Curriculum Outlines and Lesson Plans for Educators

"Please Hear Me: What Addiction Means to Me"

Materials from the Family Component of the Edna I. Davis Family Support and Education Program

Index

General Introduction to the Teacher

Kids love to perform! Theater and re-enactment can provide some of the most impactful educational experiences of a young person's life. The activities below all feature some type of interactive material for students, as in playlets to re-enact or participatory "games" promoting interaction among the students. All of these activities can be accomplished either in a live classroom setting or virtually with existing videoconference software (Zoom, Teams, etc.).

The material derives in part from my *Harm Reduction in Practice: Games to Enhance Executive Function* (2016), digital copies of which are available. The material is designed to be implemented in a "flipped classroom" format idiomatic for virtual class instruction and activity, the students being supplied with the background material in advance and then guided through the activities by the teacher after s/he has reviewed the material with them.

As the teacher, you will naturally want to use this material as a starting point for your own creativity. Please do feel free to embellish and expand these resources as you see fit, remembering all the while that the subject matter you're covering often has immediate and powerful resonance in the lives of your students. As you always do, summon your best empathy and compassionate caution as you survey this material.

[Note that the Keywords in each Module can be researched and defined by the students before the class if the flipped format is used; otherwise, to engender discussion, they might be researched during the class session. Some Keywords will recur in more than one Module.]

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Module 1: "Grand Opera Is Not for Children: Youth and Substance Use"

Keywords to Be Defined: Neuron; Synapse; Pruning; Reward Centers; Anhedonia

Introduction to the Teacher: "What an amazing voice for a child so young!" "She's so tiny; where does all that sound *come* from!?" "Even at his young age, he was born to sing opera!" These and other exclamations of surprise and delight greet the latest wonder-child appearing from time to time on television performance contest shows. The young singers wow audiences with their seemingly-mature, full-throated vocal production. Cause for celebrating their prodigious talent, indeed! Or is it? What if we are, in fact, hearing a disaster—even a tragedy—in the making? That said, how is encouraging youth to over-sing related to juvenile substance abuse?

Description: This activity deals with substance abuse prevention and why prevention is so important to the health of those in our care who are the most vulnerable. We learn why children and adolescents are at special risk of becoming ensnared with chemicals.

Learning Goals: After completing this Module, the students will be able to

1. Demonstrate understanding of the special vulnerability of the childhood and adolescent brain to mood-altering substances and behaviors.

2. Describe specific prevention strategies appropriate this population related to sound decision making.

Background Material:

Handout: "Grand Opera Is Not for Children: Youth and Substance Abuse" with Post-Test

Video: *America's Got Talent* Clip: https://www.youtube.com/watch?v=Xs4tx6tS4y8

Activity Detail:

Step 1. Review the handout, "Grand Opera Is Not for Children," and take the post-test.

Step 2. Discuss the answers to the post-test as a group.

Step 3. Introduce the topic of normal brain formation being based on systematic pruning and exploitation of neurons.

Step 4. Contrast normal brain development with the concept of damaging a part of the body by over-driving it through exposure to excessive exertion by playing the following YouTube video of the child contestant, Angelica Hale, being allowed—even encouraged—to over-sing on the reality show, *America's Got Talent*: https://www.youtube.com/watch?v=Xs4tx6tS4y8

Step 5. Introduce anhedonia as the flattening out of the ability to experience pleasure in activities that used to be pleasurable.

Step 6. Discuss with class how even a few episodes of overdriving the voice can cause temporary or sometimes permanent damage to the vocal cords, as Miss Hale may do if she doesn't receive proper vocal coaching.

Step 7. Make the analogy to youth overdriving their incompletely-developed reward centers in the brain by using chemicals and the effects such use can have now and later in life.

Questions for Discussion with Students:

1. If you have ever been hoarse after yelling at a sports event, discuss with the class what it felt like to try and speak normally while you were still hoarse.

2. Did you assume that the hoarseness would subside and that you would get back your normal voice?

3. When you were hoarse, did people have trouble understanding what you were saying? If so, what was that communication difficulty like for you?

4. What effects do you think someone might experience when they have overdriven their reward centers? Do you think they would have surges or interruptions in their ability to experience pleasurable feelings?

5. What would it be like if you never regained your normal speaking or singing voice?

6. Have you ever felt a slight letdown at the end of a really good movie or other exciting event?

7. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

Module 1:

Resource for Discussion:
Grand Opera Is Not for Children

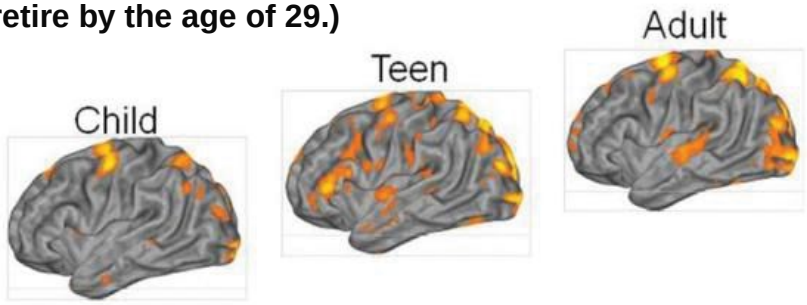
"What an amazing voice for a child so young!" "She's so tiny; where does all that sound *come* from!?" "Even at his young age, he was born to sing opera!" These and other exclamations of surprise and delight greet the latest wonder-child appearing from time to time on television performance contest shows. The young singers wow audiences with their seemingly-mature, full-throated vocal production. Cause for celebrating their prodigious talent, indeed! Or is it? What if we are, in fact, hearing a disaster—even a tragedy—in the making? That said, how is encouraging youth to over-sing related to juvenile substance abuse?

Eduard Magnus: Jenny Lind (1862)

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about prevention of chemical use and why prevention is so important to the health of those in our care who are the most vulnerable. Why are children and adolescents at special risk of becoming ensnared with chemicals?

Our concern in today's podcast is for children and adolescents who use any drug, including marijuana or alcohol, whether or not they have a family history of addictive disorders. **In no realm of their functioning are children merely small adults. It is never safe for children to use alcohol or drugs because they have not had time to mature physically, cognitively, or emotionally.**

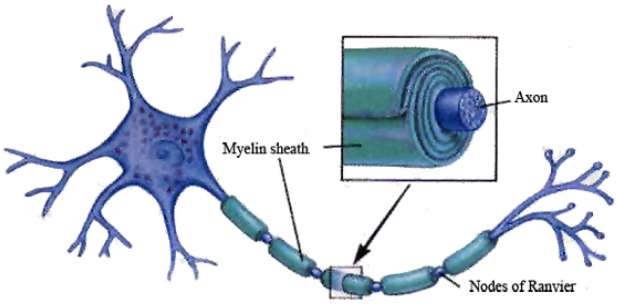
Youth substance use poses a situation similar to that of a child or adolescent trying to sing grand opera. Their vocal physiognomy is just not developed to the point that such high-impact singing is safe or sustainable. It takes at least 20 years for the larynx, vocal folds and adjoining support structures to finish maturing. (It should be remembered that even trained, adult singers run the risk of vocal problems from time to time when they over-sing.) All the vocal coaching in the world isn't going to change the reality that young people can and do permanently damage their vocal apparatus trying to sing material that is beyond their vocal capacity before they're physically able to do so safely.) The vocal folds which produce musical tones are a highly delicate, extremely fragile, easily damaged organ. **(An example out of history: Jenny Lind, the "Swedish Nightingale," gave her first performance at 18. Vocal damage may have forced her to retire by the age of 29.)**



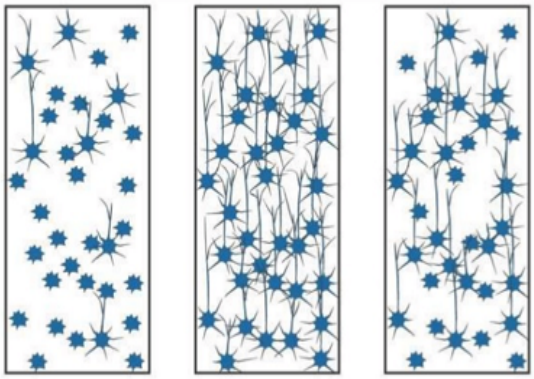
Similarly, other concerns notwithstanding, **the reward and cognitive centers in the developing brain are just not matured sufficiently in children and adolescents to accommodate use of any drug, making exposure to chemicals potentially catastrophic.** To understand the risk of substance use in children and adolescents, it's necessary to spend a little time covering how the brain matures. From childhood into early adulthood, important events take place that give us the bran we'll have as adults:

From early stages of adolescence into adulthood, the brain experiences major growth and pruning. Initial developments begin near the back of the cortex, and tend to finish in the frontal areas (e.g. prefrontal cortex). There are several key ways by which the brain remodels during various stages of development.

Myelination: **Brain nerve fibers are sheathed with a substance called myelin, a lipoprotein providing insulation for nerve cells to transmit electrical signals effectively.** During developmental stages, the process of myelination promotes healthy brain functioning and allows for more complex functions.



Synaptic pruning: **During maturation, neuronal synapses are eliminated or "pruned" selectively. This process of elimination peaks during the teen years and wanes in late adolescence/early adulthood, extending even into the mid-to-late 20s.** Pruning facilitates more efficient brain functioning, a "use-it-or-lose-it" proposition.



* brain grows rapidly during early years of life;
* maturing neurons increase the number of axonal and dendritic synapases (age 6);
* however, synaptic pruning removes weaker synapases (starting in age 14 and throughout life);
* that is, synapases that are not frequently stimulated;
* synaptic pruning is an adaptive process;
* aging, stress, and neurodegeneration can cause synapse loss with or without loss of neurons.

https://www.slideshare.net/adonissfera/neuroplasticity-and-neurodegeneration

Increased connectivity: **The connections between brain regions that are used regularly appear to be strengthened, thus making communication more efficient.** The brain is able to transmit greater amounts of information between regions and becomes better at planning, dealing with emotions, and problem solving.

Executive functions: **A majority of the executive functions that we develop are via the prefrontal cortex. This allows us to help assess risk, think ahead, evaluate ourselves, set goals, and regulate our emotions.**

A generalization that can be made about the developing brain is its gradual evolution throughout childhood and adolescence into adulthood toward increased emotional and behavioral equilibrium.

Compare the tantrums and "meltdowns" of toddlers when they don't get their way to the reasoned and emotionally-congruent reaction and restraint of adults—well, at least *mature* adults—who, although disappointed, retain the will and the power to conduct themselves in an age-appropriate manner. This gradual development of self-control is made possible by the growth of reliable connections involving executive function in the frontal cortex. Although, under ideal circumstances, many of these functions are developed during teenage years, they are still under ongoing development and strengthening until our mid-20s.

It's folly to expect the developing brain to be able to cope effectively with the intense reward and emotional and cognitive shifts associated with substance use, even at a low level. The brains of youth are no more able to process such signals effectively than their vocal apparatus can withstand the rigors of high-level singing.

The "rush" of emotional stimulation and pleasurable experience overwhelms the areas of the brain that are meant to moderate that experience with clear thinking. Due to the power of the ecstatic response, the childhood need for instant gratification quickly becomes ingrained, with little or no nuance of the pleasureful impulse. If you also factor in the reality that the child/adolescent may be experiencing a painful, even traumatic home environment (e.g., an abusive parent or the trauma of witnessing violence in the home), which is, in itself, warping the brain's development of executive function behavioral self-control, you have a recipe for disaster. **The youth hyper-learns that using alcohol or some other mood-changing drug soothes the rage and terror they're experiencing on a daily basis.**

You cannot over-drive any part of the human body for very long without risking permanent damage. In juvenile substance use, the immature reward pathways become over-driven and develop a "hair-trigger" response to emotions engendered in the outside world. **This over-driving of the reward circuits primes the child to seek solace and comfort in substances or in other addictive behaviors.** Just as young singers have to be prevented from over-singing to avoid permanent damage to the vocal apparatus, prevention or early intervention in the traumatic environment and rescue from use of substances is the only known way to prevent the child being set up for catastrophic problems both in childhood and later in life.

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of Northwest Louisiana

Grand Opera Is Not For Children

Post Test

1. In no realm of their functioning are children merely small adults. It is never safe for children to use alcohol or drugs because they have not had time to mature physically, cognitively, or emotionally.
   a) True b) False

2. An example out of history: Jenny Lind, the “Swedish nightingale,” gave her first performance at 18. Vocal damage may have forced her to retire by the age of 29.
   a) True b) False

3. The reward and cognitive centers in the developing brain are just not matured sufficiently in children and adolescents to accommodate use of any drug, making exposure to chemicals potentially catastrophic.
   a) True b) False

4. From early stages of adolescence into adulthood, the brain experiences major growth and pruning. Initial developments begin near the back of the cortex, and tend to finish in the frontal areas (e.g. prefrontal cortex).
   a) True b) False

5. Brain nerve fibers are sheathed with a substance called myelin, a lipoprotein providing insulation for nerve cells to transmit electrical signals effectively.
   a) True b) False

6. During maturation, neuronal synapses are eliminated or “pruned” selectively. This process of elimination peaks during the teen years and wanes in late adolescence/early adulthood, extending even into the mid-to-late 20s.
   a) True b) False

7. The connections between brain regions that are used regularly appear to be strengthened, thus making communication more efficient.
   a) True b) False

8. A majority of the executive functions that we develop are via the prefrontal cortex. This allows us to help assess risk, think ahead, evaluate ourselves, set goals, and regulate our emotions.
   a) True b) False

9. A generalization that can be made about the developing brain is its gradual evolution throughout childhood and adolescence into adulthood toward increased emotional and behavioral equilibrium.
   a) True b) False

10. It’s folly to expect the developing brain to be able to cope effectively with the intense reward and emotional and cognitive shifts associated with substance use, even at a low level.
    a) True b) False

11. The “rush” of emotional stimulation and pleasurable experience overwhelms the areas of the brain that are meant to moderate that experience with clear thinking.
    a) True b) False

12. The youth hyper-learns that using alcohol or some other mood alterer soothes the rage and terror they’re experiencing on a daily basis.
    a) True b) False

13. This over-driving of the reward circuits primes the child to seek solace and comfort in substances or in other addictive behaviors.
    a) True b) False

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Grand Opera Is Not for Children

Post Test – Key

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Module 2: "What Is Addictive Disease?"

(Mature Content - High School Only)

Content Warning: Passing Mention of Human Sexuality; Persecution and Bullying of People with Addictive Disorders

Keywords to Be Defined: Etiology; addiction; anterior; cingulate; cortex; ambivalence; tempo

Introduction to the Teacher: To a generally-underappreciated extent, addictive disorders are both caused and exacerbated by deficits in executive function. The American Society of Addiction Medicine's now-archived Long Definition of Addiction (ASAM, 2011) cites executive function problems as part of the presentation of the overall syndrome. This activity engages the student in attending to the extent necessary to complete close-order mastery of a test introduced by psychologist Ridley Stroop in 1935. The task is to say aloud the *color* of the ink in which the words appear, not necessarily the *word* for the color itself. Dr. Stroop's exercise protocol has been modified to include variations in performance germane to day-to-day recovery, as set forth below in "Activities."

Description: This activity is an overview of the etiology, course, and presentation of substance-related and addictive disorders emphasizing the effects of mood-altering chemicals on the brains of children and adolescents.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate understanding of the special vulnerability of the childhood and adolescent brain to mood-altering substances and behaviors.

2. Describe specific prevention strategies appropriate this population related to sound decision making.

Background Material:

Handout: "What Is Addictive Disease," with Stroop Test (Ridley Stroop, PhD, 1935)

Game: "Making Decisions": Reading the Stroop Test

Activity Detail:

Step 1. Describe addiction as the result of out-of-control appetites for chemical or other pleasure-bring activities in a way similar to hunger, thirst, and the sex drive.

Step 2. Discuss the role of pleasure seeking in addictive disorders.

Step 3. Describe the goal of the test to the students: to say aloud the *color* of the ink, not necessarily the *name* of the color as written. The attentional focus required to do

that successfully mirrors the kind of moment-to-moment attention to detail needed to prevent relapse and stay on task in recovery.

Step 4. Go through the exercise as quickly as possible, with all the students having a turn in the activity, striving for accuracy.

Step 5. While each student is reciting the names of the ink colors, have the other Students try to distract them by insisting they go faster. Instruct the reciting student to do their best to ignore the distraction and continue to move slowly and deliberately through the exercise.

Step 6. Make the analogy that the resulting mistakes are just like slips in thinking and behavior when people with addiction "slip up" and rink or use other chemicals again, as if by accident.

Step 7. As in Steps 2 and 3, go through the exercise again, but this time at a deliberate, steady tempo as slow as necessary to not make mistakes. As before, have the other students do their best to distract the reciting student while reminding the student to move slowly and deliberately through the exercise.

Step 8. Make the analogy that going through the day carefully, step by step, is how people with addiction stay in abstinence on a daily basis.

Questions for Discussion with Students:

1. How does it feel to go through the Stroop exercise very quickly? Do you become anxious?

2. How does it feel to go through it very slowly?

3. What thoughts and feeling do you have when the other students try to get you off track by urging you to go faster?

4. What do you think it would be like to have this sense of being distracted all your life any time you try to concentrate on a task?

5. Do you become impatient and frustrated when you make mistakes?

6. Does the exercise become boring and tedious? (Perhaps this is how people with addiction feel when they want to drink or use other chemicals.)

7. Why do you think the human brain would contain centers that detect confusing, contradictory information?

8. Why do you think the human brain would contain centers that detect pleasurable things, like food, games, and friendship?

9. Why do you think some people overdo activities that bring a pleasurable response from the pleasure centers of the brain?

10. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

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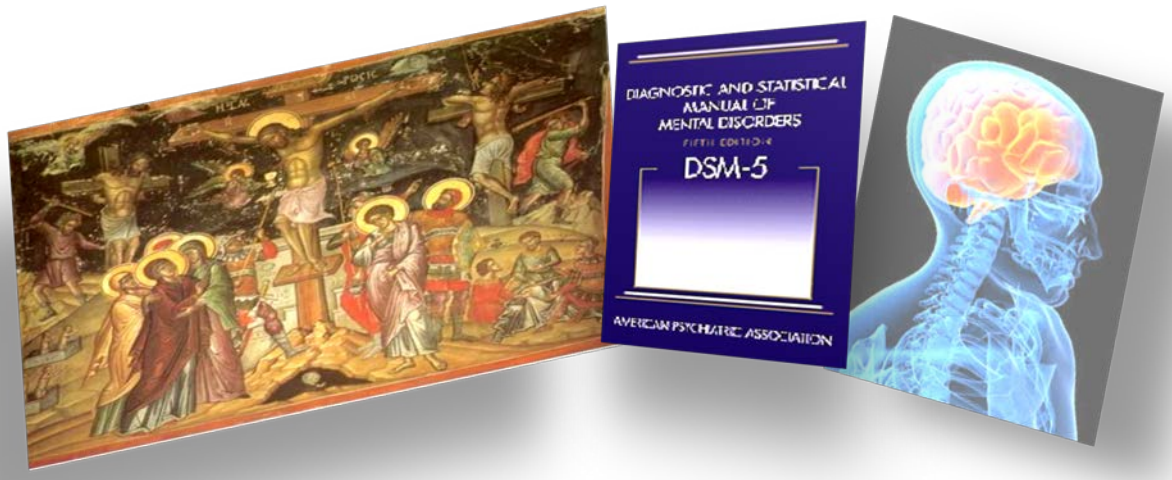

Resource for Discussion:

What Is Addictive Disease?

ADDICTIVE DISORDER REGULATORY AUTHORITY
CADA Council on Alcoholism & Drug Abuse of Northwest Louisiana
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Frontispiece--
Theophanes the Cretan (1490–1559):
Crucifixion
Stavronikita Monastery

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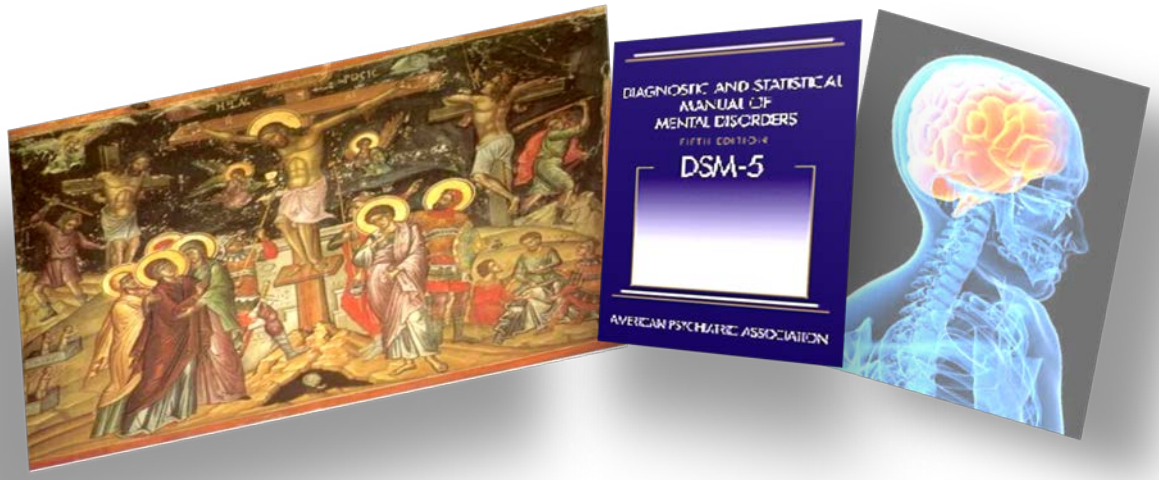
What is Addictive Disease?

Educational Objectives



1. *Have a more complete understanding of the nature of addictive disorders (including gambling disorder) and how they are created in the brain*
2. *Learn about other factors that can create addictive disorders and co-occuring disorders*
3. *Develop understanding of the causes and major directions of treatment for addictive disorders*

ADDICTIVE DISORDER REGULATORY AUTHORITY

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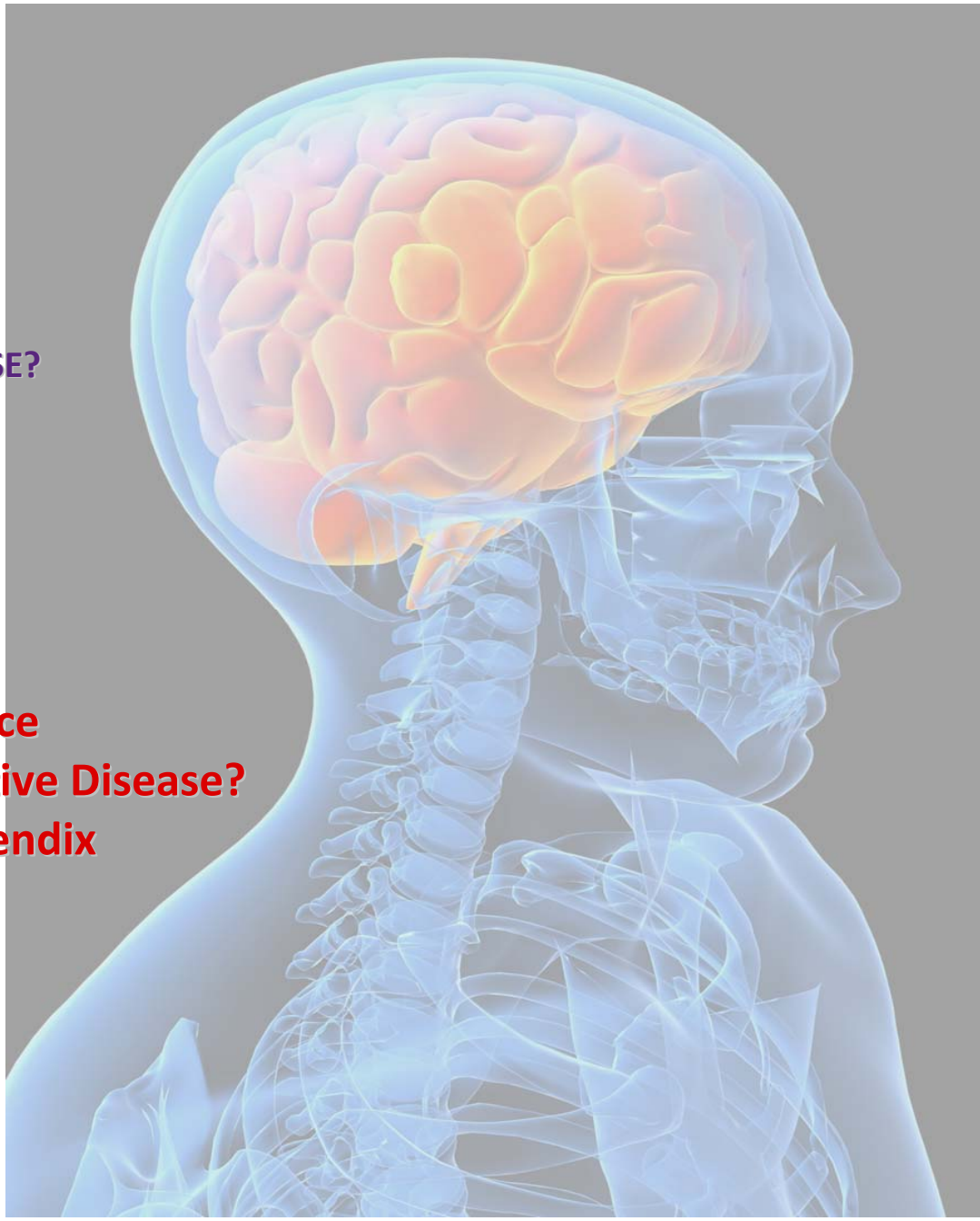
WHAT IS ADDICTIVE DISEASE?



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WHAT IS ADDICTIVE DISEASE?

Preface

WHAT IS ADDICTIVE DISEASE?

PREFACE

Welcome!

We all live in a frenetic world. You have only to observe people going about their daily business to note the speed with which everyone and everything is moving. You can look at almost any movie or television show made recently and compare it with those made a decade or more ago: the editing of these more recent programs makes the "shower scene" in "Psycho" look almost slow in comparison!

Saul Bass, 1959

This pace is not new in itself, and complaints about the speed of modern life aren't new, either. Charlie Chaplin's 1936 film, "Modern Times," was an effective spoof of the fast business of the industrial, the machine age. We have it on the good authority of none other than Simon and Garfunkel in their "59th Street Bridge Song": "Slow down; you move too fast." Words of wisdom, certainly; but, more recently, the overall pace of our daily lives does seem to have sped up.

The problem is, we don't seem to be wired to adapt readily to such a breakneck pace without giving up some important things in the process. People with addiction are especially vulnerable to this bustle, since they are already struggling (some more, some less) with the challenges that accompany abstinence and self-exploration.

We know that an unusually-large percentage of people with addiction have Attention-Deficit Disorder. Those who have not been diagnosed do seem to have specific problems keeping their attention on a task and sustaining that attention long enough to bring the task to some degree of completion.

When you consider that people in recovery are dealing with anxiety and, often, untreated or undertreated depression, it's small wonder that they have trouble centering themselves and achieving reliable stability. Learning to center themselves and maintain stability (serenity) is a primary skill of recovery.

Ed Koch Queensboro Bridge (59th Street Bridge)
(Gustav Lindenthal, Leffert L. Buck, Henry Hornbostel, 1909)

Believe it or not, your recovery actually began the moment you detected that you have some sort of problem and decided to do something to make your life better.

Remember: For the rest of your life, you must always reserve the right to

Stop.

Relax.

Refocus.

Slow yourself.

Resume.

Abstinence naturally promotes and encourages you to

Come to yourself.

Focus your self awareness.

Find your voice.

Take your time.

Live your life.

The Paradox of Addiction

Modern humans (*"homo sapiens,"* "knowing man") evolved from older primate ancestors and appeared during the middle Paleolithic, about 200,000 years ago. Behaviorally modern humans evolved from these ancestors and appeared about 50,000-100,000 years ago.

Three Principles to Keep in Mind

1. We have a Central Nervous System (CNS) in four parts
   Brain stem, Limbic system, Cerebral cortex, Spine

2. We have an Autonomic Nervous System (ANS) in two parts
   Sympathetic Nervous System: Activation ("Arousal")
   Parasympathetic Nervous System: Sedation ("Inhibition")

3. Mammals (including *homo sapiens*) operate according to "The Pleasure Principle"
   Moving to and repeating behaviors we find rewarding and safe
   Distancing ourselves from and avoiding behaviors we find repellent and dangerous

---

Central Nervous System in Four Parts

Brain Stem (in Primates, Other Mammals and Non-Mammals)

Activation ("Arousal")

Automatic ("involuntary," "avolitional") and typically very rapidly acting
The oldest section of the brain, pre-dating our species, *homo sapiens*

Limbic System (in Primates and Other Mammals)

Mood, threat sense, memory, appetites and satisfaction/reward

Some functions semi-automatic ("semi-voluntary," "semi-volitional")
Some functions automatic
More recent in our evolutionary history, but still pre-dates *homo sapiens*

Cerebral Cortex (in Primates and Other Mammals)

Mostly voluntary ("volitional"); activation on demand

Spine (in All Vertebrate Animals)

Transmits signals from brain to other parts of the body

Autonomic Nervous System in Two Parts

Sympathetic Nervous System: Activation ("Arousal")

Activated by chemicals, so-called "sympathomimetics," such as amphetamine, cocaine, nicotine and caffeine, and behaviors which imitate and enhance the action of this nervous system, such as certain forms of gambling, thrill-seeking behaviors, tantrums, violence

Parasympathetic Nervous System

Sedation ("Inhibition")

Activated by chemicals which imitate the action of this nervous system (e.g., alcohol, benzodiazepines and anesthetics and some antihistamines) and by behaviors (e.g., certain forms of gambling, cutting, hair pulling, hypersexuality)

Paradox of Addiction: "If It feels Good, Do It" (?)

Appetites for keeping the individual and/or species alive

Addiction creates appetites for chemicals/activities that threaten well-being under the guise of sustaining wholeness and health

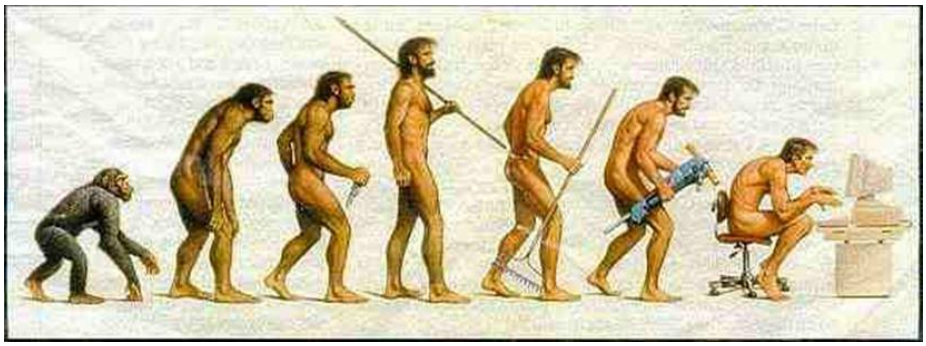
---

Debriefing Round With Affirmation

"H. U. G."

1. [Name], will you be **H**ere for the next meeting of the conference this morning?
   [Regardless of the answer, proceed to Question 2]
2. [Name], do you have the **U**rge to gamble?
   [Regardless of the answer, proceed to Question 3]
3. [Name], are you **G**oing to gamble?
   [Regardless of the answer, proceed to the Affirmation]

[Name], you don't have to gamble, and you've been "**HUG**ged"!



If you think about it …

... substance abuse and gambling don't have very savory reputations!

Observe this early depiction of gambling in Western culture:

Jesus' crucifixion is, seemingly, foretold in the Old Testament:

"They divide my garments among them; for my clothing they cast lots." --Psalm 22:18 …

… and recorded in this New Testament reference in which Roman soldiers wager to divide Christ's garments while He is still on the cross:

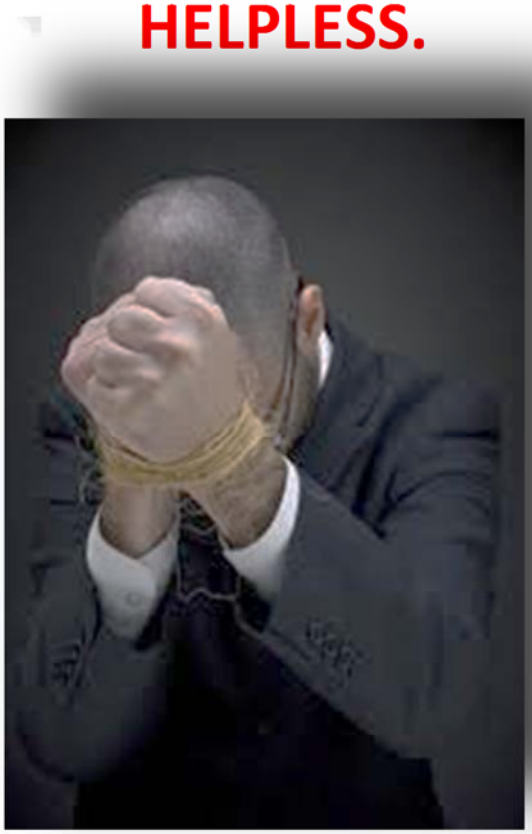
"And they crucified Him and divided up His garments among themselves, casting lots for them to decide what each man should take." --Mark 15:24

Just think of all those hyperventilative sermons delivered by generations of "fire and brimstone" preachers!

