ABSTRACT

Polysubstance abuse may be diagnosed when a person is dependent on three or more substances over a 12-month period. Unique challenges exist for individuals with polysubstance abuse, which include a higher degree of physical side effects from substances consumed and longer period of time of detoxification. A personalized detoxification treatment plan is needed for individuals diagnosed with polysubstance abuse according to their unique medical, psychiatric, and substance use history. Polysubstance Abuse Part I discusses standard screening tools to aid in differentiation of polysubstance use from other conditions, diagnosis and an individualized plan of care.
Continuing Nursing Education Course Director & Planners:
William A. Cook, PhD, Director, Douglas Lawrence, MS, Webmaster, Susan DePasquale, CGRN, MSN, FPMHNP-BC, Lead Nurse Planner

Accreditation Statement:
This activity has been planned and implemented in accordance with the policies of NurseCe4Less.com and the continuing nursing education requirements of the American Nurses Credentialing Center's Commission on Accreditation for registered nurses.

Credit Designation:
This educational activity is credited for 3.5 hours. Nurses may only claim credit commensurate with the credit awarded for completion of this course activity.

Course Author & Planner Disclosure Policy Statements:
It is the policy of NurseCe4Less.com to ensure objectivity, transparency, and best practice in clinical education for all continuing nursing education (CNE) activities. All authors and course planners participating in the planning or implementation of a CNE activity are expected to disclose to course participants any relevant conflict of interest that may arise.

Statement of Need:
Polysubstance abuse is associated with a variety of life circumstances, medical and mental health conditions. Health professionals informed of best practice screening tools and treatment guidelines are able to support patient success in an individualized plan of care.
**Course Purpose:**

To provide nurses and health team associates with knowledge about polysubstance abuse and treatments in all age groups.

**Learning Objectives:**

1. Differentiate between substance abuse and polysubstance abuse.
2. Identify common characteristics of polysubstance abuse.
3. Identify recommended screening tools for substance abuse.
4. Describe the seven dimensions of substance addiction.
5. Identify mental health conditions frequently associated with alcohol and drug dependency.

**Target Audience:**

Advanced Practice Registered Nurses, Registered Nurses, Licensed Practical Nurses and Nursing Associates

**Course Author & Director Disclosures:**

Jassin M. Jouria, MD, William S. Cook, PhD, Douglas Lawrence, MS
Susan DePasquale, CGRN, MSN, FPMHNP-BC – all have no disclosures

**Acknowledgement of Commercial Support:** None exists.

**Activity Review Information:**

Reviewed by Susan DePasquale, CGRN, MSN, FPMHNP-BC

**Release Date:** 11/1/2014   **Termination Date:** 11/1/2016

---

Please take time to complete the self-assessment Knowledge Questions before reading the article. Opportunity to complete a self-assessment of knowledge learned will be provided at the end of the course.
1. Polysubstance abuse is defined as a substance dependence disorder in which the individual uses:
   a. two or more substances for one year.
   b. three or more substances or substance groups on a regular basis.
   c. three substance for 6 months with known adverse health outcomes.
   d. substances illegally.
2. Harm to self develops when a person uses substance(s) despite:
   a. having a physical or psychological condition made worse by using substance(s).
   b. trouble with the law.
   c. family conflict.
   d. long-term polysubstance use remission.
3. With the CAGE or CAGE-AID, a positive screening test is:
   a. greater than 3 “yes” responses.
   b. greater than 6 “yes” responses.
   c. greater than 10 “yes” responses.
   d. one or more “yes” responses.
4. True or False. The AUDIT is screening tool that is only used by a licensed health professional.
   a. True
   b. False
5. DAST is a screening instrument that surveys a person’s:
   a. marital-family relationships, social relationships, employment, legal and physical conditions.
   b. comorbid mental health and physical diseases.
   c. family history and genetic predisposition to addiction.
   d. demographic and cultural background.
Introduction

Polysubstance abuse can be diagnosed when an individual is found to be dependent on three or more substances or substance groups within a 12-month period. An individual may receive this diagnosis even if they do not meet criteria for dependence on a singular substance. Although similarities exist between substance abuse and polysubstance abuse, the latter may present unique challenges, which include a lengthier detoxification period and an increase in physical side effects of the substances consumed. However, in some cases, polysubstance abusers may be more tolerant of the detoxification process since a physical reliance upon any singular substance may not have developed. Consequently, each polysubstance abuser requires a personalized treatment plan developed according to their unique medical, psychiatric, and substance use history. The treatment plan will need to consider resources available within the patient’s support network, hospital or treatment facility, and community.

It is important to understand the distinction between polysubstance abuse and single substance abuse, as polysubstance abusers will require different diagnostic and treatment strategies than those who are dependent on a single substance. Nonetheless, there are some similarities between the conditions and treatment approaches; and, polysubstance users may benefit from some of the strategies used to treat single substance users.

Polysubstance Abuse Defined

Polysubstance abuse is defined as a substance dependence disorder in which the individual uses at least three or more substances or substance groups on a regular basis (1). However, unlike single
substance abusers, the polysubstance abuser does not have a single substance that he or she favors over other substances and would not qualify as substance dependent in any single substance category (2).

While individuals with polysubstance use disorders may go through the same five stages of addiction as single substance abusers, what differentiates them from single substance abusers is the onset, development, and severity of their addiction. Many polysubstance abusers will not show signs of addiction as quickly and readily as single substance users because they will switch the substances they consume on a regular basis (3). Therefore, unlike an alcoholic who will drink heavily on a regular basis, the polysubstance user may only consume small amounts of alcohol before switching to another substance. This will minimize the telltale signs associated with single substance abuse. In addition, the polysubstance user may not progress through the five stages of addiction, as he or she may never develop an addiction to one specific substance. The individual will develop a reliance on multiple substances, but this development may occur in different stages (4).

To define polysubstance abuse, it is necessary to identify the specific components that are used to diagnose and define substance abuse in general. The Diagnostic and Statistical Manual of Mental Disorders (DSM) specifies that three or more of the following symptoms must occur at any time during a 12-month period, and cause significant impairment or distress, in order to meet diagnostic criteria for substance dependence: tolerance, withdrawal and loss of control. These symptoms are defined below and discussed throughout various sections of this study.
**Tolerance**

When tolerance to a substance develops the individual finds that the same amount of the substance has much less of an effect over time than before and the individual has to use increasingly higher amounts of the substance in order to achieve the same effect. After using several different substances regularly over a period of time, an individual may find that he or she needs to use at least half as much more of the amount they began using in order to get the same effect.

**Withdrawal**

Withdrawal to a substance occurs as the individual experiences the withdrawal symptoms when he or she stops using the substance. Additionally, withdrawal can be diagnosed in an individual known to use a substance in order to avoid or relieve withdrawal symptoms.

**Loss of control**

The individual who demonstrates a loss of control either repeatedly uses more substances than planned or uses the substances over longer periods of time than planned. For instance, an individual who previously used substances on the weekends may begin using substances (any combination of three or more types of substances) on weekdays in addition to weekends.

