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Substance use disorders: Clinical assessment

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INTRODUCTION

Substance use disorders (SUDs) are highly prevalent. According to a United States national survey, approximately 14.5 percent of individuals age 12 or over had a diagnosable SUD in the past year, including approximately 10.2 percent with an alcohol use disorder and 6.6 percent with an illicit drug use disorder [1]. Illicit drug use and nonmedical use of medications alone or in combination with alcohol are associated with a substantial proportion of emergency department visits in the United States [2,3]. The United States Centers for Disease Control and Prevention's National Center for Health Statistics estimated that there were 105,752 overdose deaths in the 12-month period ending October 2021 [4].

A thorough substance use assessment includes a detailed inventory of the type, amount, frequency, and consequences of the patient's substance use, their perception of their use, and readiness to change. Additionally, we review past medical and psychiatric history and assess for co-occurring psychiatric disorders. We review family history and psychosocial factors that may contribute to substance use or facilitate treatment. We do a general physical examination and order laboratory tests as indicated.

The clinical assessment of substance use disorders is reviewed here. Screening for substance use is reviewed separately. The clinical presentation and diagnosis of SUDs specific to individual classes of substances are also reviewed separately.

• (See "Screening for unhealthy use of alcohol and other drugs in primary care".)

- (See "Risky drinking and alcohol use disorder: Epidemiology, clinical features, adverse consequences, screening, and assessment".)
- (See "Opioid use disorder: Epidemiology, clinical features, health consequences, screening, and assessment".)
- (See "Methamphetamine use disorder: Epidemiology, clinical features, and diagnosis".)
- (See "Cocaine use disorder: Epidemiology, clinical features, and diagnosis".)
- (See "Cannabis use and disorder: Epidemiology, pharmacology, comorbidities, and adverse effects".)
- (See "Benzodiazepine use disorder".)

OVERVIEW

Patients receive a substance use disorder (SUD) assessment when the possibility of an SUD has been established, for example, through screening, history, or one or more clinical findings. The purpose of a comprehensive SUD assessment is to:

- Determine the type and severity of a patient's substance use
- Diagnose substance use disorder(s) or other conditions if present
- Understand the patient's perception of their condition and readiness to change
- Identify comorbid psychiatric and medical conditions
- Identify barriers and facilitators to reducing substance use
- Inform the development of a plan for treatment if needed

In contrast to screening, which identifies patients at higher risk for substance use consequences, assessment is a lengthier and more complex process with the aim of reaching a diagnosis and informing treatment. Screening patients for alcohol and other drug use is reviewed separately. (See "Screening for unhealthy use of alcohol and other drugs in primary care".)

Information about a patient's substance use and its consequences should be obtained from various sources including the patient, family members, prior medical records, and clinical observation. When multiple sources of information are available, they should be compared to evaluate the accuracy of patient self-report.

SUBSTANCE USE

Type, frequency, and amount — An initial assessment should establish which substance(s) are or have been used. Unhealthy use of one substance increases the likelihood of unhealthy use of

other substances [5,6]; thus assessment should include querying about all the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) classes of substances. In a nonjudgmental fashion and to establish some level of comfort for the patient, it is typically best to first ask about socially accepted substances and progress to illicit substances. A reasonable order might be:

- Caffeine, tobacco/nicotine, alcohol. (See "Benefits and risks of caffeine and caffeinated beverages", section on 'Caffeine dependence, abuse, and withdrawal' and "Risky drinking and alcohol use disorder: Epidemiology, clinical features, adverse consequences, screening, and assessment" and "Benefits and consequences of smoking cessation".)
- Prescription medications misuse (eg, opioids, sedative/hypnotics, stimulants). (See "Prescription drug misuse: Epidemiology, prevention, identification, and management".)
- Marijuana Consider medical use and misuse (as one does for prescription medications)
 and legal status locally along with other DSM-5-TR criteria for cannabis use disorder. (See
 "Cannabis use and disorder: Epidemiology, pharmacology, comorbidities, and adverse
 effects".)
- Illicit drugs Stimulants including cocaine, opioids including heroin, hallucinogens, and inhalants. (See "Methamphetamine use disorder: Epidemiology, clinical features, and diagnosis" and "Cocaine use disorder: Epidemiology, clinical features, and diagnosis" and "Opioid use disorder: Epidemiology, clinical features, health consequences, screening, and assessment" and "Intoxication from LSD and other common hallucinogens".)