Are drug use and gambling *always* deliberate choices?

No, they aren't. Not for some people.

People with addictive disorders are, simply put,



The DSMs

Ancient merchants setting into foreign ports …

faced an immediate communication problem. For almost a millennium, before English became the *de facto* standard of business, diplomacy and science, the European mercantile community maintained a unique solution to this linguistic dilemma. Their solution was a multinational *patois*: a hodgepodge of French, Italian, Greek, Turkish, Spanish, etc. This "pidgin" language was known as the *"lingua franca."* The *"lingua franca"* enabled everyone to both communicate and cooperate for the economic betterment of all.

Before the 1950s, people who do science for a living were faced with a similar lack of standardization of the language of psychiatry. There was no "lingua franca" that enabled behavioral scientists to understand one another; indeed, such unified language would have been impossible at the time, given the vast range and disparities of theory and clinical practice concerning mental illness. The international language that would make such communication possible was, as yet, still in the future. There were those, however, who were beginning to fashion something of a common language even before the advent of the first Diagnostic and Statistical Manual of Mental Disorders (DSM) in 1952.

There were, among others, Sigmund Freud (1856-1939), Carl Jung (1875-1961), and Karen Horney (1885-1952)

To be sure, they and many others all spoke and wrote with great eloquence, but they were, in effect, speaking different clinical languages.

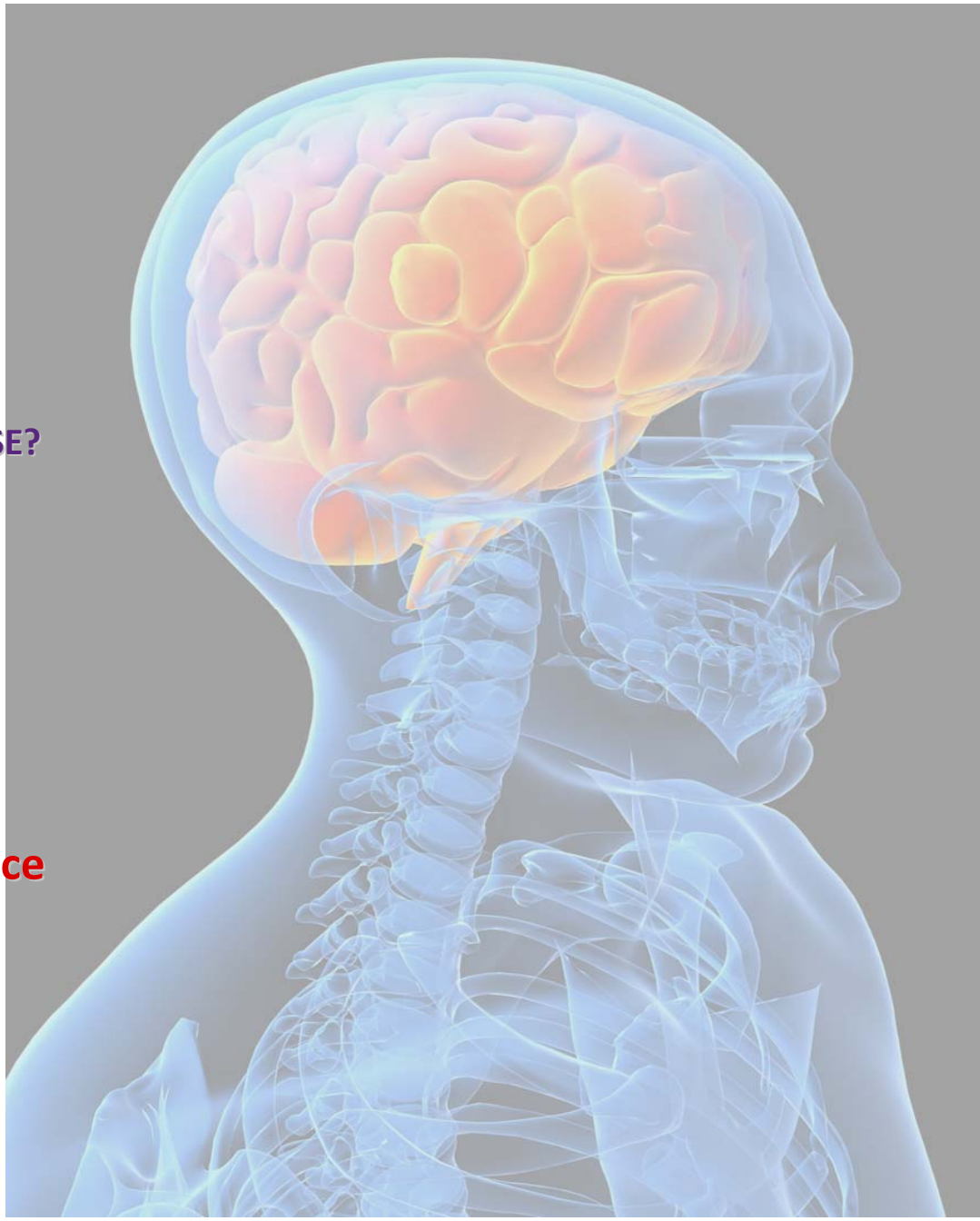
One of the first classifiers of mental illness …

and the "father" of psychopharmacology, was psychiatrist Emil Kraepelin (1856-1926), whose work emphasized the biological and genetic factors affecting mental illness.

Only now, with the advent of DSM-5 in 2013, are the ramifications of Kraepelin's work toward uncovering etiology of mental disorders being linked to their descriptions. (See the discussion on biomarkers in the DSM-5.)

The American Psychiatric Association's first Diagnostic and Statistical Manual of Mental Disorders was published in January, 1952. DSM-II followed in May of 1968; III in May, 1980; III-R in January, 1987; IV in January, 1994; IV-TR in June, 2000; and DSM-5 in May, 2013.

WHAT IS ADDICTIVE DISEASE?



Your Quiet Place

SKILLS TRAINING RITUAL WORKSHEET
YOUR QUIET PLACE

CONCEPT *WHAT* TO *LEARN*	SKILL *WHAT* TO *DO*	RITUAL *HOW* TO *DO* IT
Serenity and Calm Are Portable	1. Create an Individual, Permanent Sanctuary	1. Basic Centering Exercise (Timed)
	2. Sustain Permanent Serenity and Calm	2. Sustaining Centering (Timed)

HOW TO PRACTICE THE RITUAL

RITUAL 1. BASIC CENTERING EXERCISE

Find a private place to sit comfortably and undistracted.

Establish both this physical place and your remembrance of this room as Your Quiet Place, your Sanctuary, where you can always come and relax.

Scan the room and become deeply comfortable with your location.

Take the time to become accustomed to the room you're in.

Look straight ahead with your eyes at the level of the horizon.

For fifteen minutes, look at a candle flame or some other restful image.

If any specific thoughts appear, just let them be there; don't try to make them go away.

When you feel ready, in your "mind's eye," observe yourself sitting there.

Just "be at yourself" like this for five to fifteen minutes (whatever time span feels comfortable).

Every time you leave Your Quiet Place, always take it with you and to inhabit it in your remembrance, wherever you go.

If your attention wanders, just return to Your Quiet Place, and begin again.

Breathe in a calm, relaxed way as you practice this Ritual.

SKILLS TRAINING RITUAL WORKSHEET
YOUR QUIET PLACE

CONCEPT *WHAT* TO *LEARN*	SKILL *WHAT* TO *DO*	RITUAL *HOW* TO *DO* IT
Serenity and Calm Are Portable	1. Create an Individual, Permanent Sanctuary	1. Basic Centering Exercise (Timed)
	2. Sustain Permanent Serenity and Calm	2. Sustaining Centering (Timed)

HOW TO PRACTICE THE RITUAL

RITUAL 2. SUSTAINING CENTERING (TIMED)

A. Find a noisy place and allow the noise just to be there without trying to ignore it.

Stay in this frame of mind for five minutes, then leave the area and go to Your Quiet Place (in your remembrance if not your physical Sanctuary).

Breathe in a calm, relaxed way as you practice this Ritual.

B. In Your Quiet Place, use Ritual 2 to center yourself.

Claim this time and space in your mind as your Sanctuary where you can meditate uninterrupted.

Find or create a word or sound that brings you to calm and peace.

(This word or sound is sometimes called a mantra; you can call it whatever you like).

Repeat this word or sound over and over slowly, either quietly aloud or in your mind.

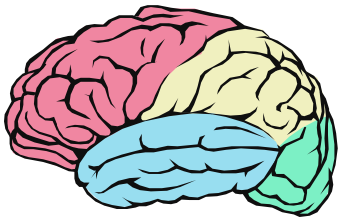
Keep this word or sound strictly secret forever; ***never*** share it with anyone (including your therapist).

Breathe in a calm, relaxed way as you practice this Ritual.

WHAT IS
ADDICTIVE DISEASE?

What Is Addictive Disease?

WHAT IS ADDICTIVE DISEASE?



That question has puzzled everyone who deals with addiction, including therapists, physicians and other scientists, and loved ones. Historically, addictive disease has been blamed on everything from demonic possession to a failure of character or will power.

In the past, the unusual, strange and even dangerous behaviors associated with addiction were seen as a result of a person's having been demon-possessed. Given the erratic and even bizarre nature of these behaviors, it is understandable that people—including those with the disease—might have thought that!

Now we have a more complete answer: Addictive disorders and compulsions to take things, set fires, gamble, etc., result from genetically pre-set "misadjustments" in the middle of the brain.

What creates these "misadjustments" in the limbic system?

a) faulty coding of the person's genetics at conception;
b) exposure to mood altering chemicals or behaviors; and
c) the presence of traumatic stress the person wants to "medicate" away.

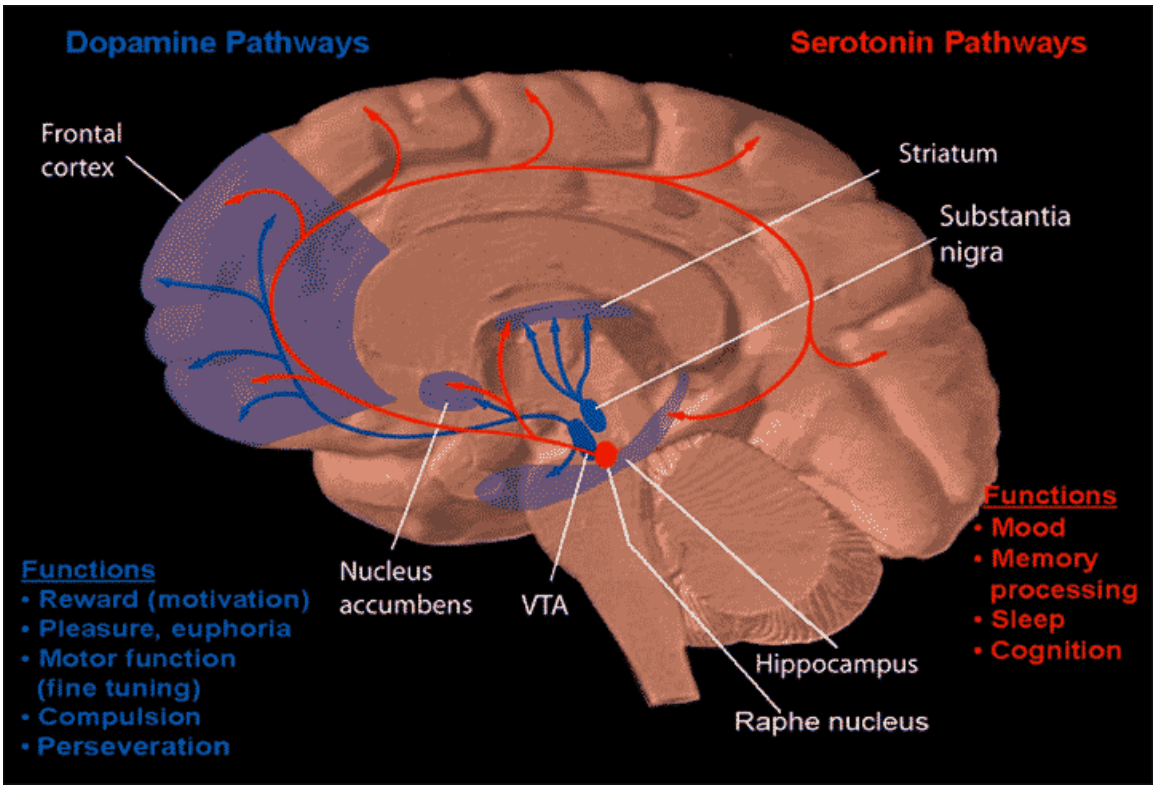
Genetically vulnerable people develop crippling dependence on chemicals or other pleasureful behaviors. They then try to maintain a certain level of pleasure in those areas of the brain that regulate pleasure. To fail to do so can create severe emotional pain.

The word "crippling" matters. People in the grip of addiction don't get to choose their behavior. They've lost the ability to resist urges driving them so strongly. (If they did have the ability to resist these urges, they surely would never have allowed the disorder to get so severe that it damages their lives and relationships!)

Which parts of the middle of the brain are involved?

a) the lateral hypothalamus,
b) the ventral tegmentum,
c) the medial forebrain bundle,
d) the nucleus accumbens and, perhaps,
e) the insula

These brain parts normally give us drives and desires and make us satisfied when those drives are met.



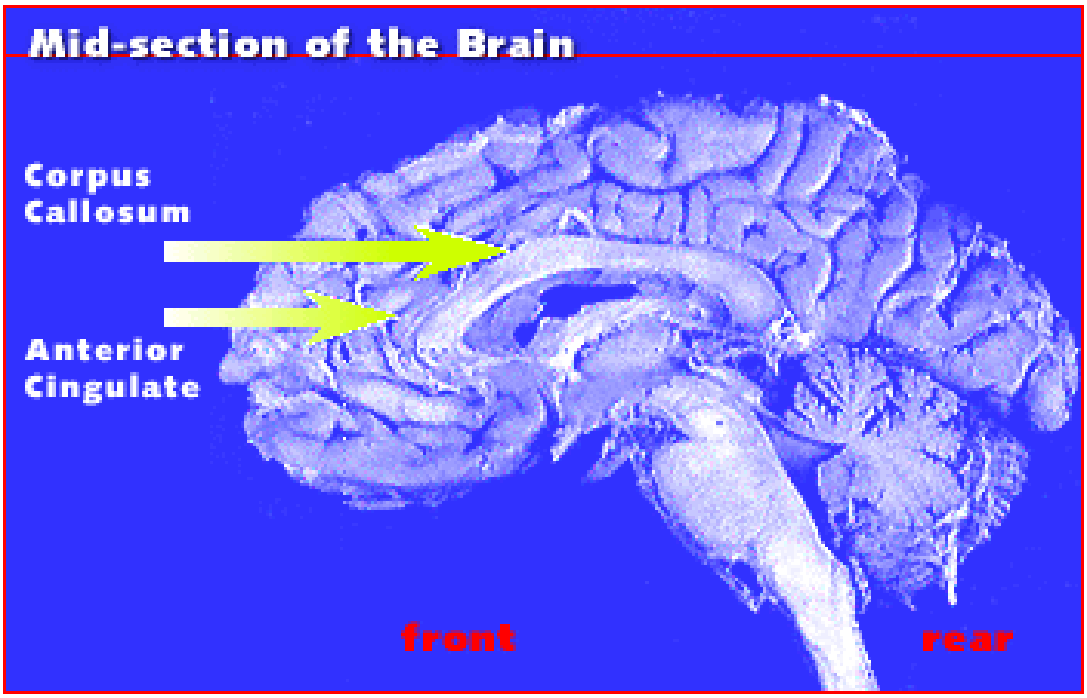
drugabuse.gov (Public Domain)

Normally, these brain parts re-set to a "satisfied" state when the person eats, drinks water, has sex, etc. In people with addiction, there seem to be coding errors for at least two brain chemicals,

a) serotonin and
b) dopamine

These chemicals (neurotransmitters) operate the brain cells (neurons) in these areas, which prevent them from "re-setting" back to that "satisfied" state. People with addiction are creatures of pathological habit, not normal pleasurable habits. It turns out that these regulating neurons are defective from conception (something like a defective thermostat, which registers the wrong temperature when connected to an air conditioner.)

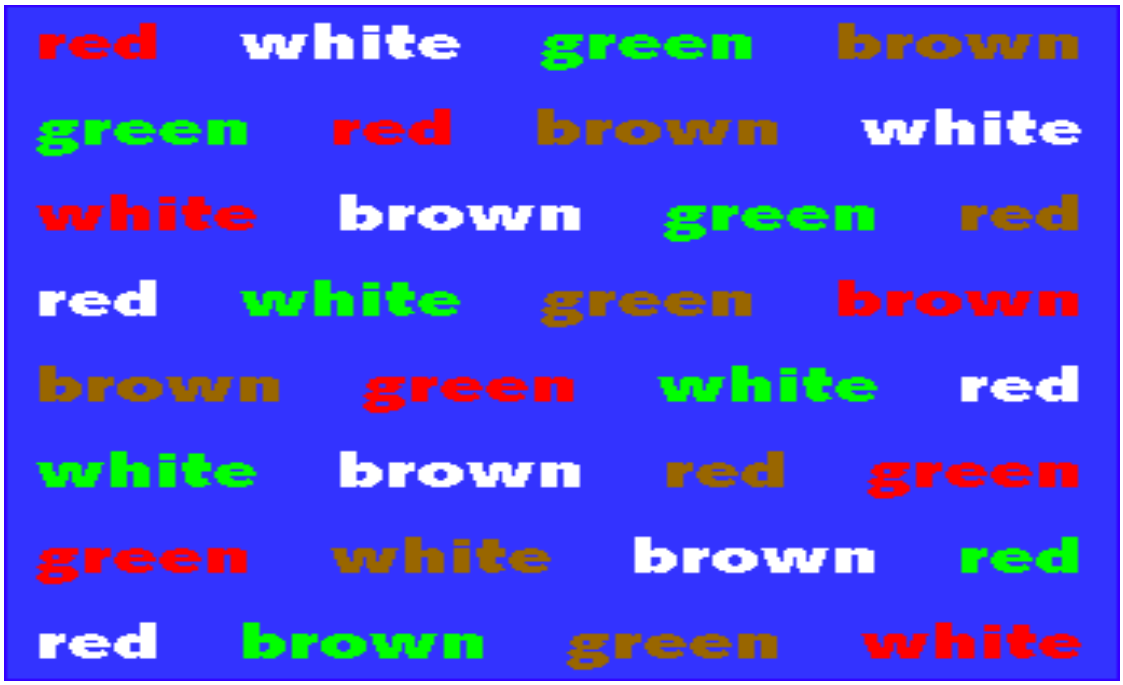
Another brain area, the anterior cingulate cortex, doesn't work properly to tell the difference between safe and dangerous behavior.



Anterior Cingulate:
Cognitive and Affective Divisions
Wayne State University/Detroit Medical Center

In the exercise below, see how fast you can zip through this series of colors, saying the color of the ink, not necessarily the name of the color as written. Go as fast as you can!

By the way, as you move through Dr. Ridley Stroop's exercise, you'll almost be able to feel your anterior cingulate cortex trying to make out the difference between contradictory signals -- the color of the ink on the page as sometimes opposed to the name of the color as written. People with addiction and compulsion typically have a hard time doing that!



John Ridley Stroop (1897-1973):
"Stroop Effect" (1935)

Treatment helps the person

a) find healthy ways to deal with everyday stresses.
b) accept that he or she has a true illness and
c) learn how to function well despite having a brain disorder.

WHAT IS ADDICTIVE DISEASE?

Technical Appendix

Technical Appendix

For those who want to know more ...

Here are some of the key areas of your brain that will need to become more active and remain engaged throughout your life as you continue your recovery:

Amygdala (Gr.: almond): ***Structure which mediates fear and attack response ("fight or flight").***

Anterior Cingulate Cortex: ***Structure involved in task organization, learning and problem solving (See Prefrontal Cortex).***

Basal Ganglia: ***Group of nuclei (neural connection hubs) connected with brainstem, cerebral cortex and thalamus and involved with emotion, motor functions and learning.***

Caudate Nucleus: ***An area of the brain involved in voluntary movement and in drug addiction.***

Cerebral Cortex: ***The largest part of the brain. It is subdivided into several parts, including the frontal cortex (motor), parietal cortex (sensory), temporal cortex (hearing and speech) and occipital cortex (vision). The sensory cortex receives sensory information coming from the spinal cord, and the motor cortex sends information back down.***

Diencephalon: ***Structure in the center of the brain which includes the thalamus and hypothalamus.***

Dopamine: ***A neurotransmitter released from neurons in parts of the brain (such as the Reward Pathway) especially involved in drug addiction (and other reward-activation disorders).***

Hippocampus (Gr: hippo = horse + campos = sea animal): *An area lying beneath the cerebral cortex of the brain. It is involved in learning and memory.*

Hypothalamic-Pituitary-Adrenal Axis (HPA Axis): *Feedback loop which mediates level of arousal, stress and activity.*

Hypothalamus: *A portion of the brain lying beneath the thalamus and exerting influence on function of the pituitary and thyroid glands (among others).*

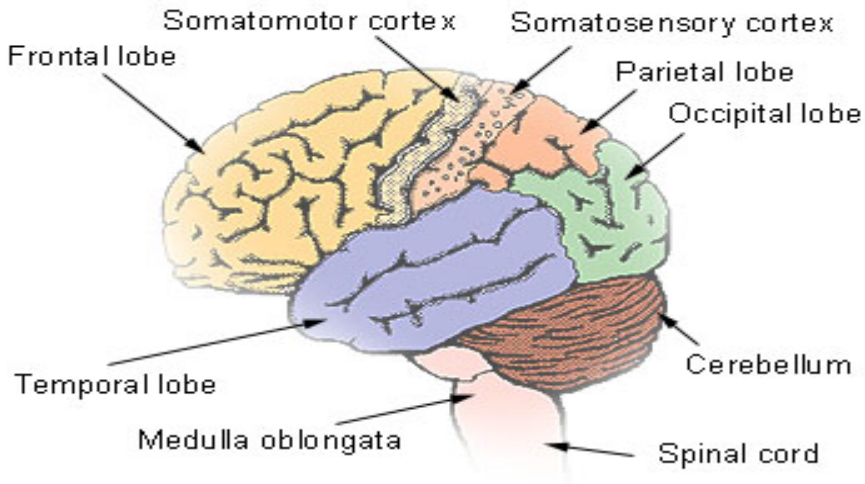
Lobes: *Specific areas of the brain (left and right hemispheres) performing specific functions:*

a. ***Frontal Lobe:***
Thought, Reasoning, Judgment, Planning

b. ***Temporal Lobe:***
Hearing, Speech

c. ***Parietal Lobe:***
Sensory Integration, Spatial Organization, Navigation

d. ***Occipital Lobe:***
Vision



Lobes of the cerebrum

United States National Cancer Institute

Locus Ceruleus: *Brainstem nucleus mediating physiological response to stressful situations.*

Nucleus: *A group of specialized nerve cells (neurons), which act as a single unit in the brain and spinal cord.*

Nucleus Accumbens *(nucleus accumbens septi, "The nucleus leaning against the septum"): Mid-brain (limbic) structure mediating pleasure, reward and satiety. The largest neuronal nucleus in the septal region of the diencephalon (the diencephalon being made up of the thalamus, hypothalamus, subthalamus and epithalamus).*

Prefrontal Cortex (PFC)/Anterior Cingulate: Cognitive (Thought- Related) and Affective (Emotion-Related) Divisions: *Structures in the mid-front of the brain that both judge and sense emotions and help arrange tasks in critical order (See Anterior Cingulate Cortex).*

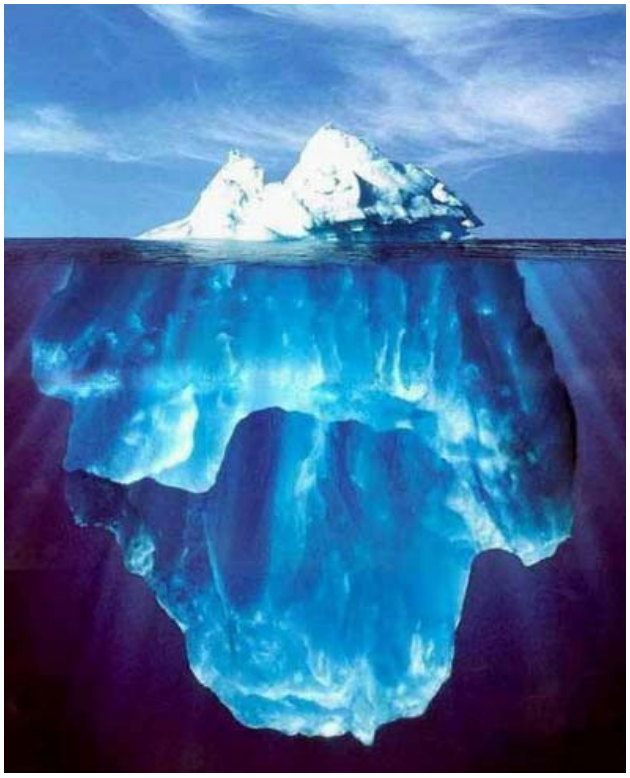
Receptor: *A special protein to which neurotransmitters, hormones and drugs bind. They are found on the membranes of the neuron dendrites, soma and even the terminal. Upon binding, the receptor changes shape to open a channel through which ions (see current) flow, producing a voltage across the membrane.*

Reticular Activating System (RAS): *Structures at the base of the brain mediating alertness and arousal (excitement, panic, surprise, etc.).*

Reward Pathway: *A specific network of neurons that become activated by pleasurable or rewarding behaviors such as use of cocaine, heroin, nicotine and alcohol, gambling, exercise, sex, eating, thrill-seeking, obsessive attention to detail, etc. Reward-mediated behaviors activate this pathway, which originates in the midbrain and travels through the nucleus accumbens and up to the frontal cortex.*

Spinal Cord: ***A bundle of long neurons that travel up and down the vertebral column. The neurons form synapses with sensory neurons from the periphery to carry sensory information up to the brain. Neurons leaving the brain travel down the spinal cord and form synapses with neurons that direct muscle movement.***

Thalamus: ***A structure of the diencephalon, located in the center of the brain. It functions as a sort of relay for information from the auditory, somatic and visual systems to the frontal cortex and also serves an important function in regulation of sleep, wakefulness, awareness and activity (arousal).***



WHAT IS ADDICTIVE DISEASE?

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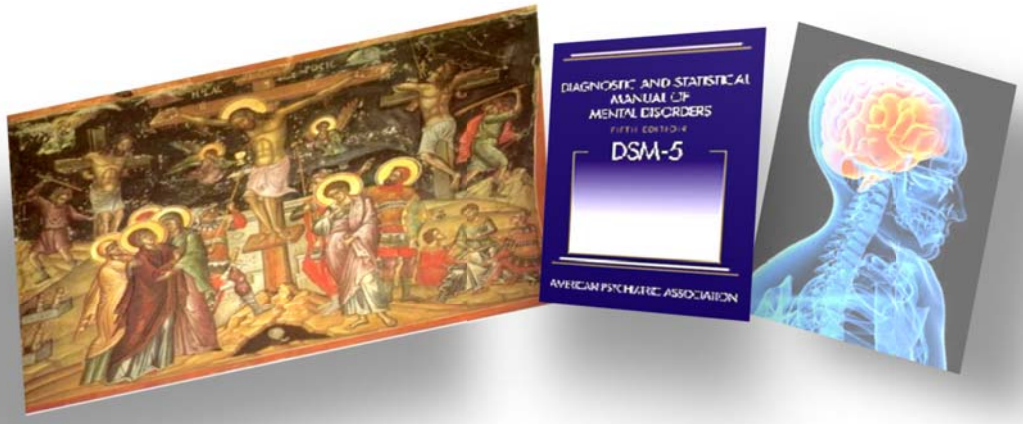

DIAGNOSTIC AND STATISTICAL
MANUAL OF
MENTAL DISORDERS
DSM-5
AMERICAN PSYCHIATRIC ASSOCIATION

Module 3: "Life Out of Balance: Why Is Addictive Disease So Disruptive?"

Keywords to Be Defined: Equilibrium; abstinence; distraction; peer pressure; safe zone; self-bracing

Introduction to the Teacher: Insofar as addictive disorders create disequilibrium in the lives of people with addiction and their loved ones, active illness can be represented by a behavioral metaphor of the disease impinging on the stability of the addicted person. The same metaphor can represent peer pressure in influencing a young person to return to using chemicals. Two people are needed to realize this metaphor: one student, who applies pressure against the second student, who represents the person with addiction.

Description: This activity describes the stresses that people in families affected by addiction have to face on a day-to-day basis and how enlisting support from a helper can be a powerful aid in withstanding and resisting the pressure exerted by the addicted family member.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of the concept of equilibrium in abstinence from mood-altering chemicals in day-to-day recovery.

2. Describe the mindset of sustaining abstinence equilibrium in the face of distractions and peer pressure.

Background Material:

Handout: "Life Out of Balance: Why Is Addictive Disease So Disruptive?"

Game: "Push Me, Pull Me"

Activity Detail:

Step 1. Describe the process of the game, "Push Me Pull Me," in which two students stand next to one another, one student gently shoving or pulling the other with increasing force until the second has difficulty remaining standing. (Virtual variant: a family member takes the place of the first student.)

Step 2. Describe the analogy that addiction pushes harder and harder against the person with addiction.

Step 3. Second student stands flat on the floor with legs 2-3 feet apart.

Step 4. First student (or family member) applies increasing pressure over several repetitions until the second student's stability is undermined. Investigate and discuss ways to minimize or eliminate the contact with the shoving first student (or family member).

Step 5. Describe the analogy hat addiction happens to someone involuntarily, against their will.

Step 6. Enlist an additional student to help the first student brace themselves against the pressure being exerted by the first student (addicted family member).

Step 7. Explore the analogy that helpers can brace people against relapse.

Questions for Discussion with Students:

1. How would you describe your “safe zone” around your body?

2. What is it like to have someone (something) inside your safe zone pressing on you?

3. Did you feel frustrated and intent on standing your ground when you were being nudged?

4. How can you brace yourself against falling over in the game without standing against a wall?

5. Would having someone brace you help you stand your ground?

6. If you were to lie on the floor, could you find a way to get up without using your arms or legs?

7. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

WHAT IS ADDICTIVE DISEASE?

PREFACE

Welcome!

We all live in a frenetic world. You have only to observe people going about their daily business to note the speed with which everyone and everything is moving. You can look at almost any movie or television show made recently and compare it with those made a decade or more ago: the editing of these more recent programs makes the "shower scene" in "Psycho" look almost slow in comparison!

Saul Bass, 1959

This pace is not new in itself, and complaints about the speed of modern life aren't new, either. Charlie Chaplin's 1936 film, "Modern Times," was an effective spoof of the fast business of the industrial, the machine age. We have it on the good authority of none other than Simon and Garfunkel in their "59th Street Bridge Song": "Slow down; you move too fast." Words of wisdom, certainly; but, more recently, the overall pace of our daily lives does seem to have sped up.

The problem is, we don't seem to be wired to adapt readily to such a breakneck pace without giving up some important things in the process. People with addiction are especially vulnerable to this bustle, since they are already struggling (some more, some less) with the challenges that accompany abstinence and self-exploration.

We know that an unusually-large percentage of people with addiction have Attention-Deficit Disorder. Those who have not been diagnosed do seem to have specific problems keeping their attention on a task and sustaining that attention long enough to bring the task to some degree of completion.

When you consider that people in recovery are dealing with anxiety and, often, untreated or undertreated depression, it's small wonder that they have trouble centering themselves and achieving reliable stability. Learning to center themselves and maintain stability (serenity) is a primary skill of recovery.

Ed Koch Queensboro Bridge (59th Street Bridge)
(Gustav Lindenthal, Leffert L. Buck, Henry Hornbostel, 1909)

Believe it or not, your recovery actually began the moment you detected that you have some sort of problem and decided to do something to make your life better.

Remember: For the rest of your life, you must always reserve the right to

Stop.

Relax.

Refocus.

Slow yourself.

Resume.

Abstinence naturally promotes and encourages you to

Come to yourself.

Focus your self awareness.

Find your voice.

Take your time.

Live your life.

The Paradox of Addiction

Modern humans (*"homo sapiens,"* "knowing man") evolved from older primate ancestors and appeared during the middle Paleolithic, about 200,000 years ago. Behaviorally modern humans evolved from these ancestors and appeared about 50,000-100,000 years ago.

