

12th

International
Symposium on
Neuropsychiatry & HIV

HIV
neuro
psychiatry

Practical focus on the diagnosis and
treatment of the psychiatric and
neuropsychological aspects of
HIV-infected patients.

Barcelona June 14-15, 2019
www.neuropsychiatry-hiv.com

Workshop: Substance Use in HIV+ individuals: Screening and Diagnosis

Friday, June 14th

02:45-05:15 pm

Workshops. (Open discussion session)

1. Substance use.

Moderator: Jordi Blanch

- Scope of the problem. Ignacio Pérez-Valero
- Prevention. Milton Wainberg
- Screening and diagnosis. Guida da Ponte
- Treatment. Annemiek Schade

No conflict of interest

INITIAL EVALUATION OF SUBSTANCE USE DISORDERS

Substance use history

- Who?
 - All HIV+ individuals;
- Why?
 - Even intermittent use can interfere with adherence to medications, raise the risk of side effects and reduce the patient's ability to practice safer sex;
- When?
 - At baseline and at least annually;
 - More frequently if at risk drug and alcohol users;
- For which substances?
 - Alcohol and other substances (heroin, cocaine, marijuana, club drug, sedative or stimulant use, whether prescribed or nonprescribed, and any dietary supplements or herbs);

Substance use history

- How to approach?
 - Nonjudgmental language;
 - Brief to more detailed questions;
 - Screen heavy smokers;
 - If patient denies but historical, physical or laboratory indicators suggest, continue to inquire at subsequent visits;
- Rephrase questions: *do you drink?* → *what do you like to drink: beer, wine or liquor?* → if the patient says he doesn't drink → *not even at a wedding? or New Year's?* → if the patient continues to deny drinking or substance use → *was there ever a time when you did drink or use drugs?*;
- Phrasing a question with "even once": *did you ever even once shoot up to get high?*;
- Current drinking: *when was the last time you had a even a sip?*;
- Sounding comfortable with the questions using street names: *so when was the last time you smoked any weed?*;

Substance use history

- What kind of information?
 - Date when the substance was first used;
 - Patterns, amount, and frequency of use;
 - Routes of administration and reactions to the use;
 - Time of last use (substance-induced disorder *vs* risk for withdrawal);
 - If the patient has had past substance use treatment – what was the response?;
 - Urine toxicology screen and routine blood tests (patient's permission);
 - Collateral information;

Substance use history

- Which are the indicators of possible substance and/or alcohol use or abuse?
 - History:
 - Referrals or participation on treatment programs;
 - Trauma, especially after drinking/substance use;
 - Legal problems;
 - Job loss, turnover, downward mobility;
 - Relationship problems;
 - Medical history: seizures, pancreatitis, liver disease, cytopenias, tachyarrhythmias, endocarditis, abscesses;
 - History of psychiatric symptoms, especially affective disorders;
 - Physical signs:
 - Hypertension: alcohol, cocaine, methamphetamine;
 - Resting tachycardia: alcohol, cocaine, methamphetamine, marijuana;
 - Tremor: alcohol withdrawal, stimulant intoxication;
 - Alcohol on breath;
 - Dilated pupils: stimulant use or sedative withdrawal;
 - Small pupils: opiate use;
 - Needle marks/tracks;
 - Bruises or healed fractures, especially of the ribs: alcohol;
 - Puffy facies: alcohol;
 - Hepatomegaly: alcohol;
 - Weight loss; cocaine, methamphetamine;
- Laboratory values:
 - ↑ MCV, if not taking zidovudine;
 - ↑ GGT: alcohol liver disease and a more sensitive marker than AST;
 - $AST > ALT$;
 - ↓ serum B12;
 - Urine drug screens and blood alcohol levels: diagnosis and monitoring;

