

Stimulants

(Session 2)



Michael Weaver, MD, DFASAM

*Professor and Medical Director
Center for Neurobehavioral Research on Addiction
The University of Texas Health Science Center at Houston*


Objectives




Identify different types of behavioral counseling to treatment of stimulant use disorder.



Discuss Contingency Management for enhancement of counseling.

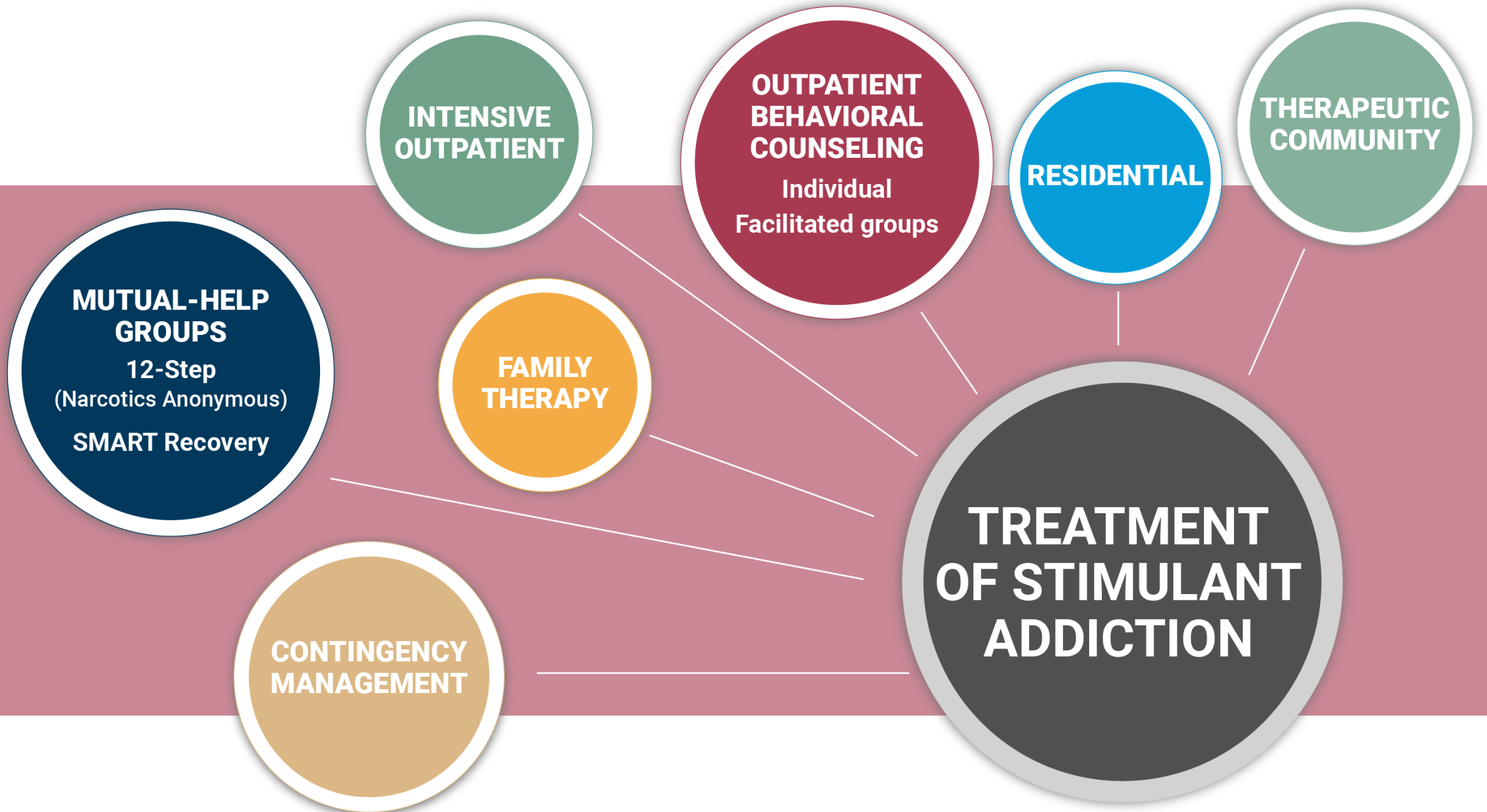


Recognize the basics of Mindfulness for addiction treatment.



