Learning Objectives

• Participants will be able to describe the research evidence to support Contingency Management.

• Participants will be able to understand how Cognitive Behavioral Therapy (CBT) and Community Reinforcement Approach (CRA) can be used to treat Stimulant Use Disorder (StUD).

• Participants will be able to describe the ways in which exercise can help people with StUD.
Clinical Challenges for Individuals with Methamphetamine Use Disorder (MUD)

- Overdose death
- Limited understanding of stimulant addiction
- Ambivalence about need to stop use
- Impulsivity/Poor judgment
- Cognitive impairment and poor memory
- Paranoia
Clinical Challenges with Individuals with Methamphetamine Use Disorder

- Anhedonia
- Hypersexuality/Hypossexualitity
- Violence and psychosis
- Powerful Pavlovian trigger-craving response
- Very poor retention in outpatient treatment
Special Treatment Consideration Should Be Made for the Following Groups

People who inject methamphetamine.
People who use methamphetamine daily.
Women (high rates of physical/sexual abuse).
Homeless, chronically mentally ill and/or individuals with high levels of psychiatric symptoms at admission.
Men who have sex with men (MSM).
People who use stimulants who are under the age of 21.
Individuals in medication-assisted treatment for Opioid Use Disorder (OUD).
• In a sample of 583 participants at a Washington State syringe exchange program (443 opioids; 140 methamphetamine), survey data were collected on their attitudes about stopping drug use.
• **82%** of the individuals who reported opioids as their main drug expressed an interest in reducing/stopping opioid use
• **46%** of individuals who reported methamphetamine as their main drug expressed an interest in reducing/stopping their meth use.
Treatment for Individuals with Stimulant Use Disorder
Dropout rates of in-person psychosocial substance abuse treatment: a systematic review and meta-analysis (Lappan et al., Addiction, 2020)

- Drop out rates in first 90 days of treatment
- 151 studies, with 26,243 participants.
- Results yielded overall average dropout rates, and predictors of dropout.
# Substance Targeted and Dropout

<table>
<thead>
<tr>
<th>Treatment Target</th>
<th>Dropout Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin</td>
<td>25.1</td>
</tr>
<tr>
<td>Tobacco</td>
<td>25.5%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>26.1%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>48.7%</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>53.5%</td>
</tr>
</tbody>
</table>
Association Between Methamphetamine Use and Retention Among Patients With Opioid Use Disorders Treated With Buprenorphine

- The study utilized data on adult patients receiving buprenorphine from Washington State Medication Assisted Treatment-Prescription Drug and Opioid Addiction program clinics between November 1, 2015, and April 31, 2018 (N=799). Past 30-day substance use data were collected at baseline, 6-months, and date of program discharge.

- 30% (n=237) of individuals reported meth use at admission. Baseline methamphetamine use was associated with more than twice the relative hazards for discharge in adjusted models (aHR=2.39; 95% CI: 1.94–2.93).
Association Between Methamphetamine Use and Retention Among Patients With Opioid Use Disorders Treated With Buprenorphine
Do individuals who use methamphetamine respond differently to behavioral treatments than individuals who use cocaine?

In published research studies where treatment response to behavioral treatments have been compared with individuals who use cocaine vs individuals who use methamphetamine, there is:

No evidence of differential treatment response.
Systematic Reviews and Meta-analyses
RESEARCH ARTICLE

Comparative efficacy and acceptability of psychosocial interventions for individuals with cocaine and amphetamine addiction: A systematic review and network meta-analysis

Franco De Crescenzo, Marco Ciabattini, Gian Loreto D’Alò, Riccardo De Giorgi, Cinzia Del Giovane, Carolina Cassar, Luigi Janiri, Nicolas Clark, Michael Joshua Ostacher, Andrea Cipriani

1 Department of Psychiatry, University of Oxford, Oxford, United Kingdom, 2 Oxford Health NHS Foundation Trust, Warneford Hospital, Oxford, United Kingdom, 3 Institute of Psychiatry and Clinical Psychology, Catholic University of the Sacred Heart, Rome, Italy, 4 School of Hygiene and Preventive Medicine, University of Rome Tor Vergata, Rome, Italy, 5 Institute of Primary Health Care (BIHAM), University of Berne, Berne, Switzerland, 6 Department of Dynamic and Clinical Psychology, Sapienza University of Rome, Rome, Italy, 7 Mental Health and Substance Abuse, World Health Organization, Geneva, Switzerland, 8 Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, California, United States of America, 9 Department of Psychiatry, VA Palo Alto Health Care System, Palo Alto, California, United States of America.
Meta-analysis Findings

Network meta-analysis was used to analyze 50 clinical studies (6,943 participants) on 12 different psychosocial interventions for cocaine and/or amphetamine addiction. The combination of contingency management and community reinforcement approach, was the most efficacious and most acceptable treatment both in the short and long term.


