

STIMULANTS (AMPHETAMINES, COCAINE, CAFFEINE, AND NICOTINE) AND INHALANT-RELATED DISORDERS

DSM-IV

AMPHETAMINE-INDUCED DISORDERS

- 292.81 Intoxication delirium
- 292.89 Amphetamine intoxication
- 292.0 Amphetamine withdrawal
- 292.11 Psychotic disorders with delusions
- 292.12 Psychotic disorders with hallucinations

CAFFEINE-INDUCED DISORDERS

- 305.90 Caffeine intoxication
- 292.89 Caffeine-induced anxiety disorder
- 292.89 Caffeine-induced sleep disorder

COCAINE-INDUCED DISORDERS

- 292.89 Cocaine intoxication
- 292.0 Cocaine withdrawal
- 292.81 Intoxication delirium

INHALANT-INDUCED DISORDERS

- 292.89 Inhalant intoxication
- 292.81 Inhalant intoxication delirium
- 292.84 Inhalant-induced mood disorder
- 292.89 Inhalant-induced anxiety disorder

NICOTINE-INDUCED DISORDER

- 292.0 Nicotine withdrawal

(For additional listings, consult *DSM-IV*.)

Stimulants are natural and manufactured drugs that speed up the nervous system. They can be swallowed, injected, inhaled, or smoked. These substances are identified by the behavioral stimulation and psychomotor agitation that they induce. They differ widely in their molecular structures and in their mechanisms of action. The most prevalent and widely used stimulants are caffeine and nicotine. Caffeine is readily available as a common ingredient in coffee, tea, colas, and chocolate. Nicotine is a primary substance in tobacco products. These are generally accepted as a part of our culture, are not usually seen in overdose situations, and are included here for information only. Other more potent stimulants (e.g., cocaine, amphetamines, and nonamphetamine stimulants) are regulated by the Controlled Substance Act. They are available for therapeutic purposes by prescription but are also widely available on the illicit drug market. The potential for overdose and even death is high.

Inhalant substances such as gasoline, glue, paint/paint thinners, spray paints, cleaning compounds, and correction fluid, to name a few, are not classified as stimulants; however, the intoxicating effects of these products and their therapeutic interventions are similar and therefore addressed here.

This plan of care addresses acute intoxication/withdrawal and is to be used in conjunction with CP: Substance Dependence/Abuse Rehabilitation.

ETIOLOGICAL THEORIES

Psychodynamics

Individuals who abuse substances fail to complete tasks of separation-individuation, resulting in underdeveloped egos. The person retains a highly dependent nature, with characteristics of poor impulse control, low frustration tolerance, and low self-esteem, low social conformity, neuroticism, and introversion. The superego is weak, resulting in absence of guilt feelings for behavior. Underlying psychiatric status must be assessed, as these individuals may use stimulants for varying self-medication reasons (dual diagnosis).

Biological

An apparent genetic link is involved in the development of substance use disorders. However, the statistics are currently inconclusive regarding abuse of stimulant drugs.

Family Dynamics

Predisposition to substance use disorders occurs in a dysfunctional family system. There is often one parent who is absent or who is an overpowering tyrant and/or one parent who is weak and ineffectual. Substance abuse may be evident as the primary method of relieving stress. The child has negative role models and learns to respond to stressful situations in like manner.

CLIENT ASSESSMENT DATA BASE

The client may present with intoxication or in various stages of withdrawal, affecting data gathered. Data depend on stage of withdrawal, concurrent use of alcohol/other drugs, or contaminants in drug “cut.”