Three Principles to Keep in Mind

1. We have a Central Nervous System (CNS) in four parts
   Brain stem, Limbic system, Cerebral cortex, Spine

2. We have an Autonomic Nervous System (ANS) in two parts
   Sympathetic Nervous System: Activation ("Arousal")
   Parasympathetic Nervous System: Sedation ("Inhibition")

3. Mammals (including *homo sapiens*) operate according to "The Pleasure Principle"
   Moving to and repeating behaviors we find rewarding and safe
   Distancing ourselves from and avoiding behaviors we find repellent and dangerous

---

Central Nervous System in Four Parts

Brain Stem (in Primates, Other Mammals and Non-Mammals)

Activation ("Arousal")

Automatic ("involuntary," "avolitional") and typically very rapidly acting
The oldest section of the brain, pre-dating our species, *homo sapiens*

Limbic System (in Primates and Other Mammals)

Mood, threat sense, memory, appetites and satisfaction/reward

Some functions semi-automatic ("semi-voluntary," "semi-volitional")
Some functions automatic
More recent in our evolutionary history, but still pre-dates *homo sapiens*

Cerebral Cortex (in Primates and Other Mammals)

Mostly voluntary ("volitional"); activation on demand

Spine (in All Vertebrate Animals)

Transmits signals from brain to other parts of the body

Autonomic Nervous System in Two Parts

Sympathetic Nervous System: Activation ("Arousal")

Activated by chemicals, so-called "sympathomimetics," such as amphetamine, cocaine, nicotine and caffeine, and behaviors which imitate and enhance the action of this nervous system, such as certain forms of gambling, thrill-seeking behaviors, tantrums, violence

Parasympathetic Nervous System

Sedation ("Inhibition")

Activated by chemicals which imitate the action of this nervous system (e.g., alcohol, benzodiazepines and anesthetics and some antihistamines) and by behaviors (e.g., certain forms of gambling, cutting, hair pulling, hypersexuality)

Paradox of Addiction: "If It feels Good, Do It" (?)

Appetites for keeping the individual and/or species alive

Addiction creates appetites for chemicals/activities that threaten well-being under the guise of sustaining wholeness and health

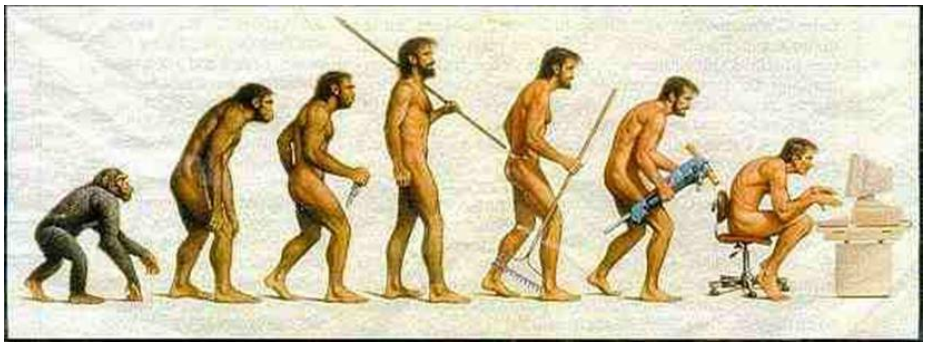
---

Debriefing Round With Affirmation

"H. U. G."

1. [Name], will you be **H**ere for the next meeting of the conference this morning?
   [Regardless of the answer, proceed to Question 2]
2. [Name], do you have the **U**rge to gamble?
   [Regardless of the answer, proceed to Question 3]
3. [Name], are you **G**oing to gamble?
   [Regardless of the answer, proceed to the Affirmation]

[Name], you don't have to gamble, and you've been "**HUG**ged"!



If you think about it …

... substance abuse and gambling don't have very savory reputations!

Observe this early depiction of gambling in Western culture:

Jesus' crucifixion is, seemingly, foretold in the Old Testament:

"They divide my garments among them; for my clothing they cast lots." --Psalm 22:18 …

… and recorded in this New Testament reference in which Roman soldiers wager to divide Christ's garments while He is still on the cross:

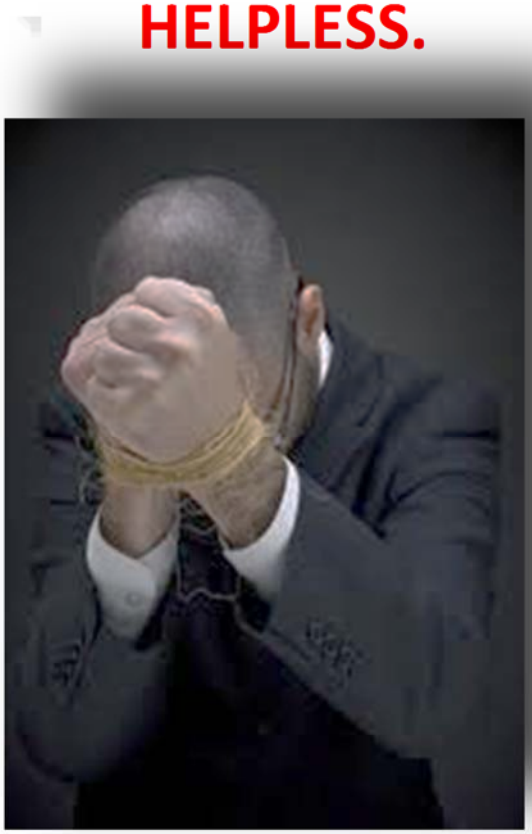
"And they crucified Him and divided up His garments among themselves, casting lots for them to decide what each man should take." --Mark 15:24

Just think of all those hyperventilative sermons delivered by generations of "fire and brimstone" preachers!

Are drug use and gambling *always* deliberate choices?

No, they aren't. Not for some people.

People with addictive disorders are, simply put,



SKILLS TRAINING RITUAL WORKSHEET
YOUR QUIET PLACE

CONCEPT *WHAT* TO *LEARN*	SKILL *WHAT* TO *DO*	RITUAL *HOW* TO *DO* IT
Serenity and Calm Are Portable	1. Create an Individual, Permanent Sanctuary	1. Basic Centering Exercise (Timed)
	2. Sustain Permanent Serenity and Calm	2. Sustaining Centering (Timed)

HOW TO PRACTICE THE RITUAL

RITUAL 1. BASIC CENTERING EXERCISE

Find a private place to sit comfortably and undistracted.

Establish both this physical place and your remembrance of this room as Your Quiet Place, your Sanctuary, where you can always come and relax.

Scan the room and become deeply comfortable with your location.

Take the time to become accustomed to the room you're in.

Look straight ahead with your eyes at the level of the horizon.

For fifteen minutes, look at a candle flame or some other restful image.

If any specific thoughts appear, just let them be there; don't try to make them go away.

When you feel ready, in your "mind's eye," observe yourself sitting there.

Just "be at yourself" like this for five to fifteen minutes (whatever time span feels comfortable).

Every time you leave Your Quiet Place, always take it with you and to inhabit it in your remembrance, wherever you go.

If your attention wanders, just return to Your Quiet Place, and begin again.

Breathe in a calm, relaxed way as you practice this Ritual.

SKILLS TRAINING RITUAL WORKSHEET
YOUR QUIET PLACE

CONCEPT *WHAT* TO *LEARN*	SKILL *WHAT* TO *DO*	RITUAL *HOW* TO *DO* IT
Serenity and Calm Are Portable	1. Create an Individual, Permanent Sanctuary	1. Basic Centering Exercise (Timed)
	2. Sustain Permanent Serenity and Calm	2. Sustaining Centering (Timed)

HOW TO PRACTICE THE RITUAL

RITUAL 2. SUSTAINING CENTERING (TIMED)

A. Find a noisy place and allow the noise just to be there without trying to ignore it.

Stay in this frame of mind for five minutes, then leave the area and go to Your Quiet Place (in your remembrance if not your physical Sanctuary).

Breathe in a calm, relaxed way as you practice this Ritual.

B. In Your Quiet Place, use Ritual 2 to center yourself.

Claim this time and space in your mind as your Sanctuary where you can meditate uninterrupted.

Find or create a word or sound that brings you to calm and peace.

(This word or sound is sometimes called a mantra; you can call it whatever you like).

Repeat this word or sound over and over slowly, either quietly aloud or in your mind.

Keep this word or sound strictly secret forever; ***never*** share it with anyone (including your therapist).

Breathe in a calm, relaxed way as you practice this Ritual.

Module 4: "Into Action: How People Change"

Keywords to Be Defined: Transtheoretical Model; Stages of Change; Risk; Frontal Cortex; Amygdala; Hippocampus; Visual Field; Anterior Cingulate Cortex; Suspicion; Threat; Table-Reading

Introduction to the Teacher: Recovery in any chronic mental illness is an ongoing, lifetime process, one that is more than merely "getting over" an episode of the illness. Like every other mature adult, people in recovery are always changing, in the process of becoming more mature versions of themselves. The advent of the art and science of promoting those changes was one of the most remarkable innovations in the field of behavioral health of the 20th Century, answering some very basic questions about how people envision and implement change.

Description: This activity describes the Transtheoretical, or Stages of Change Model as applied to addiction recovery.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of the recognized Stages of Change model in human behavior.

2. Describe the correlation between the Stages of Change and managing risk in addiction recovery.

Background Material:

Handout: Playlet, "Into Action: How People Change" with Post-Test

Game: Re-enactment of Playlet

Activity Detail:

Step 1. Review the handout, Into Action: How People Change," and take the post-test

Step 2. Discuss your answers to the post-test as a group.

Step 3. Introduce the Transtheoretical Model of Change as described in the handout, discussing the characteristics of each Stage.

Step 4. Select nine students (or assign multiple parts, if necessary) to read the playlet, *How People Change* aloud as a script.

Step 5. Table-read the script, making sure to highlight the brain structures and functions mentioned in the scenario.

Step 6. If in a live classroom situation, distance the students around the room as illustrated in the diagram in the handout, with the driver and narrator at the front of the room, at least 6-8 feet apart, for both proper infection control and clearer stereophony.

Step 7. Perform the script with no interruption.

Questions for Discussion with Students:

1. Can you recall a situation where you slowly became aware that you might be in potential danger?

2. What was happening (or not happening) around you that made you suspicious for your safety?

3. Were you instantly aware that something was wrong, or did the awareness come more gradually?

4. How did you respond to the potential threat?

5. How did you feel after the threat was ended?

6. Instead of an object on the highway, can you imagine using this kind of reasoning to work your way through an encounter with alcohol or other drugs?

7. Are there additional questions we should be raising or discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

Resource for Discussion:
Into Action: How People Change

Recovery in any chronic mental illness is an ongoing, lifetime process, one that is more than merely "getting over" an episode of the illness. Like every other mature adult, people in recovery are always changing, in the process of becoming more mature versions of themselves. **The advent of the art and science of promoting those changes was one of the most remarkable innovations in the field of behavioral health of the 20th Century**, answering some very basic questions about how people envision and implement change.

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about prevention of the pattern of dawning awareness that allows people to make changes in their lives. We'll try to answer the question of how and why people make important changes.

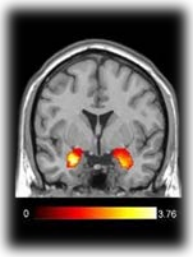
Recovery itself begins with admitting there's a problem. The person must give up the thinking that there is nothing wrong (denial) and begin taking stock of how the disease has affected their lives and their loved ones' lives and to become educated on the nature of the disease and its daily management. **The courageous step of acknowledging a problem often depends on the help of a professional therapist and a support group.** The discipline of recovery can be taught easily enough; the difficulty lies in the acceptance of the need for ongoing, lifetime recovery.

To illustrate how people make changes in their lives, let me tell you an anecdote about something that happened to me several years ago. One beautiful afternoon, I was driving on an interstate to go to a conference. I remember entering the highway noting that the weather is what pilots call “severe clear,” the visibility stretching all the way to the horizon. As the song says, on this clear day, you really *can* see forever. I drive on for several miles with not a care in the world, marveling at the beautiful weather.

At some point, it seems to me that there begins to be something just a little, how to say it … different … “off” … about the horizon. It’s the same as it has been, and yet, it’s *not* the same as it seemed just a few moments ago. Something is different somehow. I think to myself, “If I stop here, turn around, and go in the opposite direction, I might even believe that what I think I’m seeing is just an optical illusion, maybe heat waves bending the light as they rise off the road on a hot day.” Except that it isn’t a hot day; the temperature’s in the low 40s. “So much for that theory,” I remember thinking.

I’m going on about all this at such length because I’m trying to impart to you the gradualness with which my brain is cluing me in as to the situation at hand. Since I don’t turn around and am still moving in the same direction, I come to see that, in fact, there *is* something different about the horizon I’m seeing now. I hadn’t expected to see anything out of the ordinary when I started out this morning, so, for a long time, it’s hard to come to believe that something *is actually amiss*. Now, it’s undeniable: I’m having an “uh oh” moment about this “thing” on the horizon, and I’m now about to embark on a sort of “neurological teleconference” that will ultimately save my life. “What is going on here?” part of my brain is signaling to another part, in the back of my consciousness. (Literally behind my conscious awareness: this preliminary communication is happening between my amygdala, hippocampus, and some other players.)

And now I get a clear, conscious message from my threat center, my two amygdalae: “We have a problem. Danger.”



I query them, “What’s the problem?”

They whisper: *“We have a problem. Danger. We don’t know what’s wrong, but there’s a problem. Danger.”*

I respond, “If you don’t know what the problem is, why should I believe you that there is one?”

I get an answer: *“Danger. There’s a problem. Danger.”*

I respond, “Fine. Ok. There’s a problem, and you don’t know what it is, right?

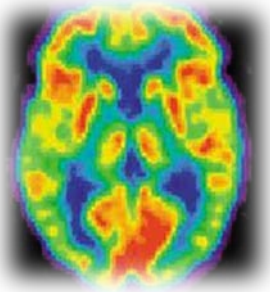
“Danger. There’s a problem. Correct. We don’t know what’s wrong, but there’s a problem. Danger.”

"Well, what am I supposed to *do* about it?"

"Danger. There's a problem. We don't know; that's not our job. Danger. There's a problem. We're forwarding this message to your front brain. Danger. There's a problem. Danger."

"Why do you keep telling me there's a problem?"

"Danger. There's a problem. Because it keeps being true. There's a problem. Danger."



"Oh! Well, thanks for letting me know!"

"Danger. There's a problem. Danger." [They will reiterate this single message repeatedly until I'm out of danger later.]

I tune into my front brain (FB), a center of reasoning and judgment, and my anterior cingulate cortex (ACC), which, among other functions, helps me decipher contradictory situations. "FB and ACC, how about you? Got any ideas about what I should do about this 'thing' on the horizon?"

My front brain suggests, "Might want to ease up off the gas a little." My ACC says, "I can't tell yet if it's safe or dangerous. Better assume the worst until we know better."

"Why ease up off the gas?"

It says, "Think this through, Kent. You're traveling 70 miles an hour in a 3500-pound vehicle, and your visual cortex is sending me information that the … 'thing' on the horizon seems to have gotten a little bit bigger in the last couple of minutes. Although *you're* going 70, it's not certain that *it's* moving at all."

Well, now I'm literally alarmed, so I do what my FB tells me to: I slow down just enough not to be a hazard to the cars behind me. I still don't know exactly *why* I'm slowing down, except that I believe and feel that I need to. I have the sense of being in potential danger because my brain is alerting me that I am. In my newly-alerted state, I continue to travel toward this ever-so-slowly-growing "thing" on the horizon.

"So then what do I do, FB? Can you come up with a plan?"

“Yes, but I need more information. **Let’s get your hippocampus [a center of learning and memory] to pull some information about what you did last time you were in a situation like this.** HC? What do you have for us? … Ok, got it. Thanks! HC’s telling me that the last time you were in a situation like this, an 18-wheeler had blown a tire. That time, you slowed down and carefully went around the tire debris in your lane.”

I press for an answer. “Ok, but I can’t really make out just what’s in the lane just yet. What do I do?”

My front brain reminds me, “I can’t know yet, Kent. We need to consult your visual cortex in the back of your brain. VC, what do you *see*?”

My visual cortex (VC), a vision-processing sheath of neurons in my occipital lobe, responds, “Scan the scene with your eyes.” [FB and ACC chime in: “Look for anything out of the ordinary.”] … “Ok,” says VC. “I have it. I see a … some sort of cage-like structure, but I can’t make out what it is … but I’m beginning to be able to see enough to tell me that it’s really big!”

“Not good, says FB. “How big is it, VC?”

“It seems to be enormous, like it takes up the entire lane we’re in!”

“Um … you *are* slowing down, aren’t you, Kent?”

“Yes, FB.”

“Good! Thanks, VC! Hey, HC! Quick! Do you have anything on evading a cage-like structure taking up a whole lane of an interstate highway?”

My Hippocampi reply, “Hang on … Looking … No … just a lot of ‘blown-tire’ and ‘disabled vehicle’ stuff. And some police traffic management at an accident where somebody ran off the road. Sorry, that’s all I have to send you at the moment.”

FB says, “Thanks for trying, HC! Kent, we’re going to have to extrapolate a bit from that time you evaded a blown truck-tire. Remind him of that incident, please HC.”

My hippocampi comply, so I recall navigating through an accident a few years back where someone had skidded off the highway.

My front brain continues: “What do you see now, VC?”

“Now it’s pretty clear that our whole lane is blocked by this ‘thing.’ ”

“Ok, Kent. From past experience, I know that we came through safely when you slowed down, got out of the lane you’re in, and—hey, VC, see any police?”

“Yeah. They’re everywhere, and they’re moving their arms and pointing.”

“Great! Thanks, VC! Educated guess, Kent, they’re probably directing traffic. Here’s the plan. We know what’s in your best interests, so, if you can do it safely, get into the other lane *now.* When you get to that ‘thing’ in the highway, follow the directions of the police on the scene *really carefully*. *Do whatever they tell you to.* They’ll get us through this ok. Got that?”

“Got it. Thanks, everyone!”

So that’s what I do. I slow down, get into the other lane, which is open to traffic, and we’re all guided through this obstruction by the police. What is blocking the lane is, indeed, a 15-foot-tall, metal, cage-like structure, the purpose of which I cannot begin to fathom. What *is* very clear to me is that, had I not listened to and heeded this inner conversation, and had I hit this “thing” at cruising speed, I’d’ve have been killed instantly. I received the right kind of help at the right time—from my brain as well as the State Police—*and I was open to accepting and using it.* Why was I open to accepting help? *Because I saw doing so as being in my best interests.* Before I knew it, we were all on our way again, heading down the highway without incident. It could have been a disaster, but it wasn’t. No injuries, no fatalities. Safe.

So let’s tie this experience in with how people change. **In the late 1970s, two psychologists, James O. Prochaska and Carlo DiClemente (and, later, Wayne Velicer), formulated a progression of awarenesses and behaviors that they called the “Transtheoretical” or “Stages of Change” model. The Stages of Change are: Precontemplation, Contemplation, Preparation, Action, Maintenance, Termination, and, possibly, Relapse, which is no longer considered a specific Stage.**

Here's a description of each of the Stages, paraphrasing the authors, along with the tie-in to my experience on the interstate:

Stage 1, Precontemplation: Not intending to take action in the foreseeable future. When I started out that morning, I was unaware there would be an obstruction on the highway. (The vehicle I owned then didn't have GPS-assisted navigation.)

Stage 2, Contemplation: Beginning to recognize that current behavior is problematic and starting to look at the pros and cons of continued actions. As I traveled, I begin perceiving something different—a little "off"—about the horizon, and it began to dawn on me that I needed to consider doing something different than planned.

Stage 3, Preparation: Intending to take action in the immediate future and (maybe) beginning to take small steps toward behavior change. I note that a sense of threat, or alarm, was forming in my mind, and I marshalled my mental resources, my front brain, hippocampi and amygdalae, and my vision, to guide me through the impending danger.

Stage 4, Action: Making specific, overt modifications in behavior or in acquiring new healthy behaviors. I heeded what my mind was telling me, and I took specific actions—slowing down, moving into the unobstructed lane, and obeying the State Police—to move safely through the potential danger.

As for **Stage 5, Maintenance**, I do my best to practice defensive driving skills, including attention to road conditions and looking ahead to possibly dangerous situations further down the road.

Recovery is an entire process of being well, a lifetime collaboration with the illness rather than conflict with it. The threat isn't typically a metal cage in the highway; it's being unexpectedly confronted with a trigger to use or drink or gamble. Cultivating this model of change can guide people with addiction through dangerous situations so they come out the other side. No relapses, no fatalities. *Safe*.

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Into Action: How People Change

Post Test

1. Recovery in any chronic mental illness is an acute, time-limited process; merely "getting over" an episode of the illness.
   a) True b) False

2. The advent of the art and science of promoting those changes was one of the most remarkable innovations in the field of behavioral health of the 21st Century
   a) True b) False

3. Recovery itself begins with admitting there's a problem.
   a) True b) False

4. The courageous step of acknowledging a problem often depends on the help of a professional therapist and a support group.
   a) True b) False

5. On my drive, I get a clear, conscious message from my pleasure center, my two amygdalae:
   a) True b) False

6. I tune into my front brain (FB), a center of reasoning and judgment, and my anterior cingulate cortex (ACC), which, among other functions, helps me decipher contradictory situations.
   a) True b) False

7. My two hippocampi, a center of learning and memory, pull some information about what I did last time I was in a situation like this.
   a) True b) False

8. My visual cortex (VC), a vision-processing sheath of neurons in my parietal lobe, scans the scene with my eyes.
   a) True b) False

9. In the late 1990s, two psychologists, James O. Prochaska and Carlo DiClemente (and, later, Wayne Velicer), formulated a progression of awarenesses and behaviors that they called the "Transtheoretical" or "Stages of Change" model.
   a) True b) False

10. The Stages of Change are: Precontemplation, Contemplation, Preparation, Action, Maintenance, Termination, and Relapse, which is still considered a specific Stage.
    a) True b) False

11. Precontemplation: Intending to take action in the foreseeable future.
    a) True b) False

12. Contemplation: Beginning to recognize that current behavior is problematic and starting to look at the pros and cons of continued actions.
    a) True b) False

13. Preparation: Not intending to take action in the immediate future or (definitely) to begin to take small steps toward behavior change.
    a) True b) False

14. Action: Making specific, overt modifications in behavior or in acquiring new healthy behaviors.
    a) True b) False

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Into Action: How People Change

Post Test – Key

1. Recovery in any chronic mental illness is an acute, time-limited process; merely "getting over" an episode of the illness.
   a) True **b) False**

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   a) True **b) False**

10. The Stages of Change are: Precontemplation, Contemplation, Preparation, Action, Maintenance, Termination, and Relapse, which is still considered a specific Stage.
    a) True
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    b) False

12. Contemplation: Beginning to recognize that current behavior is problematic and starting to look at the pros and cons of continued actions.
    a) True
    b) False

13. Preparation: Not intending to take action in the immediate future or (definitely) to begin to take small steps toward behavior change.
    a) True
    b) False

14. Action: Making specific, overt modifications in behavior or in acquiring new healthy behaviors.
    a) True
    b) False

Module 5: "Buried Treasures: Liberating People from Families Affected by Addiction"

Keywords to Be Defined: Family Roles; Mascot; Lost Child; Hero; Scapegoat; Mastermind; Playacting; Backstory; Monolog; Leveling; "I-Statements;" "You-Statements"

Introduction to the Teacher: Have you ever dreamed that your arms and legs weigh several hundred pounds and that it requires a supreme effort even to move very sluggishly? You know how it feels: there's little-to-no freedom of movement, and every exertion has to be painstakingly planned and fought through. For most people, such a dream is just an infrequent and mildly-disturbing nightmare, but for those reared in families affected by addiction and other mental illness, such a sensation is part and parcel of their waking, day-to-day existence. For them, the belongingness and validation most people take for granted are absent, buried under the weighty imperatives of secrecy and "keeping up appearances."

Description: This activity describes typical presentation and rationales for functional roles for family members affected by a loved one with an addictive disorder.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of the aberrations of typical functional family roles for family members affected by someone with an addictive disorder.

2. Describe common presentations and "workarounds" for family members affected by a loved one's addiction.

Background Material:

Handout: "Buried Treasures: Liberating People from Families Affected by Addiction" with Post-Test

Game: "Guess Who I Am" with Sample Backstory

Activity Detail:

Step 1. Review the handout on family roles played by members of a family affected by someone's addiction, and take the post-test.

Step 2. Discuss your answers to the post-test as a group.

Step 3. Introduce the concept of playacting as the activity of pretending to be someone who is different from the actor.

Step 4. Introduce the concept of "backstory" as information about the character that has an effect on the character's actions in the play; i.e., what happened to them to make them become the way they are today; which family role did they adopt to cope with an addicted family member?

Step 5. Distribute and discuss the provided sample backstory monolog of a family member's role.

Step 6. Discuss the meaning of "monolog," and introduce the concept of a person's self-image being a kind of inner monolog about themselves.

Step 7. Before the session, if possible, assign students to pick secretly one of the family roles and create their own brief self-description monolog in that role. (Example: "In this family, my name is _____, and this is how I try to get along in this family."

Step 8. Introduce "I-Statements" and "You-Statements."

Step 9. Engage the students in discussing which role each student is playing and their possible reasons for playing that role in their family.

Questions for Discussion with Students:

1. What is it like for you to be an actor (that is, to play the role of someone who is different from the real you)?

2. How is being an actor different from just being yourself?

3. Can you think of times when acting a role seems to be a better idea than being your real self?

4. Is the family role you chose similar to you in any way? In what ways? Is t different in any way? In what ways?

5. Do you see ways that playing a role in a disturbed family can help family members?

6. Do you see ways that playing a role in a disturbed family can interfere with leveling, which means honest communication and sharing love?

7. What is the harm if honest communication is missing?

8. What value do you see in using "I-Statements" rather than "You-Statements"?

9. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

Module 5:
Resource for Discussion:
Buried Treasures:
Liberating People from Dysfunctional Families

Have you ever dreamed that your arms and legs weigh several hundred pounds and that it requires a supreme effort even to move very sluggishly? You know how it feels: there's little-to-no freedom of movement, and every exertion has to be painstakingly planned and fought through. For most people, such a dream is just an infrequent and mildly-disturbing nightmare, but for those reared in families affected by addiction and other mental illness, such a sensation is part and parcel of their waking, day-to-day existence. **For them, the belongingness and validation most people take for granted are absent, buried under the weighty imperatives of secrecy and "keeping up appearances."**

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding of some powerful-yet-inhuman "rules" typically adopted by people from dysfunctional families, how to bring those rules to light, and to carefully re-write them; otherwise, these impoverishing maxims can and do wreak havoc on interpersonal development and stunt any hope of fulfillment in life. How are family members saddled with the rules they find themselves following in order to get along in a family affected by addiction?

It's long been known that people reared in family systems affected by the chaos and, often, violence engendered by mental illness (including addictive

disorders) undergo predictable alterations from normal psychosocial development. The basic task of survival is too often at a premium in these dysfunctional systems. Early on, children find themselves enmeshed in traumas of verbal and physical abuse, sexual abuse, and abandonment; profoundly chaotic and unpredictable situations, which ill-equip them to live effectively in the real word of adult responsibility. **The so-called "Three Ds" apply here: Dependency, Debility, and Dread.** Little wonder, then, that these children grow to become rootless, constricted, ragefully-fearful, and emotionally stunted adults.

The working premise is that *everyone*, identified patient and loved ones alike, develops dysfunction in families affected by mental illness (including addiction).

Stage I: Survival in the Family. Special rules seem to apply in families affected by addiction and other mental illness. They are,

1. Don't talk. Don't name the problem, or, for that matter, don't even think consciously about the problem. Ignore it, not only in conversation but also in your own, private thoughts. Banish it from your personal awareness.

2. Don't trust. Since frightening things happen unexpectedly, and since you can never know when another frightening event will take place, always be on the lookout for "the other shoe to drop." The only thing you *can* trust is the inevitable shock when the next bad thing happens.

3. Don't feel. Keep your emotions in constant check so they don't lead you astray. Don't ever let anyone know what you're feeling because, if you do, they will know and they will retaliate against you and hurt you. They may even kill you.

4. Don't "make waves." Be steadfastly loyal at all times. Never say or do anything that would alert anyone in or out of the family that you know what is happening. If you accidentally make it public, there will be catastrophic repercussions to the whole family, and it will be *all your fault.*

5. Be self-negating. Focus rigidly on others all the time. Never take the time away from being other-focused to attend to your own needs. *Your* needs don't matter. All that matters is that you take care of others.

6. Always remember that you're: crazy, guilty, evil, responsible, different, bad, and, above all, alone.

Striving to live by these rules yields a crisis in the life of the patient. They have only two options: getting help or suicide because they're telling themselves, "I have to be superhuman, and anything less is not good enough."

If people reared in dysfunction get help, they can then move to Stage 2: Awareness of Family Issues. Break the rules in a controlled, constructive way:

1. *Do* talk. Name the problem. Think consciously about the problem. Don't ignore it. Make it present, not only in your own, private thoughts but also in conversation with select other people. There may well be people in and out of your family who would prefer you keep secrets. Remember, though, that some secrets keep people imprisoned and buried under shame, and you're working to unbury yourself.

2. *Do* trust. Although frightening things do happen unexpectedly, and although you never know when another frightening event will take place, always be aware that the "other shoe" doesn't have to fall on *you*. The only thing you need to trust is your personal ability to withstand whatever happens and your ability to free yourself from situation that could harm you. With knowledge comes responsibility, and you no longer have to retreat behind a wall of powerlessness.

3. *Do* feel. Keep your emotions in constant awareness, but don't allow them to guide your behavior unless the proposed action is also in line with what your reasoning ability dictates it should be. You have to take responsibility for your feelings as well as your behavior. Other people don't make you feel an emotion; that's an inside job.

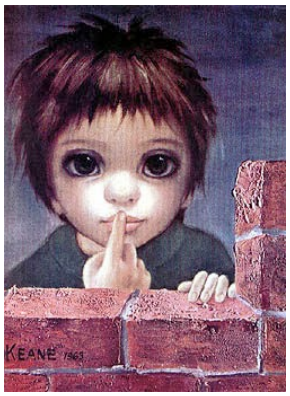
4. *Do* “make waves.” Dare to be disloyal to those who would harm or neglect you; they don’t deserve your loyalty in any event. Summon the courage to say or do anything that would alert caring people in or out of the family that you know what is happening. If what you say it is made public, there may be repercussions to the family, but the repercussions are *not your fault*, and they can bring about healing. Remember: you didn’t create the problem, and you don’t have to live in it or take responsibility for it.

5. Be self-enlightened. Focus flexibly on yourself when you need to and on others when appropriate. Take time away from being other-focused to attend to your own needs. (Your needs matter, too, after all.) It also matters that you care for others when appropriate. There’s a world of difference between being truly selfish and acting in one’s own best interest. Enlightened self-interest is one of the hallmarks of a mature personality, as you remind yourself, “I’m only human, and that’s good enough.”

Always know that you’re not: crazy, guilty, evil, responsible, different, bad, or alone. Remember that guilt says, “My behavior is bad.” False guilt claims that. “My behavior is bad” even when you haven’t done anything wrong. (Remember, just because someone is angry with you doesn’t necessarily mean you’ve done anything wrong.) Shame says, “I’m bad,” which is, typically, “throwing the baby out with the bathwater.”

Stage 3: Dealing with Family Issues

1. Liberate the child while cultivating the adult. Despite what the poster may say, when you’re an adult, it really *is* too late to have a happy childhood, but it’s never too late to grow into an appreciation of the beauty of life.



2. Feel your emotions. *All of them*.

3. Express all your emotions appropriately at the appropriate time.

4. Dare to be silly sometimes, knowing that a sense of fun is often just the right corrective for many tense situations and temporary bad moods.

5. Tolerate, then accept, love. Like salve on a wound, love can be uncomfortable at first

6. Love others.

7. Behave responsibly, not over-responsibly or under-responsibly.

8. Learn to trust your perception of reality. Just because you grew up in a "not-so-fun-house" full of distorting mirrors doesn't mean that's how things look in the real world.

Finally, remember: Courage can feel like fear. Hope can feel like despair. Faith can feel like doubt. Love doesn't feel like anything because it's not a feeling; it's self-sacrificial (but *not* self-destructive) behavior directed toward the welfare of another.

Distortions of personality arising from the "not-so-fun-house" environment of a dysfunctional family can include a deep dependency on others for self-validation and autonomy. As an example of this strong tendency to remain dependent, let me share with you an anecdote about a client of mine some years ago (and the circumstances have been altered to protect the privacy of the patient):

I once treated someone who was very dependent emotionally, and he said that his greatest fear was of making a mistake and being condemned for it. He said he needed a new blazer to wear for work, and I asked him if he had gotten one yet. "Oh, no," he said. "I've thought about getting one, but I haven't gotten around to it yet.

Since he had a tendency to procrastinate, I made a behavioral agreement with him that he'd go purchase a blazer before our next session in a week and come back

wearing it. He agreed to do that.

When he appeared the next week, he wasn't wearing the blazer. I asked him if he'd remembered that he'd wear it to the session. "To tell you the truth," he admitted, "I didn't pick one out." I asked him if he'd gone to the clothier to carry out his purchase. "I did, but, honestly, I just couldn't figure out what I like. I didn't know which of all the coats there was one that I liked. He hesitated a bit and then confided, "You see, I told you so. I just don't know what I like. I don't want to make a mistake."

I immediately congratulated him vociferously on just having gone to the store in the first place, and I made a suggestion: "What if you go back to the store and pick out a blazer that you *think* someone *else* would like? If you do that, just make sure that you can take it back for an exchange or a refund if you get it home and decide you really don't like it. Could you do that?" He agreed to do so.