For each substance, a few questions that determine ever used, pattern of use, last use, recent frequency (eg, once or twice a week, daily), and some indication of quantity should provide enough information to determine whether or not to assess for a substance use disorder for that particular substance. Since it is impossible to list every addictive substance a patient might be using, it is useful to ask about use of any other substances like those above (eg, novel psychoactive substances, synthetic cannabinoids, "bath salts," and others).

Risk thresholds for alcohol in the United States as defined by the National Institute on Alcohol Abuse and Alcoholism are [7]:

• Males (under 65): Five or more standard drinks (ie, 12 grams of ethanol, the amount generally found in 1.5 oz of 80 proof liquor, 5 oz of wine, and 12 oz of beer) in a day or more than 14 drinks per week on average.

• Females and males over 65: Four or more standard 12 gram drinks in a day or more than seven drinks in a week on average.

Similar risk thresholds have not been established for gender minority populations. There are no agreed upon definitions for unhealthy use of substances other than alcohol. For some substances, any use is considered unhealthy. For instance, any cocaine or methamphetamine use increases one's risk of cardiac events.

Quantification is:

- Easier for tobacco (eg, number of cigarettes) and alcohol (eg, number of standard drinks) than for other drugs.
- Names and doses of prescription drugs may be identifiable from pictures or marking.
- Other substances may be purchased in more idiosyncratic quantities or may vary in potency, which is often unknown. Amount of money spent on a daily/weekly/monthly basis for drugs may help to quantify use.

Regardless of amounts, one should proceed with a comprehensive assessment in certain circumstances. Examples of such circumstances include individual drinking any amount of alcohol despite awareness of compromised liver function, pregnancy, and potential interactions with prescribed medications (eq., alcohol and benzodiazepines).

History of prior substance use disorder, treatment — If an individual has a history of SUD, evaluate participation in mutual-help groups, such as Alcoholics Anonymous or Narcotics Anonymous, and past substance use disorder treatment episodes.

Route of administration — The current route of drug administration should be identified:

- Oral Drinking, swallowing pills
- Smoking
- Intranasal inhalation (eg, "snorting" or "sniffing")
- Subcutaneous injection (eg, "skin popping")
- Intramuscular injection (eg "muscling")
- Intravenous injection (eg, "shooting up")

Route of administration has value in suggesting risks of medical problems (eg, perforated sinus from intranasal intake or infectious disease from injection). Associated behaviors, such as needle sharing, can increase risks of disease.

More invasive routes of delivery such as injection can be indicative of a more severe disorder [6]. For instance, research indicates that among people who use heroin, those who inject have more severe SUD than those who inhale. (See 'General medical' below.)

Overdose history — Drug overdoses in the United States are driven largely by synthetic opioids (ie, illicitly manufactured fentanyl or fentanyl analogs) [8] and to lesser extent psychostimulants and cocaine, most often with concurrent involvement of synthetic opioids [9]. Use of synthetic opioids with other drugs can be inadvertent as products may be adulterated. Overdose is more likely in individuals who have an opioid use disorder. Moreover, it is important to assess overdose history as a prior overdose is associated with increased likelihood in the following year of a subsequent fatal or nonfatal overdose [10,11].

MENTAL HEALTH

The co-occurrence of mental health and substance use disorders (SUDs) is well documented [12]. For this reason, it is important for clinicians to conduct a comprehensive mental health history and evaluation to identify past and current concurrent psychiatric disorders and treatment.