Activity/Rest

Insomnia; hypersomnia; nightmares

Anxiety

Hyperactivity, increased alertness, or falling asleep during activities; lethargy (inhalants)

Inability to tolerate or to correct chronic fatigue (depression and/or loneliness may be a factor)

General muscle weakness, incoordination, unsteady gait (inhalants)

Circulation

BP usually elevated; may be hypotensive

Tachycardia, irregular pulse

Diaphoresis

Ego Integrity

Need to feel elated, sociable, happy with self, desire to prove self-worth, improve self-concept; craving for excitement

Compulsion regarding substance use, or denial of powerlessness over the substance (use of drug for celebration or crisis, believing drug can be used in regulated quantities, often resulting in binge use); may think of recovery process as notion of willpower, subject to impulse control

Absence of guilt feelings for behavior

Underdeveloped ego; highly dependent nature, with characteristics of poor impulse control, low frustration tolerance, and low self-esteem; reckless/rebellious behavior, weak superego

May be seen or view self as susceptible to influence by others, having an inability to say “no”

Feelings of helplessness, hopelessness, powerlessness

Emotional status: Anxious, evasive, irritable, may be angry/hostile, belligerent

Food/Fluid

Nausea/vomiting, anorexia
Weight loss; thin, cachectic appearance
Compulsiveness with food (especially sugars)

Neurosensory

Emotional/psychological symptoms (e.g., elation, grandiosity, loquacity [excessive talkativeness], hypervigilance)
Numbness in hands and feet
Twitching, jerking in face, neck, arms, hands (dyskinesias; dystonias)
Dizziness
Pupillary dilation with slowed reaction to light; blurred vision or diplopia; nystagmus, lack of convergence (inhalants)
Tremors, convulsions, coma
Delirium with tactile and olfactory hallucinations, as well as hallucinations of insects or vermin crawling in/under the skin (formication); labile affect, violent or aggressive behavior, symptoms of a paranoid delusional disorder (amphetamine or similarly acting substances)
Fixed delusional system of a persecutory nature, lasting weeks to a year or more
Psychosis (can occur with a 1-time high dose of amphetamine [especially with IV administration] or with long-term use at moderate or high dose)
Ideas of reference
Aggressiveness, hostility, violence, quick response to anger; psychomotor agitation/hyperactivity
Hypersensitive to sound, light, touch
Stereotyped compulsive motor behavior (e.g., sorting, taking things apart and putting them back together, moving mouth from side to side)
Psychomotor retardation, depressed reflexes, unsteady gait (inhalants)
Anxiety; impaired judgment and perception
Apathy, stupor, coma, or euphoria (inhalants)

Pain/Discomfort

Bone/chest pain

Respiration

Tachypnea, coughing
Nasal rhinitis (chronic cocaine use)
Chronic/recurrent bronchiolitis; pneumonia
Pulmonary hemorrhage

Safety

History of accidents; exposure to STDs, including HIV
Acute allergic/anaphylactic reaction (response to contaminants in drug cut)
Elevated temperature; fever/chills, diaphoresis
Evidence of trauma (e.g., bruises, lacerations, burns); nasal damage (if drug is snorted)
Assaultive behavior (inhalants)

Sexuality

Diminished/enhanced sexual desire; disinhibition regarding sexual behavior (promiscuity/prostitution)
Increased likelihood of pregnancy/abortion

Social Interactions

Impairment in relationship, social, or occupational functioning; encounters with the legal system;
expulsion from school
Dysfunctional family system (family of origin)

Teaching/Learning

Predominant age range of 21 to 44 years (stimulants), teenage population (inhalants)
Learning difficulties (e.g., attention-deficit hyperactivity disorder)
Family history of substance abuse (especially alcohol)
Concurrent use of alcohol/other drugs (compounds symptoms/reactions)
Pattern of habitual use of the particular drug or pathological abuse, with inability to reduce or to stop use, occurring for at least 1 month
Intoxication throughout the day, sometimes with daily involvement
During-Period of Abstinence: Drug hunger, delayed reemergence of withdrawal symptoms (reemergence may occur at 3 months, between 9 and 12 months, and perhaps as late as 18 months after abstinence)
Previous hospitalizations or having been in residential treatment program for substance use/dual diagnosis
Health beliefs about use of drugs (e.g., "Diet pills are OK to use to lose weight.")
Attendance at recovery groups (e.g., Narcotics/Alcoholics Anonymous or other drug-specific recovery groups)

DIAGNOSTIC STUDIES

Blood and Urine Drug Screens: To identify presence/type of drug(s) being used

Tests for Hepatitis and HIV: May be routine in known IV drug users or when client has identified risk factors.