I'd love to say he next appeared proudly decked out in a fine, new blazer of his own choosing, but he didn't. He'd gone back to the store, all right, but he was still hobbled by this fear of getting the "wrong" blazer. I praised his persistence and asked him if he'd seen any blazers there that he was certain that he *didn't* like. "Yeah, there were some I thought just 'weren't me.' " "Great!" I said. "Think about going back and getting one of the ones that's in the group that you *didn't dislike*; and, if you do, please be sure and wear it to the session; will you do that?" He agreed. I reinforced to him that I wanted to see the blazer, not to pass judgment on it, but to praise his having made an autonomous choice.

The next week, he came to the session sporting his new blazer (which he had to have for work, anyway). I congratulated him heartily on this accomplishment, being careful not to indicate whether or not I thought the blazer was becoming to him. I made it clear to him that his choice was his alone to make, and that no one had the right to contradict his sense of taste in choosing this particular blazer. I think he might have known all along that this blazer was the one he wanted, but he had to permit himself to come to that conclusion in his own time and at his own pace, not mine (or anyone else's).

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Buried Treasures:

Liberating People from Dysfunctional Families

Post Test

1. For people from dysfunctional families, the belongingness and validation most people take for granted are absent, buried under the weighty imperatives of secrecy and "keeping up appearances."
    a) True b) False

2. It's long been known that people reared in family systems affected by the chaos and, often, violence engendered by mental illness (including addictive disorders) undergo predictable alterations from normal psychosocial development.
    a) True b) False

3. The basic task of _____ is too often at a premium in these dysfunctional systems.
    a) Validation
    b) Survival
    c) Creativity
    d) None of the above

4. The so-called "Three Ds" apply here: _____, _____, and _____.
    a) Dependency, Debility, and Dread
    b) Danger, Daydreaming and Deceit
    c) Decorum, Defeatism, Deference
    d) None of the above

5. The working premise is that everyone, identified patient and loved ones alike, develops dysfunction in families affected by mental illness (including addiction).
    a) True b) False

6. The "rules" of a dysfunctional family tend to be:
    a) Don't talk.
    b) Don't trust.
    c) Don't feel.
    d) Don't "make waves."
    e) Be self-negating.
    f) All of the above

7. Always remember that you're: crazy, guilty, evil, responsible, different, bad, and, above all, never alone.
    a) True b) False

8. If people reared in dysfunction get help, they can then move to Stage 2: Awareness of Family Issues. Follow the rules in a controlled, constructive way:
    a) True b) False

9. Courage can feel like _____. Hope can feel like _____. Faith can feel like _____.
    a) Fear. Despair. Doubt.
    b) Dread. Anger. Sadness.
    c) Excitement. Joy. Anticipation.

10. Distortions of personality arising from the “not-so-fun-house” environment of a dysfunctional family can include a deep dependency on others for self-validation and autonomy.
    a) True b) False

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Buried Treasures: Liberating People from Dysfunctional Families

Post Test – Key

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    a) True
    b) False

Module 6: "Fear Upon Fear: Addiction and Anxiety"

Keywords to Be Defined: Symptom; "Fight, Flight, or Freeze Reaction;" Anxiety; Dread; Support

Introduction to the Teacher: We all know the signs: sweaty palms, rapid breathing, foreboding and a sense of doom, the need to run and hide … No, we're not talking about taking a final exam; we're talking about something every one of us experiences from time to time: anxiety. For most of us, those sensations, unpleasant as they may be, can be withstood relatively easily because you know they'll pass with time. But what if they don't? What if they come and go unpredictably, leaving you dreading their return to the point you trigger an episode by worrying that you'll have one? That's an anxiety disorder.

Description: This activity describes the co-presentation of addictive disorders and anxiety disorders.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of the co-presentation of addictive disorders and anxiety disorders.

2. Describe effective, compassionate strategies for detecting, intervening in, and/ or referring out for appropriate treatment for this comorbidity.

Background Material:

Handout: "Fear Upon Fear: Addiction and Anxiety" with Post-Test

Game: "Help Me Hold the Shoes"

Activity Detail:

Step 1. Review the handout on addiction and anxiety, and take the post-test.

Step 2. Discuss your answers to the post-test as a group.

Step 3. Introduce the concept of dread by discussing the metaphor, "waiting for the other shoe to drop."

Step 4. Ask a volunteer to demonstrate the "family expectation/rule" of holding a pair of shoes out in front of them as long as they can, at arm's length, parallel to the floor.

Step 5. Before the "shoe drops," the student enlists the help of a second student to change the family rule in supporting their arms as they continue to hold up the shoes.

Step 6. Together, the two students change the rule by allowing the first student to accept support from the second student.

Step 7. After holding the shoes for an additional minute, the students put them down, ending the exercise.

Step 8. Engage all the students in a general discussion of the meaning of “following the rules” and of the concept of support in making a difficult task easier.

Questions for Discussion with Students:

1. When you have felt anxious, did you see yourself as being weak or strong?

2. What is it like when you see a loved one feeling anxious or afraid?

3. What does the expression, “waiting for the other shoe to drop,” mean to you now?

4. Have you ever been able to offer help to someone experiencing anxiety? If so, did you feel weak or strong?

5. Have you ever been able to accept help from someone when you were experiencing anxiety? If so, did you feel weak or strong?

6. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

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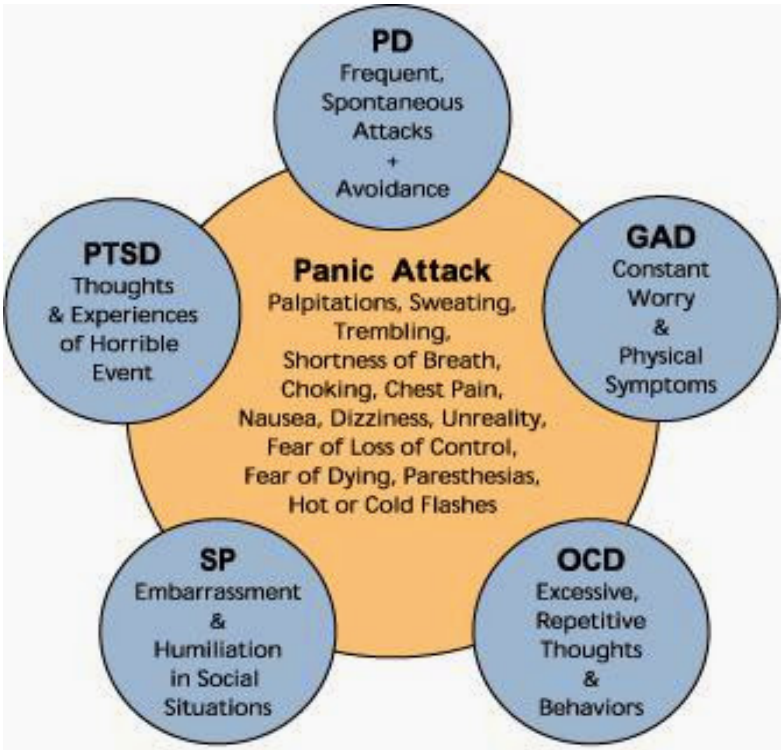
School of Addiction and Behavioral Health

Resource for Discussion:
Fear Upon Fear: Addiction and Anxiety

We all know the signs: sweaty palms, rapid breathing, foreboding and a sense of doom, the need to run and hide … No, we're not talking about final exam day, we're talking about something every one of us experiences from time to time: anxiety. For most of us, those sensations, unpleasant as they may be, can be withstood relatively easily because you know they'll pass with time. But what if they don't? What if they come and go unpredictably, leaving you dreading their return to the point you trigger an episode by worrying that you'll have one? That's an anxiety disorder.

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about the disorders of addiction and anxiety; how they interact with one another, and how they're treated at the same time.



Roughly 20% of Americans present with anxiety problems, which may go along with the addictive disorders or be a separate, coexisting problem; after all, anxiety--**the belief that one is in some sort of threat situation, and the emotions that go with it--is a normal part of active addiction, anyway.** Finding out whether the person is having trouble with anxiety as part of their disorder or whether they are suffering from separate anxiety problems is challenging because **the anxiety will often be so intense that recovery in addiction is impossible unless it is dealt with.**

While the common anxiety disorders, panic disorder, social phobia, posttraumatic stress disorder, generalized anxiety disorder and obsessive-compulsive disorder, differ in their symptoms, one commonality is a sense of dread and all the unpleasant—and, often, truly frightening—symptoms accompanying it. Small wonder, then, that early recovery in addiction is made greatly more-challenging by the appearance of these symptoms; so much so that it is often more than the patient can bear without falling back on the tried-and-true (and catastrophic) solution of drinking, using other drugs or gambling, to name a few addictive options. To say to these people, “This, too, shall pass” is not only unfeeling but all-too-often untrue without the right kinds of help.

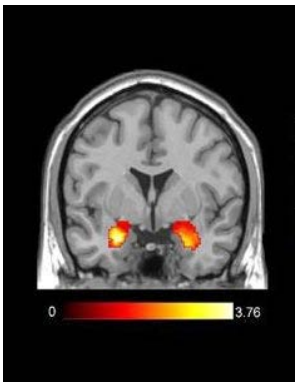
Until relatively recently, the only effective medications available to treat anxiety were benzodiazepines, drugs such as Valium, Xanax, or Klonopin, etc. While they worked well, they posed the troubling problem of being abusable in people with a history of substance abuse; the very medication that was supposed to be decreasing their anxiety could actually cause more problems than it solved. These difficulties with these medications often led to the attitude of **"Leave the anxiety alone, work a solid recovery program, and the anxiety will go away by itself in time."** While this standpoint about anxiety is sometimes true, it is more often not true, and people can suffer with untreated anxiety and relapse needlessly into active addiction.

Fortunately, these days, there are options. **Medications used to treat depression have been found to be helpful anti-anxiety drugs.** These medicines are called SSRIs (from the way they work in the brain, i.e., inhibiting the reuptake of serotonin), and they include Prozac, Paxil, Zoloft and Celexa, among others. Like another drug, buspirone (BuSpar), they’re not habit-forming, but they make take several days to be effective. They can be taken for long periods of time with no risk of the person's becoming addicted to them.

Psychotherapy is also essential to help the patient regain a sense of self-confidence, especially if they have been using alcohol or other drugs for a long time. The patient has to learn how to deal with both the symptoms and the causes of anxiety, including past traumatic events which may still be upsetting to them (sometimes years after the trauma). Proper medication and appropriate therapy can help addicts who also suffer with anxiety to achieve a stable, happy recovery.

Let's take a brief look at specific structures implicated in anxiety:

Amygdala: The amygdala is part of the limbic system, a group of structures deep in the brain associated with emotions. It is activated when a person recalls emotionally charged memories, such as a frightening situation. Although it is accurate to state that the amygdala detects threat, it is probably not the case that the amygdala is a "fear center," per se, since it is only a part of the overall system which causes the individual to detect and then process the meaning of a threat.



MRI of amygdala activation during threat detection

Hippocampus: The hippocampus has a central role in processing learning, long-term memory and recollection. Interplay between the hippocampus and the amygdala might account for the old saying, "once bitten, twice shy." The hippocampus registers fear when, for example, you're confronted by a barking, aggressive dog, and the memory of such an experience may make you wary of dogs you come across later in life:

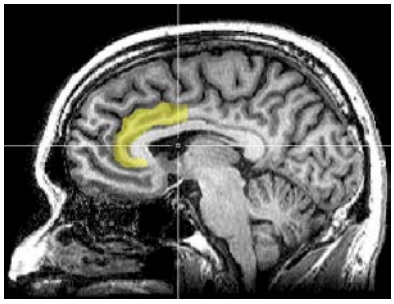
The **angry dog** is growling at me. (Vision sense, hippocampus, working memory)

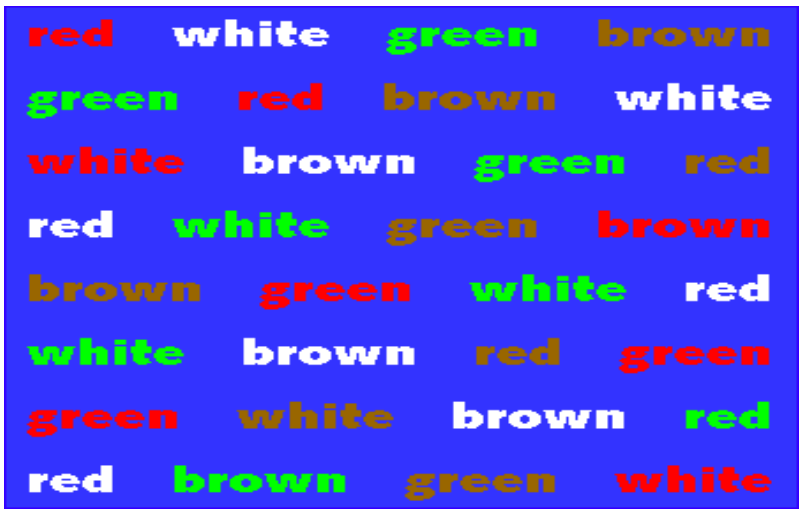
The angry dog is **growling** at me. (Hearing sense, hippocampus, working memory)

The angry dog is growling **at me.** (Amygdala, hippocampus, frontal cortex).

The anterior cingulate cortex is particularly involved in appraising and expressing fear and in judgment and anticipation of emotional stimuli. (To self: "The dog is growling, but does that mean I'm in danger?")

MRI of anterior cingulate cortex





Ridley Stroop, PhD (1935)

The insula is involved with perceiving bodily sensations of anxiety. It's an island of the cerebral cortex. Its overall shape is like a pyramid with a triangular base.

One symptom which must not be ignored is thinking (and even planning) to harm one's self to escape the emotional pain of the disorder. If it is determined that someone is having thoughts of hurting themselves, they must be seen as soon as possible by a physician so they can be assessed and, if necessary, treated in a protected environment until they are free of the desire to harm themselves.

It is important to understand and remember that other disorders, including physical problems, such as diabetes or fibromyalgia, for example, can cause many or all of these symptoms in people. Diagnosing a primary anxiety disorder in addicts is frequently challenging, and when the person also has a history of substance abuse, the doctor must first help the person get the chemicals out of their system before an accurate diagnosis can be made. The substance abuse counselor can offer the support and coaching the patient needs to be able to stay free of chemicals long enough for the diagnosis to be made and then for the appropriate treatment to be given. When there is a clear, primary anxiety disorder, the physician may well diagnose and treat it with one or more medications.

Symptoms of anxiety can be masked by addictive behavior, both as a distraction for the person and as a part of the stress and demoralization which normally accompany active addiction.

If anxiety symptoms persist, the patient is likely to benefit from professional help. It's important to remember that, for some people under some circumstances of loss, a normal, anxiety-triggering grieving process can go on for a long time. This protracted grieving is most often caused by attempts to deny or get away from the pain or trying to avoid letting go, either by refusal to address the issues precipitating the grief or by non-compliance in resorting to use of alcohol or other drugs in an attempt to medicate the grief.

Barriers to full recovery in anxiety disorders include: patient noncompliance to taking medication; lying to the doctor about taking the medication; self-discontinuing the medication due to impatience, side effects, or inappropriate fear of becoming dependent.

Seems like an awful lot of bad news, doesn't it? Well, the good news is that anxiety disorders and addiction are both highly responsive to proper treatment. Let's look at some current treatments that have a positive impact on both addictive disorders and on anxiety.

First, for those who need it, detoxification techniques are available to ease the transition from using to drug-free. Medications can be used to treat persisting symptoms, such as depressed mood and emotional instability.

Any therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the very same areas of the brain affected by addiction. Talking therapies have been found useful in helping recovering addicts reorient their self-image and stay abstinent from chemicals. Family networking therapy helps addicts "rejoin the human race" and take their place in their families and other relationships. Peer-support groups can be an important adjunct to treatment in providing a network of encouragement and shared progress in becoming and staying more stable.

Cognitive behavioral therapy (CBT) focuses on the development of personal coping strategies to solve current problems and change unhelpful patterns in thinking, behavior, and emotion. It was originally designed to treat depression and is now used for a number of mental health conditions, including addiction. **CBT is based on the understanding that symptoms and associated distress can be reduced by teaching new information-processing skills and coping mechanisms.**

Contingency management helps addicts by providing positive consequences when they meet treatment goals and negative consequences when they don't. An example of a positive consequence for abstinence could be receiving vouchers (not cash!) exchangeable for retail goods or progressing in a phased treatment program. A negative consequence could be withholding vouchers or a negative report to a parole officer. Therapists may create written behavioral contracts that detail the desired behavior change and other treatment details.

While they don't cure it, there are medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, that can stabilize the ongoing operating balance among the brain structures affected by addiction (specifically the ventral tegmental area, nucleus accumbens and frontal cortex). These medicines help do for the brain what it can't do for itself; they are assistive technology for the brain. In moderating anxiety symptoms, antidepressants also help the reward centers rebalance and stabilize as well.

So … Here's the short version: Even though neither addiction nor anxiety can be cured, they *can* be stabilized. The good news is that help is available right here in the Shreveport-Bossier area for people and their loved ones; everything from medically-supported detox to residential treatment to outpatient and intensive outpatient treatment programs are available.

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Fear Upon Fear: Addiction and Anxiety

Post Test

1. Roughly 30% of Americans present with anxiety problems.
   a) True b) False

2. The belief that one is in some sort of threat situation, and the emotions that go with it--is a normal part of active addiction, anyway.
   a) True b) False

3. The anxiety will often be so intense that recovery in addiction is impossible unless it is dealt with.
   a) True b) False

4. While the common anxiety disorders, panic disorder, social phobia, posttraumatic stress disorder, generalized anxiety disorder and obsessive-compulsive disorder, differ in their symptoms, one commonality is a sense of not caring.
   a) True b) False

5. Until relatively recently, the only effective medications available to treat anxiety were antipsychotics.
   a) True b) False

6. A common attitude in dealing with anxiety was "Leave the anxiety alone, work a solid recovery program, and the anxiety will go away by itself in time."
   a) True b) False

7. Medications used to treat depression have not at all been found to be helpful anti-anxiety drugs.
   a) True b) False

8. Psychotherapy is also essential to help the patient regain a sense of self-confidence, especially if they have been using alcohol or other drugs for a long time.
   a) True b) False

9. Amygdala: The amygdala is part of the limbic system, a group of structures deep in the brain associated with thoughts.
   a) True b) False

10. Hippocampus: The hippocampus has a central role in processing learning, long-term memory and recollection.
    a) True b) False

11. The anterior cingulate cortex is particularly involved in appraising and expressing fear and in judgment and anticipation of emotional stimuli.
    a) True b) False

12. The insula is involved with perceiving bodily sensations of anxiety.
    a) True b) False

13. One symptom which must not be ignored is thinking (and even planning) to harm one's self to escape the emotional pain of the disorder.
    a) True b) False

14. It is important to understand and remember that other disorders, including physical problems, such as diabetes or fibromyalgia, for example, do not cause any anxiety symptoms in people.
    a) True b) False

15. Symptoms of anxiety can be masked by addictive behavior, both as a distraction for the person and as a part of the stress and demoralization which normally accompany active addiction.
    a) True b) False

16. If anxiety symptoms persist, the patient is likely to benefit from professional help.
    a) True b) False

17. Barriers to full recovery in anxiety disorders include: good patient compliance to taking medication; lying to the doctor about taking the medication; self-discontinuing the medication due to impatience, side effects, or inappropriate fear of becoming dependent.
    a) True b) False

18. No therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the very same areas of the brain affected by addiction.
    a) True b) False

19. CBT is based on the understanding that symptoms and associated distress can be reduced by teaching new information-processing skills and coping mechanisms.
    a) True b) False

20. Contingency management helps addicts by providing negative consequences when they meet treatment goals and positive consequences when they don’t.
    a) True b) False

21. While they don’t cure it, there are medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, that can stabilize the ongoing operating balance among the brain structures affected by addiction
    a) True b) False

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Fear Upon Fear: Addiction and Anxiety

Post Test – Key

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    a) True b) False

Module 7: "Double Trouble: Addiction and Depression"

Keywords to Be Defined: Symptom; Depression; Demoralization; Table-Reading; Support

Introduction to the Teacher: Addictive illness frequently occurs simultaneously with other mental (i.e., brain) disorders. One of the most common conditions which happen in tandem with addiction is depression. It's more than the occasional emotional "let-down" we all have when we aren't feeling well or when confronted with a disappointment or loss (even a major loss, such as the death of a loved one or a divorce, etc.). Depression is a many-sided disorder in the centers of the brain which regulate mood, and it shows itself in a wide variety of symptoms. What's more, depression and addictive disorders often coincide, creating a panoply of symptoms, problems and challenges to recovery.

Description: This activity describes the co-presentation of addictive disorders and depressive disorders.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate a basic understanding of the presentation of addictive disorders as they interact with depression.

2. Describe proven strategies in identifying and intervening successfully in coexisting addictive disorders and depression.

Background Material:

Handout: "Double Trouble: Addiction and Depression" with Post-Test

Playlet: "I Don't Want to Talk About It"

Activity Detail:

Step 1. Review the handout on addiction and depression, and take the post-test.

Step 2. Discuss the post-test answers as a group.

Step 3. Introduce the playlet, "I Don't Want to Talk About It."

Step 4. Assign the parts to the available students. In live performance, the Depressed Person sits at the front of the room with the other students in a semi-circle around them.

Step 5. Table-read the playlet from start to finish.

Step 6. Discuss every student's experience of trying to communicate with a reluctant, listless friend.

Questions for Discussion with Students:

1. When you have felt depressed or demoralized, did you see yourself as being weak or strong?

2. What is it like seeing a loved one feeling sad or depressed?

3. Do you think refusing to talk about how you feel make you feel better or worse?

4. Have you ever been able to offer help to someone when they are depressed? If so, did you feel weak or strong?

5. Have you ever been able to accept help from someone when you were feeling depressed? If so, did you feel weak or strong?

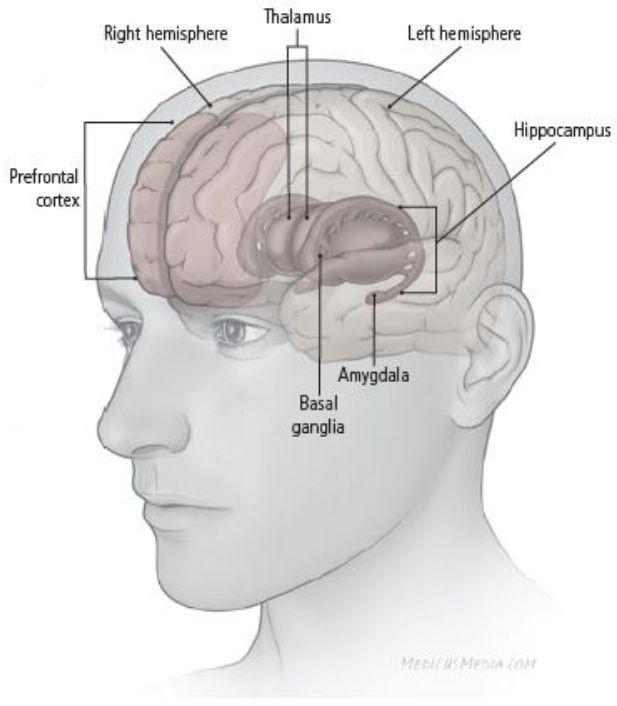
6. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

Resource for Discussion:
Double Trouble: Addiction and Depression

Addictive illness frequently occurs simultaneously with other mental (i.e., brain) disorders. One of the most common conditions which happen together with addiction is depression. It's more than the occasional emotional "let-down" we all have when we aren't feeling well or when confronted with a disappointment or loss (even a major loss, such as the death of a loved one). Depression is a many-sided disorder in the centers of the brain which regulate mood, and it shows itself in a wide variety of symptoms. **What's more, depression and addictive disorders often coincide, creating a panoply of symptoms, problems and challenges to recovery**.

Areas of the Brain Affected by Depression



The regions shown here are mirrored in both hemispheres of the brain. Also, these structures are interlocking; the illustration suggests location and relative region but not precise location.

Harvard Medical School

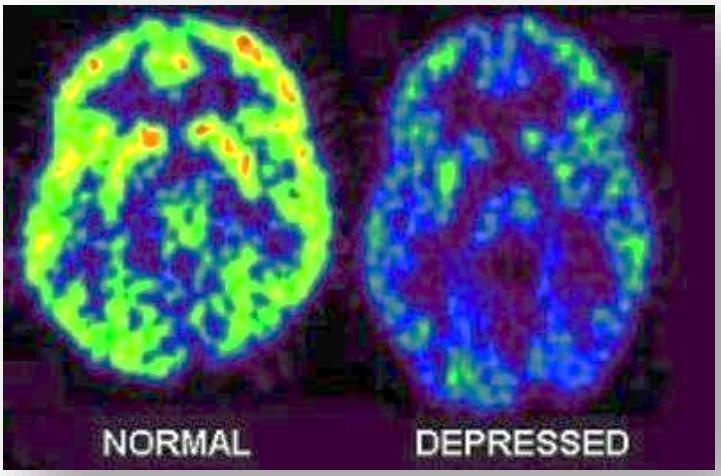
Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about the disorders of addiction and depression when they appear at the same time in the same person; what they are, how they interact with one another, and how they can be treated. Does depression cause addiction? Does addiction cause depression? Just what is the relationship between the two diseases?

We note specific structures implicated in depression:

Amygdala: The amygdala is part of the limbic system, a group of structures deep in the brain associated with emotions. It is activated when a person recalls emotionally charged memories, such as a frightening situation. **Activity in the amygdala is higher when a person is sad or clinically depressed. This increased activity continues even after recovery from depression.**

Thalamus: The thalamus receives most sensory information and, similarly to a microwave repeater, relays it to the cerebral cortex, which directs high-level functions such as speech, behavioral reactions, movement, thinking, and learning. Some research suggests that bipolar disorder may result from problems in the thalamus, which helps link sensory input to pleasant and unpleasant feelings.

Hippocampus: The hippocampus has a central role in processing learning, long-term memory and recollection. Interplay between the hippocampus and the amygdala might account for the adage "once bitten, twice shy." It is this part of the brain that registers fear when you are confronted by a barking, aggressive dog, and the memory of such an experience may make you wary of dogs you come across later in life. **The hippocampus is smaller in some depressed people, and research suggests that ongoing exposure to stress hormone impairs the growth of nerve cells in this part of the brain.**



Crystal Pirner

Naturally, the most-common symptom of depression is the obvious one of a generally-depressed and sad mood even though life in general may be free of situations which one would normally find depressing. **Other symptoms of depression can include loss of interest, fatigue, fretting about things, loss of (or increase in) appetite, irritability, rumination on real or perceived negatives in one's life, difficulty in sleeping and in concentrating, unreliable memory, aches and pains, difficulty in carrying out even the simplest of tasks, and feelings of guilt, hopelessness and unworthiness.**

One symptom which must not be ignored is thinking (and even planning) to harm one's self to escape the emotional pain of the disorder. If it is determined that someone is having thoughts of hurting themselves, they must be seen as soon as possible by a physician so they can be assessed and, if necessary, treated in a protected environment until they are free of the desire to harm themselves. **The greatest cause of suicide in adults and adolescents alike is untreated depression.**

It is important to understand and remember that many other disorders (including physical problems, such as diabetes or fibromyalgia, for example) can cause many or all of these symptoms in people. Diagnosing depression can sometimes be challenging, but when the person also has a history of substance abuse, the doctor must first help the person get the chemicals out of their system before an accurate diagnosis can be made. The substance abuse counselor can offer the needed support and coaching for the patient to be able to stay abstinent long enough for the diagnosis to be made and then for the appropriate treatment to be given. When there is a family history, the physician may well diagnose depression and treat it with one or more remarkable medications, which can actually assist the mood centers in the brain in adjusting the person's mood back to normal.

A major loss can trigger depression, and this trigger is now recognized as a common evoking agent to incipient depression. It is common for people to have sadness, pain, anger, bouts of crying, and a depressed mood after a loved one dies. It is important to know about normal grief responses so that you can know if the bereaved person might be getting worse -- going into a major depression. **Symptoms of depression can be masked by addictive behavior, both as a distraction for the person and as subsumed into the predictable stress and demoralization which normally accompany active addiction.**

About 1 in 5 grieving people develop major depression. People at highest risk for clinical depression include those who have been depressed before, those with no support system, those who have had problems with alcohol or drug abuse, or those who have other major life stresses. People with addictive disorders experiencing the stress accompanying their illness will find it difficult or impossible to withstand the emotional pain of bereavement. **Addicts' ability to adapt and heal in their grief is impaired by the effect on slowing of maturation brought about by their illness and by constant triggering of the reward centers in the brain trying to feel better, causing a desire to self-medicate the pain of the loss with chemicals.**

To be clear: symptoms of major depression that are not explained by normal bereavement may include:

1. Constant thoughts of being worthless or hopeless. ("See? I told you I was no good. Just look at me, here, all alone, drinking and using and losing everything important to me.")

2. Ongoing thoughts of death or suicide (other than thoughts that they would be better off dead or should have died with their loved one) These thoughts or statements are always to be taken seriously.

3. Being unable to perform day-to-day activities ("I'm so far behind in everything I'm supposed to do, I may as well just stay here and keep on drinking.")

4. Intense guilt over things done or not done at the time of the loved one's death ("Where was I when he died? Right here, getting high, instead of being there when he needed me.")

5. Delusions (beliefs that are not true) "If I had been there, she wouldn't have died.")

6. Slower body responses and reactions ("I just want to disappear into this slot machine.")

7. Uncharacteristic weight loss or gain

If depressive symptoms last more than 2 months after the loss, the bereaved person is likely to benefit from professional help. It's important to remember that, for some people under some circumstances of loss, the grieving process can go on for a long time, perhaps even years. This protracted grief can appear frequently in those who were very close to the deceased. It is most often caused by attempts to deny or get away from the pain or trying to avoid letting go.

Also receiving more study is *undertreated* depression, sometimes referred to as residual depression. **The term, "undertreated depression" describes a stall in initial, marked improvement after beginning antidepressant therapy.** The depressed person begins a good, responsive recovery but does not attain the full measure of symptom relief and normal functioning that can be possible today.

Barriers to full recovery in depression and other mood disorders include: patient noncompliance to taking medication; lying to the doctor about taking the medication; self-discontinuing the medication due to impatience, side effects, or inappropriate fear of becoming dependent.

Treatment success can also be hampered occasionally by lack of physician expertise in prescribing optimally (such as using recognized augmentation strategies as a SSRI in combination with a dual action agent such as bupropion or with buspirone) and giving the medication(s) enough time to be effective, increasing the dose when appropriate rather than moving to a different agent.

So-called "double depression" **dysthymia (a type of less-severe but still troubling depression)**, coexisting with major depressive disorder) responds well to CBT and appropriate medication. Decisive treatment of dysthymia is often overlooked in double depression because the patient has improved when the major depressive episodes are stopped, and the tendency is to "settle for less." This lapse in care leaves the person vulnerable to all the problems of dysthymia plus an increased risk of relapse into major depressive episodes, substance abuse and (in some cases) suicide.

Well, that's the bad news. Seems like an awful lot of bad news, doesn't it? So, what's the good news? The good news is that depression and addiction are both highly responsive to proper treatment. These days, there is a strong likelihood that an addict with depression can go on to lead a happy, productive life. Let's look at some current treatments that have a positive impact on both addictive disorders and on depression.

First, for those who need it, detoxification techniques are available to ease the transition from using to drug-free. Medications can be used to treat persisting symptoms, such as depressed mood and emotional instability. (Example: **just as alcohol or other drugs interfere with the brain's ability to conserve the transmitter supplies needed to remain stable, antidepressant and anti-craving medications actually help reverse that deficit to some extent by helping the brain more-effectively store up what transmitter it can now make.)**

Any therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the very same areas of the brain affected by addiction. Talking therapies have been found useful in helping recovering addicts reorient their self-image and stay abstinent from chemicals. Family networking therapy helps addicts “rejoin the human race” and take their place in their families and other relationships. Peer-support groups can be an important adjunct to treatment in providing a network of encouragement and shared progress in becoming and staying more stable.

Cognitive behavioral therapy (CBT) focuses on the development of personal coping strategies to solve current problems and change unhelpful patterns in thinking, behavior, and emotion. It was originally designed to treat depression and is now used for a number of mental health conditions, including addiction. **CBT is based on the belief that symptoms and associated distress can be reduced by teaching new information-processing skills and coping mechanisms.**

Contingency management helps addicts by providing positive consequences when they meet treatment goals and negative consequences when they don’t. An example of a positive consequence for abstinence could be progressing in a phased treatment program or receiving vouchers (not cash!) exchangeable for retail goods. A negative consequence could be a negative report to a parole officer or withholding vouchers. Therapists can create written behavioral contracts that detail the desired behavior change and other treatment details.

While they don’t cure it, there are medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, that can stabilize the ongoing operating balance among the brain structures affected by addiction (specifically the ventral tegmental area, nucleus accumbens and frontal cortex). These medicines help do for the brain what it can’t do for itself; in that sense, they’re assistive technology for the brain. In moderating depressive symptoms, antidepressants also help the reward centers rebalance and stabilize as well. Additionally, rapid transcranial magnetic stimulation and other stimulatory devices (all of which are FDA-cleared) have been helpful to many patients in lessening how severe the episodes of depression turn out to be.