**Inability to stop using**

The individual that shows an inability to stop using substances has either unsuccessfully attempted to cut down or stop using substances coupled with a persistent desire to stop using them. For example, an individual who desires to stop using substances on weekdays finds that
he or she is unable to do so despite well-intentioned efforts to discontinue.

*Time using and interference with life activities*

A polysubstance use disorder often interferes with life activities when the individual using spends a lot of time obtaining and using substances, being under the influence of substances, and recovering from the effects of substance use. The individual either gives up or reduces the amount of time involved in recreational activities, social activities, and/or occupational activities because of the use of substances. An individual may use substances instead of engaging in hobbies, spending time with friends, or going to work.

*Harm to self*

Harm to self develops when an individual continues to use substances despite having either a physical or psychological problem that is caused by or made worse because of the use of substances (5). While the criteria listed above are used to identify dependence in substance users, it is important to note that some polysubstance users will not display three or more of the symptoms listed in the criteria due to continuous transition from one substance to another.

It is important that health professionals involved in the treatment of potential polysubstance abusers utilize various diagnostic screening tools to assist with identification of the disorder (6). Health professionals need to also remember that some polysubstance abusers may have developed dependence on one or more of the substances regularly used when considering diagnostic criteria referenced in an assessment and treatment plan. Approaches to individualized
treatment of the polysubstance user and various screening tools used to develop a treatment plan will be discussed further on the study.

**Progression stages**

Substance use disorder develops over time and goes through five distinct stages of progression. The length of time for each stage, and the duration of the progression to a complete addiction to substance(s) will vary by individual. In some instances, the progression will occur quickly, with the individual spending brief periods in each stage. In other instances, the individual will slowly progress through the stages of addiction and will not reach becoming addicted to substances for an extended period of time (7).

The following table provides a description of each stage of progression:(8)

<table>
<thead>
<tr>
<th>STAGE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage One: Experimentation</strong></td>
<td>The first stage, experimentation, is the voluntary use of alcohol or other drugs. Quite frequently, the person experimenting is trying to erase another problem. The substance seems to solve the problem so the person takes more, and moves from experimentation to regular use, which is the next stage.</td>
</tr>
<tr>
<td><strong>Stage Two: Regular Use</strong></td>
<td>Here the person has moved from experimentation to regular use. Some people stay in the regular use stage indefinitely. They will not develop a problem, and they are able to stop using substances by themselves. Others start using substances in a manner that is risky or hazardous to themselves or to others.</td>
</tr>
<tr>
<td>Stage Three: Risky Use</td>
<td>Here the individual engages in “risky behavior”. When and how the transition from regular to risky use happens differs for every individual because what constitutes “risky behavior” for one person may not be considered risky behavior for another. People can pass quickly from risky use to dependence.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stage Four: Dependence</td>
<td>Characteristics of dependence include:</td>
</tr>
<tr>
<td></td>
<td>- Repeated use of alcohol or other drugs that leads to failure to fulfill major responsibilities related to work, family, school or other roles.</td>
</tr>
<tr>
<td></td>
<td>- Repeatedly drinking or using drugs in situations that are physically hazardous, such as driving while intoxicated or using heavy machinery when intoxicated.</td>
</tr>
<tr>
<td></td>
<td>- Repeated legal problems.</td>
</tr>
</tbody>
</table>

Many dependent people are able to work, maintain family relationships and friendships, and limit their use of alcohol or other drugs to certain time periods, such as evenings or weekends.

<table>
<thead>
<tr>
<th>Stage Five: Addiction</th>
<th>The last phase of the spectrum of substance use problems is addiction. Addiction is a medical condition involving serious psychological and physical changes from repeated heavy use of alcohol, other drugs, or both. Symptoms include uncontrollable alcohol or other drug craving, seeking, and use, that persists even in the face of negative consequences.</th>
</tr>
</thead>
</table>

**Common Characteristics Of Polysubstance Use**

Although polysubstance use can affect any individual, there are some common characteristics that are found in the majority of
polysubstance abusers. The following section discusses factors known to increase an individual’s risk of developing substance abuse issues.

**Homelessness**

Homelessness and substance abuse are often co-occurring conditions. In fact, substance abuse is more common among homeless individuals than the general population. Approximately 64% of homeless individuals abuse alcohol and/or other substances (9). In most instances, substance abuse is the cause of homelessness. Individuals with addictive disorders will often experience a loss of support from friends and family, along with chronic unemployment. These factors will increase their chances of becoming homeless. In fact, approximately 65% of homeless individuals self-report that their homelessness was directly caused by drug and alcohol abuse (10).

In some instances, individuals will develop dependence as a means of coping with their housing situation. It is common for homeless individuals to begin using, or increase their consumption of, drugs or alcohol as a means of coping with their situation (11). Drugs and alcohol are readily available and easily accessible in the homeless community, and they provide an opportunity for the homeless individual to self-medicate as a means of finding temporary relief from their problems (12).

It can be difficult for homeless individuals to identify their substance abuse problems, as many also suffer from mental health issues and may not be aware of their problematic behaviors (13). Recovery can also be more challenging for individuals who have substance abuse and mental illness comorbidity (having both disorders at the same
time). In addition, homeless individuals have limited access to the support networks and services necessary to successfully recover from substance abuse (14). Most treatment programs for homeless individuals focus on abstinence rather than harm reduction, which can make it difficult for individuals to adhere to the program. Consequently, many homeless individuals do not seek assistance with their addiction recovery (10).

The following summarizes the common characteristics and statistics associated with homelessness and substance use disorders:

- An estimated 50 percent of homeless adults with serious mental illnesses have a co-occurring substance use disorder. Individuals with co-occurring disorders have more problems, need more help, and are more likely to remain homeless than other groups of people.

- Homeless people with mental and substance use disorders often have significant acute and chronic medical conditions, including diabetes, liver disease, upper respiratory infections, severe dental health problems, tuberculosis, and AIDS. Homeless individuals with a substance abuse disorder are in especially poor health.

- People with substance use disorders who are homeless are more likely to have arrest histories, to have been arrested in the past year, and to report that they have a felony drug conviction. Fifty percent of all arrests of homeless people relate to drinking alcohol in public places.
• Homeless people with substance use disorders, especially those with co-occurring mental disorders, are at risk for losing their housing due to eviction, arrest, and incarceration. Once homeless, they are unlikely to succeed in treatment without access to safe, sober housing.

• Fewer than one quarter of individuals who need treatment for alcoholism or the use of illicit drugs receive treatment. Those with the least resources face the most significant barriers to care.