Use of screening instruments

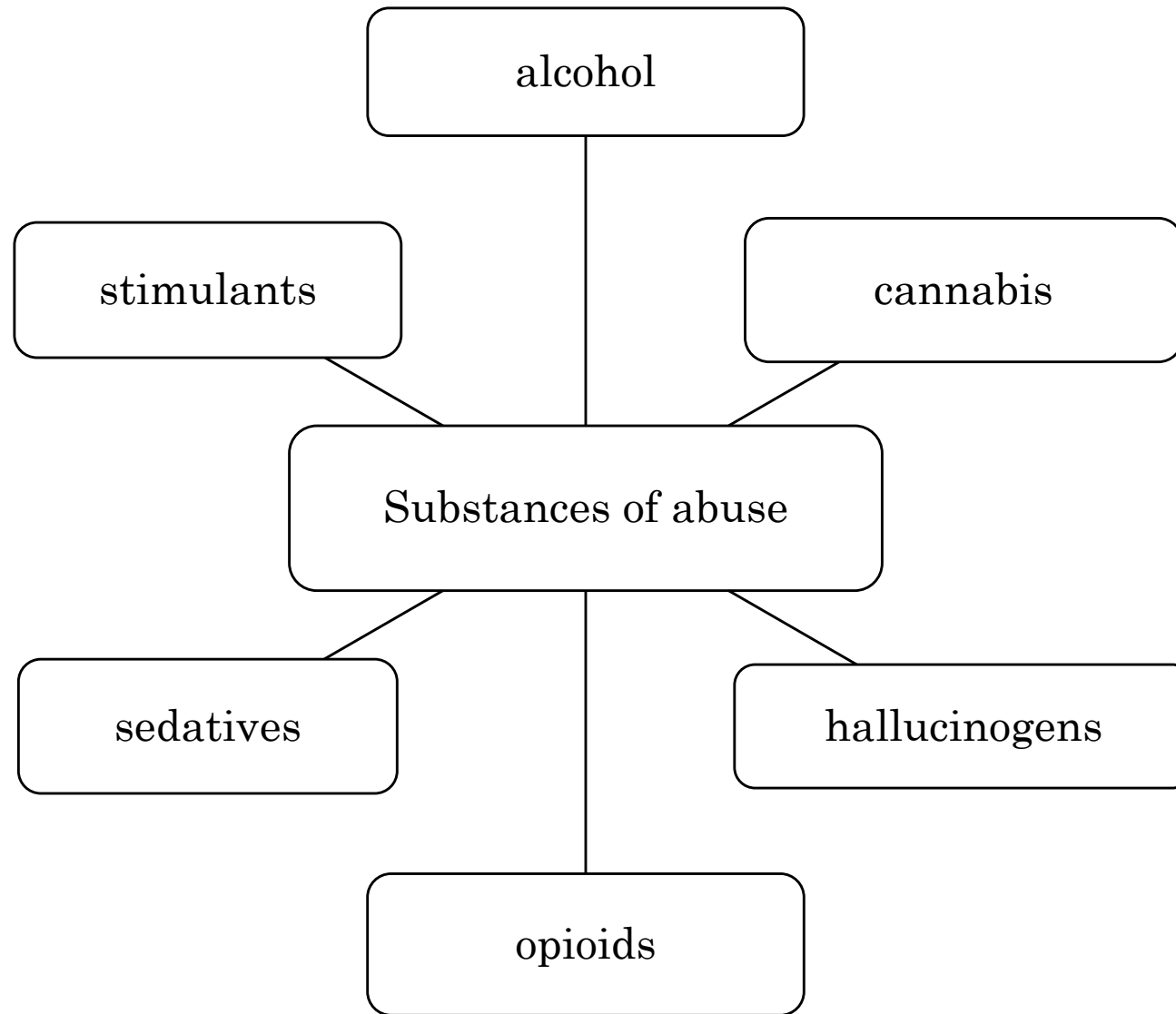
- Screening instruments should be tailored for optimal use at initial, annual and interim visits and adjusted for the patient's substance use history;
- It may helpful to modify screening tools that have been validated, using alcohol questions to also include other drugs - eg: *how often you have a drink containing alcohol or use drugs?*;
- Single alcohol screening question:
 - *How many times in the past year you had 4 (women)/5 (men) or more drinks in 1 day?* → ≥ 1 heavy drinking days in the past year is considered a positive screen;
- Two question screens (sensitivity: 91%):
 - 1 - have you ever has a drinking problem?
 - 2 - when was your last drink?

Use of screening instruments

- Two Item Conjoint Screen (identify 80% of current substance abusers; particularly sensitive to polysubstance use disorders) - ≥ 1 positive may be suggestive of a problem
 - 1 - in the last year, have you ever drunk or used drugs more than you meant to?
 - 2 - have you felt you wanted or needed to cut down on your drinking or drug use in the last year?
- CAGE - AID (CAGE - Adapted to Include Drugs) - ≥ 2 may be suggestive of a problem;
 - 1. Can you *cut down* on your use of alcohol or drugs?
 - 2. Has anyone *annoyed* you by criticizing your use of alcohol or drugs?
 - 3. Have you ever felt *guilty* because of something you've done while drinking or using drugs?
 - 4. Have you ever taken a drink or used drugs to steady your nerves or get a hangover (*eye-opener*)?