- 44 Studies reviewed.
- Conclusions: While Contingency Management (CM) interventions showed the strongest evidence favoring the outcomes assessed, tailored Cognitive Behavioral Therapy (CBT) alone or with CM was also effective in the target population.

Results and Conclusions (Bentzly et al, 2021)

**Results**  A total of 157 studies comprising 402 treatment groups and 15,842 participants were included. Only contingency management programs were significantly associated with an increased likelihood of having a negative test result for the presence of cocaine (OR, 2.13; 95%)

**Conclusions**  In this meta-analysis, contingency management programs were associated with reductions in cocaine use among adults.
The search identified 1443 reports of which 74 reports involving 10,444 unique adult participants met inclusion criteria for narrative review and 60 for inclusion in meta-analyses.

A systematic search of PubMed, Cochrane CENTRAL, Web of Science, and reference sections of articles from inception through May 5, 2020. The following search terms were used: vouchers OR contingency management OR financial incentives.
Contingency management was associated with end-of-treatment outcomes for all 6 problems examined separately, with mean effect sizes for 4 of 6 in the medium-large range:

- stimulants, Cohen d = 0.70 [95% CI, 0.49-0.92];
- cigarette use, Cohen d = 0.78 [95% CI, 0.43-1.14];
- illicit opioid use, Cohen d = 0.58 [95% CI, 0.30-0.86];
- medication adherence, Cohen d = 0.75 [95% CI, 0.30-1.21],

2 in the small-medium range
- polysubstance use, Cohen d = 0.46 [95% CI, 0.30-0.62];
- therapy attendance, d = 0.43 [95% CI, 0.22-0.65].

Collapsing across abstinence and adherence categories, contingency management was associated with medium effect sizes for abstinence (Cohen d = 0.58; 95% CI, 0.47-0.69

These results provide evidence supporting the use of contingency management in addressing key clinical problems among patients receiving Medications for Opioid Use Disorder (MOUD), including the ongoing epidemic of comorbid psychomotor stimulant misuse.
Treatment of stimulant use disorder: A systematic review of reviews
Ronsley et al., 2020

– Synthesize available evidence on psychosocial and pharmacologic interventions for the treatment of stimulant use disorder.
– Identify the most effective treatments.
– Highlight gaps for future study.
Interventions reviewed

- 29 reviews resulted.
- 11 interventions were examined:
  - Contingency management
  - Cognitive behavioral treatment
  - Acupuncture
  - Antidepressants (e.g., fluoxetine, bupropion)
  - Dopamine agonists (e.g., levodopa)
  - Antipsychotics (e.g., aripiprazole)
  - Anticonvulsants (e.g., topiramate)
  - Disulfiram
  - Opioid agonists (e.g., buprenorphine, methadone)
  - N-acetylcysteine (for acetaminophen overdose)
  - Psychostimulants (e.g., modafinil, methylphenidate)
Conclusions

- The strongest body of evidence was for contingency management.
- Of pharmacologic treatments, psychostimulants appear to be the most promising, but data are insufficient to support clinical use and further research is necessary.
- Some positive results for opioid agonist treatment, n-acetylcysteine, disulfiram, and antidepressants.
- All other interventions found predominantly negative results.
Contingency Management (also known as Motivational Incentives)
Contingency Management

A technique employing the **systematic delivery of positive reinforcement for desired behaviors**. In the treatment of methamphetamine dependence, vouchers or prizes can be “earned” for submission of methamphetamine-free urine samples or for attendance at treatment sessions.
The 3 Essential Elements

1. Target behaviors must be readily detected
2. Tangible reinforcers are provided whenever the targeted behavior is demonstrated
3. When the target behavior does not occur, the reinforcers are withheld
1. Identify Target Behavior

A target behavior should be:
- Problematic and in need of change
- Observable
- Measurable
- Relatively easy for the patient to accomplish (at least initially)
3. Choice of Reinforcer

- May be different from what you want or like to do—and it is not what you think is good for the patient.