• There is often a discrepancy between what homeless individuals want and what health providers believe they need. Homeless individuals may urgently want a job, housing, and help with housing expenses. Only 9% of homeless respondents to a national survey mentioned alcohol and drug treatment as something they needed “right now.” (11)

**Personality disorders**

Personality disorders and polysubstance abuse disorders are common co-occurring conditions. Personality disorders are present in approximately 34% of substance abusers (15). Personality disorders are a form of mental illness that affects an individual’s behavior, emotions, and thoughts. These individuals express their thoughts and emotions differently than what is considered socially normal (16). Personality disorders can have a significant impact on an individual’s life, and are commonly associated with substance abuse problems.
The general characteristics of personality disorders include the following: (17)

- Pattern of problematic relationships
- Tendency to blame difficulties on others, or on “bad luck”
- A lack of personal responsibility
- Impaired ability to learn from previous experience

The above is a list of the general characteristics associated with personality disorders. However, there are a number of different personality disorders that are characterized by their effect on the individual’s thoughts and behaviors. Personality disorders are categorized into the groups listed below (18).

- Antisocial personality disorder:
  Manipulating, exploiting or violating other’s rights

- Avoidant personality disorder:
  Excessive shyness, inadequacy and fear of rejection

- Borderline personality disorder:
  Unstable and turbulent emotions, actions and relationships

- Dependent personality disorder:
  Excessive dependence on other people

- Histrionic personality disorder:
  Acting emotional or dramatic to draw attention

- Narcissistic personality disorder:
  Inflated ego and an obsession with the self
- Obsessive-compulsive personality disorder: A preoccupation with rules, orderliness and control

- Paranoid personality disorder: Unfounded distrust and suspicion of others

- Schizoid personality disorder: Feelings of social isolation and indifference to people

- Schizotypal personality disorder: Difficulty with relationships and irregular lifestyle patterns

The various personality disorders are quite diverse in their symptoms and severity. While some individuals will experience significant complications, others may only experience minor complications. Individuals with substance abuse problems and personality disorders will experience additional complications, as their inability to appropriately process and express thoughts and emotions makes it difficult for them to address their problem behaviors (19).

There is a direct correlation between those who abuse drugs and those who have a personality disorder. In fact, there is a 50 to 65 % likelihood that an individual with substance abuse problems will also be afflicted with one or more personality disorders (20). While all personality disorders can co-occur with substance abuse, some disorders are more common and associated with an increased risk of substance abuse. The following is a list of the percentage of the occurrence of specific personality disorders in individuals who use alcohol and at least one other substance: (15)
• Obsessive Compulsive Disorder: 21%
• Antisocial Personality Disorder: 21%
• Narcissistic: 14.5%
• Borderline Personality Disorder: 11%
• Paranoid: 10%
• Dependent Disorder: 9%

It is difficult to determine if substance abuse is caused by the personality disorder or if the substance use increases the development and severity of the personality disorder. In some instances, an individual who experiences symptoms associated with a personality disorder will self-medicate with alcohol and other drugs. In other instances, the substances that the individual consumes will alter brain chemistry and trigger the onset and subsequent development of the personality disorder (21).

**Psychiatric disorders**

Comorbid psychiatric and substance abuse disorders are quite common. While there are differing views on how and why they occur, there is consensus regarding the fact that comorbidity is a significant problem in both groups. The following data shows the significance and prevalence between substance abuse and psychiatric disorders.

In the National Comorbidity Study, a nationally representative population study, about 41-65% of participants with any lifetime substance use disorder also had a lifetime history of at least one mental health disorder. The most common individual diagnosis was conduct disorder (29%), followed by major depression (27%), and social phobia (20%). Among those with a lifetime history of any
mental disorder, 51% had a co-occurring addictive disorder, with those respondents with conduct disorder or adult antisocial personality having the highest prevalence of lifetime substance use disorder (82%), followed by those with mania (71%) and PTSD (45%). In the Epidemiologic Catchment Area Study, lifetime prevalence of alcohol use disorder was highest among persons with bipolar disorder (46%) and schizophrenia.

In 501 patients seeking addictions treatment, 78% had a lifetime psychiatric disorder in addition to substance abuse and 65% had a current psychiatric disorder. The most common lifetime disorders were antisocial personality disorder, phobias, psychosexual dysfunctions, major depression, and dysthymia (mild, chronic depression). Similarly, in 298 patients seeking treatment for cocaine use disorders, 73.5% met lifetime, and 55.7% met current, criteria for a psychiatric disorder. These rates accounted for conditions of major depression, bipolar spectrum conditions such as hypomania and cyclothymic personality, anxiety disorders, antisocial personality, and history of childhood attention deficit disorder.

A variety of mental illnesses such as post-traumatic stress disorder, antisocial personality disorder (characterized by a lack of empathy toward other people), anxiety, sleep disorders, or depression, increase the risk of addiction. Those with the highest risk of addiction have bipolar disorder or schizophrenia: up to 50 percent of people with these conditions can have an addiction (22).

Certain mental conditions frequently associated with alcohol and drug dependency are listed below: (23)
• Depression
  In some cases, individuals may start to abuse a substance to mask the symptoms of depression. Female substance abusers are particularly likely to have depression, but it also occurs in male substance abusers.

• Bipolar disorder
  Those with bipolar disorder — a condition that causes alternating cycles of depression and an abnormally elevated mood — may attempt to smooth out mood swings with substances.

• Anxiety
  Alcohol abuse is more common in both men and women with anxiety disorders.

• Schizophrenia
  Psychotic symptoms, such as hallucinations and delusions, may lead to substance abuse as a way to ease the distress that these symptoms can cause.

There are also other factors that may explain the frequent simultaneous occurrence of addiction and mental illness. These factors include: (24)

• Genetics
  Genetic factors seem to account for some of the comorbidity of substance abuse and mental disorders. Studies comparing identical and fraternal twins found more instances of having two disorders among the identical twins, indicating that genetics likely play some role.
• Chemical deficiency
  Neurochemical factors were also found to be a common thread when mental disorders and addiction occur together. A reduction in the amount of serotonin, a chemical critical to brain functioning, may be the reason that alcoholism and anxiety disorders coincide so often. There is also evidence that addiction and mental disorders are associated with the dysfunction of a group of brain chemicals called monoamine oxidases.

• Shared environment
  Studies surrounding twins also show that environment plays a major role in having both a substance abuse problem and another mental disorder.

• Withdrawal symptoms
  Abruptly stopping alcohol intake can lead to withdrawal symptoms — including hallucinations — that may look just like schizophrenic symptoms.

• Personality changes and mental disorders
  Alcoholism and drug abuse can cause changes in the brain, sometimes leading to changes in personality and mental disorders. Alcoholics of both genders frequently suffer depression and anxiety disorders, while men are more likely to exhibit antisocial personality disorder than non-abusers of alcohol.
Screening For Polysubstance Use

Screening refers to methods and procedures, often of a brief nature, designed to rule out the possibility of substance use problems. Screening is not the same thing as providing a diagnosis (determining if one meets criteria as established in a diagnostic manual) or evaluation (a more thorough analysis of substance use problems, of which screening is but one component). Screening procedures are designed to detect the possible presence of a substance abuse issue and the need for further care. In general, screening methods can be informal and observational or more formal with the use of brief screening instruments (25).