Patients with SUDs are at higher risk of experiencing comorbid:

- Depressive disorders
- Bipolar disorder
- Anxiety disorders
- Posttraumatic stress disorder
- Eating disorders
- Schizophrenia
- Attention deficit hyperactivity disorder

SUD risk is elevated among individuals with personality disorders, especially borderline personality disorder and antisocial personality disorder [13].

Patients who are actively going through withdrawal may present with anxiety, agitation, sleep disturbances, and behavioral changes. Specific withdrawal symptoms vary by substance as does timing of withdrawal.

Patients may present with psychosis resulting from the ingestion of prescribed stimulants, alcohol, cocaine, phencyclidine and other hallucinogens, or methamphetamines, or from

withdrawal from alcohol or sedative/hypnotic drugs such as barbiturates or benzodiazepines. Patients should be evaluated for suicidal or homicidal ideation.

Mental status examination — A mental status examination should be performed that includes the evaluation of:

- General appearance
- Behavior and interaction
- Speech and voice
- Motor activity
- Mood and affect
- Perceptions
- Thought process
- Thought content (suicidal or homicidal ideation, hallucinations, delusions)
- Insight
- Judgement
- Cognitive functioning

Findings from a mental status examination typically would be unremarkable except in cases of current intoxication or withdrawal, when the patient is actively psychotic, and when chronic substance use has resulted in impaired cognitive function and/or dementia.

The presence of a psychiatric disorder or symptoms should alert the clinician to the possibility of an SUD, as patients who have these disorders are more likely to use substances than those who do not. When comorbid substance use and psychiatric disorders are present, individuals are often more clinically severe and difficult to treat relative to those who have either type of disorder alone [14]. As such, this information is critical in the development of a comprehensive treatment plan.

GENERAL MEDICAL

Substance use can be associated with compromised functioning in virtually every system of the body [15-17]. Medical conditions may develop as a result of the toxicity of the substance, route of administration, and high-risk behaviors in which the patient engages (eg, needle sharing, unprotected sexual encounters, poor hygiene).

Physical examination and medical history — During the physical examination, the clinician should be alert to physical indicators of substance use including:

- Poor personal hygiene.
- Significant weight loss or weight gain.
- Signs of injection drug use including scars at injection sites (so-called "track marks") on the skin.
- Signs of drug inhalation including atrophy of the nasal mucosa and perforation of the nasal septum.
- Evidence of acute intoxication or withdrawal (eg, slurred speech, unsteady gait, pinpoint pupils, bizarre or atypical behavior, changes in level of arousal [agitation or sedation], tachycardia, conjunctival injection, sweating, watery eyes, runny nose).

Medical conditions that can result from and may serve as indicators of substance use include:

- Cardiovascular problems such as hypertension, cardiomyopathy, endocarditis, and heart failure. (See "Cardiovascular benefits and risks of moderate alcohol consumption", section on 'Effect of alcohol on cardiovascular risk' and "Clinical manifestations, diagnosis, and management of the cardiovascular complications of cocaine abuse" and "Right-sided native valve infective endocarditis".)
- Serious gastrointestinal and renal problems such as pancreatitis, cirrhosis, chronic liver disease, kidney failure, hepatitis B, and hepatitis C.
- Central nervous system issues such as dementia, memory and attention impairments, intraparenchymal hemorrhage, cerebral vasculitis, ischemic events and strokes, and traumatic brain injury. (See "Overview of the chronic neurologic complications of alcohol".)
- Pulmonary problems such as bronchospasm, chronic obstructive lung disease, pulmonary edema, pneumonia, hypersensitivity pneumonitis, barotrauma, undifferentiated hemoptysis, and tuberculosis. (See "Pulmonary complications of cocaine use" and "Overview of pulmonary disease in people who inject drugs".)
- Anemia and bone marrow hypofunction. (See "Hematologic complications of alcohol use".)
- Sexually transmitted infections such as HIV, syphilis, gonorrhea, and genital warts. (See "Prevention of sexually transmitted infections", section on 'Sexual health assessment' and "Screening for sexually transmitted infections" and "Substance use disorder in patients with HIV".)