Identify promising pharmacologic options for treatment of stimulant use disorder.





Behavioral Addiction Treatment



MOTIVATIONAL INTERVIEWING

Motivate the patient to
reduce/stop drinking
and/or seek further
treatment

COGNITIVE-BEHAVIORAL TREATMENT

Identify life stressors,
high-risk situations for
drinking, and coping skills
deficits
Use modeling and rehearsal

RELAPSE PREVENTION

Identify triggers, practice
avoiding, emphasize
responsibility
A 'slip' is a learning
opportunity

Other Types of Addiction Counseling



- **Supportive psychotherapy**
- **Network therapy**
- **Building Social Networks**
- **Community Reinforcement and Family Training (CRAFT)**
- **Acceptance and Commitment Therapy**

Contingency Management

- Behavioral therapy that has shown success for stimulant addiction and others
- “Paying addicts to stay clean”
- Voucher-based system to give positive rewards for staying in treatment and giving urine samples that are negative for drugs
- Exchange vouchers for items that encourage healthy living
- Drug-free lifestyle goals eventually replace need for vouchers as rewards
- Expensive, but less than costs of addiction to society



Paying People (less) to Stay Clean



- Contingency Management strategies are effective for treating addiction
- Expensive
- Prize-based CM is less expensive
- Earn chance to draw a chip for a prize (0-\$100) for each clean urine
- Number of draws increases as number of weeks clean increases
- Can also use lottery tickets

Mindfulness



- **Derived from philosophies concerning cultivation of awareness**
- **Practices designed to evoke a state of mindfulness**
- **Focused attention**
 - Concentrate on breathing
- **Acknowledge and disengage from distracting thoughts and emotions**
- **State of metacognitive awareness**
- **Moment-by-moment monitoring**
 - Cognition
 - Emotion
 - Sensation
 - Perception
- **Attentive and nonjudgmental**
- **No perseveration on thoughts of past and future**

Mindfulness and Addiction



- **Mindlessness**

- Characteristic of addiction
- Habitual responses
- Automatic behavior
- No regard for consequences

- **Mindfulness**

- Remain nonreactive
- Accept distressing thoughts and emotions

- **Mindfulness enhances capacity for cognitive control**

- **Reduces substance use and craving**

- **Mindfulness originally focused on reducing emotional distress**

- Stress
- Chronic pain
- Depression

- **Mindfulness meditation leads to changes in brain structure**

Mindfulness-based Interventions



■ Practices

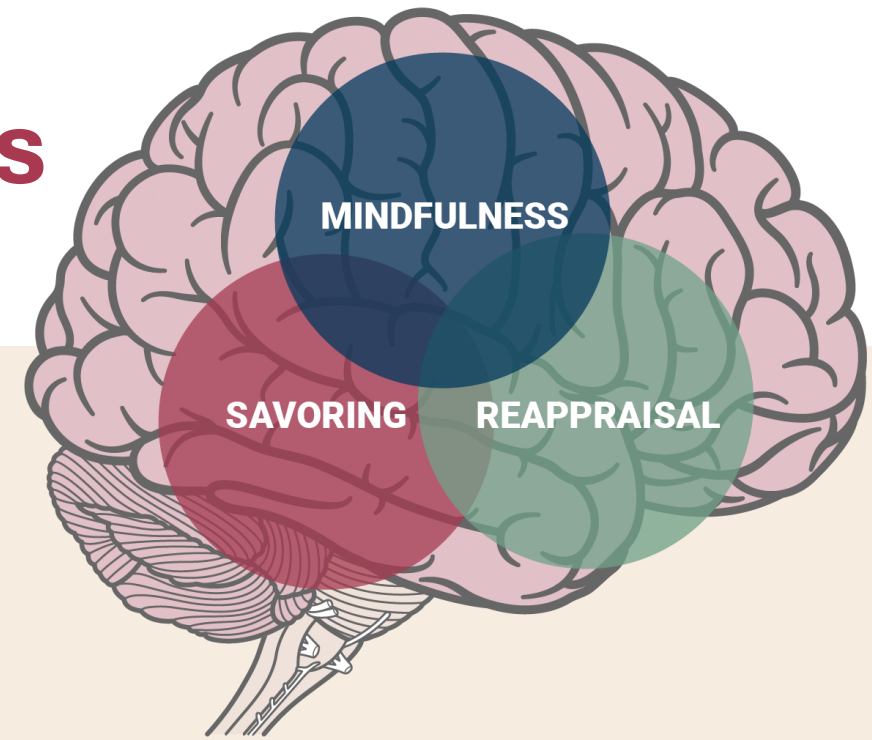
- Mindful breathing
- Body scan meditation
- Debrief as group