Unlike substance specific dependence disorders, which only screen for addiction of one substance, polysubstance abuse requires screening with multiple instruments. Since individuals will have multiple dependence problems, practitioners will have to rely on more than one instrument to identify dependence issues and severity (1). Until recently, the Diagnostic and Statistical Manual of Mental Disorders was used to identify and categorize substance use disorders, including polysubstance abuse. However, with the creation of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V), the diagnostic criteria have changed significantly.

Changes have been made to the substance abuse category of the DSM-V; polysubstance dependence has been removed from DSM-5. It was historically diagnosed by the use of three or more substances (excluding caffeine and nicotine) with no single substance dominating. Key to diagnosis was the lack of a specific drug preference, with the primary motivation for use being uninterrupted intoxication.
Dependence criteria also needed to be met for substances as a group, but not for any individual substance. The diagnostic terms of 'Abuse' and 'Dependence' for all substances have also been removed from DSM-5 based on evidence for unidimensionality of diagnostic criteria. The nondichotomized diagnosis term 'Substance Use Disorders' is now represented on a continuum of severity ranging from 2 'mild' to 11 'severe'.

Patients who use multiple substances will be diagnosed by substance type and graded on this scale. This subtle change means that the relatively small but clinically unique group of patients who previously met DSM Polysubstance Dependence criteria will now be subsumed into a broader diagnostic umbrella. This may have implications from a comparative, epidemiological standpoint – although most population level research has not included diagnostic criteria or severity, only frequency of substance use. The prospective clinical implications are not yet known, nor are the reliability of clinical assessments of the DSM-5 severity index (26).

Polysubstance abuse requires a thorough screening and assessment process to ensure the level of dependence and types of substances used are appropriately identified. Therefore, the clinician will rely on a combination of tools to assess the patient. To ensure the appropriate tools are used, it is important to identify the goals of addiction screening and assessment. The goals of addiction screening are as follows: (3)

- Identify individuals who are at risk for developing drug- or alcohol-related problems;
• Identify individuals who may have developed drug- or alcohol-related problems or addiction;

• Identify individuals who require further medical or addiction assessment;

• Diagnose addiction or other substance-related disorders;

• Develop recommendations and plan for appropriate addiction treatment;

• Assess the biopsychosocial needs of patients with addictions.

The initial screening process will utilize a variety of tools, including screening instruments, laboratory evaluations, and patient interviews. Once a problem has been identified, the clinician will determine what type of further assessment is needed. In most instances, the clinician will utilize in-depth interviews, family interviews, and diagnostic assessments (27).

Screening typically occurs via a diagnostic or intake interview; if the client reports problems in a specific area, the clinician has the option to focus in by asking more specific questions related to the substance problem. Screening also occurs through observation of the client’s immediate signs and symptoms as well as his or her behavior outside the counseling setting, including past history (28). Part of screening is addressing and exploring the red flags that provide clues as to what role, if any, alcohol or drug use plays in the client’s life. These red flags become even more important when the client is not forthcoming.
about his or her substance use at the beginning of the screening. In general, observational red flags fall into the three categories of physiological, psychological, and behavioral.

**Physiological category**

A brief inquiry into typical physiological issues or general medical conditions can sometimes point to the extent of possible substance use problems. Liver problems, hypertension, ulcers, tremors, or injection track marks are indications of severe use. For clients who do not immediately admit to use but who are still using problematically, these and other physiological symptoms can tip off the clinician that problematic substance use is a possibility and that substance use needs further exploration.

An additional area of exploration, although not directly about current physiological symptoms, is the client’s potential genetic predisposition. Inquiry about family history of substance use provides additional insights to help clarify the assessment and diagnostic picture. For example, a client who suggests that he or she has a drink now and then, but insists that his or her drinking is not a problem, may report that their mother and father were “alcoholics” and that the father used other substances as well. In this case, the possible genetic link to alcohol use would warrant further and more targeted substance use assessment, especially if the client reports some negative consequences as a result of drinking alcohol.

**Psychological category**

Many clients report symptoms of depression, anxiety, or other emotional problems and use substances to self-medicate or cope.
Indeed, psychological symptoms, such as depression and anxiety, are often associated with problematic substance use. Also associated with substance use are negative or difficult emotions such as guilt, shame, anger, or boredom. At minimum, practitioners should check in with clients who report severe negative emotions related to their substance use history, current behavior, and typical methods of coping.

**Behavioral category**

There are many behavioral signs of substance addiction, some of which are obvious (e.g., evidence of intoxication), and some of which are indirectly related (e.g., work problems). Perhaps the most important area of inquiry is if there has been any past treatment for substance-related problems. Clients who affirm previous attempts at treatment to address substance-related problems often struggle currently with those same problems. Additional behavioral problems often associated with substance use include legal problems, poor work history, financial problems, extreme talkativeness, poor judgment, erratic behavior, frequent falls, increase in risk taking, and frequent hospitalizations. One or more of these behavioral issues should alert the clinician to the possibility of significant substance use (29).

**Biological screens**

An effective addition to self-report screening instruments is biological lab tests designed to detect the presence of substances. Typically, biological drug screens occur by sampling via urinalysis or hair analysis. These tests may be most useful to corroborate self-report data, especially when there is high suspicion that one is not being honest about his or her substance use (30). Some agencies or substance abuse programs require random screens, particularly when
medication is used as part of the addiction treatment. Clinicians, however, may not have the ability to screen for recent drug use within their agency. In these instances, the clinician will utilize a referral list of medical specialists who are trained to perform biologically based substance abuse screening (31).

It is important to know that biologically based screens are not a substitute for self-report data. Biological screening tests tend to have low sensitivity (producing a high false positive rate) and are impacted by one’s age, gender, smoking status, metabolism, how the drug was taken, how long ago the drug was ingested, and the drug’s potency (32). They are best used as one piece of the screening process and in conjunction with self-report data. If possible, the clinician should utilize all available resources in the screening process: well-established screening instruments, biological measures, intake interviews, and collateral reports (6).

**Dimensions of addiction**

There are seven dimensions of substance addiction that are interrelated but also operate independently. The dimensions are thought to be on a continuum from less severe or low risk to more severe or high risk. Knowledge of where a client falls along each continuum can provide useful clinical information and strengthen the assessment process (33).

Clinicians can use the seven dimensions of addiction as a starting point when assessing their clients. They are useful in determining the extent or severity of one’s substance use. For example, a client that abuses alcohol might self-report moderate use but be extremely high on
consequences, behavioral dependence, and medical harm. Subsequent treatment could focus on these “higher” dimensions with an eye on reducing or eliminating use (34). Assessing the dimensions could be accomplished as part of a clinical interview or as seven lines drawn on a piece of paper, ranging from low to high, for each dimension. If using seven lines, the clinician could place a mark on each line indicating the extent of the problem related to a particular dimension. Once completed, the clinician has a snapshot of the client’s addiction pattern, which can inform placement and treatment-planning decisions (35). The seven dimensions are as follows: (36)

1. Use:
   Three behaviors characterize use: quantity, frequency, and variability. Quantity refers to how much one uses a substance on a “typical occasion;” frequency refers to how often one uses on a typical occasion; and, variability addresses the pattern of substance use.