DIAGNOSIS FOR SUBSTANCE USE

Diagnostic and Statistical Manual Disorders - 5



Which drugs causes...

- Intoxication:

- alcohol;
- cannabis;
- hallucinogens;
- opioids;
- sedatives;
- stimulants;

- Withdrawal:

- alcohol;
- cannabis;
- ~~hallucinogens;~~
- opioids;
- sedatives;
- stimulants;

Criteria for substance use disorder

- The substance is taken in larger amounts or over a longer period than was intended;
- There is a persistent desire or unsuccessful efforts to cut down or control;
- It's spent a great deal of time in activities to obtain, use or recover from its effects;
- Craving;
- Failure to fulfill major role obligations at work, school or home;
- Continuous use despite having persistent or recurrent social or interpersonal problems;
- Given up or reduce important social, occupational or recreational activities;
- Recurrent use in situations in which is physically hazardous;
- Continuous use despite knowledge of having a persistent or recurrent physical or psychological problem;
- Tolerance:
 - Need of increased amounts to achieve intoxication or desired effect, or
 - Markedly diminished effect with continued use of the same amount;
- Withdrawal:
 - Characteristic withdrawal syndrome, or
 - Substance is taken to relieve or avoid withdrawal symptoms;

Alcohol

- Intoxication:

- Recent ingestion;
- Clinically significant problematic behavioral or psychological changes (eg: *inappropriate sexual or aggressive behavior, mood lability, impaired judgment*) that developed during, or shortly after, alcohol ingestion;
- *One (or more) during, or shortly after, alcohol use:*
 - *Slurred speech;*
 - *Incoordination;*
 - *Unsteady gait;*
 - *Impairment in attention or memory;*
 - *Stupor or coma;*

- Withdrawal:

- Cessation of (or reduction in) alcohol use that has been heavy and prolonged;
- Two (or more) developing within *several hours to few days* after the cessation of (or reduction in) alcohol use;
 - *Autonomic hyperactivity (eg: sweating or pulse rate > 100 bpm);*
 - *Increased hand tremor;*
 - *Insomnia;*
 - *Nausea or vomiting;*
 - *Transient visual, tactile or auditory hallucinations or illusions;*
 - *Psychomotor agitation;*
 - *Anxiety;*
 - *Generalized tonic-clonic seizures;*

Opiates

- Intoxication:
 - Recent use;
 - Clinically significant problematic behavioral or psychological changes (eg: *initial euphoria followed by apathy, dysphoria, psychomotor agitation or retardation, impaired judgment*) that developed during, or shortly after, opioid use;
 - *Pupillary constriction (or dilatation due to anoxia from severe overdose) and one (or more) signs or symptoms during, or shortly after, opioid use:*
 - *Drowsiness or coma;*
 - *Slurred speech;*
 - *Impairment in attention or memory;*
- Withdrawal:
 - Cessation of (or reduction in) opioid use that has been heavy and prolonged (ie, several weeks or longer) or administration of an opioid antagonist;
 - Three (or more) of the following developing *minutes to several days (4 to 8 hours; methadone: 24 to 48 hours) after;*
 - Dysphoric mood;
 - Nausea or vomiting;
 - Muscle aches;
 - Lacrimation or rhinorrhea;
 - Pupillary dilation, piloerection, or sweating;
 - Diarrhea;
 - Yawning;
 - Fever;
 - Insomnia;

Cocaine and Other Stimulants

- Cocaine:
 - Detectable (blood/urine): 36 hours after administration;
 - IV route:
 - Onset of action: 10–60 seconds;
 - Peak effect: minutes;
 - Duration of effect : up to 1 hour;
 - Intranasal route:
 - Onset of action: 5 minutes;
 - Peak effect: 20 minutes;
 - Duration: 1 hour;
 - Crack cocaine:
 - Onset of action: 3–5 seconds;
 - Peak effect: 1 minute;
- Amphetamines:
 - \approx effects as cocaine with similar routes of administration;
- Methamphetamines (“sextasy”):
 - Associated with risk behaviors including sharing of needles, and unprotected sexual activity;
 - Sextasy (+ sildenafil);
 - Chronic use: neuropsychological impairment;
- MDMA (“sextasy”):
 - \approx effects as methamphetamines;
 - Chronic use: mood instability. cognitive impairment;