- Critical to view from patients’ perspectives, or you will compromise effectiveness.

It must be something the patient wants or likes to do.

MAXINE STITZER, PH.D.
6. Timing of Incentive

- Immediacy is important
- Poor timing can undermine the most well-planned intervention

I earn a point for each recovery meeting I attend weekly.
LOW COST INCENTIVES

Challenges

Isn’t this just rewarding patients for what they should be doing anyway?

That’s a common concern. But sometimes the problem is that patients are not doing the things that are good for them and need a motivational boost!
Current status of Treatment Approaches for Methamphetamine Use Disorder

- Contingency management unanimously (7 systematic reviews and meta-analyses) found to have best evidence of effectiveness.
- Other approaches with less but clear evidence of support: Cognitive Behavioral Therapy (CBT) and Community Reinforcement Approach (CRA).
- Approach with evidence for treatment of a broad variety of SUD: Motivational Interviewing (MI).
- Approach with recent studies showing benefit to methamphetamine users: Physical Exercise (PE)
Community Reinforcement Approach (CRA)
Community Reinforcement Approach

Community Reinforcement Approach (CRA) is a combination of behavioral strategies that address the role of environmental contingencies in encouraging or discouraging drug use, and attempts to rearrange these contingencies so that a non-drug using lifestyle is more rewarding than a using one.
Components of CRA

- Behavioral skills training
- Social and recreational counseling
- Marital therapy
- Motivational enhancement
- Job counseling
- Relapse prevention
A sample of CRA Topics

- Functional Analysis
- Drug Refusal Skills
- Social Skills/Assertiveness Training
- Social Recreational Counselling
- Employment Preparation Skills
- Relationship Happiness Scale
- Positive Interactions
Functional Analysis

– An essential “starting point” to provide the counselor a picture of the way stimulant use had become integrated into each patient’s life

– Allowing patients to describe aspects of her/his drug use provides valuable information important to developing a plan of recovery

– The counselor should take a non-judgmental, genuine interest and curiosity about the details of the When, Where, Why and with Whom of an individual’s stimulant use
ICS 1 – Functional Analysis: The Five Ws

Your drug use isn’t random. It doesn’t happen accidentally. If you have been using stimulants on a regular basis, then there are probably some patterns to your use. Discovering these is a good first step to understanding how to reduce or stop using.

Regular use, or binge use of methamphetamines or cocaine usually occurs in specific circumstances (e.g., places, times of day, with certain people). If you understand how methamphetamine/cocaine are entangled in your life, then you can work on reducing or eliminating your use.

To gain an understanding of how drug use has become involved in your life, it is useful to do a “Functional Analysis.” In brief, a functional analysis helps you see a clear picture of the factors that influence your drug use or simply “The five Ws.”

The Five Ws

- **When**: The time periods you use stimulants
- **Where**: The places you use and buy stimulants
- **Why**: The external cues and internal emotional states that trigger craving and use of stimulants
- **Who**: The people you use drugs with or the people you buy drugs from
- **What**: What effects do you experience (good and bad) when you use stimulants

---

**When** are the days of the week/times of day that you most often use cocaine or methamphetamine:

---

**Where** are the places you most often use and buy meth/cocaine:

---

**Why does use happen?** What are the events or things around you or the emotional feelings (triggers) that you have that often occur right before you buy and use meth/cocaine:

---

**Who** are the people you frequently use stimulants with, or buy stimulants from:

---

**What** happens when you use methamphetamine/cocaine? Good and Bad:

---
Drug Refusal Skills

- As many as one-third of individuals who return to substance use following a period of abstinence, are directly influenced by friends or family who also use.
- This inadvertent, or sometimes planned contact with friends or acquaintances who are still using can have devastating effects.
- Drug refusal is much more difficult than patients anticipate.
- It is important for the counselor to explain the importance of practicing drug-refusal training, and an example of this prompt is included.
ICS 2 – Drug Refusal Skills

Refusing Methamphetamine and Cocaine

Some Important Things to Know:

- Remember that those persons who offer you drugs or alcohol are not thinking of your best interests. They may be your friends, but once you have decided to quit, it is important for you to consider anyone who asks you to use to be a danger. They must be discouraged - politely, if possible, but firmly.

- Saying “no” is the first and most important part of your refusal response. There are different ways of saying “no” that are appropriate in different situations. Different people say “no” in different ways. It is important to feel comfortable, which means that you have to develop your own style.