Other Screening Studies: Depend on general condition, individual risk factors, and care setting.

Addiction Severity Index (ASI): Produces a "problem severity profile," which indicates areas of treatment needs.

NURSING PRIORITIES

1. Maintain physiological stability.
2. Promote safety and security.
3. Prevent complications.
4. Support client's acceptance of reality of situation.
5. Promote family involvement in Intervention/treatment process.

DISCHARGE GOALS

1. Homeostasis maintained.
2. Complications prevented/resolved.
3. Client is dealing with situation realistically/planning for the future.
4. Abstinence from drug(s) maintained on a day-to-day basis.
5. Attending rehabilitation program/therapy group.
6. Plan in place to meet needs after discharge.

NURSING DIAGNOSIS**CARDIAC OUTPUT, risk for decreased****Risk Factors May Include:**

Drug (e.g., cocaine) effect on myocardium (dependent on drug purity/quantity used)

Preexisting cardiomyopathy (with or without previous prolonged drug abuse)

Alterations in electrical rate/rhythm/conduction

Possibly Evidenced by:

[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis.]

Desired Outcomes/Evaluation Criteria—

Report absence of chest pain.

Client Will:

Demonstrate adequate cardiac output free of signs of dysrhythmias, shock.

ACTIONS/INTERVENTIONS**RATIONALE**

Independent

Monitor BP.

BP fluctuations can be extreme, with both hypertension and hypotension affecting cardiac output.

Monitor cardiac rate and rhythm.
Document dysrhythmias.

Ventricular dysrhythmias/cardiac arrest may occur at any time, especially with toxic levels of certain drugs (e.g., cocaine, “crack,” “ice,” and amphetamine congeners).

Investigate reports of chest pain, indigestion/heartburn.

Incidence of myocardial infarction is increased in cocaine users.

Have emergency equipment/medications available.

Prompt treatment of dysrhythmias may prevent cardiac arrest.

Collaborative

Administer supplemental oxygen as needed.

Tachycardia and other cardiac dysrhythmias may be improved/decreased with increased oxygen delivery to tissues.

Administer medications as indicated, e.g.,
propranolol (Inderal);

Beta-adrenergic blockers can reduce cardiac O₂ demand by blocking catecholamine-induced increases in heart rate, BP, and force of myocardial contraction.

Antidysrhythmics.

May be needed to abort life-threatening dysrhythmia/maintain cardiac function.

Transfer to medical setting as appropriate.

May be necessary to provide closer observation and more aggressive interventions.

NURSING DIAGNOSIS

VIOLENCE, risk for, directed at self/others

Risk Factors May Include:

Toxic reaction to drug, withdrawal from drug
Panic state, profound depression/suicidal behavior
Organic brain syndrome

[Possible Indicators:]

Overt and aggressive acts
Increased motor activity
Possession of destructive means
Suspicion of others, paranoid ideation, delusions, and hallucinations

Desired Outcomes/Evaluation Criteria—

Expressed intent directly/indirectly

Client Will:

Acknowledge fearfulness and realities of situation.

Verbalize understanding of behavior and precipitating factors.

Demonstrate self-control as evidenced by use of problem-solving skills in situations that usually precipitate violence.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Obtain information specific to pattern of drug use over past month, what drugs have been used together, in addition to immunization history, allergies, medications used for other purposes.

Initial factual history can reveal information essential to treatment needs. Where person obtained drug could assist in investigating possible “cut” with other drugs.

Decrease stimuli; provide quiet in own room or place in stimulus-reduction room with supervision.

Remove potentially harmful objects from environment.

Explain consistent rules of unit (e.g., no violence, no threats).

Maintain high staff profile in situations in which potential violence can occur.