Cocaine and Other Stimulants

- Intoxication:
 - Recent use of an amphetamine type substance, cocaine, or other stimulant;
 - Clinically significant problematic behavioral or psychological changes (eg: *euphoria or affective blunting; changes in sociability; hypervigilance; interpersonal sensitivity; anxiety, tension, or anger; stereotyped behaviors; impaired judgment*) that developed during, or shortly after, stimulant use;
 - Two (or more) of the following signs or symptoms developing during, or shortly after:
 - *Tachycardia or bradycardia;*
 - *Pupillary dilatation;*
 - *Elevated or lowered blood pressure;*
 - *Perspiration or chills;*
 - *Nausea or vomiting;*
 - *Evidence of weight loss;*
 - *Psychomotor agitation or retardation;*
 - *Muscular weakness, respiratory depression, chest pain, or cardiac arrhythmias;*
 - *Confusion, seizures, dyskinesias, dystonias, or coma;*
- Withdrawal:
 - Cessation of (or reduction in) prolonged amphetamine-type substance, cocaine or other stimulant use;
 - *Dysphoric mood* and two (or more) of the following physiological changes, developing within a few hours to several days;
 - *Fatigue;*
 - *Vivid, unpleasant dreams;*
 - *Insomnia or hypersomnia;*
 - *Increased appetite;*
 - *Psychomotor retardation or agitation;*

Hallucinogens

- Intoxication – phencyclidine:

- Recent use;
- Clinically significant problematic behavioral changes (eg: *belligerence, assaultiveness, impulsiveness, unpredictably, psychomotor agitation; impaired judgment*) that developed during, or shortly after, phencyclidine use;
- Within *1 hour (or less if smoked, "snorted" or IV)* two (or more) of the following signs or symptoms developing during, or shortly after:
 - *Vertical or horizontal nystagmus;*
 - *Hypertension or tachycardia;*
 - *Numbness or diminished responsiveness to pain;*
 - *Ataxia; Dysarthria;*
 - *Muscle rigidity;*
 - *Seizures or coma;*
 - *Hyperacusis;*

- Intoxication – other hallucinogen:

- Recent use;
- Clinically significant problematic behavioral or psychological changes (eg: *marked anxiety or depression, ideas of reference, fear of "losing one's mind", paranoid ideation, impaired judgment*) that developed during, or shortly after, hallucinogen use;
- *Perceptual changes occurring in a state of full awfulness and alertness (eg: subjective intensification of perceptions, depersonalization, derealization, illusions, hallucinations, synesthesias)* that developed during or shortly after;
- Two (or more) of the following signs developing during, or shortly after:
 - Pupillary dilation; Tachycardia; Palpitations;
 - Sweeting; Blurring of vision;
 - Tremors; Incoordination;

- Hallucinogen Persisting Perception Disorder:

- Following cessation of use, the *reexperiencing of one or more of the perceptual symptoms that were experienced while intoxicated* with the hallucinogen (eg: *geometric hallucinations, false perceptions of movements in the peripheral visual fields, flashes of color, intensified colors, trails of images of moving objects, positive afterimages, halos around objects, macropsia and micropsia*);

Club Drugs

- Substances used in the context of going to parties or clubs;
 - Raves: stimulants and hallucinogens (eg: LSD and MDMA);
 - Circuit parties: MDMA, ketamine, GHB, methamphetamine, cocaine, marijuana, and alcohol;
- Club drugs that are of the most concern in relation to HIV/AIDS: MDMA, GHB, and methamphetamine;
- GHB (date-rape drug):
 - Effects: sedative and euphoric; amnesia;
 - It has a relatively narrow therapeutic range → toxic effects: seizures, coma, death;
 - Withdrawal: severe syndrome among chronic users;
- GBL and 1,4- BD:
 - Converted to GHB after ingestion;
 - Available in a variety of dietary supplements for purported but unproven anabolic effects;