- When working to develop your style, it is important to keep a few goals in mind:

  Your primary goal is to refuse or turn down an opportunity for drugs.

  Your secondary goals might be to:
  - Reinforce your commitment not to use
  - Feel good about yourself for not using.

Components of Effective Refusal

When creating your own refusal style, a few basic components of your refusal responses will increase the likelihood that they will be effective.

1. “No” should be the first thing you say.
   a. No, thank you.
   b. No, I’m not using anymore; it’s causing me too many problems.

2. Tell the person offering you drugs not to ask you now or in the future.

3. Saying things like: “maybe later,” “I have to get home,” or “I’m on medication” just make it likely that they will ask again.

4. Body language is important.

5. Making good eye contact is important; look directly at the person when you answer.

6. Your expression and tone should clearly indicate that you are serious.

7. Change the subject to a new topic of conversation but don’t prolong being in the presence of the person.

Practice Refusal Skills

It can be helpful to practice refusal skills. Practice prepares you with words and a plan.

Think about situations where you have used drugs. Examples of such situations are friends stopping by with drugs, friends calling or texting, running into friends while shopping or leaving work, and attending parties or celebrations.

What are at least three typical scenarios in which you have had, or may have difficulty refusing drugs? Choose a specific situation, include specific people, the time of day, the place, and the activity.
Social Skills/Assertiveness Training

– Poor interpersonal skills can give rise to emotional states such as anger, frustration, resentment, depression or anxiety
– Training will help patients meet not drug-using peers, become a more effective communicator, participate in social activities and allow patients to express their feelings in an appropriate way
– The goal is to better handle interpersonal situations
– Learn to be assertive without stepping on the rights of others
– Role play will provide an opportunity for the patient to become more comfortable in asserting her/himself
ICS 4 – Social Skills/Assertiveness Training

What is assertiveness?
Assertiveness means to behave in a confident, forceful, yet respectful way. Being assertive helps you to stand up for yourself and stick to your beliefs.

Why is assertiveness training relevant to treatment for drug use?
Assertiveness training can help with improving interpersonal relations. Poor interpersonal skills can give rise to emotional states such as anger, frustration, resentment, depression, or anxiety and decrease the quality of life and increase the risk of relapse.

Social-skills training is provided to help you to:
• Meet nondrug-using peers.
• Interact more effectively with coworkers, family members, or roommates.
• Attend social activities that have normally been avoided.
• Express feelings or assert yourself in an appropriate way.

Assertiveness training is particularly appropriate if you tend to be either too passive or too aggressive in social situations. Assertiveness training is one method for increasing positive experiences and decreasing negative experiences in social settings.

What is passive behavior?
• Do you deny yourself or your rights? ___Yes ___No ___Sometimes
• Do you avoid expressing feelings? ___Yes ___No ___Sometimes
• Do you feel hurt and anxious? ___Yes ___No ___Sometimes
• Do you allow others to choose for you? ___Yes ___No ___Sometimes
• Do you fail to achieve your goals? ___Yes ___No ___Sometimes

What is aggressive behavior?
• Do you accomplish goals without concern of bad feelings and resentment in others?
  ___Yes ___No ___Sometimes

• Do you express feelings and promote yourself, but usually hurt others in the process?
  ___Yes ___No ___Sometimes
• Do you minimize others’ worth and put them down?
  ___Yes ___No ___Sometimes
• Do you make choices for others, and deny them their rights?
  ___Yes ___No ___Sometimes

What is assertive behavior?
• Assertive behavior enables you to express your feelings honestly.
• Assertive behavior allows you to achieve your personal goals.
• Assertive behavior respects the feelings of others.

In summary:
• Passive: You are hurt by not getting what you want.
• Aggressive: The other person is hurt and may seek revenge.
• Assertive: Neither person is hurt, and both get what they want.
Some tips on how to be assertive.

Rate yourself on each item from 0 to 10,
0 meaning “I need to work on this”
10 meaning “I’m as good as I can be with this.”