Provide opportunities for verbal expression of aggressive feelings in acceptable ways.

Assist client in identifying what provokes anger.

Provide outlets for expression that involve physical activity (e.g., walking, stationary bicycle).

Discuss consequences of aggressive behavior.

Be alert to violence potential (e.g., increased pacing, verbalization of delusional persecutory content, hypervigilance regarding specific persons in the milieu, gesturing aggressively, threatening others verbally or physically).

Isolate client immediately if he or she becomes violent, using adequate number of staff trained in assaultive management. Maintain calm, nonpunitive attitude.

Negotiate conditions for coming out of isolation/ "quiet time" when the client is calm, based on agreement of social appropriateness.

Build trust: follow through on commitments/ agreements, maintain consistent staff and frequent brief contact with client.

Reduces reactivity, enhances calm feelings. Observation enhances client safety, allowing for timely intervention.

Reduces opportunity for harmful behaviors. **Note:** Client may be suicidal when/if rebound CNS depression occurs secondary to stimulant withdrawal.

Secure environment enhances sense of safety, which can decrease perceived threat. Enhances opportunity for client to learn ways to cope with aggressive feelings before reacting.

May prevent onset of violence and allows quick response if violence does occur.

Encouragement of new avenue of expression helps client learn new coping skills.

Awareness of reaction is the first step in learning change.

Physical activity in protected environment can lessen aggressive drive.

Learning choices helps client gain control of situation and self.

Recognizing potential and helping client gain control can be more effective before violent outbreak.

Client will feel safer if others take control until internal locus of control can be regained. An attitude of acceptance is important while refusing to tolerate the violent behavior. **Note:** Use of seclusion and restraints may exacerbate hyperactivity.

Clear expectations help client feel secure about own control.

Trust is essential to working with all clients. Brief contacts can prevent overstimulation.

Collaborative

Administer medications as indicated, e.g.:

Chlorpromazine (Thorazine), haloperidol (Haldol);

Short-term use of antipsychotics during acute intoxication/psychosis helps client gain self-control; promotes sedation/rest when agitated, assaultive, overstimulated. **Note:** Thorazine may cause postural hypotension, and Haldol may provoke acute extrapyramidal reaction, requiring additional evaluation/medication.

Diazepam (Valium), chlordiazepoxide (Librium).

Occasionally useful for treatment of acute cocaine intoxication. Either drug is useful for preventing delirium tremens when substance use is combined with alcohol.

NURSING DIAGNOSIS

May Be Related to:

Possibly Evidenced by:

Desired Outcomes/Evaluation Criteria—

Client Will:

SENSORY/PERCEPTUAL alterations (specify)

Chemical alteration: exogenous (CNS stimulants or depressants, mind-altering drugs)

Altered sensory reception, transmission, and/or integration: altered status of sense organs

Bizarre thinking, anxiety/panic

Preoccupation with/appears to be responding to internal stimuli from hallucinatory experiences (e.g., assumes “listening pose,” laughs and talks to self, stops in midsentence and listens, “picks” at self and clothing, tries to “get away from bugs”)

Changes in sensory acuity, decreased pain perception

Distinguish reality from altered perceptions.

State awareness that hallucinations may result from substance use.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Notice client’s preoccupation, responses, gesturing, social skills.

Assist client in checking perceptions verbally, provide reality information.

Helps assess whether or not client is hallucinating without overstimulating verbally.

Can calm the client and provide reassurance of safety and that formication (illusion of insects crawling on the body) or other misperceptions are not occurring.

Acknowledge client's emotional state; letting client know safety will be maintained.

Explore ways of calming client. Encourage use of relaxation techniques (e.g., deep-breathing exercises, focusing on caregiver).

Be aware that altered sensation and perception may cause injury (e.g., be alert for client burning self with cigarette, excessive scratching at skin to rid self of bugs or drug [which may feel as though it is inside the skin], accidentally harming self through poor judgment or misperceptions). (Refer to ND: Violence, risk for, directed at self/others.)