- Bacterial infections including methicillin-resistant S. aureus. (See "Clinical manifestations of Staphylococcus aureus infection in adults".)
- Pregnancy and birth complications. (See "Substance use during pregnancy: Screening and prenatal care".)

The specific medical conditions vary by the substance(s) used. In addition to evaluating presenting symptomatology, a comprehensive medical history should be taken.

Following a positive screen for unhealthy substance use or upon suspicion of a substance use disorder, clinicians should conduct a thorough review of the patient's medical history, current symptomatology, and physical examination results to identify any physical symptoms of substance use, as well as comorbid health conditions resulting from substance use. The identification of comorbid medical conditions is a critical part in developing a treatment plan as they may impede recovery from substance use disorder [18].

Laboratory tests — Although laboratory tests of biologic samples (eg, urine, blood, sweat, hair, saliva, breath) have limited utility in making a substance use disorder diagnosis specifically, they can be used to detect recent drug use, and patients are more likely to answer questions related to use more honestly if an objective measure has been used. However, laboratory tests do not provide information on the frequency or intensity of use. For this reason, they may be more useful for monitoring abstinence repeatedly over time than for one-time assessment.

Basic biologic screens for addictive drugs used across the United States test for five drugs: amphetamine, cocaine, cannabis, some opioids, and phencyclidine. Many basic drug screens used in Australia, New Zealand, and much of the European Union and Asia omit phencyclidine but include tests for benzodiazepines and a wider range of opioids. Other drugs that may be tested for include barbiturates, methamphetamine, and synthetic opioids. Many widely used substances are not detected by routine addictive drug screening tests used in many locales, including alcohol (which can be detected by measuring ethyl glucuronide), synthetic cannabinoids, synthetic cathinones ("bath salts"); synthetic opioids, such as meperidine, methadone, and fentanyl; plant-derived substances such as hallucinogenic mushrooms; and other synthesized substances such as lysergic acid diethylamide. (See "Testing for drugs of abuse (DOAs)".)

Urine drug screens are the most widely used type of test as they are inexpensive, easy to administer, and noninvasive. They can identify when there is a detectable concentration of the substance, but have limited utility to detect use other than recent. A table describes the period of detection for urine screens for common drug classes (table 1). For instance, the window of detection for amphetamines and cocaine is generally two to three days, while moderate to

heavy marijuana use can be detected for up to one month. Blood toxicology tests, while accurate for detecting recent use, are used less frequently as they are more costly, less immediate, and more invasive than urine tests. Blood and breath testing (the latter providing immediate results) can inform the extent of intoxication or at least the amount used, and can be useful with injured, cognitively impaired and unconscious patients.

Several laboratory tests have been used to help identify excessive substance use and/or systemic damage and to monitor response to treatment over time. These are described in topics addressing specific classes of substances. (See "Risky drinking and alcohol use disorder: Epidemiology, clinical features, adverse consequences, screening, and assessment".)

Except in emergency situations, permission for conducting a urine drug screen should be obtained from patients, as testing for illegal drugs without a person's consent may represent a violation of their civil rights. Requirements regarding notification and permission vary by jurisdiction [19].

FAMILY HISTORY

A family history of substance use disorder (SUD) has been shown to be a risk factor for the development of an SUD [20,21]. [22]. Heritability estimates range from [23-27]:

- 50 to 70 percent for alcohol use disorder
- From 34 to 78 percent for cannabis use disorder
- 42 to 79 percent for cocaine use disorder
- 23 to 54 percent for opioid use disorder

Family environments in which a parent or primary caregiver has an SUD are associated with higher rates of physical and sexual abuse and trauma, poor parenting skills, and poor quality parent-child interactions, all of which are risk factors for SUDs [28,29].

