a general question, such as "Do you perceive any problem in the way you use alcohol or drugs?" This could then be followed by gentle, unhurried questioning (to allow time for meaningful answers) with the CAGE items.

**Table 2**

### The modified CAGE questionnaire

**C:** Have you ever felt the need to **cut** down on your use of alcohol or drugs?

**A:** Has anyone **annoyed** you by criticizing your use of alcohol or drugs?

**G:** Have you ever felt **guilty** because of something you've done while drinking or using drugs?

**E:** Have you ever taken a drink or used drugs to steady your nerves or get over a hangover (**eye-opener**)?

Data from Hinkin CH et al. *Am J Addict.* 2001.<sup>40</sup>

A single positive response suggests a substance-related problem, and 2 or more positive responses indicate a problem. However, this screening tool is not reliable for adolescents, who should be referred to a health care professional with experience in child psychology or psychiatry. In addition, the CAGE questionnaire may not accurately screen for substance use disorders across gender and culture lines.

**Dual diagnosis.** A comprehensive screening for dual diagnosis cannot be performed in the ED. Even the most user-friendly format is time-consuming.<sup>42</sup> Although there are no quick and simple validated tests to determine whether a dual diagnosis is appropriate, asking the patient the following questions can help ascertain its presence: (1) Do you recall any period of abstinence that lasted about 6 months? (If the answer is yes, then proceed to the next question.) (2) During that period, did you experience anxiety; depression; or unusual symptoms, such as hearing voices, having strange thoughts, or feeling paranoid? (3) Did you have any difficulty in getting along with people? If the patient answers yes to question 2 or 3, the health care professional can then ask: Did any of these problems interfere with your daily routine, including work, school, and relationships?

A positive response to both questions 1 and 2 indicates the presence of psychiatric symptoms; a subsequent positive response to question 3 may suggest a psychiatric disorder.

**Laboratory tests.** Reliance on blood tests (eg, mean corpuscular volume and liver function tests) alone for diagnostic purposes is inadequate because many patients may show no pathologic variations in their values. The evaluation and integration of clinical data and drug-screen results is the most effective way to determine whether a substance use disorder is present.<sup>43-45</sup>

### **Enhancing motivation**

Health care professionals have used the motivational approach for the past 20 years to engage patients in managing alcohol and substance use disorders. Its theoretic premises are consistent with the principle that people engage more readily in treatment when counseled in nonconfrontational and empathic ways.<sup>46,47</sup> To attain this goal, several steps must be completed, including an initial "staging" of the patient's motivational readiness.

According to the motivational approach paradigm, health professionals can stage patients as precontemplative (no clear signs of motivation), con-templative (ambivalent about treatment), ready for action (motivated for treatment), or maintenance (involved in treatment). Many persons evaluated in an ED setting fall into the first 2 categories; these persons usually respond better to a nonconfrontational approach.

During the intervention, the health care professional should keep in mind the following principles:

- Divest yourself of the "expert role" by welcoming the patient's input as equally valuable.
- View and respect any resistance to treatment as the patient's perception of reality rather than as sheer denial and a barrier to treatment.
- Avoid confrontation, replacing it with an empathic reframing of the patient's experience.
- Illustrate a discrepancy between the patient's perceptions about reality and the objective findings about his or her pathologic use of drugs or alcohol.
- Encourage the patient to contribute to the development of his treatment plan by fostering his sense of self-efficacy.

Since it would be too time-consuming to apply this model faithfully in most ED settings, a condensed format is necessary. The ED professional can use the following example as a guideline if a patient denies an evident substance use or mental health disorder: "Your blood tests, screening, and life difficulties indicate that you may have a serious alcohol/drug problem. However, you see it differently and, personally, I have trouble understanding why. . . ."

Independent from a change in a patient's view after this feedback, the ED professional can move on to review the possible consequences of the patient's dysfunctional alcohol or drug use by saying, "You may decide not to change and to face chronic physical consequences, financial problems, etc. . . ." These 2 steps invite the patient to see a discrepancy between his own perception of his substance use and its objective reality.

Next, the health care professional can involve the patient in developing an appropriate treatment plan. The key is to request the patient's feedback: "Even if you don't see a problem with your use of alcohol and substances, I need your help in setting up a treatment plan, which may become helpful if things get out of control."