2. Consequences:
   Clients do not often come to counseling because they are drinking and/or using but rather because their using behaviors have gotten them into trouble. Exploring the consequences of substance use can lead to enhanced motivation and is a key part of motivational interviewing. The consequences of substance use range from none to many within a typical day.

3. Physical adaptation:
   Another dimension of addiction is the presence or absence of physical dependence. The presence of tolerance and/or withdrawal is usually the hallmark of physical dependence.
4. Behavioral dependence:
In the DSM-V definition of substance dependence (discussed later), tolerance or withdrawal do not have to be present for someone to be dependent on a substance. Clients may be psychologically dependent, in which case they develop a mental need for the substance to get through the day or cope with stress. They believe they cannot do this without the substance.

5. Cognitive impairment:
Substance use alters brain chemistry. Even relatively brief stints with substance use can have noticeable negative cognitive effects. Long-term use of some chemicals, such as alcohol, can result in permanent damage to memory, motor skills, and attention.

6. Medical harm:
Substance use also impacts physical health. For example, smoking marijuana is especially dangerous due to high levels of carcinogens that enter the bloodstream. Cocaine and other stimulant drugs can have deleterious effects on cardiovascular functioning. Excessive, long-term alcohol use can damage almost every organ system in the body.

7. Motivation for change:
Lack of client motivation can make treatment planning and movement toward goals a difficult process. Knowing how important making a change in substance use is to the client can help clinicians gauge what strategies might be most helpful.
Many techniques are available that can assist in enhancing motivation to change.

For more formal methods of assessment, a number of instruments (discussed in the following sections) correspond with each of these seven dimensions.

**Addiction Screening Instruments**

There are a number of valid addiction screening instruments available for clinicians to include in the evaluation of individuals with polysubstance use. In most instances, substance specific screening instruments will be used to determine the extent and severity of addiction to each substance. Some medical providers and clinicians will develop their own screening tools to identify the presence of substance abuse and other comorbid conditions (37). Examples of addiction screening instruments are described in greater detail in this section, beginning with the following list of various available screening instruments.

**Drug screening**

- COWS (Clinical Opiate Withdrawal Scale)
- SOWS (Subjective Opiate Withdrawal Scale)
- DAST- 10 (Drug Abuse Screening Test)
- CINA (Clinical Institute Narcotic Assessment Scale for Withdrawal Symptoms)
- CAGE- AID (CAGE alcohol screening questionnaire adapted to include drugs)
- Narcotic Withdrawal Scale
Alcohol screening

- CAGE (Alcohol screening questionnaire)
- AUDIT (Alcohol Use Disorders Identification Test)
- MAST (Michigan Alcohol Screening Test)
- SMAST (Short Michigan Alcohol Screening Test)

The following will provide more detailed information regarding the most widely used screening instruments.

**CAGE and CAGE-AID**

The CAGE is a four question-screening instrument that is used to detect alcohol dependence in patients. The questions typically focus on current feelings and actions associated with alcohol use, but can be modified to assess the patient’s history with alcohol (39). The assessment is intended to be completed in less than a minute and to be useful as an initial screening instrument for the detection of abuse issues. Primary care physicians, nurses, and general internists often rely on it. The assessment can be administered in three formats: (47)

- pencil-and-paper self-administered
- through an interview
- computer self-administered

The CAGE-AID is a modified version of the CAGE that is used to screen for substances other than alcohol. The CAGE-AID also focuses on lifetime use, which means that individuals who are at risk of developing a substance abuse problem may not be identified through the use of the screening instrument (48).
The CAGE-AID has a lower success rate than the CAGE due to its focus on illicit substances rather than alcohol. Many patients are less willing to disclose other substance use than they are to discuss alcohol use due to the stigma attached to the former. The CAGE-AID has a sensitivity of 79% and a specificity of 77% (27).

In addition the administration formats listed above, the CAGE-AID can also be structured as a parent report-screening tool to assess adolescent substance abuse. This format is especially useful with adolescents in mental health care (49). While the CAGE and CAGE-AID are considered valid and useful screening instruments for alcohol and substance abuse, there are three primary concerns regarding the assessment tools: (50)

- The CAGE or CAGE-AID is not gender-sensitive, and women who are problem drinkers and/or substance abusers are less likely to screen positive than men.

- The instrument identifies alcohol-dependent and substance dependent persons, but may not identify binge drinkers.

- The CAGE asks about “lifetime” experience rather than current drinking and substance use, so a person who no longer drinks or uses substances may screen positive unless the clinician directs the questions to focus on a more current time frame.

*CAGE or CAGE-AID Scoring*

One or more “yes” responses constitute a positive screening test. Note, however, that due to language barriers, individual interpretation
of the questions, or other confounding factors, individuals answering “no” to all CAGE or CAGE–AID questions, may still be at risk due to elevated drinking or drug use levels.\(^{(47)}\).

**CAGE Substance Abuse Screening Tool**

Directions: Ask patients these four questions and use the scoring method described below to determine if substance abuse exists and needs to be addressed.

**CAGE Questions**
1. Have you ever felt you should cut down on your drinking?

2. Have people annoyed you by criticizing your drinking?

3. Have you ever felt bad or guilty about your drinking?

4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?

**CAGE Questions Adapted to Include Drug Use (CAGE-AID)**
1. Have you ever felt you ought to cut down on your drinking or drug use?

2. Have people annoyed you by criticizing your drinking or drug use?

3. Have you felt bad or guilty about your drinking or drug use?

4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?

Score: __ /4

2/4 or greater = positive CAGE, further evaluation is indicated.

Scoring: Item responses on the CAGE questions are scored 0 for “no” and 1 for “yes”.
**Alcohol Use Disorders Identification Test (AUDIT)**

The Alcohol Use Disorders Identification Test (AUDIT) is a screening instrument that was developed by the World Health Organization (WHO). It’s primary purpose is to identify patterns of alcohol use in patients, with the goal of determining if the patient’s level of use is harmful and/or excessive (51). It is used frequently in primary care settings as an initial screening instrument to identify individuals who may benefit from a reduction or cessation of alcohol consumption. If a patient is identified as a risk, he or she will require additional assessments to determine the specific level of treatment needed (52).

The AUDIT, as a valid screening tool, can be used successfully with various populations. The AUDIT is intended as a screening tool to be used by practitioners and clinicians in various health care settings; however, it can be self-administered or used by non-health care professionals in other settings. The instrument does not require any specific training to be administered, so it is often used by individuals in community crisis centers and social service organizations (53). The following is a description of the screening instrument and how it is scored.