- I clearly express my needs (what you want). Rating: _____
- I balance the negative with the positive when I give others feedback. I always start with something positive before stating something that is critical or implies blame. (For example if telling someone that you want them to stop nagging at you, you might say, “I know you have really tried to be supportive and understanding of my problem in the past, but lately I feel like you have been on my case constantly.”) Rating: _____
- I use “I” statements when expressing my feelings or needs. (For example, you could say “I am angry because I feel like nobody cares about my feelings,” instead of “You make me feel awful.”) Rating: _____
- I speak loudly and firmly (Your message should be said with authority but not hostility. You want to convey that you mean business but are respectful). Rating: _____
- I respond promptly. (This lets the other person know that you have thought about this and are sure of yourself). Rating: _____
- I make good eye contact when speaking. I look at the other person when I speak and when I listen. (Again, this promotes the impression that you are serious about your message). Rating: _____
- My body gestures and facial expressions are consistent with my message. (For example, don’t smile if you are angry.) Rating: _____

Practice

What are some situations where you feel you might have been too passive or too aggressive? For example, at home, at work, with friends, with neighbors. Pick one to act out with your counselor.
Social/Recreational Counseling

– Patients are assisted in developing an interest and participating in recreational and social activities that do not involve drugs
– A rational for lifestyle changes to support their recovery are address in this session
– Patients develop a list of potentially reinforcing activities, may some they use to enjoy or new activities they may have been interested in
– A list of persons who might join them in these activities is created

Center on Rural Addiction
UNIVERSITY OF VERMONT

Vermont Center on Behavior & Health
The University of Vermont
ICS 8 – Social/Recreational Counseling

This session focuses on developing interest and participation in recreational and social activities that are pleasurable and do not involve drug use. The goal is to increase your participation in social activities that may serve as alternatives drug use.

Why this is important?
Social and recreational activities are important in most people's lives. They provide a source of enjoyment that can be looked forward to after a stressful day, a way to decrease boredom, a way to feel physically healthy, an outlet for developing a skill that makes you feel good about yourself, a chance to be with people you like to develop friendships.

These activities can play a very important part in becoming and staying drug free. When you give up using drugs, you must do something else during the times you were using. If the things you do are not satisfying or enjoyable, or you don't do anything but sit around and feel lonely or bored, you are more likely to use drugs.

List Activities and People
The first step is to develop a list of activities that you are interested in pursuing.

(See the Leisure Interest Checklist for ideas.)

- What are some current activities you enjoy?

- What are some activities you have always wanted to do, but have never done?

- Of these activities which are the most realistic with regard to: your amount of interest, cost, others' involvement, time commitment, your likelihood of engaging in the activity?

- List some non-drug-using people who might participate in these activities with you?
Set Goals

- What activities could you take part in over the next week?
  ____________________________________________________________
  ____________________________________________________________
  ____________________________________________________________

- What activities could you take part in over the next month?
  ____________________________________________________________
  ____________________________________________________________
  ____________________________________________________________

- What one new activity would you like to try during this month?
  ____________________________________________________________
  ____________________________________________________________
  ____________________________________________________________

- Who could take part in these activities with you?
  ____________________________________________________________
  ____________________________________________________________
  ____________________________________________________________
Cognitive Behavioral Therapy (CBT)
Cognitive Behavioral Therapy

• CBT is a form of “talk therapy” based on principles of social learning theory.
  – Used to teach, encourage and support individuals in reducing or stopping their harmful drug use
  – Provides skills aimed at sustaining abstinence
  – Addresses negative thought patterns and helps to develop coping strategies to prevent relapse
Drugs-Drug Paraphernalia-Drug Using Friends

• Important first things to do:
  – Disposing of drugs and drug paraphernalia
  – Inventory your residence, car and other places where drug paraphernalia might be located
  – Determining friends, family and acquaintances to avoid and or prepare a strategy to interact with these folks
  – Develop and practice drug refusal skills
Five Common Challenges in Stopping Drug Use

• How do we address the following challenges moving forward?
  – Drug Using Friends (build on what was discussed in Session 1)
  – Drugs and alcohol in the home
  – Emotional triggers such as anger and irritability
    • Boredom and loneliness
  – Special occasions such as holidays, anniversaries, weddings, birthdays as well as not-so-good occasions
# Five Common Challenges in Stopping Drug Use

Everyone who attempts to stop using substances runs into situations that make it difficult to maintain abstinence. Listed below are five of the most common situations that are encountered during the first few weeks of treatment. Next to these problems are some suggested alternatives for handling these situations.