Sedatives, hypnotics or anxiolytics

- Intoxication:
 - Recent use of sedative, hypnotic or anxiolytic;
 - Clinically significant maladaptive behavioral or psychological changes (eg: *inappropriate sexual or aggressive behavior, mood lability, impaired judgment*) that developed during, or shortly after, sedative, hypnotic or anxiolytic use:
 - *Slurred speech;*
 - *Incoordination; Unsteady gait;*
 - *Nystagmus;*
 - *Impairment in cognition (eg: attention, memory);*
 - *Stupor or coma;*
- Withdrawal:
 - Cessation of (or reduction in) prolonged use;
 - Two (or more) of the following developing within several hours to few days after the cessation (or reduction):
 - Autonomic hyperactivity (eg: sweating or pulse > 100 bpm);
 - Hand tremor;
 - Insomnia;
 - Nausea or vomiting;
 - Transient visual, tactile, or auditory hallucinations or illusions;
 - Psychomotor agitation;
 - Anxiety;
 - Grand mal seizures;

Cannabis

- Intoxication:
 - Recent use of cannabis;
 - Clinically significant problematic behavioral or psychological changes (eg: *impaired motor coordination, euphoria, anxiety, sensation of slowed time, impaired judgment, social withdrawal*) that developed during, or shortly after, cannabis use:
 - *Conjunctival injection;*
 - *Increased appetite;*
 - *Dry mouth;*
 - *Tachycardia;*
- Withdrawal:
 - Cessation of cannabis that has been heavy and prolonged (ie, usually daily or almost daily use over a period of at least a few months);
 - Three (or more) of the following signs and symptoms develop within ≈ 1 week:
 - *Irritability, anger or aggression;*
 - *Nervousness or anxiety;*
 - *Sleep difficulty (eg: insomnia, disturbing dreams);*
 - *Decreased appetite or weight loss;*
 - *Restlessness;*
 - *Depressed mood;*
 - At least one of the following physical symptoms causing significant discomfort: *abdominal pain, shakiness/tremors, sweating, fever, chills, or headache;*

Thanks for your attention

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Other screening tes

- A CRAFFT score of 2 or higher has been shown to have good sensitivity and specificity in identifying substance-related problems and disorders in a general population of adolescent medical clinic patients
- To date, the CRAFFT has been utilized in samples of youth living with HIV as an indicator of problematic substance use; however, to our knowledge, research has yet to validate its use by examining how it is associated with selfreport substance use behaviors

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

A

During the PAST 12 MONTHS, did you:

	No	Yes
1. Drink any <u>alcohol</u> (more than a few sips)? (Do not count sips of alcohol taken during family or religious events.)	<input type="checkbox"/>	<input type="checkbox"/>
2. Smoke any <u>marijuana</u> or <u>hashish</u> ?	<input type="checkbox"/>	<input type="checkbox"/>
3. Use <u>anything else</u> to <u>get high</u> ? ("anything else" includes illegal drugs, over-the-counter and prescription drugs, and things that you sniff or "huff")	<input type="checkbox"/>	<input type="checkbox"/>

For clinic use only: Did the patient answer "yes" to any questions in Part A?

No ☐

Yes ☐

Ask CAR question only, then stop

Ask all 6 CRAFFT questions

B

	No	Yes
1. Have you ever ridden in a CAR driven by someone (including yourself) who was "high" or had been using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you ever use alcohol or drugs to RELAX , feel better about yourself, or fit in?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you ever use alcohol or drugs while you are by yourself, or ALONE ?	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you ever FORGET things you did while using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
6. Have you ever gotten into TROUBLE while you were using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>

CONFIDENTIALITY NOTICE:

The information recorded on this page may be protected by special federal confidentiality rules (42 CFR Part 2), which prohibit disclosure of this information unless authorized by specific written consent. A general authorization for release of medical information is NOT sufficient for this purpose.

Other screening tests

- The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was developed for the World Health Organization (WHO) to detect drug and other psychoactive substance;
- The ASSIST has demonstrated good concurrent, construct, discriminative, and predictive validity as well as test-retest reliability (WHO, 2003).
- Accordingly, the ASSIST has been recommended for use by the U.S. National Institute of Drug Use (NIDA, 2009) and the Substance Abuse and Mental Health Services Administration (SAMHSA, 2015).

Question 1

(If completing follow-up please cross check the participant's answers with the answers given for Q1 at baseline.

Any differences on this question should be queried)

In your life, which of the following substances have you ever used? (NON-MEDICAL USE ONLY)	No	Yes
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	3
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	3
d. Cocaine (coke, crack, etc.)	0	3
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	3
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	3
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	3
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	3
j. Other - specify:	0	3

Probe if all answers are negative:
"Not even when you were in school?"

If "No" to all items, stop interview.
If "Yes" to any of these items, ask Question 2 for each substance ever used.