So … Here's the short version: Even though neither addiction nor depression can be cured, they can be stabilized. The good news is that help is available right here in the Shreveport-Bossier area for people and their loved ones; everything from medically-supported detox to residential treatment to outpatient and intensive outpatient treatment programs are available.

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Resource for Discussion:
"I Don't Want to Talk About It"

Helping Student

Hi, Janie! I was looking for you after this morning's class. Say, you look a little down. Are you ok?

Depressed Student

Yeah, I'm ok.

Helping Student

You look like you don't feel good.

Depressed Student

I guess I'm just a little depressed.

Helping Student

What to talk about it?

Depressed Student

No, I don't. I just want to be alone right now.

Helping Student

You seem really down right now. Won't you let me help?

Depressed Student

I don't want to talk about it.

Helping Student

Are you sure?

Depressed Student

Yeah. I don't want to talk about it.

Helping Student

Are you sure there's not anything I can do for you?

Depressed Student

No, I just don't want to talk about it.

Helping Student

Can you at least tell me what's making you feel so depressed?

Depressed Student

[Stays silent]

Helping Student

We've been friends for a long time. Please just tell me what's bothering you.

Depressed Student

It's nothing.

Helping Student

Listen to me. You're obviously very depressed, and you wouldn't just leave me by myself if you saw me that way.

Depressed Student

I can manage it.

Helping Student

Remember when I was very upset about my parents' divorce?

Depressed Student

Yes.

Helping Student

It really meant so much to me that you came to me and encouraged me to talk about what was going on and how I felt about it.

Depressed Student

I remember you told me how much it helped. I'm glad it helped, but this is different.

Helping Student

Are your parents getting divorced?

Depressed Student

I wish …! Uh, no.

Helping Student

Are they having—

Depressed Student

I sure wish they would.

Helping Student

Why? They aren't getting along with each other?

Depressed Student

Drinking

Helping Student

How do you mean?

Depressed Student

They always argue when they've been drinking.

Helping Student

They drink a lot?

Depressed Student

I shouldn't talk about it. I talked with the school counselor, Ms. Jamison, once and they got really mad at me when I told them I'd talked with her. They told me to keep that to myself from now on, that it was nobody else's business.

Helping Student

Our next door neighbors got divorced because of his drinking. We used to hear them arguing and fighting during the night and on weekends. I remember the police had to come several times because they were making so much noise.

Depressed Student

Are you going to call the police on my parents?

Helping Student

No, I was just letting you know that the fights can be serious. I remember their daughter, Kristen—you know her—started missing a lot of school and finally had a breakdown and tried to kill herself.

Depressed Student

I remember.

Helping Student

I guess she didn't have anyone to talk to about how she was feeling.

Depressed Student

Guess not.

Helping Student

Are you thinking about hurting yourself?

Depressed Student

No! I mean … not really … no.

Helping Student

Are you willing to promise me that you won't hurt yourself?

Depressed Student

What do you mean?

Helping Student

I mean right here, face to face, to promise me that you won't hurt yourself?

Depressed Student

Ok, I won't.

Helping Student

You have to look me right in the eye and say that.

Depressed Student

I won't hurt myself. Really, it's not so bad. Lots of kids have it a lot worse than I do.

Helping Student

One of the best things about when you talked to me when I was depressed is that you showed me that I'm not alone. There are people who care about me and how I'm doing. I want you to know the same thing. You're not alone, and there are people who care about you. Whatever is going on, you don't have to deal with it alone.

Depressed Student

Thank you.

Helping Student

I also want you to know that, when I talked with Ms. Jamison, it was confidential, and it really helped a lot. She's very nice, and she can help you.

Depressed Student

[A little alarmed] Are you going to tell her what I said?

Helping Student

What I wish we could do is you let me go with you to her office so you can set up a time to talk with her. Friends are important, but I learned that sometimes it's also good to have an adult on your side. I think she used the word, "advocate." Someone who stands beside you. Like me. I'm an advocate for you.

Depressed Student

I'll think about it.

Helping Student

Ok, but you remember your promise to me not to hurt yourself, tight?

Depressed Student

I remember.

Helping Student

Are you gonna stick with that promise?

Depressed Student

Yes. I promise.

Helping Student

Good! It's time for class. Can we get together again afterwards, just so I can see how you're doing?

Depressed Student

Sure, I guess so.

Helping Student

You promise?

Depressed Student

Yeah. I promise.

Helping Student

Remember, I'm here for you now, and I'm going to be here for you.

Depressed Student

Ok. Thanks.

Rembrandt van Rijn (1606-1669)
The Good Samaritan (1630)
Oil on oak panel
24.2cm X 19.8cm
East Galleries I

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Double Trouble: Addiction and Depression

Post Test

1. Addictive illness frequently occurs simultaneously with other mental (i.e., brain-based) disorders. One of the least common conditions which happen in tandem with addiction is depression.
   a) True b) False

2. Depression and addictive disorders often coincide, creating a panoply of symptoms, problems and challenges to recovery.
   a) True b) False

3. The amygdala is part of the limbic system, a group of structures deep in the brain associated with emotions.
   a) True b) False

4. Activity in the amygdala is higher when a person is sad or clinically depressed. This increased activity continues even after recovery from depression.
   a) True b) False

5. The thalamus receives most sensory information and, similarly to a microwave repeater, relays it to the cerebral cortex, which directs high-level functions such as speech, behavioral reactions, movement, thinking, and learning.
   a) True b) False

6. The hippocampus has a central role in processing learning, long-term memory and recollection.
   a) True b) False

7. The hippocampus is larger in some depressed people, and research suggests that ongoing exposure to stress hormone impairs the growth of nerve cells in this part of the brain.
   a) True b) False

8. Other symptoms of depression can include loss of interest, fatigue, fretting about things, loss of (or increase in) appetite, irritability, rumination on real or perceived negatives in one's life, difficulty in sleeping and in concentrating, unreliable memory, aches and pains, difficulty in carrying out even the simplest of tasks, and feelings of guilt, hopelessness and unworthiness.

   a) True b) False

9. The greatest cause of suicide in adults and adolescents alike is untreated depression.
   a) True b) False

10. A major loss cannot trigger depression, so this trigger is not recognized as a common evoking agent to incipient depression.
   a) True b) False

11. Symptoms of depression can be masked by addictive behavior, both as a distraction for the person and as subsumed into the predictable stress and demoralization which normally accompany active addiction.
   a) True b) False

12. About 1 in 10 grieving people develop major depression.
   a) True b) False

13. Addicts' ability to adapt and heal in their grief is impaired by the effect on slowing of maturation brought about by their illness and by constant triggering of the reward centers in the brain trying to feel better, causing a desire to self-medicate the pain of the loss with chemicals.
   a) True b) False

14. If depressive symptoms last more than 8 months after the loss, the bereaved person is likely to benefit from professional help.
   a) True b) False

15. The term, "undertreated depression" describes a stall in initial, marked improvement after beginning antidepressant therapy.
   a) True b) False

16. Which of the following is not a barrier to recovery in depression and other mood disorders?
   a) Patient noncompliance to taking medication
   b) Lying to the doctor about taking the medication
   c) Refusal to self-discontinue the medication due to impatience
   d) Side effects
   e) Inappropriate fear of becoming dependent.

17. Dysthymia is a type of less-severe but still troubling depression.
   a) True b) False

18. Just as alcohol or other drugs interfere with the brain's ability to conserve the transmitter supplies needed to remain stable, antidepressant and anti-craving medications actually help reverse that deficit to some extent by helping the brain more-effectively store up what transmitter it can now make.
   a) True b) False

19. Any therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the very same areas of the brain affected by addiction.
    a) True b) False

20. CBT is based on the belief that symptoms and associated distress can be reduced by teaching new information-processing skills and coping mechanisms.
    a) True b) False

21. Contingency management helps addicts by providing positive consequences both when they meet treatment goals and when they don't.
    a) True b) False

22. Medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, can stabilize the ongoing operating balance among the brain structures affected by addiction and, thereby, cure it.
    a) True b) False

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Double Trouble: Addiction and Depression

Post Test – Key

1. Addictive illness frequently occurs simultaneously with other mental (i.e., brain-based) disorders. One of the least common conditions which happen in tandem with addiction is depression.
   a) True **b) False**

2. Depression and addictive disorders often coincide, creating a panoply of symptoms, problems and challenges to recovery.
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3. The amygdala is part of the limbic system, a group of structures deep in the brain associated with emotions.
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4. Activity in the amygdala is higher when a person is sad or clinically depressed. This increased activity continues even after recovery from depression.
   a) True b) False

5. The thalamus receives most sensory information and, similarly to a microwave repeater, relays it to the cerebral cortex, which directs high-level functions such as speech, behavioral reactions, movement, thinking, and learning.
   a) True b) False

6. The hippocampus has a central role in processing learning, long-term memory and recollection.
   a) True b) False

7. The hippocampus is larger in some depressed people, and research suggests that ongoing exposure to stress hormone impairs the growth of nerve cells in this part of the brain.
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8. Other symptoms of depression can include loss of interest, fatigue, fretting about things, loss of (or increase in) appetite, irritability, rumination on real or perceived negatives in one's life, difficulty in sleeping and in concentrating, unreliable memory, aches and pains, difficulty in carrying out even the simplest of tasks, and feelings of guilt, hopelessness and unworthiness.
   a) True b) False

9. The greatest cause of suicide in adults and adolescents alike is untreated depression.
   a) True b) False

10. A major loss cannot trigger depression, so this trigger is not recognized as a common evoking agent to incipient depression.
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11. Symptoms of depression can be masked by addictive behavior, both as a distraction for the person and as subsumed into the predictable stress and demoralization which normally accompany active addiction.
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12. About 1 in 10 grieving people develop major depression.
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13. Addicts' ability to adapt and heal in their grief is impaired by the effect on slowing of maturation brought about by their illness and by constant triggering of the reward centers in the brain trying to feel better, causing a desire to self-medicate the pain of the loss with chemicals.
    a) True b) False

14. If depressive symptoms last more than 8 months after the loss, the bereaved person is likely to benefit from professional help.
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    e) Inappropriate fear of becoming dependent.

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19. Any therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the very same areas of the brain affected by addiction.
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22. Medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, can stabilize the ongoing operating balance among the brain structures affected by addiction and, thereby, cure it.
    a) True **b) False**

Module 8: "Deadly Despair: Getting Perspective on Suicide"

Keywords to Be Defined: Suicide Attempt; Suicide Gesture; Indicators; Inner Voice; Emotional Fatigue

Introduction to the Teacher: Suicide. The word conjures up all sorts of emotional responses in everyone, and even mental health professionals are no exception. How do you feel when you know someone is contemplating ending their life? Fear? Panic? Maybe even anger at them? Most people know of at least one person who has killed themselves, and no one is immune from the feelings around the possibility of suicide or from the obligation to do everything humanly possible to keep it from happening.
Description: This activity describes indicators and interventions in suicide.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of universally-common indicators for potential suicidal gestures and attempts.

2. Describe effective interventions to prevent suicide in vulnerable people exercising proper referral protocols to responsible faculty and administration as described in school policy statements.

Background Material:

Handout: "Deadly Despair: Getting Perspective on Suicide" with Comment Menu and Post-Test

Game: "Hold the Vase"

Activity Detail:

Step 1. Review the handout, including the Comment Menu, and take the post-test.

Step 2. Discuss the answers to the post-test as a group, with emphasis on detecting possible suicidality.

Step 3. Introduce the concept of the "inner voice" as a faculty of self-awareness that can be accurate or inaccurate.

Step 3. Assign a student the task of holding a vase (provided) out to their side at arm's length, parallel to the floor.

Step 4. The student holds the vase as long as they can, without putting it down or letting their arm fall to their side.

Step 5. As the student holds the vase, the other students taunt them to try to influence them to either drop the vase or to continue to strive to hold it up.

Step 6. When the student is noticeably fatigued, a second person come to their aid to help them hold the vase parallel to the floor.

Step 7. When they both tire, the teacher lets them know that another solution to the game is to change the rules and do away with the requirement that they hold the vase at all, reminding them that saying “No” is always a possible response to an unreasonable demand.

Step 8. The students put down the vase, giving up the stress and exertion of doing the impossible (i.e., holding it up forever).

Questions for Discussion with Students:

1. When you have felt down, depressed, or emotionally fatigued, what was that like for you?

2. When you felt down, how did you keep going? What did you tell yourself?

3. Has anyone ever told you they felt suicidal?

4. If so, how did you handle the situation?

5. When they said they were feeling suicidal, how did you feel?

6. Do you know what you should do in such a situation?

7. What would you do if someone told you to keep their suicidal thoughts a secret?

8. Do you think it should be considered “failure” when someone is unable to do something that is actually impossible? If so, why? If not, why not?

9. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

Resource for Discussion:
Deadly Despair: Getting Perspective on Suicide

Suicide. The word conjures up all sorts of emotional responses in everyone, and mental health professionals are no exception. How do you feel when you know someone is contemplating ending their life? Fear? Panic? Maybe even anger at them? Most people know of at least one person who has killed themselves, and no one is immune from the feelings around the possibility of suicide or from the obligation to do everything humanly possible to keep it from happening.

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about suicide prevention and how the reality of suicide affects people with addiction as well as families affected by addiction.

By far, the most-common cause of suicide is untreated or under-treated depression or other psychiatric disorder. Prevention begins with understanding what a suicidal episode is like, how it is experienced by the patient. To aid in understanding, here's a scenario:

As a demonstration, imagine you've been asked to fully extend your right arm out to your side parallel to the floor. With no additional support and no help from anyone, your task is to hold an extraordinarily expensive and somewhat heavy vase in your right hand for as long as you can without setting it down, resting it on the floor, or dropping it.

Going into this demonstration, basic common sense tells you that there's only a limited amount of time you'll be able to extend your arm and hold up the vase. You know that, at some point, you're going to lose the ability to support the vase in this way. Never forget, the vase is priceless, a one-of-a-kind treasure, so you don't want to let it fall and shatter on the floor. If you drop it, you fail the test. If you set it down, you also fail the test, because the test is one of endurance.

For a few moments, perhaps, you'll find this demonstration only mildly difficult and not very strenuous. More time passes, and you're continuing to stand there supporting the weighty vase. You're quickly finding that the exertion of holding out your arm and supporting the vase is becoming slightly more strenuous. You're noting the first inkling of weakness. For the moment, you're still holding up the vase. Although you were fully rested when you began this demonstration, the strain is becoming more intense as the seconds go by. It's becoming pretty clear to you that your ability to hold this vase up without help will soon be coming to an end.

A time of decision is drawing near for you, and *quickly*: you're going to have to do something to avoid setting the vase down or dropping it to the floor and letting it shatter. The options are few. The primary need to not let the vase fall is being replaced by another, more-pressing urge: to get relief from the pain and fatigue of exertion that is now spreading up and down your arm. As your arm muscles continue to contract, a buildup of lactic acid causes a burning sensation. This burning feeling is only getting worse; it's beginning to really hurt, and you're getting more fatigued as the seconds pass by. What started out as a minor ache has quickly become an excruciating fire-like sensation, and you're not sure how much longer you can stand it.

Unless someone else helps you, the outcome is going to be certain. Pain and fatigue will overtake your arm's ability to remain horizontal. You'll ultimately have to let go of the vase one way or the other. You'll fail the test. You're now at the point that you desperately want help, but if you let someone help you, you fail the test.

You drop the vase. Pain and fatigue have overtaken you. You held out as long as you could. You just couldn't hold on forever.

You might think this scenario is a metaphor for a suicidal episode. It isn't. This scenario is a metaphor for a normal, healthy human being who's challenged to exhaustion by some major task. Everyone has vases to hold, or, to use the famous metaphor, "crosses to bear." Here's the suicidal metaphor: At just the point that you drop the vase and feel completely exhausted, having given it your all for as long as you

could, you're instructed to pick up the vase and do it all again, with no time to rest. You may be able to summon some degree of resolve and pick up and hold the vase again, but you're not going to be able to do it for very long at all. When you started, you were fully rested, but now, you're taking up the challenge from the position of exhaustion. *Maybe it's time to change the rules of the test and let someone help you hold the vase.* (Just remember, even Christ had help, and someone who's suicidal has very likely already done more than enough "dying for someone else's sins.")

The most basic human urge is to survive. Everything we do, think, and feel guides us to one imperative: survival. Depression and many other situations can sap people of their will to survive. It isn't that they don't care about staying alive; it's that they're so physically, emotionally and spiritually exhausted that they can't care.

One crucial symptom of suicidality is thinking—and even planning—to harm one's self to escape excruciating emotional or physical pain. If it is determined that someone is having thoughts of hurting themselves, they must be seen as soon as possible by a physician so they can be assessed and, if necessary, treated in a protected environment until they are free of the desire to harm themselves. The most-common triggers to suicide are untreated (or undertreated) depression, bipolar disorder and substance-related disorders.

Also receiving more study is *undertreated* depression. **The term, "undertreated depression," or "residual depression," describes a stall in initial, marked improvement after beginning antidepressant therapy.** The depressed person begins a good, responsive recovery but does not attain the full measure of symptom relief and normal functioning that can be possible today.

The American Foundation for Suicide Prevention notes several risk factors of concern for possible suicide attempt, some of which are the following:[1]

Talk

Being a burden to others
Feeling trapped
Having no reason to live
Killing themselves

Behavior

Looking for ways to kill themselves, such as searching online

Acting recklessly
Withdrawing from activities
Isolating from family and friends
Sleeping too much or too little
Visiting or calling people to say goodbye
Giving away prized possessions
Aggression

Mood

Depression
Loss of interest
Rage
Irritability
Humiliation
Anxiety

Psychiatric Disorders

Depression (including dysphoria from a serious or chronic health condition)
Bipolar disorder
Schizophrenia
Borderline or antisocial personality disorder
Anxiety disorders
Substance-related disorders

Environmental Factors

Stressful life events which may include a death, divorce, or job loss
Prolonged stress factors which may include harassment, bullying, relationship problems, and unemployment
Access to lethal means including firearms and drugs
Exposure to another person's suicide, or to graphic accounts of suicide

Historical Factors

Previous suicide attempts
Family history of suicide attempts

Any therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the same areas of the brain affected by addiction. Talking therapies have been found useful in helping recovering addicts reorient their self-image and stay abstinent from chemicals. Family networking therapy helps addicts "rejoin the human race" and take their place in their families and other relationships. Peer-support groups can be an important adjunct to treatment in providing a network of encouragement and shared progress.

Cognitive behavioral therapy (CBT) focuses on the development of personal coping strategies to solve current problems and change unhelpful patterns in thinking, behavior, and emotion. It was originally designed to treat depression and is now used for a number of mental health conditions, including addiction. **CBT is based on the belief that symptoms and associated distress can be reduced by teaching new information-processing skills and coping mechanisms.**

Dialectical behavior therapy focuses on building a meaningful life rather than merely remaining abstinent. It has been found helpful both for people who are suicidal and for those with addictive disorders. **The goal is to balance the patients' desire to avoid pain while at the same time helping them to learn how to tolerate the normal pain that goes with living "life on life's terms."** The addiction counselor helps patients bring about change as they discover new meanings from examining differing perspectives around a subject.

Interpersonal therapy (IP) incorporates several other theories: object relation, attachment and family systems: **Three assumptions central to IP are:**

1) Human beings are relational creatures, so many problems are interpersonal in nature;

2) Family experience is the central source of learning about ourselves and others;

3) The therapist-patient relationship can help solve problems.[2]

Contingency management helps addicts by providing positive consequences when they meet treatment goals and negative consequences when they don't. An example of a positive consequence for abstinence could be progressing in a phased treatment program or receiving vouchers (not cash!) exchangeable for retail goods. A negative consequence could be a negative report to a parole officer or withholding vouchers. Therapists can create written behavioral contracts that detail the desired behavior change and other treatment details.

While they don't cure it, there are medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, that can stabilize the ongoing operating balance among the brain structures affected by addiction (specifically the ventral tegmental area, nucleus accumbens and frontal cortex). These medicines help do for the brain what it can't do for itself; in that sense, they're assistive technology for the brain. In moderating depressive symptoms, antidepressants also help the reward centers rebalance and stabilize as well. **Additionally, use of repetitive transcranial magnetic stimulation (rTMS) and other stimulatory devices (all of which are FDA-cleared) have been helpful to some patients in lessening intractable depressive episodes; however, the *long-term* effectiveness of neurostimulatory interventions is under study.[3]**

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[1] American Foundation for Suicide Prevention, https://afsp.org/

[2] Teyber E: Interpersonal Process in Psychotherapy. Pacific Grove: Brooks/Cole, 1997.

[3] Baeken C: Accelerated rTMS: a potential treatment to alleviate refractory depression. Bethesda, MD.NLM, 2018, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6220029/

Supportive Comments Menu

Pick any of the following sentences in any order. Say the sentence out loud gently to the person holding the vase. After saying one sentence, say another one at random. Continue until the teacher ends the exercise.

You look like you need a friend.

Do you want to talk? I'll listen.

You don't have to hurt yourself.

What can I do to help?

Have you talked to the counselor?

Are you thinking about hurting yourself?

I'm glad you told me you're depressed.

I'm right here with you.

Please tell me if you ever think about hurting yourself.

You seem depressed to me. Are you feeling down?

Being depressed is not something to be ashamed of.

The situation is not hopeless.

Talking about feelings can make you feel better.

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Deadly Despair:
Getting Perspective on Suicide

Post Test

1. By far, the most-common cause of suicide is untreated or under-treated depression or other psychiatric disorder.
    a) True b) False

2. The most basic human urge is to procreate.
    a) True b) False

3. One crucial symptom of suicidality is thinking—and even planning—to harm one's self to escape excruciating emotional or physical pain.
    a) True b) False

4. The term, “undertreated depression,” or “residual depression,” describes a stall in initial, marked improvement after beginning antidepressant therapy.
    a) True b) False

5. Verbalized signs of suicidality can include:
    a) Being a burden to others
    b) Feeling trapped
    c) Killing themselves
    d) All of the above

6. Behavioral signs of suicidality include:
    a) Isolating from family and friends
    b) Visiting or calling people to say goodbye
    c) Giving away prized possessions
    d) All of the above

7. Mood signs of suicidality include:
    a) Depression
    b) Loss of interest
    c) Rage
    d) Humiliation
    e) All of the above

8. Psychiatric disorders with high risk for suicide include:
    a) Depression
    b) Schizophrenia
    c) Substance-related disorders
    d) All of the above

9. Environmental factors contributing to suicidality include:
    a) Stressful life events
    b) Prolonged stress factors
    c) Access to lethal means
    d) Exposure to another person's suicide, or to graphic accounts of suicide
    e) All of the above

10. Historical factors contributing to suicidality include:
    a) Previous suicide attempts
    b) Family history of suicide attempts
    c) Neither of the above
    d) a and b

11. No therapy that helps the person with socialization and a sense of belonging has any neurochemical benefits in the same areas of the brain affected by addiction.
    a) True b) False

12. CBT is based on the belief that symptoms and associated distress can be reduced by teaching new information-processing skills and coping mechanisms.
    a) True b) False

13. In dialectical behavior therapy, the goal is to balance patients' desire to avoid pain while at the same time helping them to learn how to reject the normal pain that goes with living "life on life's terms."
    a) True b) False

14. Three assumptions central to IP are:
    a) Human beings are relational creatures
    b) Family experience is the central source of learning about ourselves and others
    c) The therapist-patient relationship can help solve problems
    d) a and c
    e) All of the above

15. Contingency management helps addicts by providing negative consequences when they meet treatment goals and positive consequences when they don't.
    a) True b) False

16. While they don't cure it, there are medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, that can stabilize the ongoing operating balance among the brain structures affected by addiction.
    a) True b) False

17. Use of repetitive transcranial magnetic stimulation (rTMS) and other stimulatory devices (all of which are FDA-cleared) have been helpful to some patients in ameliorating intractable depressive episodes, and the *long-term* efficacy of neurostimulatory interventions is clinically verified.
    a) True b) False

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Deadly Despair: Getting Perspective on Suicide

Post Test - Key

1. By far, the most-common cause of suicide is untreated or under-treated depression or other psychiatric disorder.
   a) True b) False

2. The most basic human urge is to procreate.
   a) True **b) False**

3. One crucial symptom of suicidality is thinking—and even planning—to harm one's self to escape excruciating emotional or physical pain.
   a) True b) False

4. The term, “undertreated depression,” or “residual depression,” describes a stall in initial, marked improvement after beginning antidepressant therapy.
   a) True b) False

5. Verbalized signs of suicidality can include:
   a) Being a burden to others
   b) Feeling trapped
   c) Killing themselves
   d) All of the above

6. Behavioral signs of suicidality include:
   a) Isolating from family and friends
   b) Visiting or calling people to say goodbye
   c) Giving away prized possessions
   d) All of the above

7. Mood signs of suicidality include:
   a) Depression
   b) Loss of interest
   c) Rage
   d) Humiliation
   e) All of the above

8. Psychiatric disorders with high risk for suicide include:
   a) Depression
   b) Schizophrenia
   c) Substance-related disorders
   d) All of the above

9. Environmental factors contributing to suicidality include:
    a) Stressful life events
    b) Prolonged stress factors
    c) Access to lethal means
    d) Exposure to another person's suicide, or to graphic accounts of suicide
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    a) True **b) False**

Module 9: "Life in fast-Forward: Addiction and Attention-Deficit/Hyperactivity Disorder"

Keywords to Be Defined: AD(H)D; Attending; Hyperactive; Stimulus; Inhibition; Self-Pacing; Refusal Skills

Introduction to the Teacher: In recent years, there's been something of a quiet revolution in treating addiction. It's becoming clearer that success in recovery beyond mere abstinence involves learning and practicing the skills of sustaining attention, self-pacing, repetitive and sequential behavior, placing a delay on reaction, and declining to react physically, to learn how to "put on the brakes."

Description: This activity describes how attention-deficit/hyperactivity disorder often presents with addictive disorders.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of the interrelationships between AD(H)D and addictive disorders.

2. Describe practical interventions in working with people with addictive disorders who present also with AD(H)D or other executive function deficits.

Background Material:

Handout: "Life in Fast-Forward: Addiction and AD(H)D" with Post-Test and Including Two Versions of the Serenity Prayer: One with All Words Included, and Another with Some Words Missing.

Game: "Pass the Ball"

Activity Detail:

Step 1. Review the handout on addiction and AD(H)D, and take the post-test.

Step 2. Discuss the post-test answers as a group.

Step 3. Introduce "stimulus" as an event which seems to call for a response.

Step 4. Introduce "inhibition" as the faculty of delaying a response to a stimulus.

Step 5. Review the game, "Pass the Ball." One student offers the ball (or other object) to another student, who receives it.

Step 6. The other student responds as in the game script.

Step 7. When their interaction is complete, the receiving student becomes the offering student and goes though the game with a third, receiving, student.

Questions for Discussion with Students:

1. What goes through your mid when you hear the Serenity Prayer read with some of the words skipped?

2. When you are distracted, do some things seem to get skipped over in your awareness?

3. Do you think someone with addiction might have trouble pacing themselves?

4. Do you think someone with addiction who has trouble paying attention might have a special difficulty with staying away from chemicals on a daily basis? If so, why?

5. How does feeling impatient affect your ability to stay focused on the ball-passing exercise when you go through it very slowly?

6. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

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Resource for Discussion:
Living in Fast Forward: Addiction and Attention-Deficit/Hyperactivity Disorder

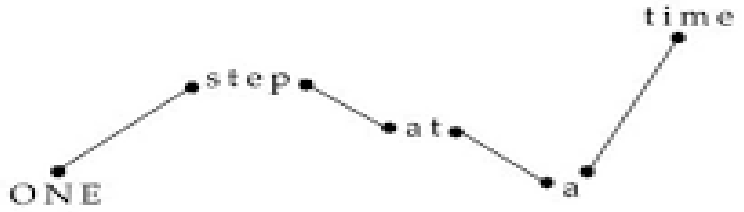
In recent years, there's been something of a quiet revolution in treating addiction. It's becoming clearer that success in recovery beyond just not using chemicals involves learning and practicing the skills of sustaining attention, self-pacing, repetitive and sequential behavior, placing a delay on reaction, and declining to react physically, to learn how to "put on the brakes." Today's lesson involves addiction and attention-deficit/hyperactivity disorder as they look when they appear together; what they are, how they interact with one another, and how they can be treated.

The fear of having somehow damaged their brain is a common one for people early in their addiction recovery. Even compulsive gamblers who have never abused alcohol or other drugs wonder aloud about their apparent lack of mental focus and disorganization. **While "brain damage" in the traditional sense is unusual, there are real problems in functioning that become apparent only after abstinence in addiction begins.** These deficits, which "ride along" in people with addiction, involve the abilities to pre-envision, plan, order and carry out tasks.

The exercises, or what we're calling "games," that we'll look at later have been used with actual inpatients and outpatients. The response has generally been very favorable, as long as the participants understand two points: first, note that there is no intention to make light of these deficits or of those who have them. Note also that practice brings enhanced skill

Researchers describe addiction as a chronic neurological disorder, which involves and also makes worse the specific deficits, including problems in cognition, motivation, and insight; behavioral disinhibition; attention deficits; emotional instability;

impulsiveness; aggressiveness; depression; anhedonia; and persistent movement disorders.

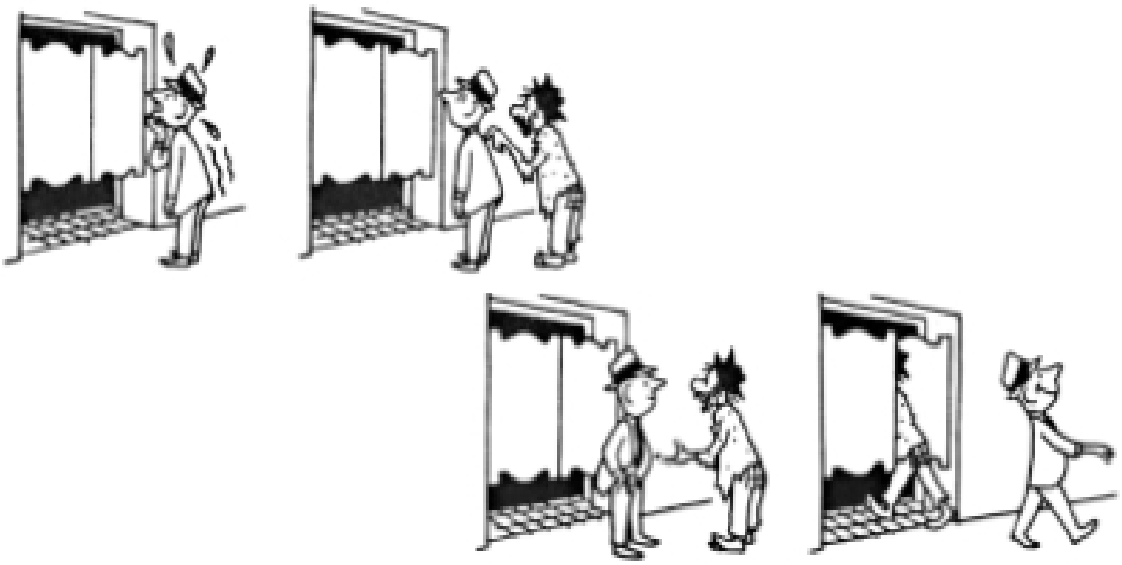


Executive functions are those abilities of attention and concentration that allow us to perform and complete tasks and then shift attention to new tasks. Here is a passage from the American Society of Addiction Medicine's Long Definition of Addiction. We're struck by the impression that, if this passage isn't describing true attention-deficit disorder, it's coming very close to delineating a disorder that, as yet, hasn't been named: "In addiction there is a significant impairment in executive functioning, which manifests in problems with perception, learning, impulse control, compulsivity, and judgment. **People with addiction often manifest a lower readiness to change their dysfunctional behaviors despite mounting concerns expressed by significant others in their lives; and display an apparent lack of appreciation of the magnitude of cumulative problems and complications."** The authors continue, "The still-developing frontal lobes of adolescents may both compound these deficits in executive functioning and predispose youngsters to engage in 'high risk' behaviors, including engaging in alcohol or other drug use. The profound drive or craving to use substances or engage in apparently rewarding behaviors, which is seen in many patients with addiction, underscores the compulsive or avolitional aspect of the disease. This is the connection with 'powerlessness' over addiction and 'unmanageability' of life, as is described in Step 1 of 12 Step programs."

In their paper, "Attention to action: willed and automatic control of behavior," Donald A. Norman and Tim Shallice have outlined specific executive functions:

Those that involve planning or decision making
Those that involve error correction and troubleshooting
Situations where responses are not well-rehearsed or contain novel (new) sequences of actions
Dangerous or technically difficult situations
Situations that require the overcoming of a strong habitual response or resisting temptation.