Although motivational techniques are generally helpful, there are still questions about their effectiveness in certain populations, such as minority groups and persons with severe drug and alcohol problems. Therefore, awareness of cultural and contextual factors when treating persons who belong to these subpopulations could increase the effectiveness of motivational techniques, particularly if a history of personal and communal trauma is reported. For example, the tragic events, such as forced relocation, assimilation, and land loss, affecting American Indians could have triggered intense trauma in them, which may be responsible for their high rates of alcohol and substance abuse.<sup>48-50</sup>

### **Developing treatment plans that include referrals**

Referring patients for proper treatment is both the final step of the evaluation and the initial stride toward recovery. An appropriate referral is made by synthesizing

the information gathered during the assessment. By keeping in mind the following highlights of the American Society of Addiction Medicine placement criteria,<sup>51,52</sup> the clinician and the patient together can establish an appropriate treatment plan.

**Intoxication/withdrawal.** If the patient is in acute physical danger because he is experiencing acute withdrawal symptoms or life-threatening intoxication, he should be referred to a medically supervised setting (usually inpatient).

**Biomedical conditions.** Acute medical problems may require inpatient medical/surgical services. Chronic medical problems, such as diabetes and hypertension, should be managed in an outpatient setting in which the patient can receive both medical and behavioral health services. The ideal setting would be a primary care clinic with access to psychiatric, addiction, and counseling services.

**Emotional/behavioral conditions.** If the patient is medically stable and receives a diagnosis of both a major psychiatric illness and a substance use disorder, then referral to a dual-diagnosis clinic is appropriate.

**Relapse/continued-use potential.** If the evaluation does not reveal any acute problems but identifies a propensity toward continued use of the problem substance, then referral can range from regular outpatient--relapse-prevention groups, 12-step programs--to intensive outpatient programs consisting of no less than 9 hours per week of full-spectrum treatment modalities, depending on the risk of relapse.

## CONCLUSION

Evaluating the adult patient for a substance use disorder can be accomplished efficiently in the ED setting if the assessment is approached systematically. Clarifying personal values and views about substance use disorders, understanding cultural norms, screening for substance use and psychiatric disorders, enhancing motivation, and making an appropriate referral are essential steps in the evaluation process.

Although there are no empiric data to support the effectiveness of the collective assessment approach presented in this article, each of its steps has been empirically tested or has had strong anecdotal support. Therefore, it is logical to integrate them into a comprehensive evaluation paradigm that may constitute the ED patient's first step toward recovery.

*When this article was written, Dr Maviglia was assistant professor and director of dual diagnosis services, department of psychiatry and behavioral medicine, Medical College of Wisconsin, Milwaukee. He is now medical director of ValueOptions and assistant professor of family and community medicine at the University of New Mexico in Albuquerque. He reports no conflicts of interest regarding the subject matter of this article. This article first appeared in Psychiatric Issues in Emergency Care Settings.*

## Drugs Mentioned in This Article

Alprazolam (Xanax)  
 Clonazepam (Klonopin)  
 Codeine (Paverol, others)  
 Diazepam (Valium)  
 Fentanyl (Actia)  
 Flurazepam (Delmane)  
 Lorazepam (Ativan)  
 Methadone (Methadose)  
 Methamphetamine (Desoxyn, others)  
 Methylphenidate (Concerta, Ritalin, others)  
 Oxycodone (OxyContin, others)  
 Temazepam (Restoril)

## References:

1. Substance Abuse and Mental Health Services Administration, Office of Applied Studies. *Drug Abuse Warning Network, 2003: Interim National Estimates of Drug-Related Emergency Department Visits*. Rockville, Md: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2004. DAWN Series D-

26, DHHS publication (SMA) 04-3972.