SOCIAL HISTORY

A patient's social history can provide information about risk factors for unhealthy substance use and the impact of substance use on the patient's role functioning [30].

Risk factors for substance use include:

• A romantic partner with a substance use disorder (SUD)

- Friends who have SUDs
- Living in a community characterized by poverty, violence, and/or high alcohol and other drug availability

Identification of these risk factors can be achieved by conducting a comprehensive evaluation of the patient's living environment.

Social roles and relationships are often compromised by the development of an SUD. Individuals who have an SUD often experience the following negative social events:

- Disrupted familial and social relationships
- Failure to fulfill responsibilities at school or work (eg, loss of job, poor grades in school)
- Legal involvement (eg, arrests for disorderly conduct, driving under the influence, theft)
- Financial problems
- Violent behavior
- Child abuse/neglect
- Engagement in high-risk sexual behaviors (eg, multiple partners, unprotected sexual intercourse)
- Failure to engage in activities that were once enjoyable

In addition to signaling the presence of an SUD, identification of these problems can inform the development of a treatment plan that includes necessary ancillary services (eg, employment services, legal services, parenting classes).

Engaging family members in the treatment process can improve the likelihood of positive outcomes for individuals who have an SUD.

ASSESSMENT/DIAGNOSIS

Diagnosis of a substance use disorder (SUD) was revised with the transition from DSM-IV to DSM-5 [31]. Replacing the two DSM-IV diagnoses of substance abuse and dependence is a single diagnosis, SUD, named by the type of substance involved (eg, alcohol use disorder or cannabis use disorder) and a specifier indicating severity. (See 'Severity' below.)

The assessment process can elicit strong feelings in the patient. It can be a positive cathartic and insightful experience and/or feel invasive and stressful. It is best conducted in a respectful, supportive and nonjudgmental manner that is responsive to the patient's needs and values. Such a patient centered approach may lead to improved treatment response.

DSM-5-TR diagnostic criteria — DSM-5-TR diagnostic criteria for SUD are described below [32].

A problematic pattern of use leading to clinically significant impairment or distress is manifested by two or more of the following within a 12-month period:

- 1. Often taken in larger amounts or over a longer period than was intended.
- 2. A persistent desire or unsuccessful efforts to cut down or control use.
- 3. A great deal of time is spent in activities necessary to obtain, use, or recover from the substance's effects.
- 4. Craving or a strong desire or urge to use the substance.
- 5. Recurrent use resulting in a failure to fulfill major role obligations at work, school, or home.
- 6. Continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by its effects.
- 7. Important social, occupational, or recreational activities are given up or reduced because of use.
- 8. Recurrent use in situations in which it is physically hazardous.
- 9. Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
- 10. Tolerance.
- 11. Withdrawal.

Preoccupation with use is often demonstrated by giving up previously important activities, increasing the time spent in activities related to substance use, and using more frequently or for longer amounts of time than planned. Consumption may continue despite the continued existence or worsening of problems caused by substance use. In applying criteria on consequences and behaviors associated with use, it is important to include alcohol-related blackouts, and impulsive sexual behavior.

Severity — Alcohol and drug symptom profiles appear to vary along a severity dimension. DSM-5-TR severity specifiers mild, moderate, and severe are based on the number of diagnostic criteria met by the patient at the time of diagnosis:

- Mild Two to three criteria
- Moderate Four to five criteria
- Severe Six or more criteria

Healthcare coding and billing in the United States is based on the International Classification of Diseases (ICD). DSM-5 and ICD criteria for a substance use disorder are very similar, but ICD require a minimum of three criteria instead of two. The ICD diagnoses of "harmful use" require only substance related physical or psychological harm [33].