The test uses a 10-item scale, takes 2-4 minutes to complete and is quick and simple to score. The test is in the public domain and can be used without cost with acknowledgement of the source. Guidelines for use of the screening test in primary care propose that, ideally, all patients should be screened for alcohol use once a year. This can be done by administering the tool on its own, or by combining the AUDIT with other questions as part of a general health interview or medical history.
Each question has a set of possible responses and each response has a score ranging from 0-4 (items 1 to 8 are scored on a 0-4 scale and items 9 and 10 are scored 0, 2, 4). Scores are added together and the total score can be compared with the cut-off scores provided to identify hazardous and harmful drinkers, and those with established alcohol dependence. A cut-off score of 8 or more indicates a hazardous or harmful pattern of drinking.

In addition to the total AUDIT score, a sub-total of ‘dependence’ can be calculated by adding the scores of questions 4 to 6. If this sub-total score is 4 or more, the patient is likely alcohol dependent and further assessment should be considered (54).

The Alcohol Use Disorders Identification Test (AUDIT)

Please circle the answer that is correct for you.

1. How often do you have a drink containing alcohol?
   - Never
   - Monthly or less
   - 2-4 times a month
   - 2-3 times a week
   - 4 or more times a week

2. How many standard drinks containing alcohol do you have on a typical day when drinking?
   - 1 or 2
   - 3 or 4
   - 5 or 6
   - 7 to 9
   - 10 or more
3. How often do you have six or more drinks on one occasion?
   - Never
   - Less than monthly
   - Monthly
   - Weekly
   - Daily or almost daily

4. During the past year, how often have you found that you were not able to stop drinking once you had started?
   - Never
   - Less than monthly
   - Monthly
   - Weekly
   - Daily or almost daily

5. During the past year, how often have you failed to do what was normally expected of you because of drinking?
   - Never
   - Less than monthly
   - Monthly
   - Weekly
   - Daily or almost daily

6. During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?
   - Never
   - Less than monthly
   - Monthly
   - Weekly
   - Daily or almost daily

7. During the past year, how often have you had a feeling of guilt or remorse after drinking?
   - Never
   - Less than monthly
   - Monthly
   - Weekly
   - Daily or almost daily
8. During the past year, have you been unable to remember what happened the night before because you had been drinking?
   - Never
   - Less than monthly
   - Monthly
   - Weekly
   - Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?
   - No
   - Yes, but not in the past year
   - Yes, during the past year

10. Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?
    - No
    - Yes, but not in the past year
    - Yes, during the past year

**Scoring the AUDIT**

Scores for each question range from 0 to 4, with the first response for each question (e.g. never) scoring 0, the second (e.g. less than monthly) scoring 1, the third (e.g. monthly) scoring 2, the fourth (e.g. weekly) scoring 3, and the last response (e.g. daily or almost daily) scoring 4. For questions 9 and 10, which only have three responses, the scoring is 0, 2 and 4 (from left to right).

A score of 8 or more is associated with harmful or hazardous drinking, a score of 13 or more in women, and 15 or more in men, is likely to indicate alcohol dependence.

**Michigan Alcoholism Screening Test (MAST)**

The most researched diagnostic instrument is the self-administered Michigan Alcoholism Screening Test (MAST), which was created in 1971 by M. L. Selzer (38). The 22-item MAST correctly identifies up to
95% of alcoholics, and the SMAST, an even shorter 10-question form of the MAST, has also been shown to identify over 90% of the alcoholics entering general psychiatric hospitals (39). The MAST was originally validated with treatment-seeking alcoholics. Numerous studies have used it to assess both adolescent and adult populations in a variety of settings. The MAST may realistically and effectively be used with virtually any population (38).

The MAST is simple to administer; clients are instructed to answer all questions either yes or no. After clients complete the test, the points assigned to each question are totaled. The MAST text indicates a number of points assigned for each question. A total of 4 points is presumptive evidence of alcoholism and a total of 5 or more points makes it extremely unlikely that the individual is not an alcoholic. In addition, given the scoring values, a positive (yes) response to three test questions - 10, 23, or 24 - is enough to diagnose alcohol addiction. Three questions from the MAST that quickly diagnose potential alcohol problems are: (39)

- Has your family ever objected to your drinking?
- Did you ever think you drank too much in general?
- Have others said you drink too much for your own good?

These three questions can be easily incorporated into the interview process to serve as indicators for a more thorough evaluation. The above questions may also be adapted to use with clients who may be abusing other substances by inserting the term “using” (to address the substance(s) used) instead of limiting each question to “drinking.”
The questions used on the MAST specifically utilize the patient’s self-appraisal of social, vocational, and family issues that can often be associated with alcohol abuse. It is used in the general population as an initial assessment and is considered very effective in identifying alcohol addiction \(^{(40)}\). However, there are two primary drawbacks associated with the MAST that are not present with other alcohol screening instruments. The standard test is very lengthy, which makes it difficult to administer to patients in emergency room settings or during short visits in primary care offices. To address this concern, shorter versions of the MAST have been developed, including the brief MAST, the short MAST, and the self-administered MAST \(^{(37)}\). The second concern with the MAST is that the questions used in the screening tool attempt to discern the presence of alcohol issues throughout the duration of the patient’s lifetime, rather than in the recent time frame. As a result, the test may not detect problems while they are in the early stages of addiction \(^{(41)}\).

The following is the 22-question, self-administered MAST.

**Michigan Alcoholism Screening Test (MAST)**

This test is nationally recognized by alcoholism and drug dependence professionals. You may substitute the words “drug use” in place of “drinking”.

1. Do you feel you are a normal drinker? ("normal" - drink as much or less than most other people)
   Circle Answer: YES NO

2. Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening?
   Circle Answer: YES NO
3. Does any near relative or close friend ever worry or complain about your drinking?
Circle Answer: YES NO

4. Can you stop drinking without difficulty after one or two drinks?
Circle Answer: YES NO

5. Do you ever feel guilty about your drinking?
Circle Answer: YES NO

6. Have you ever attended a meeting of Alcoholics Anonymous (AA)?
Circle Answer: YES NO

7. Have you ever gotten into physical fights when drinking?
Circle Answer: YES NO

8. Has drinking ever created problems between you and a near relative or close friend?
Circle Answer: YES NO

9. Has a family member/close friend gone to anyone for help about your drinking?
Circle Answer: YES NO

10. Have you ever lost friends because of your drinking?
Circle Answer: YES NO

11. Have you ever gotten into trouble at work because of drinking?
Circle Answer: YES NO

12. Have you ever lost a job because of drinking?
Circle Answer: YES NO

13. Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking?
Circle Answer: YES NO
14. Do you drink before noon fairly often?  
Circle Answer: YES NO

15. Have you ever been told you have liver trouble such as cirrhosis?  
Circle Answer: YES NO

16. After heavy drinking have you ever had delirium tremens (D.T.'s), severe shaking, visual or auditory (hearing) hallucinations?  
Circle Answer: YES NO