<table>
<thead>
<tr>
<th>Challenges</th>
<th>New Approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Friends and acquaintances who use: You want to continued associations with old friends who use.</td>
<td>- Try to make friends at 12-step or other community support meetings.&lt;br&gt;- Participate in new activities that increase chances of meeting abstinence people.&lt;br&gt;- Plan activities with abstinence friends and family members.</td>
</tr>
<tr>
<td>2. Anger, irritability: Small events can create feelings of anger that seem to preoccupy your thoughts and can lead to relapse.</td>
<td>- Remind yourself that you are experiencing a healing of the brain and strong unpredictable emotions are a natural part of recovery&lt;br&gt;- Exercise&lt;br&gt;- Talk to a counselor or supportive friend.</td>
</tr>
<tr>
<td>3. Drugs and alcohol in the house: You have decided to stop using, but others in your house may still be using.</td>
<td>- Get rid of all drugs and alcohol&lt;br&gt;- Ask others not to drink or use at home&lt;br&gt;- If the problem continues, consider moving out.</td>
</tr>
<tr>
<td>4. Boredom, loneliness: Stopping substance use often means that activities you did for fun can be a problem.</td>
<td>- Put new activities on your schedule.</td>
</tr>
</tbody>
</table>

| 5. Special Occasions: Parties, dinners, holidays, celebrations | - Have a plan for answering questions about drug or alcohol use (or not using)<br>- Start your own drug-free celebrations and traditions.<br>- Have your own transportation to and from events.<br>- Leave if you get uncomfortable or start feeling deprived. |

Are some of these issues likely to be a problem for you in the next few weeks? Which ones?

---

How will you handle them?

---
Internal/External Trigger Questionnaire/Trigger Chart

– Explanation of Internal and External Triggers and their relationship to stimulant use
– Assist patient to recognize triggers, avoid triggers when possible, and when not possible to avoid learn to manage/cope with triggers
– Goal is to give patients a better understanding of the reflexive nature of the craving process and how to avoid use
RS 2 – Internal Trigger Questionnaire

During recovery there are often certain feelings or emotions that trigger the brain to think about using drugs. Read the following list of emotions and indicate which of them might trigger (or used to trigger) thoughts of using for you:

_____ Afraid       _____ Frustrated       _____ Neglected
_____ Angry        _____ Guilty          _____ Nervous
_____ Confident    _____ Happy           _____ Passionate
_____ Criticized   _____ Inadequate      _____ Pressured
_____ Depressed    _____ Insecure        _____ Relaxed
_____ Embarrassed  _____ Irritated       _____ Sad
_____ Excited      _____ Jealous         _____ Bored
_____ Exhausted    _____ Lonely          _____ Tired

C. Are there any times in the recent past in which you were attempting to not use and a specific change in your mood clearly resulted in your using? (For example, You got in a fight with someone and used in response to getting angry.) Yes _____ No _____

If yes, describe: ____________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

D. Go back to the trigger chart and enter these triggers.

A. Circle the above emotional states or feelings that have triggered your use of drugs recently.

B. Has your use in recent weeks/months been:

_____ 1. Primarily tied to emotional conditions

_____ 2. Routine and automatic without much emotional triggering.
RS 3 – External Trigger Questionnaire

1. Place a check mark next to activities or situations in which you frequently used stimulants. Place a zero (0) next to activities or situations in which you never have used stimulants.

- [ ] When home alone
- [ ] At home with friends
- [ ] At a friend’s home
- [ ] At parties
- [ ] While at dinner
- [ ] At movies
- [ ] At bars/clubs
- [ ] At concerts
- [ ] In the park
- [ ] When I gain weight
- [ ] In certain neighborhoods
- [ ] Travelling (airports, hotels, planes)
- [ ] Before a date
- [ ] During a date
- [ ] Before sexual activities
- [ ] During sexual activities
- [ ] After sexual activities
- [ ] Before going out to dinner
- [ ] Before breakfast
- [ ] At lunch break
- [ ] At sporting events
- [ ] Before work
- [ ] When carrying money
- [ ] After going past a dealer’s place
- [ ] With drug using friends
- [ ] At or near a liquor store
- [ ] Texting certain people
- [ ] After medical visits
- [ ] Before Payday
- [ ] Before going out to dinner
- [ ] Before breakfast
- [ ] At lunch break
- [ ] At sporting events
- [ ] After work
- [ ] Driving near some streets
- [ ] At a school residence
- [ ] When driving
- [ ] When internet browsing
- [ ] Calling friends who use
- [ ] At a pharmacy

C. Are there any times in the recent past in which you were attempting to not use and a specific change in your mood clearly resulted in your using? (For example, You got in a fight with someone and used in response to getting angry.) Yes _____ No _____

If yes, describe: __________________________________________
_________________________________________________________
_________________________________________________________

D. Go back to the trigger chart and enter these triggers.
### RS 2a-3a – Trigger Chart

**Name:**

**Date:**

**Instructions:** List people, places, objects, situations, and emotions below according to how likely they would trigger drug or alcohol use.