Question 2

In the <u>past three months</u> , how often have you used the substances you mentioned (FIRST DRUG, SECOND DRUG, ETC)?	Never	Once or	Twice	Monthly	Weekly	Daily or	Almost	Daily
a. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	2	3	4	6			
b. Alcoholic beverages (beer, wine, spirits, etc.)	0	2	3	4	6			
c. Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6			
d. Cocaine (coke, crack, etc.)	0	2	3	4	6			
e. Amphetamine type stimulants (speed, diet pills, ecstasy, etc.)	0	2	3	4	6			
f. Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	2	3	4	6			
g. Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)	0	2	3	4	6			
h. Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)	0	2	3	4	6			
i. Opioids (heroin, morphine, methadone, codeine, etc.)	0	2	3	4	6			
j. Other - specify:	0	2	3	4	6			

If "Never" to all items in Question 2, skip to Question 6.
If any substances in Question 2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used.

TABLE 1 Diagnoses associated with substance class

	Psychotic disorders	Bipolar disorders	Depressive disorders	Anxiety disorders	Obsessive-compulsive and related disorders	Sleep disorders	Sexual dysfunctions	Delirium	Neurocognitive disorders	Substance use disorders	Substance intoxication	Substance withdrawal
Alcohol	I/W	I/W	I/W	I/W		I/W	I/W	I/W	I/W/P	X	X	X
Caffeine				I		I/W					X	X
Cannabis	I			I		I/W		I		X	X	X
Hallucinogens												
Phencyclidine	I	I	I	I				I		X	X	
Other hallucinogens	I*	I	I	I				I		X	X	
Inhalants	I		I	I				I	I/P	X	X	
Opioids			I/W	W		I/W	I/W	I/W		X	X	X
Sedatives, hypnotics, or anxiolytics	I/W	I/W	I/W	W		I/W	I/W	I/W	I/W/P	X	X	X
Stimulants**	I	I/W	I/W	I/W	I/W	I/W	I	I		X	X	X
Tobacco						W				X		X
Other (or unknown)	I/W	I/W	I/W	I/W	I/W	I/W	I/W	I/W	I/W/P	X	X	X

Note. X = The category is recognized in DSM-5.

I = The specifier “with onset during intoxication” may be noted for the category.

W = The specifier “with onset during withdrawal” may be noted for the category.

I/W = Either “with onset during intoxication” or “with onset during withdrawal” may be noted for the category.

P = The disorder is persisting.

*Also hallucinogen persisting perception disorder (flashbacks).

**Includes amphetamine-type substances, cocaine, and other or unspecified stimulants.

Alcohol

Alcohol Use Disorder

Diagnostic Criteria

- A. A problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:
1. Alcohol is often taken in larger amounts or over a longer period than was intended.
 2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
 3. A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
 4. Craving, or a strong desire or urge to use alcohol.
 5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home.
 6. Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
 7. Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
 8. Recurrent alcohol use in situations in which it is physically hazardous.
 9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
 10. Tolerance, as defined by either of the following:
 - a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
 - b. A markedly diminished effect with continued use of the same amount of alcohol.
 11. Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for alcohol (refer to Criteria A and B of the criteria set for alcohol withdrawal, pp. 499–500).
 - b. Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms.

- It's associated with risky sexual behaviors and IV drug use, both of which lead to higher rates of HIV transmission;
- Blood alcohol concentrations of 100–200 mg: impaired motor function and judgment; 200–400 mg: stupor and coma:

TABLE 8.3. Medical Complications of Alcohol Abuse and Dependence

Gastritis/peptic ulcer	Pancreatitis
Cirrhosis/hepatic failure	Anemia
Pneumonia	Malnutrition
Trauma	Peripheral neuropathy
Subdural hematoma	Dementia
Cardiomyopathy	Wernicke-Korsakoff syndrome

Alcohol

Alcohol Intoxication

Diagnostic Criteria

- A. Recent ingestion of alcohol.
- B. Clinically significant problematic behavioral or psychological changes (e.g., inappropriate sexual or aggressive behavior, mood lability, impaired judgment) that developed during, or shortly after, alcohol ingestion.
- C. One (or more) of the following signs or symptoms developing during, or shortly after, alcohol use:
 - 1. Slurred speech.
 - 2. Incoordination.
 - 3. Unsteady gait.
 - 4. Nystagmus.
 - 5. Impairment in attention or memory.
 - 6. Stupor or coma.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication with another substance.