2. Ball JK; Substance Abuse and Mental Health Services Administration, Office of Applied Studies. New DAWN: why it cannot be compared with old DAWN. *The New DAWN Report*. September 2005. Available at: [http://dawninfo.samhsa.gov/files/DAWN\\_TDR\\_new\\_old.pdf](http://dawninfo.samhsa.gov/files/DAWN_TDR_new_old.pdf). Accessed January 10, 2006.
3. Substance Abuse and Mental Health Services Administration. Trends in major substances of abuse. In: *Emergency Department Trends From the Drug Abuse Warning Network, Final Estimates 1994-2001*. Available at: <http://dawninfo.samhsa.gov>. Accessed January 10, 2006.
4. Schiller MJ, Shumway M, Batki SL. Patterns of substance use among patients in an urban psychiatric emergency service. *Psychiatr Serv*. 2000;51:113-115.
5. Szuster RR, Schanbacher BL, McCann SC. Characteristics of psychiatric emergency room patients with alcohol- or drug-induced disorders. *Hosp Community Psychiatry*. 1990;41:1342-1345.
6. Rund DA, Summers WK, Levin M. Alcohol use and psychiatric illness in emergency patients. *JAMA*. 1981; 245:1240-1241.
7. Drake RE, Mueser KT, Clark RE, Wallach MA. The course, treatment, and outcome of substance disorder in persons with severe mental illness. *Am J Orthopsychiatry*. 1996;66:42-51.
8. Penn PE, Brooks AJ. *Final Report to National Institute on Drug Abuse-- Comparing Treatments for Dual Diagnosis: Twelve Step and Self Management and Recovery Training*. Rockville, Md: National Institute on Drug Abuse; 1999. Grant R01 DA08537.
9. Minkoff K, Ajilore C; Center for Mental Health Services Managed Care Initiative. Clinical standards and workforce competencies project co-occurring mental and substance disorders panel. *Co-occurring Psychiatric and Substance Disorders in Managed Care Systems: Standards of Care, Practice Guidelines, Workforce Competencies, and Training Curricula*. Washington, DC: Center for Mental Health Services; 1998.
10. Rockett IR, Putnam SL, Jia H, Smith GS. Assessing substance abuse treatment need: a statewide hospital emergency department study. *Ann Emerg Med*. 2003; 41:802-813.
11. Rockett IR, Putnam SL, Jia H, et al. Unmet substance abuse treatment need, health services utilization, and cost: a population-based emergency department study. *Ann Emerg Med*. 2005;45:118-127.
12. Straussner SL. *Ethnocultural Factors in Substance Abuse Treatment*. New York: Guilford Press; 2001.
13. Yost DA. Acute care for alcohol intoxication: be prepared to consider clinical dilemmas. *Postgrad Med*. 2002; 112:14-16, 21-22, 25-26.
14. Giannini AJ. An approach to drug abuse, intoxication and withdrawal. *Am Fam Physician*. 2000;61: 2763-2774.
15. Sands BF, Knapp CM, Ciraulo DA. Interaction of alcohol with therapeutic drugs and drugs of abuse. In: Kranzler HR, ed. *The Pharmacology of Alcohol Abuse*. New York: Springer-Verlag; 1995:475-505.
16. Ashton H. Protracted withdrawal syndromes from benzodiazepines. *J Subst Abuse Treat*. 1991;8:19-28.
17. Cape G, Hulse G, Robinson G, et al. Sedative-hypnotics. In: Hulse G, White J, Cope G, eds. *Management of Alcohol and Drug Problems*. South Melbourne, Australia: Oxford University Press; 2003.
18. Mayo-Smith MF. Management of alcohol intoxication and withdrawal. In: Graham AW, Schultz TK, Wilford BB. *Principles of Addiction Medicine*. 2nd ed. Chevy Chase, Md: American Society of Addiction Medicine; 1998:431-440.
19. Williams D, McBride AJ. The drug treatment of alcohol withdrawal symptoms: a systematic review. *Alcohol*. 1998;33:103-115.
20. Goldfrank LR, Flomenbaum NE, Lewin NA. Cocaine. In: Goldfrank LR, Flomenbaum NE, Levin NA, et al, eds. *Goldfrank's Toxicologic Emergencies*. 6th ed. Stamford, Conn: Appleton & Lange; 1998:1071-1089.
21. Harris D, Batki SL. Stimulant psychosis: symptom profile and acute clinical course. *Am J Addict*. 2000;9: 28-37.
22. Weaver MF, Jarvis MA, Schnoll SH. Role of the primary care physician in

problems of substance abuse. *Arch Intern Med.* 1999;159:913-924.

23. Haverkos HW, Stein MD. Identifying substance abuse in primary care. *Am Fam Physician.* 1995;52: 2029-2035.

24. Goldfrank L, Bresnitz E, Weisman R. Clinical aspects of drug intoxication: opioids and opiates. *Heart Lung.* 1983;12:114-122.

25. Farrell M. Opiate withdrawal. *Addiction.* 1994;89: 1471-1475.

26. Maxwell JC. The response to club drug use. *Curr Opin Psychiatry.* 2003;16:279-289.

27. Tong T, Boyer EW. Club drugs, smart drugs, raves, and circuit parties: an overview of the club scene. *Pediatr Emerg Care.* 2002;18:216-218.

28. Koesters SC, Rogers PD, Rajasingham CR. MDMA ("ecstasy") and other "club drugs." The new epidemic. *Pediatr Clin North Am.* 2002;49:415-433.

29. Deitch R. Doctors' attitudes towards drug abusers. *Lancet.* 1985;1:354.

30. Lehman WE, Cole SG. Treatment staff attitudes toward the combined treatment of drug and alcohol abusers. *Am J Drug Alcohol Abuse.* 1982;9:77-93.

31. Howard MO, Chung SS. Nurses' attitudes toward substance misusers, III. Emergency room nurses' attitudes, nurses' attitudes toward impaired nurses, and studies of attitudinal change. *Subst Use Misuse.* 2000; 35:1227-1261.