<table>
<thead>
<tr>
<th>Chance of Using</th>
<th>0%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost Never Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost Always Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always Use</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*These are "safe" situations.*

*These are low risk, but caution is needed.*

*These situations are high risk. Staying in these is extremely dangerous.*

*Involvement in these situations is deciding to stay vulnerable to addiction. Avoid totally.*
DC Session 4
Your Brain and Stimulant Recovery

• This session helps patients better understand the conditioning process that underlies craving and drug use
• A brief explanation of the powerful conditioned cravings that persist despite one’s intentions to stop using
• The automatic nature of this process is discussed in relation to Pavlov’s conditioning experiments
• Patients need to understand that stimulants change the way the brain works and can result in depression, sleep disturbances, irritability, low or high energy and drug cravings
Your Brain and Recovery

DC 4 – Your Brain and Recovery

In understanding and dealing with addiction it is important to think about your brain regarding two very powerful and different parts:

1. The higher, rational brain. This is the decision-making part of your brain.

2. The lower, emotional centers in the brain. This is your pleasure center.

Decisions to use drugs or alcohol start in the higher brain. You weigh the positives and negatives associated with using, and when you use, the pleasurable experiences happen in the lower brain.

After a time, as the negative consequences of use mount, you have probably decided at times to stop using but you are not able to stop. You decide in your higher brain, but the decision to stop is overpowered by your lower brain.

What happens?

Most people describe craving that overpower the rational decision to stop using.

Why does this happen?

1. After a period of regular substance use, the people, places, and circumstances that have been associated with the drug use have the power to trigger a response in the lower, “addicted,” brain.

2. When this happens, you feel a craving and your thinking changes, making it seem OK to use, “one more time,” or “just a little bit,” etc.

Why is this important?

1. The triggered reaction in the lower brain cannot be directly controlled. This automatic reaction is like a reflex.

2. No amount of good intentions, promises, or commitments will reduce the strength of the cravings.

3. If you are around people, in places, or in situations where you have used in the past, the chances are great that you will use again even if you have a sincere desire to stop using.

4. If you understand substance dependence, you can begin to effectively deal with it.

What can you do about this?

1. Change your behavior so that you avoid the things that will trigger cravings.

2. Start doing more healthy, alternative behaviors.

3. Reassume higher brain control of what you do by planning your day and scheduling your time.

Understanding the brain and addiction makes sense out of your behavior up until now and provides the key to beginning your first steps in recovery.

1. Have you tried to stop in the past and failed? What happened?

2. What could you have done differently in light of what you know now about the brain?
Motivational Interviewing (MI)
Motivational Interviewing

- MI aims to help individuals resolve their ambivalence and initiate positive change in their lives.
- In a recent randomized clinical trial, MI demonstrated positive benefit with decreased methamphetamine (MA) use and lower cravings in participants receiving MI regardless of intensity.
Encouraging Motivation to Change
Am I Doing this Right?

Motivational Interviewing encourages you to help people in a variety of service settings discover their interest in considering and making a change in their lives (e.g., to manage symptoms of mental illness, substance abuse, other chronic illnesses such as diabetes and heart disease).

REMIND ME
Use the back of this card to build self-awareness about your attitudes, thoughts, and communication style as you conduct your work. Keep your attention centered on the people you serve. Encourage their motivation to change.

1. Do I listen more than I talk?  
   Or am I talking more than I listen?

2. Do I keep myself sensitive and open to this person’s issues, whatever they may be?  
   Or am I talking about what I think the problem is?

3. Do I invite this person to talk about and explore his/her own ideas for change?  
   Or am I jumping to conclusions and possible solutions?

4. Do I encourage this person to talk about his/her reasons for not changing?  
   Or am I forcing him/her to talk only about change?

5. Do I ask permission to give my feedback?  
   Or am I presuming that my ideas are what he/she really needs to hear?

6. Do I reassure this person that ambivalence to change is normal?  
   Or am I telling him/her to take action and push ahead for a solution?

7. Do I help this person identify successes and challenges from his/her past and relate them to present change efforts?  
   Or am I encouraging him/her to ignore or get stuck on old stories?