17. Have you ever gone to anyone for help about your drinking?  
Circle Answer: YES NO

18. Have you ever been hospitalized because of drinking?  
Circle Answer: YES NO

19. Has your drinking ever resulted in your being hospitalized in a psychiatric ward?  
Circle Answer: YES NO

20. Have you ever gone to any doctor, social worker, clergyman or mental health clinic for help with any emotional problem in which drinking was part of the problem?  
Circle Answer: YES NO

21. Have you been arrested more than once for driving under the influence of alcohol?  
Circle Answer: YES NO

22. Have you ever been arrested, even for a few hours because of other behavior while drinking? (If Yes, how many times ________)  
Circle Answer: YES NO
SCORING
Please score one point if you answered the following:
1. No
2. Yes
3. Yes
4. No
5. Yes
6. Yes
7 through 22: Yes

Add up the scores and compare to the following score card:
0 - 2 No apparent problem
3 - 5 Early or middle problem drinker
6 or more Problem drinker

Short Michigan Alcoholism Screening Test (SMAST)
The Short Michigan Alcoholism Test (SMAST) can be administered in the same manner as the MAST, or it can be given verbally. It consists of thirteen questions selected from the twenty two questions that comprise the MAST (42).

The SMAST is very easy to score. One point is given for each of the following answers: no on questions 1, 4, and 5; yes on all other questions (2, 3, and 6–13). A score of 0–1 indicates a low probability of alcoholism, a score of 2 points indicates the client is possibly alcoholic, and a score of 3 or more points indicates a strong probability of alcoholism.
**SHORT MICHIGAN ALCOHOL SCREENING TEST (SMAST)**

The following questions concern information about your involvement with alcohol during the past 12 months. Carefully read each question and decide if your answer is "YES" or "NO". Then, check the appropriate box beside the question. Please answer every question. If you have difficulty with a question then choose the response that is mostly right. These questions refer to the past 12 months only.

**YES   NO**

1. Do you feel that you are a normal drinker? (by normal we mean do you drink less than or as much as most other people.) _____ _____
2. Does your wife, husband, a parent, or other near relative ever worry or complain about your drinking? _____ _____
3. Do you ever feel guilty about your drinking? _____ _____
4. Do friends or relatives think you are a normal drinker? _____ _____
5. Are you able to stop drinking when you want to? _____ _____
6. Have you ever attended a meeting of Alcoholics Anonymous (AA)? _____ _____
7. Has your drinking ever created problems between you and your wife, husband, a parent or other near relative? _____ _____
8. Have you ever gotten into trouble at work because of your drinking? _____ _____
9. Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking? _____ _____
10. Have you ever gone to anyone for help about your drinking? _____ _____
11. Have you ever been in a hospital because of drinking? _____ _____
12. Have you ever been arrested for drunken driving, driving while intoxicated, or driving under the influence of alcoholic beverages? _____ _____
13. Have you ever been arrested, even for a few hours, because of other drunken behaviors? _____ _____

<table>
<thead>
<tr>
<th>SMAST Score</th>
<th>Degree of Problem</th>
<th>Suggested Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>No problems reported</td>
<td>None at this time.</td>
</tr>
<tr>
<td>3</td>
<td>Borderline alcohol</td>
<td>Further investigation problem reported is required.</td>
</tr>
<tr>
<td>4 or more</td>
<td>Potential Alcohol Abuse</td>
<td>A full assessment reported is reported.</td>
</tr>
</tbody>
</table>
Drug Abuse Screening Test (DAST)

The Drug Abuse Screening Test (DAST), which was developed in 1982, is widely used to screen for substance abuse. The instrument consists of twenty-eight items that the patient self-reports on. These items are similar to those found on the Michigan Alcohol Screening Test, but the focus is on substances other than alcohol. The DAST has proven to be highly reliable and valid as a screening instrument for identifying substance abuse. It can be administered in one of two ways: the patient can provide a self-report using the twenty-eight items, or the clinician can conduct the assessment using an interview format. The purpose of the assessment is twofold:

1) To provide a brief, simple, practical, yet valid method for identifying individuals who are abusing psychoactive drugs
2) To yield a quantitative index score of the degree of problems related to drug use and misuse.

Although the DAST is highly reliable and corresponds well with the DSM diagnosis of substance abuse, the instrument is somewhat limited. It does not obtain information regarding the specific substances the patient is using. However, it does attempt to discern if the patient is using multiple substances. In addition to drug use, the DAST also identifies the severity of the problem in regard to the impact the patient’s use is having on other areas of his or her life. Specifically, the instrument surveys the following life areas:

a. Marital-family relationships
b. Social relationships
c. Employment
d. Legal
e. Physical (medical symptoms and conditions)
A description of how the DAST is scored and the ways in which it identifies substance use issues in patients is explained below, and the DAST screening tool is shown on page 44-46.

A factor analysis of the 20 items has indicated that the DAST is essentially a unidimensional scale. Accordingly, it is planned to yield only one total or summary score ranging from 0 to 20, which is computed by summing all items that are endorsed in the direction of increased drug problems. Only two items are keyed for a "No" response: "Can you get through the week without using drugs?" and "Are you always able to stop using drugs when you want to?" (46)

A DAST score of six or above is suggested for case finding purposes, as it increases the sensitivity of not missing a case of substance abuse. It is also suggested that a score of 16 or greater be considered to indicate a very severe abuse or a dependency condition.

The DAST is one of the few instruments for the assessment of drug use and related problems, which may be of interest to those programs that are more diagnostically or psychiatrically oriented. The DAST provides a score that should be sensitive to changes in substance using experiences over a 6 and 12-month follow-up period; however, no studies have been published using the DAST as an outcome measure (46).
Drug Abuse Screening Test (DAST)

Directions: The following questions concern information about your involvement with drugs. Drug abuse refers to (1) the use of prescribed or “over-the-counter” drugs in excess of the directions, and (2) any non-medical use of drugs. Consider the past year (12 months) and carefully read each statement. Then decide whether your answer is YES or NO and check the appropriate space. Please be sure to answer every question.