In the abstract to their paper, Norman and Shallice write: "The major theme of the paper is that the primary role of attention is in the control of action. The basic idea is that human action sequences can run themselves off, efficiently, smoothly, without any need for deliberate attention. However, when modifications in a plan must be made, *or when it is desired that some novel alternative action sequence be followed, or when it is desired to prevent some habitual act from occurring* [italics mine], then it is necessary for deliberate attentional intervention into the process."*****



In other words, the challenges that accompany doing something new or even something that is not well-rehearsed (such as declining the action of drinking, using or gambling, for instance) rather than resorting to "going through the motions," require that attention be paid to the new task, lest the person find himself reverting to old, previously practiced behavior. As the saying goes, "If you do what you always did, you'll get what you always got."

Understanding is important, but *doing* is everything! An early illustration of this truth is found in the Twelve Steps of Alcoholics Anonymous, all of which describe *doing* something. (Interestingly enough, a verb, an action word, is the first significant word in each of the Twelve Steps, and they're described in the A.A. Big Book Chapter called "How It Works.") We know that specific areas of the brain respond to various types of repetition. As these brain areas become more practiced at the skill they're being taught, the skill becomes more automatic. If practice is lacking, the skill deteriorates.

A.A. also advocates for doing what is necessary to stay in the reality of recovery rather than lapsing into the fantasy of being able to take that first—or next—drink with impunity, without spiraling headlong into yet another alcohol-fueled catastrophe. **Meditation (or what we might refer to nowadays as mindfulness) is the perfect antidote to impulsive behavior and bollixed-up emotions.** The overarching task is to stay grounded in reality; in the here and now.

Exercises ("games") have been designed that enhance specific functions of the brain typically *under*-practiced in active addiction and in early recovery. It turns out that one of the most important of these brain skills involves declining to do something, "putting on the brakes." *Remember: declining to do something is a complete action in itself*, an action which is *different from not* doing something because you haven't considered doing it. The importance of this skill is obvious to anyone who has struggled with the urge to gamble or toward some other addictive behavior. It's not just about "just saying no;" it's more accurate to say it's about saying, "No, not right now. Not this

second. Not this moment. Not now. Not here. Not today."

One of the so-called "games" involves offering someone a small ball. The sequence goes like this. John and I are within reaching distance of one another. I say to him, "Hi, John." He responds, "Hi, Kent." Notice that John and I are now engaged in paying attention to one another. Once that attention has been established, that connection made, I say, "John, please take this ball." I show him the ball, but I don't reach out to him to offer it just yet." John says, Ok." Only then do I offer him the ball. He has been instructed to count silently to ten before reaching for the ball and taking it. Once he has reached the count of ten, he reaches over to me and takes the ball. Sounds pretty easy, in fact elementary, doesn't it? The reality is that addicts have special difficulty doing this, because the parts of the brain that enable someone to decline to act on an invitation are, shall we say, "rusty" at best. The impulse is to take the ball immediately, and declining to do so takes special effort and has to be a specific and much-practiced, single-minded goal for the person to be able to carry it out effectively and reliably.

Here's what got me thinking along these lines some years ago. I used to teach at a K-12 school. As I was leaving the campus at the end of a school day, I walked past the gymnasium, as I always did, to get to the parking lot. The doors to the gym were open, and as I approached the gym, I could hear a lot of shuffling and laughing. Curious as to what was happening, I looked inside and saw the varsity basketball team in a practice session. What was fascinating to me was that there wasn't a basketball in sight. The team was running single-file up and down the gym in a more or less straight line as fast as possible. Interestingly enough, they were all running backwards! As you might expect, many of them were falling down on the heavily-padded gym floor, laughing as they lost balance and fell. I thought to myself, "Why in the world would the basketball team be doing something so bizarre? What could running up and down the gym backwards possibly have to do with practicing playing basketball?"

Immediately, of course, it dawned on me why the coach would have the team doing that. When you're playing a real basketball game, you have to do a lot of running more-or-less backwards, and you have to do it without falling down and without fouling the player next to you. The coach was running them through their paces doing a movement isolated from playing basketball as a whole. He was giving them a tool they could use during a real game, and he introduced it to them and practiced it with them in its simplest form. No dribbling, no throwing, just the single act of running backwards. Taken out of context, it didn't seem to make a lot of sense. Put in the context of a real game, it made all the sense in the world!

Going back to my description of the ball-passing game a moment ago, the real-world utility of that game and its skill set become apparent as John, who happens to be an alcoholic in early recovery, is with friends one evening. One of them—presumably not knowing that John is an alcoholic in early recovery—suggests they all go bar-hopping. John has recent memories of getting drunk and initially enjoying the experience and then also coming to regret having gotten drunk when he had an auto accident and smashed up the family car. The invitation to go bar-hopping incites within him both an anticipation of the pleasure of getting drunk and the dread of what he fears may happen—again—when he does so. ***Both the anticipation of drinking and the dread of the likely consequences affect the reward centers, making it especially difficult for an addict to think straight.*** Since John can't summon the attentional focus to take himself out of the immediate situation and, perhaps, call his sponsor to discuss the craving and get support, he has yet another relapse.

If, on the other hand, John has systematically cultivated the knack of installing a period of time between the invitation to go bar-hopping and what he does next, he can fall back on that now-practiced response of waiting until his head clears a bit and then getting support from his sponsor, to keep him grounded in reality. This time, in the face of the invitation from his friends, John is able to perform what may seem like a miraculous feat: *he does nothing. For a period long enough to allow him to come back to himself and reorient to reality, he simply stays still and does nothing.*

Again, the primary task is to stay grounded in reality as a guide for what should be the next move, when the time is right to make it. For now, however, do nothing. Just <u>be</u>.

Harm reduction strategies and activities stem from the desirability of adopting and sustaining practices that mitigate risk and minimize the frequency and severity of harm to our patients (as in a relapse). As important as theory is in psychiatric disease management, its utility is realized only in the doing of behaviors that promote abstinence and recovery. **Patients can benefit from contingency planning and from intelligent management of time. Scheduling their day is one very empowering way of helping them stay mentally focused.**

The logic of time management in recovery and in relapse-prevention planning goes like this:

There is only one of me.
Since there is only one of me, I have only one brain.
Since I have only one brain, I can pay attention only to one thing at a time.
Since I have only one brain, I can think only one thought at a time.
Since I can think only one thought at a time, I will experience only one emotion at a time.
Since I have only one brain, I can do only one task at a time.
Since there is only one of me, I can be in only one place at a time.
Since it's always today, I can live in only one day at a time.
Therefore: I ask myself the question: "Right here, right now, am I where I'm supposed to be, doing what I'm supposed to be doing?" As long as the answer is "Yes," I can't relapse. If the answer is "No," I reserve the right for the rest of my life to stop and re-set my day as many times a day as necessary to get and stay on track.

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*Norman DA and Shallice T: Attention to action: willed and automatic control of behavior. In M Gazzaniga (ed.): Cognitive Neuroscience: A Reader. Blackwell, 2000

What is wrong with
Version 2 of the "Serenity Prayer"
by Reinhold Niebuhr?

How could Version 2 resemble AD(H)D?

Version 1.

God grant me serenity to accept the things I cannot change,
Courage to change the things I can, and
Wisdom to know the difference.

Version 2.

God grant serenity accept things cannot
Courage change things and
Wisdom the difference

Reinhold Niebuhr
(1892-1971)

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Living in Fast-Forward: Addiction and Attention-Deficit/ Hyperactivity Disorder

Post Test

1. While "brain damage" in the traditional sense is unusual, there are real functional problems that become apparent only after abstinence in addiction begins.
   a) True b) False

2. Research consensus describes addiction as a chronic neurological disorder.
   a) True b) False

3. Executive functions are those abilities of attention and concentration that allow us to perform, complete and then _____ attention to new tasks.
   a) Stop
   b) Shift
   c) Interrupt

4. People with addiction often manifest a lower readiness to change their dysfunctional behaviors despite mounting concerns expressed by significant others in their lives; and display an apparent lack of appreciation of the magnitude of cumulative problems and complications.
   a) True b) False

5. In their paper, "Attention to action: willed and automatic control of behavior," Donald A. Norman and Tim Shallice have outlined specific executive functions, including which of the following?
   a) Those that involve planning or decision making
   b) Those that involve error correction or troubleshooting situations where responses are not well-rehearsed or contain novel (new) sequences of actions
   c) Dangerous or technically difficult situations
   d) Situations that require the overcoming of a strong habitual response or resisting temptation.
   e) All of the above

6. In the abstract to their paper, Norman and Shallice write: "The major theme of the paper is that the primary role of attention is in the control of _____."
   a) Attention
   b) Emotion
   c) Action

7. Doing is important, but understanding is everything!
    a) True b) False

8. Meditation (or what we might refer to nowadays as mindfulness) is an ineffective antidote to impulsive behavior and bollixed-up emotions.
    a) True b) False

9. Both the anticipation of drinking and the dread of the likely consequences affect the reward centers, making it especially difficult for an addict to think straight.
    a) True b) False

10. Harm reduction strategies and activities stem from the desirability of adopting and sustaining practices that mitigate _____ and minimize the frequency and severity of harm to our patients (as in a relapse).
    a) Risk
    b) Pleasure
    c) Anxiety

11. The overarching task is to stay grounded in reality as a guide for what should be the next move, when the time is right to make it. For now, however, do nothing. Just <u>be</u>.
    a) True b) False

12. Patients can benefit from contingency planning and from intelligent management of _____. Scheduling their day is one very effective way of helping them stay mentally focused.
    a) Others
    b) Time
    c) Thinking

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Living in Fast-Forward: Addiction and Attention-Deficit/ Hyperactivity Disorder

Post Test - Key

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    b) False

12. Patients can benefit from contingency planning and from intelligent management of _____. Scheduling their day is one very effective way of helping them stay mentally focused.
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    b) Time
    c) Thinking

Module 10: "The Zombie Apocalypse Made Real: Methamphetamine Addiction"

Keywords to Be Defined: Amphetamine; Methamphetamine; Snorting; Stimulants; Neurotransmitter; Dopamine; Norepinephrine

Introduction to the Teacher: Methamphetamine—or "meth," as it's commonly called—is a stimulant, one of a group of substances known collectively as amphetamines. Meth can be a white powder or a pill, and "crystal meth" looks like glass or shiny, bluish-white "rocks." It's taken into the body by snorting, smoking or by injection. It's also known as "crank," "chalk," "crystal," "fire," "meth," "speed," and "ice." Used properly, it has some legitimate medical uses. Used improperly, it can create a waking nightmare for addicts and for everyone who cares about them

Description: This activity describes the biopsychosocial effects of addiction to methamphetamine.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of the modes and sites of action and the pathophysiology of methamphetamine addiction.

2. Describe recognized treatment and stabilization strategies.

Background Material/Handout:

Handout: "The Zombie Apocalypse Made Real: Amphetamine Addiction" with Post-Test

Activity: Google Search of Amphetamine's Effects on the Human Body

Activity Detail:

Step 1. Read through the handout, The Zombie Apocalypse Made Real: Methamphetamine Addiction, and take the post-test.

Step 2. Discuss the post-test answers as a group.

Step 3. Introduce the word, "neurotransmitter," and the two transmitters involved with methamphetamine, dopamine and norepinephrine.

Step 4. Assign student the following topics for research on Google: stimulants, methamphetamine, intoxication, "crash."

Step 5. Discuss students' findings from their Google searches.

Questions for Discussion with Students:

1. What are some common stimulants found in everyday foods or beverages?

2. Does methamphetamine have any legitimate uses in medicine? If so, what are they?

3. Describe the effects of methamphetamine intoxication.

4. Describe the effects of chronic methamphetamine abuse.

5. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

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Resource for Discussion:
The Zombie Apocalypse Made Real:
Methamphetamine Addiction

Methamphetamine—or "meth," as it's commonly called—is a stimulant, one of a group of substances known collectively as amphetamines. Meth can be a white powder or a pill, and "crystal meth" looks like glass or shiny, bluish-white "rocks." It's taken into the body by snorting, smoking or by injection. **It's also known as crank, chalk, crystal, fire, meth, speed, and ice.** Used properly, it has some legitimate medical uses. Used improperly, it can create a waking nightmare for addicts and for everyone who cares about them.

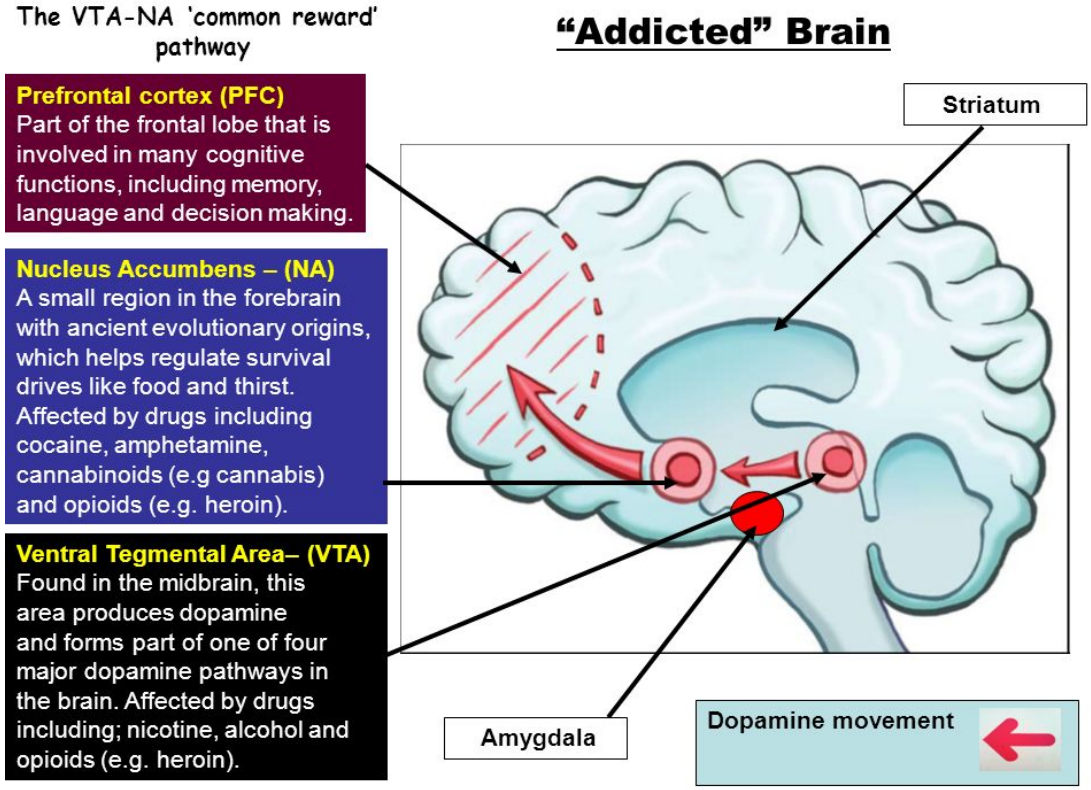
Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about methamphetamine addiction; what it is and how it can be treated. If ever there were a "bad drug" that brings about much suffering, it may well be methamphetamine; the range and severity of the problems caused by methamphetamine are seemingly beyond belief!

Methamphetamine activates the central nervous system by causing dopaminergic (dopamine-making) and adrenergic (norepinephrine-making) cells to release extra amounts of those neurotransmitters into the space between cells (synapse) and also by blocking the retrieval back into the cell (reuptake) of dopamine and norepinephrine after they have been released.

Although methamphetamine has a couple of legitimate uses in medicine, for attention deficit disorder and, as something of a last resort, for appetite management, it does appear that many prescribers seem to be moving away its use.

Today, we're going to be looking at the problem of meth abuse rather than at its legitimate therapeutic uses. So, how prevalent is meth abuse? **According to the US Department of Health and Human Services, as of 2015, 4.5 million people aged 12 or older have used methamphetamine in their lifetime.** 1.7 million people had used meth within the past year. 1.9 million people have injected meth.

If we're going to be discussing meth addiction, we have to gain some understanding of what addiction is in general. To understand addiction, we have to be familiar with the normal operation of the reward system in the brain. Under normal circumstances, when someone is hungry, for example, they will experience hunger pangs, and they'll have a pleasurable anticipation of eating something tasty. In other words, they will crave food. **Two primary areas in the middle of the brain make this happen: the ventral tegmental area (VTA) and the nucleus accumbens (NA), which together form what has often been called a "rheostat of reward."**



Both when the person anticipates eating and when they are enjoying a tasty meal, the VTA sends an electrochemical signal to the NA in the form of dopamine neurotransmitter molecules, sent from the VTA's store of dopamine. The dopamine wends its way from cell to cell until it reaches the synapse bordering the NA neuron's receptors. **Once the dopamine reaches the NA, it activates that area, and, in return, the NA does two very important things: first, it responds back to the VTA by sending it a burst of a morphine-like substance known as enkephalin.** This burst of enkephalin makes us feel good, just as would a hit of morphine. **Second, the NA sends a burst of a chemical called serotonin to the prefrontal cortex of the brain, reinforcing a general good feeling and happiness.** It's clear that, *when the pleasure system functions as it should, doing things that yield pleasure not only makes us feel good but also boosts our sense of well-being.*

People with normally-functioning pleasure centers can develop problems with addictive substances, but their difficulty probably won't equal that of those who are predisposed to addictive disorders.

So what about people at risk to develop addiction? Addiction is an *abnormal* need, or craving, for certain substances or behaviors (such as gambling) brought about by progressive damage to the brain's reward centers. For several reasons, including genetic factors, some people are born with a vulnerability to develop addiction if they do use or drink. **Over time people can develop tolerance for certain chemicals, meaning they require more of the chemical over time to get the desired effect.**

Tolerance, however, is not the only problem that develops. **The neurons in the reward centers are "smart," in that they gauge the degree of reward they receive when some activity takes place, a phenomenon that's been called "reward prediction error."** When the next reward comes along, it is automatically compared with the reward already experienced, and if the new reward doesn't provide a greater burst of pleasure, either by being more intense or by being unexpected, then the dopamine neurons don't really fire much at that point. The reward is more or less ignored. (This is why repeating a pleasurable activity may be disappointing in many cases. It's the "same ol' same 'ol.") We should emphasize that this phenomenon, too, represents normal brain functioning, but its expression appears to be greatly amplified in its severity and effects in people with addiction.

Addicts can also experience withdrawal symptoms if the substance is taken away suddenly or if they can't get enough fast enough to maintain intoxication. They then use as they do to try to satisfy the craving and to stay out of withdrawal.

Meth addiction has characteristic symptoms: The addict develops an ever-increasing need for meth to maintain the euphoria they feel when they first begin using it. Initially, meth users feel "high," with a gloriously-expansive, even gleeful, outlook on life and on their ability to master life's challenges. Self-esteem, energy and concentration spike at the beginning of an addict's use. Some will say they've never felt so creative and in tune with the joy of life.

But … what goes up, comes back down. *Hard.* Greater doses of meth serve less and less well to provide the spike in good feeling, and, before they know it, addicts are using more but getting less effect. It becomes more difficult to "stay on an even keel," and this all happens before the person even begins experiencing real withdrawal. Loved ones will note a change of personality in the user, who becomes preoccupied with using meth, getting over the effects of

a using episode, and then preparing to find more meth. Someone once asked George Carlin how using cocaine made him feel. He said, “It makes you feel like doing more cocaine.” The same thing can be said of meth. It is a major understatement to note that a meth addict’s life can become extraordinarily dysfunctional *very* quickly!

So what is it that makes meth so potentially addicting? In any human being, meth can overpower (“highjack”) the brain’s reward centers to such a degree that the initial good feeling, or euphoria, that it causes makes the person want to continue to use to get back that feeling. For those especially vulnerable to addiction, the brain adapts over time, and maintaining euphoria quickly becomes an attempt to retain it. Retaining it soon becomes a futile effort to attain it at all. At that point, the addict can no longer achieve euphoria but merely succeeds in staying out of withdrawal. Over time, that capability also fades, and the addict can be left in a state of constant craving. As the saying goes, “One hit is too many, and a thousand are not enough.”

What do we see when someone had overdosed on meth? Euphoria followed by a rebound “crash” into depression, psychotic episodes, hallucinations, paranoia, violent rages, brain swelling, potentially fatal high blood pressure, abnormal heart rhythms, chest pain, shortness of breath, nausea, vomiting, and diarrhea. Meth can interfere with the body’s ability to maintain appropriate temperature, which can also be fatal. Lapsing into coma is a real possibility.

Meth is a stimulant, which means it overdrives, or overstimulates, brain cells that make dopamine, causing them to release too much of it into the space between cells. The dopamine-making brain cells would normally do their best to balance this excess by taking that extra dopamine back into themselves and storing it for use later. Since meth also prevents the cells from doing just that, an excess of dopamine rapidly builds up. One place dopamine is processed is in the reward centers of the brain. Dopamine buildup there causes powerful sensations of pleasure and euphoria. Other dopamine-processing parts of the brain regulate movement and concentration, and there, the buildup triggers increased alertness, energy and feelings of mastery in life. All this activity affects the front of the brain, too, where self-esteem and confidence take a very large—and very temporary—boost. The person thinks, “This is great! I’m feeling good emotionally, I having a lot of energy, and I’m able to concentrate effectively! I think I’ll keep on taking this stuff!” (So … what could possibly go wrong?)

Coming down off of a meth high can be a steep step! Symptoms of withdrawal include depression and extreme irritability, confusion and memory difficulty. Energy peters out into fatigue. Heightened perception can spiral into a dim recollection of how it felt to be normal.

Meth use cause severe psychological problems. This is why prevention is key: **You cannot overdrive the body for very long without sustaining some degree of permanent damage.** If you spend a lot of time in very loud surroundings without hearing protection, you'll lose some or all of your ability to hear. If you look at very bright objects, such as the recent solar eclipse, you can damage your eyesight or even go blind. If you overdrive the pleasure centers of your brain, you'll cause them to become chronically fatigued, and you don't have to be an addict to damage your brain. The reward centers become less attuned to the normal, everyday sensing of pleasurable activities, to the general ability to feel good. That lack of ability to feel pleasure also has effects in the front brain, and self-esteem and confidence suffer as well. Meth abuse over time causes depressed mood, confusion, emotional instability, even psychotic episodes.

The long-term effects of meth abuse are a waking nightmare and a walking death: depression, lethargy, inability to feel pleasure in much of anything ("I've stood on the moon; now I'm supposed to get all excited about standing at the top of Mt. Everest? Meh…"), malnutrition from appetite suppression, tremors very much like those seen in Parkinson's disease, other movement problems, dental problems, arrhythmias, organ damage, confusion, irritability, despair, isolation, generalized fear, a sense of helplessness, pessimism, self-doubt, self-loathing. Long term abuse can cause "meth mouth," in which the teeth and gums are damaged by the effects of the drug over time.

Some of the effects of meth on the brain may be long-lasting and even permanent. Recent research in humans has shown that, even three years after chronic meth users have stopped using, there is still a reduction in their brain cells' ability to take dopamine back for storage and re-use later. This matters greatly because dopamine is involved with pleasure, mood, perception and movement; and, in its interaction with serotonin, it is also involved with self-esteem, confidence and belongingness.

Sounds like a pretty grim picture, doesn't it? Well, it is. My bias has always leaned toward the belief that there's no such thing as a good or bad prescription drug, just appropriate or inappropriate uses of therapeutic medications. Looking at the devastation that meth can cause does make me wonder if it might just qualify for "bad drug" status!

So, given all this bad news, is there any way we can help? Any way to treat meth addiction? Yes, indeed! Detoxification techniques are available to ease the transition from using to drug-free. **Medications can be used to treat persisting symptoms, such as depressed mood and emotional instability.** (Example: just as meth impairs the brain's ability to conserve the transmitter supplies needed to remain stable, dopamine-evoking antidepressant medications actually help reverse that deficit to some extent by helping the brain more-effectively store up what transmitter it can now make.)

Any therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the very same areas of the brain affected by addiction. Talking therapies have been found useful in helping recovering addicts reorient their self-image and stay abstinent from chemicals. Family networking therapy helps addicts “rejoin the human race” and take their place in their families and other relationships. Peer-support groups can be an important adjunct to treatment in providing a network of encouragement and shared progress in becoming and staying more stable.

Cognitive behavioral therapy (CBT) focuses on the development of personal coping strategies to solve current problems and change unhelpful patterns in thinking, behavior, and emotion. It was originally designed to treat depression and is now used for a number of mental health conditions, including addiction. It is based on the belief that symptoms and associated distress can be reduced by teaching new information-processing skills and coping mechanisms.

Contingency management helps addicts by providing positive consequences when they meet treatment goals and negative consequences when they don’t. An example of a positive consequence for abstinence could be receiving vouchers exchangeable for retail goods or progressing in a phased treatment program. A negative consequence could be withholding vouchers or a negative report to a parole officer. Therapists may create written behavioral contracts that detail the desired behavior change and other treatment details.

While they don’t cure it, there are medications, such as acamprosate, naltrexone, and some antidepressants, such as bupropion, that can stabilize the ongoing operating balance among the brain structures affected by addiction (specifically the ventral tegmental area, nucleus accumbens and frontal cortex). These medicines help do for the brain what it can’t do for itself; they are assistive technology for the brain.

So … **Here’s the short version: Even though addiction—any addiction--can’t be cured, it *can* be stabilized, and it’s highly responsive to treatment!**

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The Zombie Apocalypse Made Real: Methamphetamine Addiction

Post Test

1. Methamphetamine—or "meth," as it's commonly called—is a depressant, one of a group of substances known collectively as amphetamines.
   a) True b) False

2. Methamphetamine is also known as crank, chalk, crystal, fire, meth, speed, and ice.
   a) True b) False

3. Methamphetamine activates the central nervous system by causing dopaminergic (dopamine-making) and adrenergic (norepinephrine-making) cells to release extra amounts of those neurotransmitters into the space between cells (synapse) and also by promoting the retrieval back into the cell (reuptake) of dopamine and norepinephrine after they have been released.
   a) True b) False

4. Methamphetamine has a couple of legitimate uses in medicine, for attention deficit disorder and, as something of a last resort, for appetite management.
   a) True b) False

5. According to the US Department of Health and Human Services, as of 2015, 10 million people aged 12 or older have used methamphetamine in their lifetime.
   a) True b) False

6. Two primary areas in the middle of the brain make this happen: the ventral tegmental area (VTA) and the nucleus accumbens (NA), which together form what has often been called a "rheostat of reward."
   a) True b) False

7. Once the dopamine reaches the NA, it activates that area, and, in return, the NA does two very important things: first, it responds back to the VTA by sending it a burst of a morphine-like substance known as enkephalin.
   a) True b) False

8. Second, the NA sends a burst of a chemical called serotonin to the prefrontal cortex of the brain, reinforcing a general good feeling and happiness.
    a) True b) False

9. People with normally-functioning pleasure centers can develop problems with addictive substances, and their difficulty is worse than that of those who are predisposed to addictive disorders.
    a) True b) False

10. Over time people can develop tolerance for certain chemicals, meaning they require less of the chemical over time to get the desired effect.
    a) True b) False

11. The neurons in the reward centers are “smart,” in that they gauge the degree of reward they receive when some activity takes place, a phenomenon called “reward prediction error.”
    a) True b) False

12. Addicts can also experience withdrawal symptoms if the substance is taken away suddenly or if they can’t get enough fast enough to maintain intoxication.
    a) True b) False

13. Meth is a stimulant, which means it overdrives, or overstimulates, brain cells that make serotonin, causing them to release too much of it into the space between cells.
    a) True b) False

14. You cannot overdrive the body for very long without sustaining some degree of permanent damage.
    a) True b) False

15. The effects of meth on the brain are always only temporary.
    a) True b) False

16. Medications can be used to treat persisting symptoms, such as depressed mood and emotional instability.
    a) True b) False

17. Any therapy that helps the person with socialization and a sense of belonging has direct neurochemical benefits in the very same areas of the brain affected by addiction.
    a) True b) False

18. Cognitive behavioral therapy (CBT) focuses on the development of personal coping strategies to solve current problems and change unhelpful patterns in thinking, behavior, and emotion.
    a) True b) False

19. Contingency management helps addicts by providing positive consequences both when they meet treatment goals and when they don't.
    a) True b) False

20. Even though addiction—any addiction--can't be cured, it can be stabilized, and it is highly responsive to appropriate treatment.
    a) True b) False

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The Zombie Apocalypse Made Real: Methamphetamine Addiction

Post Test - Key

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19. Contingency management helps addicts by providing positive consequences both when they meet treatment goals and when they don't.
    a) True
    b) False

20. Even though addiction—any addiction--can't be cured, it can be stabilized, and it is highly responsive to appropriate treatment.
    a) True
    b) False

Module 11: "'Frankendrugs': A Rogue's Gallery of Synthetics, Part 1"

Keywords to Be Defined: Designer Drugs; Refusal Skills; Synthetic Cannabinoids; Mojo; Kratom; Flakka; 2C Group; MDMA; Krokodil; N-Bomb; Pink

Introduction to the Teacher: There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm." Some current designer dugs were originally synthesized for study purposes, but they've found their way onto the street where they're often doing incalculable harm to those seeking to get high.

Description: This activity describes current "designer drugs" being distributed illegally.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of so-called "designer drugs."

2. Describe street names, appearance, and effects of these drugs.

Background Material/Handout:

Handout: "'Frankendrugs': A Rogue's Gallery of Designer Drugs, Part 1" with Post-Test

Activities: Refusal Skills Game: "Take this Ball"

Activity Detail:

Step 1. Read through the handout, "Frankendrugs 1," and take the post-test.

Step 2. Discuss the post-test answers as a group.

Step 3. Assign students to do Google searches of the drugs described in the handout.

Step 4. Discuss students' findings on each drug.

Step 5. Guide students through the game, "pass the Ball" as a metaphor for temptation, craving, and relapse.

Questions for Discussion with Students:

1. What do you see as potential risks in taking a substance which has not been studied carefully regarding its effect on the general public?

2. What choices do you see you would have if someone offered a designer drug to you?

3. Medical and law enforcement personnel are aware of the presence of some or all of these drugs locally. Are you personally aware of the presence of any of them?

4. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

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Resource for Discussion:
"Frankendrugs": A Rogue's Gallery of Synthetics Part 1

There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm." Some current designer dugs were originally synthesized for study purposes, but they've found their way onto the street where they're often doing incalculable harm to those seeking to get high.

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about a sort of "rouge's gallery" of designer dugs that have fallen into the wrong hands across the country. This is only one of several installments in this "rogue's gallery" to come as information is updated, so we're calling this the "first" one.

Synthetic Cannabinoids (a.k.a. "Mojo," "Spice," "K-2," and "Voodoo")

Although originally designed for pharmaceutical research in pain management, synthetic cannabinoids are used for recreational drug use. The irony of this situation is that the reason they were synthesized to begin with was legal restriction on using naturally-occurring cannabinoids in research. These synthetics are currently being studied to assess their therapeutic potential.

In illicit use, these synthetics are used for their effects similar to natural cannabis. They do have their selling points: they're cheaper, and easy to get

through convenience stores, tobacco shops, or head shops. **A *typical* drug assay won't identify synthetic cannabinoids where natural cannabis would show up.** Legally, it's a slippery slope, since synthetic cannabinoids have been legal in the past, or at least, not illegal to sell or possess.

They can be any of a number of different drugs, each with different effects. There's no way to describe general effects among all the different chemicals because they're all different. Also**, each synthetic cannabinoid will have different effects at different dosages, but because the drugs are crudely manufactured, it isn't possible to know what chemicals the drugs contain or how much of any chemical a user is taking.**

Synthetic cannabinoids are potent drugs capable of causing clinical intoxication and death (probably due to CNS depression and hypothermia) when used. Many compounds have been banned in the U.S. and numerous other countries, although loopholes remain and new examples continue to be encountered on a regular basis with changed chemical make-ups designed to get around bans.

As is often the case with illegal compounds, no official studies have been conducted on the effects of synthetic cannabinoids on humans. Compared to tetrahydrocannabinol (THC), the adverse effects are often much more severe and can include tachycardia, elevated blood pressure, blurry vision, nausea and hallucinations. Other symptoms included epileptic seizures, and acute psychosis.

Current studies indicate correlations between synthetic cannabinoids and episodes of psychosis, so physicians are developing vigilance about investigating possible use of these synthetics in their patients with presenting psychosis, especially when the presentation's cause isn't clear. **Such episodes can continue to occur for a few months after the patient is verified to have stopped using synthetic cannabinoids.**

Kratom (Mitragyna speciosa, a.k.a. "ketum")

The kratom is a Southeast Asian tree, the leaves of which have long been used for pain relief. They're typically crushed and brewed as tea or made into pills or capsules. Kratom is a stimulant at lower doses; at higher concentrations, it's a sedative. The DEA says it can trigger psychotic episodes and that it can be addictive. **Kratom targets the brain's opioid receptors.** Some researchers have noted that kratom doesn't produce respiratory depression as do other opioids, and there's work in progress to study it further to see if some of the compounds made from it can be exploited for their medical benefit.

Walter C. Prozialeck, PhD, chairman of the department of pharmacology at Midwestern University in Illinois, has analyzed a number of kratom studies and said he has questions about its addictive nature.