■ Chocolate exercise

- Compare with craving for drugs

■ Mindfulness de-automatizes addictive behavior

- Deconstruct craving
- Adaptively respond to urge rather than automatically react to cues to use



■ Group therapy format

■ Weekly sessions for around eight weeks

- Psychoeducational material
- Homework exercises

■ Guided by trained clinician

- Requires intensive instructor training

Smartphone Apps

- Recovery-based applications (apps) for smartphones combine evidence-based research and technology
- 24/7 access to support and connection
- Doesn't require interpersonal interaction
- Features
 - Track sobriety
 - Monitor triggers
 - Connect with peers in recovery
 - Access information
 - Keep a journal



Pharmacologic Treatments for Stimulant Use Disorder



- Desipramine
- Imipramine
- Monoamine oxidase inhibitors
- Fluoxetine
- Trazodone
- Haloperidol
- Flupenthixol
- Lithium
- Methylphenidate
- Levodopa
- Bromocriptine
- Amantidine
- Carbamazepine
- Valproate
- Topiramate
- Mazindol
- Naloxone
- Buprenorphine
- Methadone

Many tried, none effective

Possible New Combination?



- Accelerated Development of Additive Pharmacotherapy Treatment (ADAPT) for Methamphetamine Use Disorder
- Sponsored by National Institute on Drug Abuse Clinical Trials Network (NIDA CTN)
- High-dose bupropion
 - Depression medication
- High-frequency naltrexone injections
 - Opioids, alcohol
- 400 subjects with daily methamphetamine use
- Multiple sites throughout U.S.
- Just published positive findings

Referral to Treatment



- Refer high-risk patients for a full assessment
- If nearby treatment resources are not available, provide
 - Support group contact information
 - Counseling resources
 - Clergy
 - Mental health referrals
- SAMHSA Treatment locator website www.findtreatment.samhsa.gov
- American Society of Addiction Medicine www.asam.org
- American Academy of Addiction Psychiatry www.aaap.org
- National Association for Alcohol and Drug Abuse Counselors www.naadac.org

Summary



- Different types of addiction treatment are available, which are successful and cost-effective
- Cognitive-Behavioral Therapy helps identify triggers to use and works on enhancement of coping skills
- Contingency Management provides immediate positive rewards for specific recovery behaviors to compete with the rewarding aspects of stimulant use
- Mindfulness helps resist cravings and disrupt automatic behaviors of using stimulants
- No FDA-approved medications are currently available for treatment of stimulant use disorder

References



- Weaver MF: ***Addiction Treatment***. Carlat Publishing, 2017
- Weaver MF, et al: *Role of the primary care physician in problems of substance abuse*. Archives of Internal Medicine 1999;159:913
- Miller SC, et al: ***Principles of Addiction Medicine***, 7th Ed., New York: Wolters Kluwer, 2024
- Trivedi MH, et al: Bupropion and naltrexone in methamphetamine use disorder. N Engl J Med 2021;384(2):140-153.

Resources



- **Clinical Practice Guideline for Stimulant Use Disorder Management, American Society of Addiction Medicine** <https://www.asam.org/quality-care/clinical-guidelines/stimulant-use-disorders>
- **Treatment of Stimulant Use Disorder, SAMHSA** <https://store.samhsa.gov/sites/default/files/pep20-06-01-001.pdf>