32. Cohagan A, Plewa MC, Worthington R. Alcohol and substance abuse evaluation. March 16, 2005. Available at: <http://www.emedicine.com/EMERG/topic20/htm>. Accessed January 10, 2006.

33. Scheyett A, Kim M, Sangalang B. *The Providers Views and Attitudes Towards Substance Abuse and Substance Abusers: A Bibliography (1990-2000)*. Chapel Hill, NC: University of North Carolina School of Social Work. Available at: <http://www.ncattc.org/masters/attitudes.pdf>. Accessed January 10, 2005.

34. Barber B. *Drugs and Society*. New York: Russell Sage Foundation; 1967.

35. Becker HS. History, culture and subjective experience: an exploration of the social bases of drug-induced experiences. *J Health Soc Behav.* 1967;8:163-176.

36. Shaw VN. *Substance Use and Abuse: Sociological Perspectives*. Oxford, United Kingdom: Praeger Publishers; 2002.

37. Goode E. *Between Politics and Reason: The Drug Legalization Debate*. New York: St Martin's Press; 1997.

38. Parks KA, Kennedy CL. Club drugs: reasons for and consequences of use. *J Psychoactive Drugs.* 2004;36: 295-302.

39. Steinweg DL, Worth H. Alcoholism: the keys to the CAGE. *Am J Med.* 1993;94:520-523.

40. Hinkin CH, Castellon SA, Dickson-Fuhrman E, et al. Screening for drug and alcohol abuse among older adults using a modified version of the CAGE. *Am J Addict.* 2001;10:319-326.

41. Volk RJ, Cantor SB, Steinbauer JR, Cass AR. Item bias in the CAGE screening test for alcohol use disorders. *J Gen Intern Med.* 1997;12:763-769.

42. Steinbauer JR, Cantor SB, Holzer CE 3rd, Volk RJ. Ethnic and sex bias in primary care screening tests for alcohol use disorders. *Ann Intern Med.* 1998;129:353-362.

43. Hasin D, Trautman K, Miele G, et al. Psychiatric Research Interview for Substance and Mental Disorders (PRISM): reliability for substance abusers. *Am J Psychiatry.* 1996;153:1195-1201.

44. Schiller MJ, Shumway M, Batki SL. Utility of routine drug screening in a psychiatric emergency setting. *Psychiatr Serv.* 2000;51:474-478.

45. Breslow RE, Klinger BI, Erickson BJ. Acute intoxication and substance abuse among patients presenting to a psychiatric emergency service. *Gen Hosp Psychiatry.* 1996;18:183-191.

46. Miller WR, Benefield RG, Tonigan JS. Enhancing motivation for change in problem drinking: a controlled comparison of two therapist styles. *J Consult Clin Psychol.* 1993;61:455-461.

47. Martino S, Carroll KM, O'Malley SS, Rounsaville BJ. Motivational interviewing with psychiatrically ill substance abusing patients. *Am J Addict.* 2000;9:88-91.

48. Zickler P. Ethnic identification and cultural ties may help prevent drug use. NIDA Notes. September 1999. Available at: [http://www.drugabuse.gov/NIDA\\_Notes/NNVol14N3/Ethnic.html](http://www.drugabuse.gov/NIDA_Notes/NNVol14N3/Ethnic.html). Accessed January 10, 2006.

49. Berry JW, Kim U. Acculturation and mental health. In: Dasen PR, Berry JW,

Sartorius N, eds. *Health and Cross Cultural Psychology: Towards Applications*. Newbury Park, Calif: Sage; 1998:207-236.

50. Maviglia M. Historical trauma and PTSD: the "existential" versus the "clinical." *POL.it*. Available at: <http://www.pol-it.org/ital/fromstates2e.htm>. Accessed January 10, 2006.

51. Gastfriend DR, ed. *Addiction Treatment Matching: Research Foundations of the American Society of Addiction Medicine (ASAM) Criteria*. Binghamton, NY: Haworth Press, Inc; 2003.

52. Rosack J. Revised criteria guide placement of patients in addiction treatment. *Psychiatric News*. 2001;36:23.

#### Evidence-based References

- Marinelli-Casey P, Domier CP, Rawson RA. The gap between research and practice in substance abuse treatment. *Psychiatr Serv*. 2002;53:984-987.
- Saitz R, Sullivan LM, Samet JH. Training community-based clinicians in screening and brief intervention for substance problems: translating evidence into practice. *Subst Abus*. 2000;21:21-31.



**19th Annual U.S.  
Psychiatric & Mental Health Congress**  
November 16-19, 2006 New Orleans

[Learn More >>](#)