“If it lived up to its billing, some of the compounds in kratom could be useful at least as the basis for the development of better drugs that would treat pain without the addictive characteristic of opioids. That would be an amazing advance in pain management, but nobody knows how research will turn out. It could be a dead end. The biggest negative of the DEA ban is it will stifle any research in this area.” **[1]**

Flakka (a.k.a., “gravel”)

“Bath salts," a group of related drugs banned in 2012, are making something of a disguised comeback in “flakka,” a synthetic producing a cocaine-like high. “Flakka,” which can be smoked, snorted, or injected, has the potential to be much more dangerous than cocaine. Even a small overdose can produce methamphetamine-like symptoms: "excited delirium," violent behavior; spikes in core temperature, and paranoia; however, it’s most famous—even notorious—for evoking PCP-like super-strength.

“Flakka” (Spanish slang for a beautiful woman, "la flaca”) contains a chemical pharmacologically similar to methylenedioxypyrovalerone or MDPV, which is found in so-called "bath salts." **These chemicals’ mode of action is similar to cocaine and methamphetamine, i.e., causing dopamine and serotonin surges and then inhibiting the reuptake of those neurotransmitters.** The chemicals in “flakka,” however, produce these effects for a far longer period of time. Because the affected neurons can be permanently altered, there is great concern is that the effects of the drug may be permanent. Another possibly-permanent result of its use is its effect on the kidneys; it’s frightening to note that people who live through a “flakka” overdose may have to be on dialysis for the rest of their lives.

Although the FDA has placed a temporary ban on “flakka,” one way to circumvent the ban is to label the substance “not for human consumption.” Nonetheless, a ban might at least serve to discourage potential users.

2C Group (named by their creator, research pharmacologist Alexamder Schulgin [1925-2014], from their chemical structure)

When 3, 4-methylenedioxymethamphetamine (MDMA, “Ecstasy”) was banned in the US in 1985, 2C drugs became a quick replacement in the club scene. **The main varieties of the 2C group were made illegal in 1994.** Also, like many synthetic drugs, renegade chemists began creating slightly different versions of the drugs so they could claim to sell a legal version of the compound.

The 2C family has historically not been studied as much as some other synthetics because of the number of fatal overdoses. To complicate the picture, it's known that altered versions of the original 2C types can also be significantly more potent, causing tachycardia, among other complications. Not unexpectedly, problems can also occur when 2C drugs are taken with other substances.

MDMA-assisted psychotherapy has shown promise as a treatment for disorders like PTSD and anxiety in clinical studies. Shulgin believed 2C drugs could provide similar benefits. He was horrified that they were being used illicitly without appropriate control. In a 2003 interview, he said, "2C-B is, in my opinion, one of the most graceful, erotic, sensual, introspective compounds I have ever invented. For most people, it is a short-lived and comfortable psychedelic, with neither toxic side effects nor next-day hangover. Its effects are felt very much in the body, as well as in the mind, and thus it has found clinical use as a follow-up to MDMA." [2]

Desomorphine (a.k.a. "Krokodil," possibly related to the similarity to skin, damaged by the drug use, resembling crocodile leather.) Desomorphine was first synthesized in the U.S. in 1932 and patented in 1934. It's a synthetic opioid with powerful, fast-acting effects, such as sedation and analgesia. While it was found to be faster acting and more effective than morphine for the rapid relief of severe pain, its shorter duration of action and the effects of respiratory depression, dangerously lowered blood pressure, and urinary retention appear to override any advantages.

In a manner similar to the production of methamphetamine, "krokodil" can be fashioned from OTC codeine and iodine and phosphorus from matches. It goes without saying that this bootlegging process can easily introduce contaminants with other drugs or substances. Like methamphetamine, desomorphine made this way is often contaminated with various agents.

“Krokodil” has been dubbed the “flesh-eating drug” because of the he frequent occurrence of tissue damage among addicts. (The pure form of the drug doesn’t cause tissue damage.) Early medical trials of desomorphine show that even in small doses, there is a high potential for addiction, and tolerance can appear quickly. However, though tolerance to respiratory depression with repeated doses was observed in rats, early clinical trials failed to show any tolerance to these same effects with repeated doses in humans.

25I-NBOMe (**2C-I-NBOMe**, **Cimbi-5**, or "**25I**" (a.k.a. “25i,” "N-Bomb,” “Solaris," "Smiles," "Wizard”)

“N-Bomb.” a highly potent serotonin 2A receptor agonist, appeared as a common recreational drug in 2010. “**N-Bomb” is a psychedelic hallucinogen used recreationally and in biochemistry research for mapping the brain’s use of the serotonin 2A receptor.**

25I-NBOMe has effects that are similar to those of LSD. Apparent overdoses have occurred when it is taken by mouth. Other common routes of administration include under the tongue (sublingual), between the gums and cheek (buccal) on blotter paper, and intranasal.

U-47700 (a.k.a. “U4,” “Pink.” Pinky”)

A research chemical known as U-47700, or “Pink,” has been cited as the cause of dozens of deaths across the U.S. in the last several years–including the overdose death of Prince, caused by a "cocktail" that included Fentanyl and U-47700.

U-47700 was created in a lab by 20th-century pharmaceutical giant Upjohn. In 1976, chemist Jacob Szmuszkovicz patented the drug after a round of animal testing.

He noted that the new opioid blend was more potent than morphine but with supposedly less addictive potential. **U47700 was intended to treat severe pain associated with cancer, surgery, or injury. It was never tested on humans, and it ended up being relegated solely to research. "**Pink" and Fentanyl have been combined and sold on the street as a kind of bootleg Norco, and it causes a euphoric sense of relaxation and sedation. It's said to be several times as strong as morphine. The downsides are its tendency to create marked respiratory depression and, of course, habituation and dependence.

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[1] Prozialeck, Walter C. Interview with Las Vegas Channel 8 KLAS: Now What Is Kratom? Why Does the FDA Want to Ban It? September, 2016

http://www.lasvegasnow.com/webmd/webmd-addiction-substance-abuse/what-is-kratom-why-does-the-dea-want-to-ban-it/550020438

[2] Shulgin, David. Interview with "Brian." What Is 2C-B? Center for Cognitive Liberty and Ethics (2003)

http://www.cognitiveliberty.org/shulgin/adsarchive/2cb.htm

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"Frankendrugs": A Rogue's Gallery of Synthetics, Part 1

Post Test

1. There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm."
   a) True b) False

2. Synthetic cannabinoids are also known as "Mojo."
   a) True b) False

3. Although originally designed for pharmaceutical research in pain management, synthetic cannabinoids are used for recreational drug use.
   a) True b) False

4. In illicit use, these synthetics are used for their effects similar to natural cannabis.
   a) True b) False

5. A typical drug assay will identify synthetic cannabinoids where natural cannabis would show up.
   a) True b) False

6. Each synthetic cannabinoid will have different effects at different dosages, but because the drugs are crudely manufactured, it is not possible to know what chemicals the drugs contain or how much of any chemical a user is taking.
   a) True b) False

7. As is often the case with illegal compounds, many official studies have been conducted on the effects of synthetic cannabinoids on humans.
   a) True b) False

8. Such episodes can continue to occur for a few months after the patient is verified to have stopped using synthetic cannabinoids.
   a) True b) False

9. Kratom is the tree, mitragyna speciosa, also known as "ketum.")
   a) True b) False

10. Kratom targets the brain's opioid receptors.
    a) True b) False

11. "Flakka" is also known as "gravel."
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12. “Bath salts," a group of related drugs banned in 2012, are making something of a disguised comeback in “flakka,” a synthetic producing a cocaine-like high. “Flakka,” which can be smoked, snorted, or injected, has the potential to be no more dangerous than cocaine.
    a) True b) False

13. “Flakka” is derived from the Spanish slang for a beautiful woman, "la flaca.”
    a) True b) False

14. “Flakka’s” mode of action is similar to cocaine and methamphetamine, i.e., causing dopamine and serotonin surges and then inhibiting the reuptake of those neuro-transmitters.
    a) True b) False

15. Although the FDA has placed a temporary ban on “flakka,” one way to circumvent the ban is to label the substance “for human consumption only.”
    a) True b) False

16. The main varieties of the 2C group were made illegal in 1974.
    a) True b) False

17. The 2C family has historically not been studied as much as some other synthetics because of the number of fatal overdoses.
    a) True b) False

18. Desomorphine (a.k.a. “Krokodil,” possibly related to the similarity to skin, damaged by the drug use, resembling crocodile leather.)
    a) True b) False

19. “Krokodil” has been dubbed the “flesh-eating drug” because of the frequent occurrence of tissue damage among addicts.
    a) True b) False

20. 25I-NBOMe is also known as “N-Bomb.”
    a) True b) False

21. “N-Bomb” is a psychedelic hallucinogen used recreationally and in biochemistry research for mapping the brain’s use of the serotonin 2A receptor.
    a) True b) False

22. U-47700 (a.k.a. “U4,” “Pink.” Pinky”)
    a) True b) False

23. U-47700 was intended to treat severe pain associated with cancer, surgery, or injury. It was tested extensively on humans, and it ended up being relegated solely to research.
    a) True b) False

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"Frankendrugs": A Rouge's Gallery of Synthetics, Part 1

Post Test - Key

1. There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm."
   a) True b) False

2. Synthetic cannabinoids are also known as "Mojo."
   a) True b) False

3. Although originally designed for pharmaceutical research in pain management, synthetic cannabinoids are used for recreational drug use.
   a) True b) False

4. In illicit use, these synthetics are used for their effects similar to natural cannabis.
   a) True b) False

5. A typical drug assay will identify synthetic cannabinoids where natural cannabis would show up.
   a) True **b) False**

6. Each synthetic cannabinoid will have different effects at different dosages, but because the drugs are crudely manufactured, it is not possible to know what chemicals the drugs contain or how much of any chemical a user is taking.
   a) True b) False

7. As is often the case with illegal compounds, many official studies have been conducted on the effects of synthetic cannabinoids on humans.
   a) True **b) False**

8. Such episodes can continue to occur for a few months after the patient is verified to have stopped using synthetic cannabinoids.
   a) True b) False

9. Kratom is the tree, mitragyna speciosa, also known as "ketum.")
   a) True b) False

10. Kratom targets the brain's opioid receptors.
    a) True b) False

11. "Flakka" is also known as "gravel."
    a) True b) False

12. “Bath salts," a group of related drugs banned in 2012, are making something of a disguised comeback in “flakka,” a synthetic producing a cocaine-like high. “Flakka,” which can be smoked, snorted, or injected, has the potential to be no more dangerous than cocaine.
    a) True **b) False**

13. “Flakka” is derived from the Spanish slang for a beautiful woman, "la flaca.”
    a) True b) False

14. “Flakka’s” mode of action is similar to cocaine and methamphetamine, i.e., causing dopamine and serotonin surges and then inhibiting the reuptake of those neuro-transmitters.
    a) True b) False

15. Although the FDA has placed a temporary ban on “flakka,” one way to circumvent the ban is to label the substance “for human consumption only.”
    a) True b) False

16. The main varieties of the 2C group were made illegal in 1974.
    a) True **b) False**

17. The 2C family has historically not been studied as much as some other synthetics because of the number of fatal overdoses.
    a) True b) False

18. Desomorphine (a.k.a. “Krokodil,” possibly related to the similarity to skin, damaged by the drug use, resembling crocodile leather.)
    a) True b) False

19. “Krokodil” has been dubbed the “flesh-eating drug” because of the frequent occurrence of tissue damage among addicts.
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20. 25I-NBOMe is also known as “N-Bomb.”
    a) True b) False

21. “N-Bomb” is a psychedelic hallucinogen used recreationally and in biochemistry research for mapping the brain’s use of the serotonin 2A receptor.
    a) True b) False

22. U-47700 (a.k.a. “U4,” “Pink.” Pinky”)
    a) True b) False

23. U-47700 was intended to treat severe pain associated with cancer, surgery, or injury. It was tested extensively on humans, and it ended up being relegated solely to research.
    a) True **b) False**

Module 12: "'Frankendrugs': A Rogue's Gallery of Synthetics, Part 2"

Keywords to Be Defined: Designer Drugs; Refusal Skills; Nicotine; Cannabidiol; E-Cigarettes; Juul

Introduction to the Teacher: There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm." Some current designer dugs were originally synthesized for study purposes, but they've found their way onto the street where they're often doing incalculable harm to those seeking to get high. Included in this Module is a drug—and drug delivery system—that has killed far more people than all the designer drugs covered last year combined!

Description: This activity describes current "designer drugs" currently being distributed illegally.

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate basic understanding of so-called "designer drugs."

2. Describe appearance, street names, and effects of these drugs.

Background Material/Handout:

Handout: "'Frankendrugs': A Rogue's Gallery of Designer Drugs, Part 2" with Post-Test

Activities: Refusal Skills Game: "Take this Ball"

Activity Detail:

Step 1. Read through the handout, "Frankendrugs 2," and take the post-test.

Step 2. Discuss the post-test answers as a group.

Step 3. Assign students to do Google searches of the drugs described in the handout.

Step 4. Discuss students' findings on each drug.

Step 5. Guide students though the game, "Pass the Ball" as a metaphor for temptation, craving, and relapse.

Questions for Discussion with Students:

1. What do you see as potential risks in taking a substance which has not been studies carefully regarding is effect on the general public?

2. What choices do you see you would have if someone offered a designer drug to you?

3. Medical and law enforcement personnel are aware of the presence of some or all of these drugs locally. Are you personally aware of the presence of any of them in our area?

4. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

School of Addiction and Behavioral Health

Resource for Discussion:
"Frankendrugs": A Rogue's Gallery of Designer Drugs Part 2

There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm." Some current designer dugs were originally synthesized for study purposes, but they've found their way onto the street where they're often doing incalculable harm to those seeking to get high. There was a glaring oversight in last year's roundup. I neglected to include a drug—and drug delivery system—that has killed far more people than all the designer drugs covered last year combined: [1]

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about a sort of "rouge's gallery" of designer dugs that have fallen into the wrong hands across the country. This is only one of several installments in this "rogue's gallery" to come as information is updated, so we're calling this the "second" one.

Nicotine (*nicotiana tabacum*) cigarettes. Humans have been ingesting nicotine since earliest times. "How is nicotine a designer drug," you ask? Well, for decades, tobacco companies have been altering their products to increase their addictiveness. From the Surgeon General's report, "The Health Consequences of Smoking – 50 Years of Progress": **"The evidence is sufficient to conclude that the increased risk of death and disease—specifically lung cancer—results from changes in the design and composition of cigarettes since the 1950s."** [2]

From Truth Initiative.org: "**One way the tobacco industry has manipulated cigarettes to increase addictiveness is by loading cigarettes with chemical compounds.** Bronchodilators were added so that tobacco smoke can more easily enter the lungs. Sugars, flavors and menthol were increased to dull the harshness of smoke and make it easier to inhale. Ammonia was added so that nicotine travels to the brain faster.

"Specifically, increasing the amount of nicotine was of paramount importance to tobacco company executives. Experts found that Big Tobacco companies genetically engineered their tobacco crops to contain two times the amount of nicotine and adjusted their cigarette design so that the nicotine delivered to smokers increased by 14.5 percent. As Phillip Morris Principal Scientist W.L. Dunn said in 1972, 'No one has ever become a cigarette smoker by smoking cigarettes without nicotine.'" **[3]**

Cannabidiol (CBD) From the Harvard Medical School Health Blog, "CBD: What We Know and What We Don't": "**While CBD is a component of marijuana (one of hundreds), by itself it does not cause a 'high.'** According to a report from the World Health Organization, 'In humans, CBD exhibits no effects indicative of any abuse or dependence potential. To date, there is no evidence of public health related problems associated with the use of pure CBD.'" **[4]**

Although not a synthetic as such, CBD is being put to novel uses, such as treating anxiety, sleep problems, and chronic pain; however, its most telling effectiveness seems to come in its effect on seizure disorder. The FDA allowed researchers to begin conducting trials of CBD in 2015. It seems to help most in treating childhood epilepsy, reducing—and in some cases—stopping seizures. A new CBD-based drug, Epidiolex, has marked positive effects on these children.

E-Cigarettes (Electronic cigarettes) The Centers for Disease Control and Prevention (CDC) reports: "E-cigarettes, devices that typically deliver nicotine, flavorings, and other additives to users through an inhaled aerosol, are a rapidly emerging trend, and are especially popular among youth and young adults. **Scientists are still learning more about how e-cigarettes affect health.**

However, there is already enough evidence to justify efforts to prevent e-cigarette use by young people. We know that the vapor from e-cigarettes is harmful because it contains harmful ingredients, including nicotine and other substances. **Nicotine exposure during adolescence can cause addiction and can harm the developing brain … development which continues into the early to mid-20s** … Because most tobacco use starts during adolescence, actions to protect our nation's young people from a lifetime of nicotine addiction are critical.

"E-cigarettes are a 2.5 billion dollar business in the U.S. As of 2014, the e-cigarette industry spent $125 million a year to advertise their products." **Even so, CDC says that "youth are more likely than adults to use e-cigarettes"** and that "In 2016, more than 2 million U.S. middle and high school students used e-cigarettes in the past 30 days, including 4.3% of middle school students and 11.3% of high school students." E-cigarette use is now outpacing conventional cigarette use among U.S. high school students. **[5]**

"Juuling" (from Juul Laboratories)

The Juul is a nicotine vape that looks like a flash drive, and it can be charged in a USB port. It's available legally only to people 18 and older. Each cartridge contains about 200 puffs, the equivalent nicotine content to a pack of cigarettes.

Here's an excerpt from Time Magazine: "**Ashley Gould, chief administrative officer at Juul Labs, says that the product was created by two former smokers specifically and solely to help adult smokers quit,** and that the company has numerous anti-youth-use initiatives in place because 'we really don't want kids using our product.'

"Gould also notes that Juul uses age authentication systems to sell only to adults 21 and older online, though most of its sales take place in retail stores, where state laws may allow anyone 18 and older to purchase the devices.

"The design, she adds, was not meant to make the device easier to hide. 'It was absolutely not made to look like a USB port. It was absolutely not made to look discreet, for kids to hide them in school,' Gould says. 'It was made to not look like a cigarette, because when smokers stop they don't want to be reminded of cigarettes.'" **[6]**

That protestation aside, "juuling" is a growing concern among educators and parents.

Non-Broadcast Note and References

[1] CDC Fact Sheet: "**Cigarette smoking is responsible for more than 480,000 deaths per year in the United States, including more than 41,000 deaths resulting from secondhand smoke exposure. This is about one in five deaths annually, or 1,300 deaths every day. O**n average, smokers die 10 years earlier than nonsmokers." Atlanta: Centers for Disease Control and Prevention, 2018. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm Updated February 20, 2018.

[2] The Health Consequences of Smoking—50 Years of Progress. Washington, DC: Surgeon General.gov https://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html, 2014.

[3] How Big Tobacco Made Cigarettes More Addictive. Washington, DC, Truthinitiative.org. January 23, 2018. https://truthinitiative.org/news/how-big-tobacco-made-cigarettes-more-addictive

[4] Grinspoon P: CBD: What We Know and What We Don't. Cambridge, MA: Harvard Medical School Blog, August 24, 2018. https://www.health.harvard.edu/blog/cannabidiol-cbd-what-we-know-and-what-we-dont-2018082414476

[5] E-Cigarettes: What's the Bottom Line? Atlanta: Centers for Disease Control and Prevention, November 29, 2018. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html

[6] Ducharme J: Teens Are "Juuling" at School. Here's What That Means. Time Magazine, March 27, 2018. http://time.com/5211536/what-is-juuling/

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"Frankendrugs": A Rogue's Gallery of Designer Drugs, Part 2

Post-Test

1. There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm."
   a) True b) False

2. From the Surgeon General's report, "The Health Consequences of Smoking – 50 Years of Progress": "The evidence is sufficient to conclude that the increased risk of death and disease—specifically lung cancer—results from changes in the design and composition of cigarettes since the 1950s."
   a) True b) False

3. From Truth Initiative.org: "One way the tobacco industry has manipulated cigarettes to increase addictiveness is by loading cigarettes with chemical compounds.
   a) True b) False

4. "Specifically, increasing the amount of flavoring was of paramount importance to tobacco company executives. Experts found that Big Tobacco companies genetically engineered their tobacco crops to contain two times the amount of nicotine and adjusted their cigarette design so that the nicotine delivered to smokers increased by 14.5 percent.
   a) True b) False

5. "While CBD is a component of marijuana (one of hundreds), by itself it does cause a 'high.'
   a) True b) False

6. Although not a synthetic as such, CBD is being put to novel uses, such as treating anxiety, sleep problems, and chronic pain; however, its most telling effectiveness seems to come in its effect on seizure disorder.
   a) True b) False

7. Scientists are still learning more about how e-cigarettes affect health. Currently, there is not yet enough evidence to justify efforts to prevent e-cigarette use by young people.
   a) True b) False

8. Nicotine exposure during adolescence can cause addiction and can harm the developing brain … development which continues into the early to mid-20s.
   a) True b) False

9. CDC says that, “Youth are no more likely than adults to use e-cigarettes.”
    a) True b) False

10. The Juul is a nicotine vape that looks like a flash drive, and it can be charged in a USB port. It’s available legally only to people 18 and older.
    a) True b) False

11. Ashley Gould, chief administrative officer at Juul Labs, says that the product was created by two former smokers specifically and solely to help adult smokers quit.
    a) True b) False

12. “The design,” she adds, “was meant to make the device easier to hide. It was absolutely made to look like a USB port.”
    a) True b) False

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"Frankendrugs": A Rogue's Gallery of Designer Drugs, Part 2

Post-Test - Key

1. There's a wise adage in psychopharmacology: "Any drug that has the power to do good has the power to do harm."
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2. From the Surgeon General's report, "The Health Consequences of Smoking – 50 Years of Progress": "The evidence is sufficient to conclude that the increased risk of death and disease—specifically lung cancer—results from changes in the design and composition of cigarettes since the 1950s."
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4. "Specifically, increasing the amount of flavoring was of paramount importance to tobacco company executives. Experts found that Big Tobacco companies genetically engineered their tobacco crops to contain two times the amount of nicotine and adjusted their cigarette design so that the nicotine delivered to smokers increased by 14.5 percent.
   a) True **b) False**

5. "While CBD is a component of marijuana (one of hundreds), by itself it does cause a 'high.'
   a) True **b) False**

6. Although not a synthetic as such, CBD is being put to novel uses, such as treating anxiety, sleep problems, and chronic pain; however, its most telling effectiveness seems to come in its effect on seizure disorder.
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7. Scientists are still learning more about how e-cigarettes affect health. Currently, there is not yet enough evidence to justify efforts to prevent e-cigarette use by young people.
   a) True **b) False**

8. Nicotine exposure during adolescence can cause addiction and can harm the developing brain … development which continues into the early to mid-20s.
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9. CDC says that, “Youth are no more likely than adults to use e-cigarettes.”
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10. The Juul is a nicotine vape that looks like a flash drive, and it can be charged in a USB port. It’s available legally only to people 18 and older.
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11. Ashley Gould, chief administrative officer at Juul Labs, says that the product was created by two former smokers specifically and solely to help adult smokers quit.
   a) True
   b) False

12. “The design,” she adds, “was meant to make the device easier to hide. It was absolutely made to look like a USB port.”
   a) True
   b) False

Module 13: "The Rip Van Winkle Effect for Families 1: Preventing Recovery Sabotage"

Keywords to Be Defined: Rip Van Winkle; Sabotage; Recovery; Posttraumatic Stress Disorder (PTSD); Cognitive Distortion; Avoidance

Introduction to the Teacher: Why would anyone want to sabotage their loved one's recovery? After all, our patients aren't explicitly trying to cause themselves harm and frustration. The goal of self-sabotage is to circumvent, to avoid the pain and fear which come inevitably with any profound life change, including the changes that come with a critical illness and its treatment. As such, the motivation of the self-saboteur is defensive rather than self-offensive; it's a flinch from what's perceived to be unendurable pain. As we'll see, much of the reasoning and behavior of people from dysfunctional families stems from the phenomenon of re-enactment, i.e., repeating what was learned before (or, in the case of trauma, *hyper*-learned). It is, in fact, the result of unresolved posttraumatic stress disorder (PTSD).

Description: This activity describes some helpful ways that family and loved ones of recovering people can size up their day-to-day world and make intelligent, safety-reinforcing decisions in the course of each day.

1. Demonstrate basic understanding of cognitive distortions and behavioral instabilities frequently entertained by those in treatment for addictive disorders.

2. Describe effective sabotage-detection awarenesses and countermeasures for counselors in helping patients remain in the treatment setting to completion.

Background Material/Handout:

Handout: "The Rip Van Winkle Effect for Families 1: Preventing Recovery Sabotage" with Post-Test

Activity: Guessing Game: "How Am I Trying to Sabotage My Recovery?"

Activity Detail:

Step 1. Introduce the Rip Van Winkle story.

Step 2. Review the handout, "Preventing Recovery Sabotage," and take the post-test.

Step 3. Discuss the answers to the post-test as a group.

Step 4. Introduce the topic of "family sabotage" as the result of families feeling threatened by the recovery of the addicted family member.

Step 5. Review ACA materials in the handout and how these self-descriptions may unwittingly make recovery more difficult for the person with addiction.

Step 6. View and discuss the following YouTube video: “My Brain Works Differently Because of My Alcoholic Parent.”
https://www.youtube.com/watch?v=z0MCgY1c9JE

Step 7. Discuss with class how the patterns of relating learned while the person was active in their addiction can cause conflict when carried into the recovery period.

Step 8. Using the ACA “laundry list” at https://adultchildren.org/ as a guide, create a hypothetical recovering family and a corresponding family map to illustrate the problematic interactions that can arise between the recovering addict and the rest of the family.

Step 9. Discuss the common situation of children in the family feeling betrayed and cheated as the recovering person seeks to re-insert themselves into their rightful role as a parent or sibling. (i.e., “You weren’t there before. Who do you think you are trying to be a mother/father/brother/sister now?”)

Questions for Discussion with Students:

1. If you have ever been in a family affected by addiction, did you feel out of control or made to feel unsafe by someone else out of control because of addiction?

2. When you have adopted the role of one of the typical family members’ roles, and been involved in the family mapping exercise, what did you need for supportive people to understand about the situation?

3. Playing the role of one of the children in this hypothetical (make-believe) family, were you able to reach out to anyone to help you cope with being made to feel out of control or unsafe? If so, what was their response to your situation?

4. What effects (emotions or thoughts) did your feeling out of control have on you at the time?

5. Playing the role in the hypothetical family, have you noticed any lasting effects of having been made to feel out of control or unsafe?

6. Do you think someone else might experience the situation just as you did?

7. Playing your role in the hypothetical family, has having been made to feel out of control or unsafe had any effect on your relationships with your parents, other family members, or friends?

8. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

Resource for Discussion:
The Rip Van Winkle Effect for Families 1:
Preventing Recovery Sabotage

Why would anyone want to sabotage their loved one's recovery? After all, our patients aren't explicitly trying to cause themselves harm and frustration. **The goal of self-sabotage is to circumvent, to avoid the pain and fear which come inevitably with any profound life change, including the changes that come with a critical illness and its treatment.** As such, the motivation of the self-saboteur is defensive rather than self-offensive; it's a flinch from what's perceived to be unendurable pain. **As we'll see, much of the reasoning and behavior of people from dysfunctional families stems from the phenomenon of re-enactment, i.e., repeating what was learned before (or, in the case of trauma, hyper-learned). It is, in fact, the result of unresolved posttraumatic stress disorder.**

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about some helpful ways that family and loved ones of recovering people can size up their day-to-day world and make intelligent, safety-reinforcing decisions in the course of each day. Doing so may sound like a tall order, but the reality is that there are many people getting better every day!

The following information is summarized from the World Service Organization of Adult Children of Alcoholics (ACA) from material originally from **Janet Woititz, EdD, in her seminal book, Adult Children of Alcoholics (1983):**[1]

"The Problem:

"Many of us found that we had several characteristics in common as a result of being brought up in an alcoholic or dysfunctional household. We had come to feel isolated and uneasy with other people, especially authority figures. To protect ourselves, we became people-pleasers, even though we lost our own identities in the process. All the same we would mistake any personal criticism as a threat. We either became alcoholics (or practiced other addictive behavior) ourselves, or married them, or both. Failing that, we found other compulsive personalities, such as a workaholic, to fulfill our sick need for abandonment.

"We lived life from the standpoint of victims. **Having an overdeveloped sense of responsibility, we preferred to be concerned with others rather than ourselves. We got guilt feelings when we stood up for ourselves rather than giving in to others. Thus, we became reactors, rather than actors, letting others take the initiative. We were dependent personalities, terrified of abandonment, willing to do almost anything to hold on to a relationship in order not to be abandoned emotionally.** Yet we kept choosing insecure relationships because they matched our childhood relationship with alcoholic or dysfunctional parents.

"These symptoms of the family disease of alcoholism or other dysfunction made us "co-victims," those who take on the characteristics of the disease without necessarily ever taking a drink. We learned to keep our feelings down as children and kept them buried as adults. As a result of this conditioning, we confused love with pity, tending to love those we could rescue. **Even more self-defeating, we became addicted to excitement in all our affairs, preferring constant upset to workable relationships.**

"This is a description, not an indictment." [2]

Characteristics of Adult Children (Woititz et al.):

1. Isolation and fear of people
2. Approval seekers ("people pleasers)
3. Fear of anger and criticism
4. Addiction to chemicals and/or become involved an addict/alcoholic
5. Self-image of "victim"
6. More concern with others rather than with self to a fault
7. Resist self-assertion
8. Addiction to emotional extremes ("hooked on a feeling")
9. Confusion of love with pity and trauma bonding
10. Tendency to numb painful emotions, possibly to the point of dissociation
11. Low sense of self-esteem
12. Phobia about abandonment, to the point of staying in abusive or neglectful relationships
13. Reacting to life rather than acting on life

Sounds pretty grim, doesn't it? Fortunately, there are new behaviors family members can adopt to help revise or reverse the Problem:

Results of Progress in Our Recovery

1. Move out of isolation to reciprocal friendships
2. Learn the value and safety of "friendly anger"
3. Lose the compulsive need to recreate abandonment
4. Revise self-image of "victim"
5. Feel deserving, not guilty, when we are assertive
6. Avoid emotional extremes ("detox" from drama)
7. Distinguish love from pity and trauma bonding
8. Move from denial to awareness of lifetime trauma
9. Discover a sense of self-worth

10. No longer terrified of abandonment and learn the ability to form mutual relationships
11. Learn to act on life, not react to life

As We Make Progress, We Gain:

1. Empathy
2. Assertiveness
3. Appropriately self-sufficient, aware of our place in the world
4. Truthfulness about our thoughts, feelings, wants and needs
5. Concern with others while maintaining enlightened self-interest
6. Disinterest in emotional extremes and being a “drama junkie”
7. Compassionate rejection of people who trigger feelings of pity and, trauma bonding
8. Awareness of our sufficiency as a going concern as a human being (“cut the umbilical cord”)
9. Skill in avoiding enmeshment and self-loss
10. Appreciativeness of others’ approval
11. Respect for others’ non-demeaning criticism
12. Comfort with our own anger and the non-violent anger of others
13. Ability to “live and let live”

Fear and grief and their various disguises mark all attempts to sabotage recovery. There is a process of grieving that everyone in recovery has to pass through. The goal is to make that journey as uneventful and, if not brief, as efficient as possible. **Recovery of family members in the addiction of a loved one makes it essential that they understand and deal effectively with their own risks and rewards of living a relationally-sober life in the real world.**

Such an endeavor as self-sabotage deserves to be taken seriously and dealt with compassionately and with all possible respect for family members. It can be a life or death struggle for the family member as well as the addict.

“Hooked on a feeling” is a wonderful fantasy, but attaching to another human being as a way of deriving basic self-esteem can lead to nightmarish consequences, and unhealthy dependence is certainly antithetical to the self-possession and repose necessary to establish and maintain healthy intimate relationships. This being the case, we often caution our patients who are not

in a committed relationship to postpone temporarily getting into a close romantic relationship early on but to concentrate of healing themselves and their relationships with loved ones. Interestingly enough, it turns out that AA's Promises apply just as much to loved ones as they do to identified patients:

1. If we are painstaking about this phase of our development, we will be amazed before we are halfway through.
2. We are going to know a new freedom and a new happiness.
3. We will not regret the past nor wish to shut the door on it.
4. We will comprehend the word serenity, and we will know peace.
5. No matter how far down the scale we have gone, we will see how our experience can benefit others.
6. That feeling of uselessness and self-pity will disappear.
7. We will lose interest in selfish things and gain interest in our fellows.
8. Self-seeking will slip away.
9. Our whole attitude and outlook upon life will change.
10. Fear of people and of economic insecurity will leave us.
11. We will intuitively know how to handle situations which used to baffle us.
12. We will suddenly realize that God is doing for us what we could not do for ourselves.[3]

References

[1.] Woititz JG: Adult Children of Alcoholics. Deerfield Beach, FL: Health Communications, Incorporated, 1983.

[2.] http://www.adultchildren.org/lit-Problem

[3.] Wilson W and Smith R: Alcoholics Anonymous. New York: AA World Services, Inc., 1939.