Most published clinical trials of SUD treatment studied patients diagnosed with DSM-IV disorders. Applying these results to patients diagnosed with DSM-5-TR SUD is imprecise, but the most closely comparable groups are:

- Substance abuse Mild subtype of SUD
- Substance dependence Moderate to severe subtype of SUD

Diagnostic tools — To diagnosis SUDs in routine clinical practice, a clinical interview is generally used to identify which DSM-5-TR diagnostic criteria are or are not met. Structured diagnostic instruments, developed to facilitate reliable and valid diagnoses for research, as well as semistructured tools, can be relatively lengthy and require training to administer; nonetheless, they can be useful in clinical practice in some specialized settings. The range of options include:

- Fully structured instruments They generally provide a script for the assessor to follow, specify questions that should be asked, provide response codes, and identify types of probes that the interviewer should use (eg, Composite International Diagnostic Interview Alcohol and Substance Abuse Modules) [34-37].
- A relatively short structured diagnostic interview is the Mini International Neuropsychiatric Interview. It can be administered in approximately 15 minutes and assesses the 17 most common disorders in mental health including alcohol dependence and the dependence on the nonalcoholic substance causing the biggest problems [38].
- Semistructured interviews These instruments list questions to be read verbatim, but they allow the interviewer to add follow-up queries based on their clinical interpretation of the

interviewee's initial response (eg, Structured Clinical Interview for DSM, Alcohol and Drug Modules) [39-41].

 DSM criteria checklist – Making and documenting SUD diagnoses can also be done using a checklist that addresses each criterion for each substance under consideration. This can help assure that all diagnostic criteria are covered for all targeted substances. To increase diagnostic sensitivity and confidence, the interviewer should explore the symptoms that could meet criteria.

Multidimensional assessment — Making specific SUD diagnoses is part of a comprehensive assessment; so is ascertaining biopsychosocial context, readiness to change, and consequences and goals. The choice to conduct a multidimensional assessment beyond diagnosing an SUD is guided by facility constraints (eg, resources, time) and the clinical goal.

- When the goal is referral to a behavioral health practitioner or specialty SUD treatment, the diagnostic results, any additional substance use assessment results (eg, pattern of use, consequences, urine drug screening results), and relevant general medical, mental health, family/social history information are adequate.
- When on-site treatment is planned, a comprehensive assessment can identify affected life areas and issues relevant to treatment, as well as confirm appropriateness of level of care.

The assessment can be conducted by a nonclinician behavioral health specialist or other ancillary medical personnel (if available) for clinician review.

While general medical, mental health, family/social history information is supportive, it is not a substitute for a systematic multidimensional assessment. The domains include:

- Alcohol and other drugs (eg, pattern of use, treatment history; consequences, acute intoxication/withdrawal potential, continued use/problem potential)
- Employment/financial
- Illegal activity and justice involvement
- Family/social and living environment
- Biomedical conditions and complications
- Emotional, behavioral, or cognitive conditions and complications
- Readiness to change/treatment readiness

The multidimensional approach to the assessment of SUD patients has been supported and validated by the use of the Addiction Severity Index (ASI) for over 35 years [42-44] and adopted in practice [45].

- The ASI is a semistructured interview that can be conducted by trained interviewers. It has self-administered and computerized versions [46,47]. The ASI assesses current and lifetime functioning in life domains that affect or are affected by SUD and are relevant to the appropriate treatment of SUD.
- The Global Appraisal of Individual Needs (GAIN; [48]) is another rather comprehensive biopsychosocial assessment for SUD patients. The GAIN has the reported advantage of being appropriate for adolescents as well as adults.
- Adolescent-specific biopsychosocial assessment instruments have been developed and tested solely for youth (eg, Comprehensive Adolescent Severity Inventory [49].
- Patient placement criteria (PPC) developed by the American Society of Addiction Medicine (ASAM) are another multidimensional assessment instrument, this one developed to determine a patient's appropriate level of care along a continuum of SUD treatment services [50,51]. It is reviewed in detail separately. (See "Substance use disorders: Determining appropriate level of care for treatment".)
- The GAIN was developed to map onto the ASAM PPC; the ASI can substantially inform
 placement [52]. Expanded versions of the ASI have been developed to assist in making
 ASAM PPC level of care decisions [52,53]. A comprehensive tool for this purpose is
 CONTINUUM: The ASAM Criteria Decision Engine a computer-guided, semistructured
 interview.