8. Do I seek to understand this person?  
   Or am I spending a lot of time trying to convince him/her to understand me and my ideas?

9. Do I summarize for this person what I am hearing?  
   Or am I just summarizing what I think?

10. Do I value this person’s opinion more than my own?  
    Or am I giving more value to my viewpoint?

11. Do I remind myself that this person is capable of making his/her own choices?  
    Or am I assuming that he/she is not capable of making good choices?

Center for Evidence-Based Practices
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The Underlying Spirit of MI

- Partnership
- MI Spirit
- Acceptance
- Evocation
- Compassion
MI Processes

- **Engaging**-providing an atmosphere of trust, respect, safety, and hope in a genuine manner. Being Curious
- **Focusing**-coaching to achieve clarity on a specific change through exploration
- **Evoking**-Drawing out an individual’s desire, reasons, ability and need to make a specific change. What is their motivation, what are their challenges and resources in making this change
- **Planning**-Determine what if anything has worked in the past, and what change the individual is willing to make
MI Tools

- **Open-ended Questions** - ask for elaboration, more detail, in what ways, an example, etc.
- **Affirming** – commenting positively on the person’s statement. Decrease Sustain Talk and Increase Change Talk.
- **Reflecting** change talk, continuing the thought
- **Summarizing** – collecting bouquets of change talk
Ambivalence

- Ambivalence is normal
- Sustain talk is a:
  - statement that maintains status quo
  - statement that keep clients where they are
- Sustain talk is the natural other side of change talk
Change Talk

• Change talk is anything the patient says that indicates they’re moving towards change
• Change talk is inherently linked to a particular change goal
• “Change talk is like a glowing coal. If you blow on it, you can ignite it.”

What does Change Talk sound like?
## Change talk sounds like this …

### Activation Language
- I’d like to, I want to …
- I’ve done this before, I know I can do this.
- I really should. Life would be so much better if …
- If I don’t do this the judge, my wife, my health …

### Commitment to Change
- I will …
- I’m going to …
- I promise I’ll …
- I guarantee I’ll …
- I went to …,
- I did …, I didn’t …
Eliciting Change Talk

• All patients have some level of ambivalence and some level of motivation.

• “People are better persuaded by the reasons they themselves discovered than those that come into the minds of others.” —Blaise Pascale

• Our job is to arrange the conversation so that patients are making the argument for change.
Recognizing Change Talk

1. Alcohol is not my problem. I’m here to stop using meth, not alcohol.

2. I don’t want to hit the pipe. It is just that sometimes I have such a strong urge that I can’t resist it.

3. That program might be good at helping some people, but not me. I can change by myself.

4. I wake up on the morning telling myself that I’m not going to use and before I know it the day is gone. I cannot help it.

5. Look, my friends use a lot more than I do and they don’t have to be here.

6. I’ve been to treatment four times and I can tell you it doesn’t work.
Listening to Understand

• Questions to guide you:
  – Where are they going with this?
  – **How do they feel about the situation?**
  – What have they said?
  – **What do they really mean?**
  – How does this affect how they think?
  – How does this affect how they feel about themselves or their world?

– **How can my response elicit change talk?**
Exercise as a Treatment Intervention for Methamphetamine Dependence
Impact of Exercise on Methamphetamine Use Outcomes N=135

Exercise Group:
1h, 3 days/wk
N=69

Health Education Group:
1h, 3 days/wk
N=66

Exercise Summary

• For individuals in the first 100 days of meth recovery, exercise:
  – Improves physical conditioning
  – Reduces weight gain
  – Improves cardiovascular functioning (increases heart rate variability)
  – Reduces symptoms of anxiety and depression
  – Reduces craving for methamphetamine
  – Enhances recovery of dopamine system
  – Reduces relapse to methamphetamine post discharge (except in very heavy users)
Medications
Medications for Cocaine Use Disorder

Medications with positive studies and under consideration:
- Topiramate
- Modafinil
- Bupropion
- Amphetamine salts
- Disulfiram (mixed, worse retention)
- Propranolol (WD)
- Buprenorphine + naltrexone


Medications for Methamphetamine Use Disorder

Medications with positive studies:

- Bupropion/naltrexone
- Birtazapine

Under consideration:

- Bupropion
- Naltrexone
- Methylphenidate
- D-amphetamine
- Topiramate


QUESTIONS?
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