Inform client (if calm enough) of temporary nature of hallucinations that have resulted from stimulant use.

Empathetic response can diminish intensity of fear.

Relaxation can promote positive outlook, distracting from negativity and enhancing clarity of perception. **Note:** Visualization/guided imagery techniques and touch may increase agitation/hallucinations and are usually not recommended.

Amphetamine use causes impaired judgment, increasing risk of injury/self-harm. Overdose of many stimulants causes frightening hallucinations, often of large insects crawling on skin.

Learning cause, effect, and possible temporary nature of misperceptions may reduce fear, anxiety, and negativity. This may inject hope and positive attitude.

NURSING DIAGNOSIS

May Be Related to:

Possibly Evidenced by:

Desired Outcomes/Evaluation Criteria— Client Will:

FEAR/ANXIETY [specify level]

Paranoid delusions associated with stimulant use

Feelings/beliefs that others are conspiring against or are about to attack/kill client

Recognize frightening feelings before preoccupying self with acting on fears.

Discuss reality base of persecutory fears with staff.

Report fear/anxiety reduced to manageable level.

Demonstrate appropriate range of feelings and appear relaxed.

ACTIONS/INTERVENTIONS

Independent

Establish consistent staff assignment and stress importance of being reliable, honest, genuine, prompt.

Acknowledge awareness of client's feelings (e.g., fear, terror, feeling overwhelmed, panic, anxiety, confusion).

RATIONALE

Builds trust and rapport, which are necessary for overcoming fear.

Empathy can assist client to tolerate/deal with own feelings.

Be concrete, clear in communication. Assess client's readiness for humor and/or touch.

Encourage verbalization of fears/anxieties.

Assist client in reality-checking fears.
Use gentle confrontation.

Fear negatively influences one's ability to attend to and interpret stimuli. Fear is serious to the perceiver and must be respected. Laughter and touch can be misinterpreted/increase anxiety.

Ventilating feelings to trusted staff can lessen intensity of fearfulness. This provides opportunity to clarify misunderstandings and comforts client.

Client can reduce fear if he or she understands difference between reality and delusions. Should be used cautiously, as reality-checking a delusional system puts trust at risk.

NURSING DIAGNOSIS

May Be Related to:

Possibly Evidenced by:

**Desired Outcomes/Evaluation Criteria—
Client Will:**

NUTRITION: altered, less than body requirements

Anorexia (stimulant use)

Insufficient/inappropriate use of financial resources

Reported/observed inadequate intake

Lack of interest in food; weight loss

Poor muscle tone

Signs/laboratory evidence of vitamin deficiencies

Demonstrate progressive weight gain toward goal.

Verbalize understanding of causative factors and individual nutritional needs.

Identify appropriate dietary choices, lifestyle changes to regain/maintain desired weight.

ACTIONS/INTERVENTIONS

RATIONALE**Independent**

Ascertain intake pattern over past several weeks.

Stimulants cause decreased appetite and impaired judgment regarding nutritional needs.

Discuss needs/likes/dislikes about food choices.

Will be more likely to maintain desired intake if individual preferences are considered.

Anticipate hyperphagia and weigh every other day.

Overeating may be a consequence of stimulant withdrawal and may result in sudden/inappropriate weight gain.

Provide meals in a relaxed, nonstimulating environment.

Stimulus reduction aids relaxation and ability to focus on eating.

Encourage frequent nutritional snacks, small nutritious meals.

Collaborative

Obtain/review routine diagnostic studies (e.g., CBC; serum protein, albumin, vitamin levels; UA).

Consult with dietitian.

Administer multivitamins as indicated.

Small amounts of food frequently can prevent/reduce GI distress.

Assessment of nutritional state is necessary to treat preexisting deficiencies and rule out anemia, dehydration, or ketosis.

Useful in establishing individual nutritional needs/dietary program.

Supplementation enhances correction of deficiencies.