These multidimensional instruments (which all take about an hour to administer) along with the diagnostic results, any additional substance use assessment results (eg, pattern of use, consequences, urine drug screening results), and relevant general medical, mental health, family/social history provide the necessary information to make an initial patient placement and comprehensive treatment plan and to serve as a baseline from which to monitor progress.

There is a good deal of overlap in content among these instruments. To shorten the length of assessment, minimize patient burden, and maximize the amount and quality of useful information obtained, redundant questions can be identified and eliminated.

Other instruments assess individual subjects in more depth than the multidimensional instruments do (eg, readiness to change [54] and personal consequences [55]). (See "Substance"

use disorders: Motivational interviewing", section on 'Readiness to change'.)

Progress monitoring — Monitoring the clinical status of SUD patients on a regular basis during treatment has been recommended by the Institute of Medicine since 2006 [56]. Progress monitoring improves outcomes in mental health treatment [57,58] and there are demonstrations of various approaches that have been successfully used as part of SUD treatment [59]. (See "Continuing care for addiction: Components and efficacy".)

- Treatment attendance and urine drug screen results have been the mainstay of progress monitoring in SUD treatment and are recommended [60-62].
- For those noted to have an elevated gamma-glutamyltransferase or carbohydrate deficient transferrin at the beginning of treatment, repeated testing can be used to track the patient's progress in treatment.
- For patients who were evaluated using the Short Inventory of Problems, serial administration of the instrument along with repeated questions about the drug-use frequency or alcohol-use quantity can help monitor progress.
- Calls have been made for additional measures that provide a more multidimensional picture of patient functioning and that support measurement based care [56,63].
- There are several brief instruments that have demonstrated reliability and validity with SUD patients that can be used for such purposes (eg, Brief Addiction Monitor [64,65]; Treatment Outcome Profile [66]).
- More intensive and extensive monitoring can be conducted with follow-up versions of the ASI, GAIN, or CONTINUUM.

Withdrawal potential — Withdrawal is included in the diagnostic criteria for SUD, and withdrawal potential is a dimension in the ASAM criteria. As such, they are included in the diagnostic and comprehensive assessments, respectively. Withdrawal has different symptoms and manifestations, risks, and treatments and treatment implications across substances.

- (See "Opioid withdrawal: Clinical features, assessment, and diagnosis".)
- (See "Alcohol withdrawal: Epidemiology, clinical manifestations, course, assessment, and diagnosis".)
- (See "Benzodiazepine poisoning and withdrawal".)
- (See "Alcohol withdrawal: Ambulatory management".)
- (See "Management of moderate and severe alcohol withdrawal syndromes".)

- (See "Opioid withdrawal: Medically supervised withdrawal during treatment for opioid use disorder".)
- (See "Cannabis withdrawal: Epidemiology, clinical features, diagnosis, and treatment".)

APPLICATION TO TREATMENT PLANNING

The data gathered from a thorough substance use disorder assessment informs the clinician and patient's development of a treatment plan, including:

- General substance use disorder (SUD) issues
 - The extent of the problem or disorder (See "Risky drinking and alcohol use disorder: Epidemiology, clinical features, adverse consequences, screening, and assessment".)
 - The patient's readiness for treatment (See "Substance use disorders: Motivational interviewing", section on 'Readiness to change'.)
 - The intensity, level, and sequencing of care (See "Continuing care for addiction: Components and efficacy" and "Substance use disorders: Determining appropriate level of care for treatment".)
- Substance-specific treatment
 - Opioids (See "Opioid use disorder: Treatment overview".)
 - Alcohol (See "Brief intervention for unhealthy alcohol and other drug use: Efficacy, adverse effects, and administration" and "Alcohol use disorder: Pharmacologic management" and "Alcohol use disorder: Psychosocial management" and "Identification and management of unhealthy alcohol use in the perioperative period" and "Nutritional status in patients with sustained heavy alcohol use".)
 - **Stimulants** (See "Stimulant use disorder: Treatment overview".)
 - **Cannabis** (See "Cannabis use disorder: Clinical features, screening, diagnosis, and treatment".)
 - **Multiple substances** (See "Prescription drug misuse: Epidemiology, prevention, identification, and management" and "Evidence-based approach to prevention" and "Substance use disorders: Training, implementation, and efficacy of treatment with contingency management".)

- Other treatment issues informed by assessment findings include:
 - Social issues (eg, homeless) may inform level of care assignment. (See 'Social history'
 above and "Substance use disorders: Determining appropriate level of care for
 treatment".)
 - A patient with a severe SUD may require multiple treatment modalities. (See "Continuing care for addiction: Components and efficacy".)
 - A patient with an SUD and a disabling psychiatric disorder may benefit from referral to an addiction psychiatrist or coordinated or integrated addiction and psychiatric care, if available.
 - A patient with an SUD and serious medical conditions may benefit from referral to coordinated or integrated addiction and medical care, if available.

SUMMARY AND RECOMMENDATIONS

- **Substance use disorders (SUDs)** We undertake a thorough substance use assessment including a detailed inventory of the type, amount, frequency, and consequences of a patient's substance use. We assess the individual's perception of their use and readiness to change. (See 'Introduction' above.)
- Type, frequency, and amount For each substance, principally, tobacco/nicotine, alcohol, prescription medications and illicit drugs (opioids, stimulants, cannabis, sedative/hypnotics), we ask the patient a few questions that determine ever used, pattern of use, last use, recent frequency (eg, once or twice a week, daily), and an indication of quantity. We use this information to determine whether or not to assess for an SUD for that particular substance. (See 'Type, frequency, and amount' above.)
- **Mental health** The co-occurrence of mental health and SUDs is well documented. We conduct a comprehensive mental health history and evaluation to identify past and current psychiatric disorders and treatment. (See 'Mental health' above.)
- **Medical effects** Substance use can be associated with compromised functioning in virtually every system of the body. Medical conditions may develop as a result of the toxicity of the substance, route of administration, and high-risk behaviors in which the patient engages (eg, needle sharing, unprotected sexual encounters, poor hygiene). (See 'General medical' above.)

- Laboratory tests Although laboratory tests of biologic samples (eg, urine, blood, sweat, hair, saliva, breath) have limited utility in making an SUD diagnosis specifically, we often use them to detect recent drug use. We believe patients are more likely to answer questions related to use more honestly if an objective measure has been used. (See 'Laboratory tests' above.)
- **Family history** A family history of SUDs has been shown to be a risk factor, with genetic and environmental components, for the development of an SUD. Family environments in which a parent or primary caregiver has an SUD are associated with higher rates of physical and sexual abuse and trauma, poor parenting skills, and poor quality parent-child interactions, all of which are risk factors for SUDs. (See 'Family history' above.)
- **Social history** Individuals who have SUD often have disrupted familial and social relationships, unfulfilled responsibilities at school or work, problems related to finances, the legal system, raising children, violence, and engaging in high-risk behaviors. They often to engage in activities that were once enjoyable. (See 'Social history' above.)
- Diagnosis We use a clinical interview to identify if an individual meets American
 Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth
 Edition, Text Revision (DSM-5-TR) diagnostic criteria. Structured diagnostic instruments,
 developed to facilitate reliable and valid diagnoses for research, along with semistructured
 tools can be relatively lengthy and require training to administer; nonetheless, they can be
 useful in clinical practice in some specialized settings. (See 'DSM-5-TR diagnostic criteria'
 above.)

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