Alcohol Withdrawal

Diagnostic Criteria

- A. Cessation of (or reduction in) alcohol use that has been heavy and prolonged.
- B. Two (or more) of the following, developing within several hours to a few days after the cessation of (or reduction in) alcohol use described in Criterion A:
 - 1. Autonomic hyperactivity (e.g., sweating or pulse rate greater than 100 bpm).
 - 2. Increased hand tremor.
 - 3. Insomnia.
 - 4. Nausea or vomiting.
 - 5. Transient visual, tactile, or auditory hallucinations or illusions.
 - 6. Psychomotor agitation.
 - 7. Anxiety.
 - 8. Generalized tonic-clonic seizures.
- C. The signs or symptoms in Criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Opiates

Opioid Intoxication

Diagnostic Criteria

- A. Recent use of an opioid.
- B. Clinically significant problematic behavioral or psychological changes (e.g., initial euphoria followed by apathy, dysphoria, psychomotor agitation or retardation, impaired judgment) that developed during, or shortly after, opioid use.
- C. Pupillary constriction (or pupillary dilation due to anoxia from severe overdose) and one (or more) of the following signs or symptoms developing during, or shortly after, opioid use:
 - 1. Drowsiness or coma.
 - 2. Slurred speech.
 - 3. Impairment in attention or memory.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication with another substance.

Opioid Withdrawal

Diagnostic Criteria

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- A. Presence of either of the following:
 - 1. Cessation of (or reduction in) opioid use that has been heavy and prolonged (i.e., several weeks or longer).
 - 2. Administration of an opioid antagonist after a period of opioid use.
- B. Three (or more) of the following developing within minutes to several days after Criterion A:
 - 1. Dysphoric mood.
 - 2. Nausea or vomiting.
 - 3. Muscle aches.
 - 4. Lacrimation or rhinorrhea.
 - 5. Pupillary dilation, piloerection, or sweating.
 - 6. Diarrhea.
 - 7. Yawning.
 - 8. Fever.
 - 9. Insomnia.
- C. The signs or symptoms in Criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.

Cocaine and Other Stimulants

Stimulant Intoxication

Diagnostic Criteria

- A. Recent use of an amphetamine-type substance, cocaine, or other stimulant.
- B. Clinically significant problematic behavioral or psychological changes (e.g., euphoria or affective blunting; changes in sociability; hypervigilance; interpersonal sensitivity; anxiety, tension, or anger; stereotyped behaviors; impaired judgment) that developed during, or shortly after, use of a stimulant.
- C. Two (or more) of the following signs or symptoms, developing during, or shortly after, stimulant use:
 - 1. Tachycardia or bradycardia.
 - 2. Pupillary dilation.
 - 3. Elevated or lowered blood pressure.
 - 4. Perspiration or chills.
 - 5. Nausea or vomiting.
 - 6. Evidence of weight loss.
 - 7. Psychomotor agitation or retardation.
 - 8. Muscular weakness, respiratory depression, chest pain, or cardiac arrhythmias.
 - 9. Confusion, seizures, dyskinesias, dystonias, or coma.

Stimulant Withdrawal

Diagnostic Criteria

- A. Cessation of (or reduction in) prolonged amphetamine-type substance, cocaine, or other stimulant use.
- B. Dysphoric mood and two (or more) of the following physiological changes, developing within a few hours to several days after Criterion A:
 - 1. Fatigue.
 - 2. Vivid, unpleasant dreams.
 - 3. Insomnia or hypersomnia.
 - 4. Increased appetite.
 - 5. Psychomotor retardation or agitation.
- C. The signs or symptoms in Criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.

Hallucinogens

Phencyclidine Intoxication

Diagnostic Criteria

- A. Recent use of phencyclidine (or a pharmacologically similar substance).
- B. Clinically significant problematic behavioral changes (e.g., belligerence, assaultiveness, impulsiveness, unpredictability, psychomotor agitation, impaired judgment) that developed during, or shortly after, phencyclidine use.
- C. Within 1 hour, two (or more) of the following signs or symptoms:

Note: When the drug is smoked, "snorted," or used intravenously, the onset may be particularly rapid.

1. Vertical or horizontal nystagmus.
2. Hypertension or tachycardia.
3. Numbness or diminished responsiveness to pain.
4. Ataxia.
5. Dysarthria.
6. Muscle rigidity.
7. Seizures or coma.
8. Hyperacusis.

- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication with another substance.