NURSING DIAGNOSIS

Risk Factors May Include:

Possibly Evidenced by:

Desired Outcome/Evaluation Criteria—

Client Will:

INFECTION, risk for

IV-drug-use techniques; impurities of injected drugs

Localized trauma; nasal septum damage (snorting cocaine)

Malnutrition; altered immune state

[Not applicable, presence of signs and symptoms establishes an *actual* diagnosis.]

Verbalize understanding of individual risk factors.

Identify interventions to prevent/reduce risk factors.

Demonstrate lifestyle changes to promote safe environment.

Achieve timely healing of infectious process if present and be afebrile.

ACTIONS/INTERVENTIONS

Independent

Obtain information specific to pattern of drug use over past month, immunization history, allergies, specific medications used for other purposes.

Assess skin integrity and character. Assist as needed with body and oral hygiene; provide clean clothes, properly fitting shoes.

Use blood/body fluid precautions as appropriate.

RATIONALE

Helps identify risk factors, can reveal information essential to need for further evaluation/treatment.

Maintaining skin integrity requires cleanliness. If sores are present, they may need care to prevent infection.

Protects caregivers from possible contamination by infectious disease/viruses (e.g., hepatitis, HIV).

Monitor vital signs. Assess level of consciousness.

Abnormal signs, including fever, can indicate presence of infection. Cerebral complications (e.g., meningitis, brain abscess) may occur, affecting mentation. **Note:** Fever is also a symptom of toxic CNS effect.

Review physical assessment regularly.

Can reveal daily changes and problematic areas. Physical assessment provides recognition of pathology and identifies areas for providing information for health promotion and problem prevention.

Investigate recurrent cough; note characteristics of sputum. Auscultate breath sounds.

These clients are at increased risk for development of pulmonary infections.

Observe for nasal stuffiness, pain, bleeding, abnormal mucus production.

Cocaine snorting can cause erosion of the nasal septum, requiring additional therapy/interventions.

Investigate reports of acute/chronic deep bone pain, tenderness, guarding with movement, regional muscle spasm.

Occasionally, osteomyelitis may develop because of hematogenous spread of bacteria, most often affecting lumbar vertebrae.

Ascertain health status of family members/SO(s) currently in contact with client.

May have exposed client to diseases such as colds, tuberculosis, hepatitis, HIV, which could be problematic for client.

Collaborative

Review laboratory studies (e.g., UA, CBC, Biochem screen, RPR, ESR, ELISA/Western Blot test).

May identify complications of injection drug use such as hepatitis, nephritis, tetanus, vasculitis, septicemia, subacute bacterial endocarditis, embolic phenomena, malaria. Toxic allergic reactions may result from other substances in the cut, and immunological abnormalities may occur because of repeated antigenic stimulation.

Note: Injection drug users are at high risk for contamination with HIV and hepatitis viruses.

NURSING DIAGNOSIS

SLEEP PATTERN disturbance

May Be Related To:

CNS sensory alterations: External factor (stimulant use), internal factor (psychological stress)

Possibly Evidenced By:

Altered sleep cycle; initial signs of insomnia, and then hypersomnia

Constant alertness; racing thoughts that prevent rest

Denial of need to sleep or report of inability to stay awake

Desired Outcomes/Evaluation Criteria—

Sleep 6–8 hours at night.

Client Will:

Rest minimally, appropriately, during the day.

Verbalize feeling rested when awakens.

ACTIONS/INTERVENTIONS

RATIONALE

Independent

Establish sleep cycle in which client sleeps at night, is awake during day with only brief rest periods as needed.

Decrease stimuli and enhance relaxation prior to bedtime; encourage use of presleep routines (e.g., hot bath, warm milk, stretching).

Provide opportunities for fresh air, mild exercise, noncaffeinated beverages, and provide quiet environment as client can tolerate.

Adequate rest and sleep can improve emotional state; restoration of regular pattern is a priority in a sleep-deprived stimulant user.

Client may need calming to attempt rest.

Promotes drowsiness/desire for sleep.