YES NO

1. Have you used drugs other than those required for medical reasons? ___ ___

2. Have you abused prescription drugs? ___ ___

3. Do you abuse more than one drug at a time? ___ ___

4. Can you get through the week without using drugs (other than those required for medical reasons)? ___ ___

5. Are you always able to stop using drugs when you want to? ___ ___

6. Do you abuse drugs on a continuous basis? ___ ___

7. Do you try to limit your drug use to certain situations? ___ ___

8. Have you had “blackouts” or “flashbacks” as a result of drug use? ___ ___

9. Do you ever feel bad about your drug abuse? ___ ___

10. Does your spouse (or parents) ever complain about your involvement with drugs? ___ ___

11. Do your friends or relatives know or suspect you abuse drugs? ___ ___

12. Has drug abuse ever created problems between you and your spouse? ___ ___
13. Has any family member ever sought help for problems related to your drug use? ___ ___

14. Have you ever lost friends because of your use of drugs? ___ ___

15. Have you ever neglected your family or missed work because of your use of drugs? ___ ___

16. Have you ever been in trouble at work because of drug abuse? ___ ___

17. Have you ever lost a job because of drug abuse? ___ ___

18. Have you gotten into fights when under the influence of drugs? ___ ___

19. Have you ever been arrested because of unusual behavior while under the influence of drugs? ___ ___

20. Have you ever been arrested for driving while under the influence of drugs? ___ ___

21. Have you engaged in illegal activities in order to obtain drug? ___ ___

22. Have you ever been arrested for possession of illegal drugs? ___ ___

23. Have you ever experienced withdrawal symptoms as a result of heavy drug intake? ___ ___

24. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)? ___ ___

25. Have you ever gone to anyone for help for a drug problem? ___ ___

26. Have you ever been in a hospital for medical problems related to your drug use? ___ ___
27. Have you ever been involved in a treatment program specifically related to drug use? ___ ___

28. Have you been treated as an outpatient for problems related to drug abuse? ___ ___

Scoring and interpretation:
A score of “1” is given for each YES response, except for items 4, 5, and 7, for which a NO response is given a score of “1.” Based on data from a heterogeneous psychiatric patient population, cutoff scores of 6 through 11 are considered to be optimal for screening for substance use disorders.

Using a cutoff score of 6 has been found to provide excellent sensitivity for identifying patients with substance use disorders as well as satisfactory specificity (i.e., identification of patients who do not have substance use disorders). Using a cutoff score of <11 somewhat reduces the sensitivity for identifying patients with substance use disorders, but more accurately identifies the patients who do not have a substance use disorders. Over 12 is definitely a substance abuse problem.

In a heterogeneous psychiatric patient population, most items have been shown to correlate at least moderately well with the total scale scores. The items that correlate poorly with the total scale scores appear to be items 4, 7, 16, 20, and 22.

**SUMMARY**

An individual who is dependent on three or more substances or substance groups within a 12-month period can be diagnosed with polysubstance abuse. They may receive this diagnosis even if they do not meet the criteria for dependence on any singular substance. Although there are similarities between substance abuse and polysubstance abuse, the latter may present unique challenges, including a lengthier detoxification period and an increase in physical
side effects of the substances consumed. However, in some cases, polysubstance abusers may be more tolerant of the detoxification process since their bodies may not have developed a reliance on any singular substance. As a result, each polysubstance abuser requires a personalized treatment plan developed according to their unique medical, psychiatric, and substance use history. The treatment plan will need to consider resources available within the patient’s support network, hospital or treatment facility, and community.

It is important to understand the distinction between polysubstance abuse and single substance abuse, as polysubstance abusers will require different diagnostic and treatment strategies than those who are dependent on a single substance. However, there are some similarities between the conditions, and polysubstance users will benefit from some of the strategies used with single substance users, such as treatment approaches. This study introduces the learner to overlapping factors and comorbid conditions often seen in those with polysubstance abuse issues. It also aims to inform health professionals of the various screening tools available to identify polysubstance abuse. Polysubstance Abuse: Part II will discuss additional aspects of the evaluation process important in the development of an individualized treatment plan.

Please take time to help the NURSECE4LESS.COM course planners evaluate nursing knowledge needs met following completion of this course by completing the self-assessment Knowledge Questions after reading the article. Correct Answers, pg 49.
1. Polysubstance abuse is defined as a substance dependence disorder in which the individual uses:
   a. two or more substances for one year.
   b. three or more substances or substance groups on a regular basis.
   c. three substance for 6 months with known adverse health outcomes.
   d. substances illegally.

2. Harm to self develops when a person uses substance(s) despite:
   a. having a physical or psychological condition made worse by using substance(s).
   b. trouble with the law.
   c. family conflict.
   d. long-term polysubstance use remission.

3. With the CAGE or CAGE-AID, a positive screening test is:
   a. greater than 3 “yes” responses.
   b. greater than 6 “yes” responses.
   c. greater than 10 “yes” responses.
   d. one or more “yes” responses.

4. True or False. The AUDIT is screening tool that is only used by a licensed health professional.
   a. True
   b. False

5. DAST is a screening instrument that surveys a person’s:
   a. marital-family relationships, social relationships, employment, legal and physical conditions.
   b. comorbid mental health and physical diseases.
   c. family history and genetic predisposition to addiction.
   d. demographic and cultural background.
Correct Answers:

1. b
2. a
3. d
4. b
5. a
Reference List:

The following includes literature supporting the courses for Polysubstance Abuse, Part I – IV.


and other drug use disorders in first-episode psychosis. PSYCHIATRY Res. 2010;177:228–34.


55. Screening, Assessment, and Drug Testing Resources | National Institute on Drug Abuse (NIDA) [Internet]. [cited 2014 Sep 16]. Available from: http://www.drugabuse.gov/nidamed-medical-health-professionals/tool-resources-your-practice/additional-screening-resources
60. Padgett DK, Hawkins RL, Abrams C, Davis A. In their own words: Trauma and substance abuse in the lives of formerly homeless women with serious mental illness.
69. Treatment C for SA. Chapter 7. Phases of Treatment. Substance Abuse and Mental Health Services Administration (US); 2005.


104. Chapter 12. Treatment of Co-Occurring Disorders. Substance Abuse and Mental Health Services Administration (US); 2005.


112. The Substance Abuse and Mental Health Services Administration (SAMHSA) Website [Internet]. [cited 2014 Apr 3]. Available from: http://buprenorphine.samhsa.gov/about.html


115. Chapter 1 Substance Abuse Treatment and Family Therapy. Substance Abuse and Mental Health Services Administration (US); 2004.


121. Treatment C for SA. 6 Traditional Settings and Models. Substance Abuse and Mental Health Services Administration (US); 2005.

127. Chapter 4. Services in Intensive Outpatient Treatment Programs. Substance Abuse and Mental Health Services Administration (US); 2006.
137. Friedmann PD, Lemon SC, Stein MD, D’Aunno TA. Accessibility of Addiction Treatment: Results from a National Survey of


144. Chapter 7: Substance Abuse Treatment for Women. Substance Abuse and Mental Health Services Administration (US); 2009.


The information presented in this course is intended solely for the use of healthcare professionals taking this course, for credit, from NurseCe4Less.com.

The information is designed to assist healthcare professionals, including nurses, in addressing issues associated with healthcare.

The information provided in this course is general in nature, and is not designed to address any specific situation. This publication in no way absolves facilities of their responsibility for the appropriate orientation of healthcare professionals.

Hospitals or other organizations using this publication as a part of their own orientation processes should review the contents of this publication to ensure accuracy and compliance before using this publication.

Hospitals and facilities that use this publication agree to defend and indemnify, and shall hold NurseCe4Less.com, including its parent(s), subsidiaries, affiliates, officers/directors, and employees from liability resulting from the use of this publication.

The contents of this publication may not be reproduced without written permission from NurseCe4Less.com.