Other Hallucinogen Intoxication

Diagnostic Criteria

- A. Recent use of a hallucinogen (other than phencyclidine).
- B. Clinically significant problematic behavioral or psychological changes (e.g., marked anxiety or depression, ideas of reference, fear of "losing one's mind," paranoid ideation, impaired judgment) that developed during, or shortly after, hallucinogen use.
- C. Perceptual changes occurring in a state of full wakefulness and alertness (e.g., subjective intensification of perceptions, depersonalization, derealization, illusions, hallucinations, synesthesias) that developed during, or shortly after, hallucinogen use.
- D. Two (or more) of the following signs developing during, or shortly after, hallucinogen use:

1. Pupillary dilation.
2. Tachycardia.
3. Sweating.
4. Palpitations.
5. Blurring of vision.
6. Tremors.
7. Incoordination.

- E. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication with another substance.

Hallucinogen Persisting Perception Disorder

Diagnostic Criteria

292.89 (F16.983)

- A. Following cessation of use of a hallucinogen, the reexperiencing of one or more of the perceptual symptoms that were experienced while intoxicated with the hallucinogen (e.g., geometric hallucinations, false perceptions of movement in the peripheral visual fields, flashes of color, intensified colors, trails of images of moving objects, positive afterimages, halos around objects, macropsia and micropsia).
- B. The symptoms in Criterion A cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The symptoms are not attributable to another medical condition (e.g., anatomical lesions and infections of the brain, visual epilepsies) and are not better explained by another mental disorder (e.g., delirium, major neurocognitive disorder, schizophrenia) or hypnopompic hallucinations.

Sedatives, hypnotics or anxiolytics

Sedative, Hypnotic, or Anxiolytic Intoxication

Diagnostic Criteria

- A. Recent use of a sedative, hypnotic, or anxiolytic.
- B. Clinically significant maladaptive behavioral or psychological changes (e.g., inappropriate sexual or aggressive behavior, mood lability, impaired judgment) that developed during, or shortly after, sedative, hypnotic, or anxiolytic use.
- C. One (or more) of the following signs or symptoms developing during, or shortly after, sedative, hypnotic, or anxiolytic use:
 - 1. Slurred speech.
 - 2. Incoordination.
 - 3. Unsteady gait.
 - 4. Nystagmus.
 - 5. Impairment in cognition (e.g., attention, memory).
 - 6. Stupor or coma.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication with another substance.

Sedative, Hypnotic, or Anxiolytic Withdrawal

Diagnostic Criteria

- A. Cessation of (or reduction in) sedative, hypnotic, or anxiolytic use that has been prolonged.
- B. Two (or more) of the following, developing within several hours to a few days after the cessation of (or reduction in) sedative, hypnotic, or anxiolytic use described in Criterion A:
 - 1. Autonomic hyperactivity (e.g., sweating or pulse rate greater than 100 bpm).
 - 2. Hand tremor.
 - 3. Insomnia.
 - 4. Nausea or vomiting.
 - 5. Transient visual, tactile, or auditory hallucinations or illusions.
 - 6. Psychomotor agitation.
 - 7. Anxiety.
 - 8. Grand mal seizures.
- C. The signs or symptoms in Criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.

Cannabis

Cannabis Intoxication

Diagnostic Criteria

- A. Recent use of cannabis.
- B. Clinically significant problematic behavioral or psychological changes (e.g., impaired motor coordination, euphoria, anxiety, sensation of slowed time, impaired judgment, social withdrawal) that developed during, or shortly after, cannabis use.
- C. Two (or more) of the following signs or symptoms developing within 2 hours of cannabis use:
 - 1. Conjunctival injection.
 - 2. Increased appetite.
 - 3. Dry mouth.
 - 4. Tachycardia.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication with another substance.

Cannabis Withdrawal

Diagnostic Criteria

292.0 (F12.288)

- A. Cessation of cannabis use that has been heavy and prolonged (i.e., usually daily or almost daily use over a period of at least a few months).
- B. Three (or more) of the following signs and symptoms develop within approximately 1 week after Criterion A:
 - 1. Irritability, anger, or aggression.
 - 2. Nervousness or anxiety.
 - 3. Sleep difficulty (e.g., insomnia, disturbing dreams).
 - 4. Decreased appetite or weight loss.
 - 5. Restlessness.
 - 6. Depressed mood.
 - 7. At least one of the following physical symptoms causing significant discomfort: abdominal pain, shakiness/tremors, sweating, fever, chills, or headache.
- C. The signs or symptoms in Criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.