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Rip Van Winkle Effect for Families I: Preventing Recovery Sabotage

Post Test

1. Fear and grief and their various disguises mark all attempts to sabotage recovery.
    a) True b) False

2. Self-Pity: “Poor Little Ol’ Me (PLOM)” is a self-assessment guaranteed to promote a sense of helplessness and futility.
    a) True b) False

3. The defense mechanism of fixation shows us that self-pity can be an effective strategy for the patient to stay at the current, uncomfortable level of development rather than take the risk of assuming more personal responsibility and autonomy.
    a) True b) False

4. It’s important to recognize that what seems like mere self-pity may, in fact, be grief over both the stresses of early recovery but also a dawning awareness of past losses, even trauma.
    a) True b) False

5. Negotiation (otherwise known as Bargaining) is a way of departing from old ideas, situations and emotions that keeps the patient empowered at an advanced stage of recovery.
    a) True b) False

6. We all know that bargaining is, itself, one of the phases of grieving that people move through as they accept the reality of having a chronic disorder. Trying to find “loopholes” in one’s situation is a natural reaction to being confronted with the stark reality of chronic illness.
    a) True b) False

7. Compliance is manifest in the attitude, “Whatever you say. Just tell me what to do, and I’ll do it.”
    a) True b) False

8. Deflection is a way of keeping the focus on personal self-awareness and responsibility.
    a) True b) False

9. As patients make recovery their number one priority, it becomes clearer that every other consideration, including family and work life, now stems from their new-found stability and the integrity that recovery both offers and demands.
    a) True b) False

10. Elitism says, “I’m different (meaning better) than those other poor souls.”
    a) True b) False

11. The intent of patients’ elitism is attempted isolation from experiencing the pain engendered by a frank assessment of their current situation.
    a) True b) False

12. Keeping secrets says, “My specific circumstances are no one else’s business.”
    a) True b) False

13. Such self-disclosure is frequently best done with a layperson, such as a 12-Step sponsor, rather than a mental health professional.
    a) True b) False

14. “Hooked on a feeling” is a wonderful fantasy, but attaching to another human being as a way of deriving basic self-esteem can lead to nightmarish consequences, and unhealthy dependence is certainly antithetical to the self-possession and repose necessary to establish and maintain healthy intimate relationships.
    a) True b) False

15. Trying to form a bonded, interdependent relationship at the outset of recovery is often unwise for at least three reasons. Which of the following is **NOT** a reason it is unwise?
    a) At this juncture in their lives, most people don’t really know themselves that well
    b) They also tend to have a comprehensive understanding of why they turned to alcohol or other drugs to cope
    c) They clearly are not yet in any position to be a supportive, reliable partner for someone.

16. “Rescuing,” says, “I’m fine now. I’ll concentrate on helping myself, so I don’t have to accept helping others.”

17. For many people in early recovery, there is a risk of adopting the attitude of a “flight into sickness,” which would impart to them the belief that they can, somehow, never circumvent the necessary, universal stages of transition to a more-balanced way of life with a chronic illness such as addiction.

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Rip Van Winkle Effect for Families I:

Preventing Recovery Sabotage

Post Test - Key

1. Fear and grief and their various disguises mark all attempts to sabotage recovery.
   a) True b) False

2. Self-Pity: "Poor Little Ol' Me (PLOM)" is a self-assessment guaranteed to promote a sense of helplessness and futility.
   a) True b) False

3. The defense mechanism of fixation shows us that self-pity can be an effective strategy for the patient to stay at the current, uncomfortable level of development rather than take the risk of assuming more personal responsibility and autonomy.
   a) True b) False

4. It's important to recognize that what seems like mere self-pity may, in fact, be grief over both the stresses of early recovery but also a dawning awareness of past losses, even trauma.
   a) True b) False

5. Negotiation (otherwise known as Bargaining) is a way of departing from old ideas, situations and emotions that keeps the patient empowered at an advanced stage of recovery.
   a) True **b) False**

6. We all know that bargaining is, itself, one of the phases of grieving that people move through as they accept the reality of having a chronic disorder. Trying to find "loopholes" in one's situation is a natural reaction to being confronted with the stark reality of chronic illness.
   a) True b) False

7. Compliance is manifest in the attitude, "Whatever you say. Just tell me what to do, and I'll do it."
   a) True b) False

8. Deflection is a way of keeping the focus on personal self-awareness and responsibility.
   a) True **b) False**

9. As patients make recovery their number one priority, it becomes clearer that every other consideration, including family and work life, now stems from their new-found stability and the integrity that recovery both offers and demands.
   a) True b) False

10. Elitism says, “I’m different (meaning better) than those other poor souls.”
    a) True b) False

11. The intent of patients’ elitism is attempted isolation from experiencing the pain engendered by a frank assessment of their current situation.
    a) True b) False

12. Keeping secrets says, “My specific circumstances are no one else’s business.”
    a) True b) False

13. Such self-disclosure is frequently best done with a layperson, such as a 12-Step sponsor, rather than a mental health professional.
    a) True **b) False**

14. “Hooked on a feeling” is a wonderful fantasy, but attaching to another human being as a way of deriving basic self-esteem can lead to nightmarish consequences, and unhealthy dependence is certainly antithetical to the self-possession and repose necessary to establish and maintain healthy intimate relationships.
    a) True b) False

15. Trying to form a bonded, interdependent relationship at the outset of recovery is often unwise for at least three reasons. Which of the following is **NOT** a reason it is unwise?
    a) At this juncture in their lives, most people don’t really know themselves that well
    b) They also tend to have a comprehensive understanding of why they turned to alcohol or other drugs to cope
    c) They clearly are not yet in any position to be a supportive, reliable partner for someone.

16. “Rescuing,” says, “I’m fine now. I’ll concentrate on helping myself, so I don’t have to accept helping others.”
    a) True **b) False**

17. For many people in early recovery, there is a risk of adopting the attitude of a “flight into sickness,” which would impart to them the belief that they can, somehow, never circumvent the necessary, universal stages of transition to a more-balanced way of life with a chronic illness such as addiction.
    a) True **b) False**

Module 14: The Rip Van Winkle Effect for Families 2: "'Stockholm Syndrome' and the Trauma Bond"

(Mature Content - High School Only)

Trigger Warning: Depiction of Hostile, Judgmental, Invalidating Parents/Other Family Members. Language Depicting Inappropriate Boundaries. Bullying.

Keywords to Be Defined: Rip Van Winkle; "Stockholm Syndrome;" Trauma Bond; ACEs; "Stress Hormone;" Cortisol; "Fight, Flight, or Freeze" Reaction; Compassion Fatigue; Survivor Guilt

Introduction to the Teacher: In August of 1973, a parolee named Jan-Erik Olsson and Clark Olofsson took as hostages four bank employees, three women and one man, during a failed bank robbery at the Kreditbanken in Stockholm, Sweden. The employees were held for six days in one of the bank's vaults. They were systematically threatened with nooses and dynamite. When released, none of the freed hostages would testify against either captor in court, and they actually began fundraising efforts for their legal defense and visiting the perpetrators in jail! This phenomenon began to be referred to informally as "Stockholm Syndrome" and clinically as "trauma bonding."

Description: This activity describes material suitable for understanding more pieces of the puzzle in helping families affected by addictive disorders; specifically, the abnormal tenacity-at-all-costs outlook with which family members cling to maintaining the status quo, the "don't make waves" imperative, in addiction-affected family members.

Learning Goals: After completing this Module, the student will be able to:

1. Gain awareness of the existence of the trauma bonding affecting people who have themselves been traumatized.

2. Describe and learn new coping strategies for limiting the effects of trauma bonding on present-day relationships.

Background Material/Handout:

Handout: "The Rip Van Winkle Effect for Families 2: 'Stockholm Syndrome' and the Trauma Bond" with Post-Test

Activity Detail:

Step 1. Re-introduce the original Rip Van Winkle story.
https://en.wikipedia.org/wiki/Rip_Van_Winkle

Step 2. Review the handout, "Stockholm Syndrome and the Trauma Bond," and take the post-test.

Step 3. Discuss the answers to the post-test as a group.

Step 4. Introduce the topic of the effects on human beings of feeling threatened, including “trauma bond.”

Step 5. Review brain development and processing of stress as impacted by the experiences of trauma (Adverse Childhood Experiences, or ACEs), as described in this YouTube video: “Adverse Childhood Experiences (ACEs): Impact on Brain, Body, and Behavior.”

https://www.youtube.com/watch?v=W-8jTTIsJ7Q

Step 6. Discuss the effect of the “stress hormone,” cortisol, on emotions and behavior.

Step 7. Discuss with class how even a very few episodes of high negative stress or trauma can overdrive the body’s threat system, causing permanent alteration of the experience of normal, everyday stress as something to be fought, feared, or emotionally constricted by.

Step 8. Discuss “compassion fatigue” and “survivor guilt.”

Step 9. Make the analogy to youth overdriving their incompletely-developed threat centers in the brain by using chemicals and the effects such use can have now and later in life.

Questions for Discussion with Students:

1. If you have ever been bullied or made to feel unsafe by someone out of control because of addiction, did the bullying ever stop? If it did, how did you feel about the fact that it had stopped?

2. When you were being bulled or otherwise made to feel unsafe, what did you need for supportive people to understand about the situation?

3. Were you able to reach out to anyone to help you cope with being made to feel unsafe?

4. If you did reach out, what was their response to your situation?

5. What effects (emotions or thoughts) did your feeling threatened have on you at the time?

6. Have you noticed any lasting effects of having been made to feel unsafe? Do you think someone might feel when they have overdriven their reward centers?

7. Has having been made to feel unsafe had any effect on your relationships with your parents, other family members, or friends?

8. Are there additional questions we should be raising and discussing about this topic?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

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Resource for Discussion:
The Rip Van Winkle Effect for Families:
"Stockholm Syndrome" and the Trauma Bond

In August of 1973, a parolee named Jan-Erik Olsson and Clark Olofsson took as hostages four bank employees, three women and one man, during a failed bank robbery at the Kreditbanken in Stockholm, Sweden. The employees were held for six days in one of the bank's vaults. They were systematically threatened with nooses and dynamite. When released, none of the freed hostages would testify against either captor in court, and they actually began fundraising efforts for their legal defense and visiting the perpetrators in jail!

Kreditbanken, Stockholm

Welcome to this special curriculum on addictive disorders and their effects on people with addiction and on those who care about them! At the end of this lesson, we hope you'll have a better understanding about more pieces of the puzzle in helping families affected by addictive disorders. Believe it or not, sometimes being traumatized draws the person closer to their tormenter, not further away! Understanding how this can happen can be the start of reversing such a problem-causing pattern.

Nils Bejerot, a Swedish psychiatrist, coined the term, "Stockholm syndrome," after the police asked his help in understanding the victims' reactions to the event. The term was originally defined by psychiatrist Frank Ochberg to aid the management of hostage situations.

A famous example of this phenomenon is Patty Hearst, who was taken and held hostage by the Symbionese Liberation Army, a self-styled "urban guerilla group," in 1974. She was recorded denouncing her family as well as the police under her new name, "Tania," and was later seen working with the SLA to rob banks in San Francisco. She publicly asserted her sympathetic feelings towards the SLA and their pursuits as well. After her 1975 arrest, "Stockholm syndrome" wasn't admitted as a defense at trial, but her prison sentence was commuted. **She was ultimately pardoned by President Bill Clinton, on the operative principle that she was not acting under her own free will.[2]**

You might well say, "This is all very interesting, but what does it have to do with living in a family affected by addiction? No one held us hostage, and we were never threatened or tortured. We coped pretty well, seems to me, and the idea that we're somehow still affected by his drinking and using is … well … just absurd." But *is* it so absurd? *Are* family members held hostage, in a sense, and is their day-to-day interaction with the addict one of extreme stress (and maybe worse)? **In family groups, we discuss the effect that living in an addiction family (or other dysfunctional situation) has on children, but what of the adults who have been forced by circumstance to cope with the unpredictability, inconsistency, and—on occasion—violent behavior of an addicted family member?**

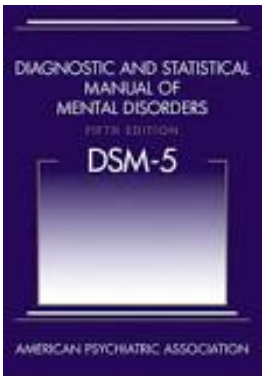
Patty Hearst in 1974

Patty Hearst Today

What of family members, children and adolescents alike, who've been abandoned, physically and verbally beaten, or molested by an intoxicated parent or sibling? **These adverse childhood events (ACEs) leave permanent scars, and they form a very close parallel to the posttraumatic stress disorder that soldiers suffer in combat.**

Physical and Psychological Effects of "Stockholm Syndrome" (a.k.a. "Trauma Bond"):

1. Cognitive: confusion; blurred memory; refusal to accept the reality of events; recurring flashbacks.
2. Emotional: lack of feeling; fear; helplessness; hopelessness; aggression; depression; guilt; dependence on captor; development of posttraumatic stress disorder
3. Social: anxious; irritable; cautious; estrangement
4. Physical: increase in effects of pre-existing conditions; development of health conditions due to possible restriction from food, sleep, or exposure to outdoors[1]



Mental health professionals utilize a set of standards, or "criteria," to make diagnoses of the various mental (i.e., brain-based) disorders that can affect people. **The manual describing these signs and symptoms is called the Diagnostic and Statistical Manual of Mental Disorders, or DSM. The DSM is now in its fifth edition, so it's "DSM-5."**

Here are the "criteria" for posttraumatic stress disorder. **It's not necessarily likely that you'll be able to identity all these symptoms in the criterion lists,** but the following list will make the point that no one comes out of an addicted family without some problems. (Fortunately, all these problems can be addressed effectively in treatment!)

Criterion A (one required): The person was exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, in the following way(s):
1. Direct exposure
2. Witnessing the trauma
3. Learning that a relative or close friend was exposed to a trauma
4. Indirect exposure to aversive details of the trauma, usually in the course of professional duties (e.g., first responders, medics)

Criterion B (one required): The traumatic event is persistently re-experienced, in the following way(s):
1. Unwanted upsetting memories
2. Nightmares
3. Flashbacks
4. Emotional distress after exposure to traumatic reminders
5. Physical reactivity after exposure to traumatic reminders

Criterion C (one required): Avoidance of trauma-related stimuli after the trauma, in the following way(s):
1. Trauma-related thoughts or feelings
2. Trauma-related reminders

The Nightmare (1781 version)
Henry Fuseli (1741-1825)

Criterion D (two required): Negative thoughts or feelings that began or worsened after the trauma, in the following way(s):
1. Inability to recall key features of the trauma
2. Overly negative thoughts and assumptions about oneself or the world
3. Exaggerated blame of self or others for causing the trauma
4. Negative affect
5. Decreased interest in activities
6. Feeling isolated
7. Difficulty experiencing positive affect

Criterion E (two required): Trauma-related arousal and reactivity that began or worsened after the trauma, in the following way(s):
1. Irritability or aggression
2. Risky or destructive behavior
3. Hypervigilance
4. Heightened startle reaction
5. Difficulty concentrating
6. Difficulty sleeping

Criterion F (required): Symptoms last for more than 1 month.

Criterion G (required): Symptoms create distress or functional impairment (e.g., social, occupational).

Criterion H (required): Symptoms are not due to medication, substance use, or other illness.[3]

Well, that's quite a laundry list of symptoms, isn't it?! **Counselors "of a certain age" had been dealing with posttraumatic stress disorder (PTSD) in Viet Nam combat veterans for some time when it began occurring to us that we'd been encountering the same kinds of difficulty in patients who'd never been in combat**; namely, in people from families affected by addiction or other mental illnesses. **Clinicians began "putting two and two together" at more or less the same time, and soon realized that PTSD is PTSD, regardless of the event(s) that brought it into being.**

Posttraumatic stress disorder can be seen as a "bruise" on the awareness and emotions of someone who's been exposed to (or witnessed) terrible events. It's the mind's way of trying to come to terms with what's happened.

What we want to reinforce again to everyone in the family is that every one of the problems listed here can be effectively dealt with in treatment for those affected by a dysfunctional family! **In addition to proper therapy, support groups like Al-Anon can provide a critically important sense of belonging and validation for those learning to rebuild their lives after—or even before—the recovery of the addicted person.**

References

[1] Alexander DA and Klein S: Kidnapping and hostage-taking: a review of effects, coping, and resilience. London: Journal of the Royal Society of Medicine, 2009.

[2] Adorjan M, Christiensen T, Kelly B, Pawluch D: Stockholm Syndrome as vernacular resource. London: The Sociological Quarterly, 2012.

[3] Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Washington, DC: American Psychiatric Association, 2013.

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The Rip Van Winkle Effect: "Stockholm Syndrome" and the Trauma Bond

Post Test

1. In August of 1973, a parolee named Jan-Erik Olsson and Clark Olofsson took as hostages four bank employees, three women and one man, during a failed bank robbery at the Kreditbanken in Stockholm, Sweden.
    a) True b) False

2. Nils Bejerot, a Swedish psychiatrist, coined the term, "Stockholm syndrome," after the police asked his help in understanding the victims' reactions to the event.
    a) True b) False

3. A famous example of this phenomenon is Patty Hearst, who was taken and held hostage by the Symbionese Liberation Army, "an urban guerilla group," in 1974. She was ultimately pardoned by President Bill Clinton, on the operative principle that she was not acting under her own free will.
    a) True b) False

4. In family groups, we discuss the effect that living in an addiction family (or other dysfunctional situation) has on children, but adults have never been forced by circumstance to cope with the unpredictability, inconsistency, and—on occasion—violent behavior of an addicted family member.
    a) True b) False

5. These adverse childhood events (ACEs) leave permanent scars, and they form a very close parallel to the posttraumatic stress disorder that soldiers suffer in combat.
    a) True b) False

6. Physical and Psychological Effects of "Stockholm Syndrome" (a.k.a. "Trauma Bond") include which of the following?
    a. Cognitive: confusion; blurred memory; refusal to accept the reality of events; recurring flashbacks.
    b. Emotional: lack of feeling; fear; helplessness; hopelessness; aggression; depression; guilt; dependence on captor; development of posttraumatic stress disorder
    c. Social: anxious; irritable; cautious; estrangement
    d. Physical: increase in effects of pre-existing conditions; development of health conditions due to possible restriction from food, sleep, or exposure to outdoors
    e. All of the above

7. The current manual describing these signs and symptoms is called the Diagnostic and Statistical Manual of Mental Disorders, or DSM. The DSM is now in its fourth edition, so it's "DSM-IV."
    a) True b) False

8. It's very likely that people will endorse all the listed criteria.
    a) True b) False

9. Criterion A does not include which of the following symptoms of the person being exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, in the following way(s)?
    a. Indirect exposure
    b. Witnessing the trauma
    c. Learning that a relative or close friend was exposed to a trauma
    d. Indirect exposure to aversive details of the trauma, usually in the course of professional duties (e.g., first responders, medics)

10. Criterion B does not include which of the following symptoms of the traumatic event is persistently re-experienced, in the following way(s)?
    a. Unwanted upsetting memories
    b. Nightmares
    c. Flashbacks
    d. Emotional distress after exposure to traumatic reminders
    e. Physical non-reactivity after exposure to traumatic reminders

11. Criterion C, Avoidance of trauma-related stimuli after the trauma, in which of following way(s)?
    a. Trauma-related thoughts or feelings
    b. Trauma-related reminders
    c. a and b are correct

12. Criterion D includes negative thoughts or feelings that began or worsened after the trauma, in which of the following way(s)?
    a. Inability to recall key features of the trauma
    b. Overly negative thoughts and assumptions about oneself or the world
    c. Exaggerated blame of self or others for causing the trauma
    d. Negative affect
    e. Decreased interest in activities
    f. Feeling isolated
    g. Difficulty experiencing positive affect
    h. All of the above

13. Criterion E includes trauma-related arousal and reactivity that began or worsened after the trauma, in the following way(s) *except*?
    a. Irritability or aggression
    b. Risky or destructive behavior
    c. Hypervigilance
    d. Decreased startle reaction
    e. Difficulty concentrating
    f. Difficulty sleeping

14. Counselors “of a certain age” had been dealing with posttraumatic stress disorder (PTSD) in Viet Nam combat veterans for some time when it began occurring to us that we’d been encountering the same kinds of difficulty in patients who’d never been in combat.
    a) True b) False

15. Clinicians began “putting two and two together” at more or less the same time, and soon realized that PTSD is PTSD, regardless of the event(s) that brought it into being.
    a) True b) False

16. Posttraumatic stress disorder can be seen as a “bruise” on the awareness and emotions of someone who’s been exposed to (or witnessed) terrible events.
    a) True b) False

17. In addition to proper therapy, support groups like Al-Anon can provide a critically important sense of belonging and validation for those learning to rebuild their lives after—or even before—the recovery of the addicted person.
    a) True b) False

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The Rip Van Winkle Effect: "Stockholm Syndrome" and the Trauma Bond

Post Test - Key

1. In August of 1973, a parolee named Jan-Erik Olsson and Clark Olofsson took as hostages four bank employees, three women and one man, during a failed bank robbery at the Kreditbanken in Stockholm, Sweden.
   a) True b) False

2. Nils Bejerot, a Swedish psychiatrist, coined the term, "Stockholm syndrome," after the police asked his help in understanding the victims' reactions to the event.
   a) True b) False

3. A famous example of this phenomenon is Patty Hearst, who was taken and held hostage by the Symbionese Liberation Army, "an urban guerilla group," in 1974. She was ultimately pardoned by President Bill Clinton, on the operative principle that she was not acting under her own free will.
   a) True b) False

4. In family groups, we discuss the effect that living in an addiction family (or other dysfunctional situation) has on children, but adults have never been forced by circumstance to cope with the unpredictability, inconsistency, and—on occasion—violent behavior of an addicted family member.
   a) True **b) False**

5. These adverse childhood events (ACEs) leave permanent scars, and they form a very close parallel to the posttraumatic stress disorder that soldiers suffer in combat.
   a) True b) False

6. Physical and Psychological Effects of "Stockholm Syndrome" (a.k.a. "Trauma Bond") include which of the following?
   a. Cognitive: confusion; blurred memory; refusal to accept the reality of events; recurring flashbacks.
   b. Emotional: lack of feeling; fear; helplessness; hopelessness; aggression; depression; guilt; dependence on captor; development of posttraumatic stress disorder
   c. Social: anxious; irritable; cautious; estrangement
   d. Physical: increase in effects of pre-existing conditions; development of health conditions due to possible restriction from food, sleep, or exposure to outdoors
   e. All of the above

7. The current manual describing these signs and symptoms is called the Diagnostic and Statistical Manual of Mental Disorders, or DSM. The DSM is now in its fourth edition, so it's "DSM-IV."
    a) True **b) False**

8. It's very likely that people will endorse all the listed criteria.
    a) True **b) False**

9. Criterion A does not include which of the following symptoms of the person being exposed to: death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence, in the following way(s)?
    a. Indirect exposure
    b. Witnessing the trauma
    c. Learning that a relative or close friend was exposed to a trauma
    d. Indirect exposure to aversive details of the trauma, usually in the course of professional duties (e.g., first responders, medics)

10. Criterion B does not include which of the following symptoms of the traumatic event is persistently re-experienced, in the following way(s)?
    a. Unwanted upsetting memories
    b. Nightmares
    c. Flashbacks
    d. Emotional distress after exposure to traumatic reminders
    e. Physical non-reactivity after exposure to traumatic reminders

11. Criterion C, Avoidance of trauma-related stimuli after the trauma, in which of following way(s)?
    a. Trauma-related thoughts or feelings
    b. Trauma-related reminders
    c. a and b are correct

12. Criterion D includes negative thoughts or feelings that began or worsened after the trauma, in which of the following way(s)?
    a. Inability to recall key features of the trauma
    b. Overly negative thoughts and assumptions about oneself or the world
    c. Exaggerated blame of self or others for causing the trauma
    d. Negative affect
    e. Decreased interest in activities
    f. Feeling isolated
    g. Difficulty experiencing positive affect
    h. All of the above

13. Criterion E includes trauma-related arousal and reactivity that began or worsened after the trauma, in the following way(s) *except*?
    a. Irritability or aggression
    b. Risky or destructive behavior
    c. Hypervigilance
    d. Decreased startle reaction
    e. Difficulty concentrating
    f. Difficulty sleeping

14. Counselors “of a certain age” had been dealing with posttraumatic stress disorder (PTSD) in Viet Nam combat veterans for some time when it began occurring to us that we’d been encountering the same kinds of difficulty in patients who’d never been in combat.
    a) True b) False

15. Clinicians began “putting two and two together” at more or less the same time, and soon realized that PTSD is PTSD, regardless of the event(s) that brought it into being.
    a) True b) False

16. Posttraumatic stress disorder can be seen as a “bruise” on the awareness and emotions of someone who’s been exposed to (or witnessed) terrible events.
    a) True b) False

17. In addition to proper therapy, support groups like Al-Anon can provide a critically important sense of belonging and validation for those learning to rebuild their lives after—or even before—the recovery of the addicted person.
    a) True b) False

Module 15: "The Ghost in the Closet"

(Mature Content - High School Only)

Trigger Warning: Depiction of Hostile, Judgmental, Invalidating Parents/Other Family Members. Language Depicting Inappropriate Boundaries. Bullying.

Keywords to Be Defined: Family Rules; "Flashbacks;" Family Ghost; Centering Exercise

Introduction to the Teacher: When people talk to a therapist or other helper, there is another "person" there with them; a "family ghost," if you will. That other person is the ghost (the memory) of the addicted family member making demands on them as to what they should and should not tell the therapist. (Remember, one of the main rules for families affected by addiction is, "Don't talk.") That "ghost" doesn't have to be allowed to produce "flashbacks" to interfere with the person getting the help they need, but contending with its presence and the hyper-vivid, seemingly-intractable memories and emotions the "ghost" calls forth can be an unnerving experience, especially in the beginning.

Description: This activity describes and re-enacts the present-day effects on family members of dysfunctional interactions in the past with both the identified addict and other impaired family members. It concludes with a restorative, clarifying centering exercise, "There Is Only One of Me."

Learning Goals: After completing this Module, the student will be able to:

1. Demonstrate understanding of the lasting effects later in life of haunting family experiences in the past.

2. Describe effective, self-validating responses to both remembered and present-day hostile, abusive family members.

Background Material/Handout:

Handouts: Playlet, "The Ghost in the Closet" and "There Is Only One of Me"

Game: Re-enacting the playlet

Activity Detail:

Step 1. Review with students the handout, "The Ghost in the Closet."

Step 2. Introduce "Flashbacks."

Step 2. Assign students the roles of Patient, Therapist, and Ghost.

Step 3. Perform the playlet without interruption with several different sets of actors.

Step 4. Discuss the possible effects in the present day of a person's experiencing "flashbacks" and being "haunted" by "ghosts" from their family of origin.

Step 5. Introduce and read the Centering Exercise, "There Is Only One of Me," each sentence being read by a different student.

Questions for Discussion with Students 1 (In Character; Still Playing Your Role):

Patient	Therapist	Ghost
1. How did you feel during the interview?	How did you feel during the interview?	How did you feel during the interview?
2. Were you aware of the Ghost at the interview?	Were you aware of the Ghost at the interview?	Were the Patient and Therapist aware of you at the interview?
3. What did the Ghost want?	What did the Ghost want?	What did you want?

Questions for Discussion with Students 2 (Out of Character; As Themselves):

Patient	Therapist	Ghost
1. How did you feel during the interview?	How did you feel during the interview?	How did you feel during the interview?
2. Were you aware of the Ghost at the interview?	Were you aware of the Ghost at the interview?	Were the Patient and Therapist aware of you at the interview?
3. What did the Ghost want?	What did the Ghost want?	What did you want?

Evaluation: Teacher's observations of student preparedness, student work samples, and participation in group activities.

Resource for Discussion: The Ghost in the Closet

Background Note: We're witnessing a shortened portion of an assessment session between Therapist and Patient, who wants help coping with addiction. Two chairs face each other in a typical counseling configuration. In the background, a third chair and (if possible) some sort of screen are offset slightly to the rear behind Therapist's chair:

Ghost from Patient's Past

Therapist **Patient**

Seated behind the screen in the background chair is Ghost, a malevolent spirit, who exists only in the past, channeling Patient's abusive, alcoholic parents, both of whom are now deceased. Ghost peers and speaks periodically from behind the screen, glowering around Therapist at Patient. The trauma-sensitive Therapist is aware of Ghost and can see and hear it. Patient is also aware of the presence of Ghost, but Patient is unaware that Therapist sees and hears it. From Patient's reactions, it's clear that s/he is startled and dismayed by these periodic appearances of Ghost, a persona keyed to peering and glaring episodes by Therapist's routine questions, which cue Patient's traumatic memories. The gender pronouns to be used depend on the gender of the re-enactors. **This playlet re-enactment is for use only for training purposes and is not to be used as a therapy session with actual patients unless the therapist's scope of practice includes trauma therapy.**

Interview

Therapist

Good afternoon, Ms./Mr. Collins. Come in and join me, won't you? What can I do to help today?

Ghost [to Patient]

Well, here you are, again, Ms./Mr. Smarty Pants! After all we've done for you, here you are, about to spill the beans on your drinking—again. You're embarrassing us, and you're making a mountain out of a molehill—again. Besides, what makes you think this

time's going to be any different? You'll get sober for a while, and then you'll start right back drinking again! You always have, and you always will! You could never see that things at home were always no big deal, and you continually overreacted. Here we go again. Before you have your little chat with the shrink—what is this, the fourth time?—you just make real sure you remember to keep your mouth shut this time about anything to do with us! We're not the crazy alcoholic, *you* are, so stop persecuting us!

Patient

Well, as I mentioned in our phone call, I think my drinking is getting out of hand.

Therapist

I'm certainly glad you called! What's making you concerned about your drinking?

Patient

I hadn't really noticed any kind of problem until a couple of years ago, when I got a DWI after going to a party. My wife was out of town, and I went to a work-related cocktail party one evening and got pulled over for weaving in the lane.

Therapist

So, you hadn't noticed anything out of the ordinary about your drinking before that event?

Patient

No, not really. You have to understand, I come from a family of drinkers.

Ghost

Shhh! Care-ful, Ms./Mr. Smarty Pants! Remember what I told you!

Patient

Both of my parents drank a lot. I'm pretty sure they'd both qualify as alcoholics. They both died years ago from alcohol-related illnesses.

Ghost

Wait a minute! Who are you calling an alcoholic??

Therapist

Why do you say that?

Patient

Well, not only did they drink a lot when they drank, which was a lot, especially on weekends. As time went on, they would argue more and more when they drank and be really cranky when they weren't drinking. They got into some real doozies of arguments!

Ghost

Stop talking about us! Remember, "Old Snapper" [a wide leather belt] is waiting for you if you don't stop telling our secrets!

Therapist

How old were you when all this was going on?

Patient

I think I couldn't have been more than 3 or 4. I don't really remember them *not* acting like that.

Therapist

Tell me more about your drinking. Do you remember the first time you used alcohol?

Patient

I must have been about 7 or 8. I was an only child, so I got a *lot* of attention, some good but mostly bad. I remember one New Year's Eve, my parents gave a party at our house, and they gave me a couple of mixed drinks later on in the evening, to "celebrate."

Therapist

Your parents gave you alcohol when you were a child?

Ghost

Don't answer that! They'll come and take us away if you say anything, and then who's going to take care of you? You're just a little kid! You can't make it without us!

Patient

Oh, yeah. That wasn't unusual at all. I'll give you an example: Part of this is a blur, but I do remember when I was a little kid getting very drunk and acting silly, then going into my bathroom later on and throwing up. I felt really crummy the next day, I can tell you!

Therapist

Were you scared?

Patient

Well, I guess that was *part* of what scared me about that particular night. I felt totally out of control.

Therapist

You said that was part of what scared you. Was there something else that frightened you about the evening?

Patient

Yes, there was, and—I haven't mentioned this to anyone. Frankly, it feels pretty weird to be bringing it up now.

Ghost

Then don't bring it up, Stupid! *For God's sake, we were just playing!*

Therapist

Well, you know you don't have to talk about it right now if you don't want to. It's your choice.

Patient

I guess I'm afraid that if I tell you, you're going to think I'm crazy or something.

Therapist

I'm pretty sure you won't have to worry about me thinking that.

Patient

Ok, if you say so.

Therapist

I admire your courage for even considering speaking with me today. Being willing to come and talk with a total stranger is a major accomplishment!

Patient

Thanks. I appreciate that. Well, like I said before, when my parents would get drunk, they'd get into fights. Then, after a fight, they'd "kiss and make up." What I mean is, they'd be all over each other, drunk on their butts, making out with each other. It was disgusting. They'd be so out of it that it didn't seem to matter to them where they were or who was around them.

Therapist

Were you confused by what you were seeing?

Patient

Absolutely. I couldn't tell whether they were fighting or making out. You have to remember, I was a little kid, so I didn't really understand what I was seeing.

Therapist

It makes sense to me that you would have been very confused and also very anxious about what was going on.

Patient

That's not the worst of it.

Therapist

Can you talk about it a little?

Ghost

No! Don't talk about it! You're my son/daughter! You have to do what I tell you!

Patient

I feel strange about detailing what happened, but I was the one that brought it up, so I must need to talk about it.

Therapist

Well, remember, it's your choice. We go at the pace you dictate. You're the one in control.

Patient

I'm afraid I'll gross you out when I talk about it.

Therapist

I promise you, you won't. One of my roles is to be your advocate, which means you can tell me anything you choose to.

Patient

It just seems so strange looking back on it. My parents were violent with me that evening.

Therapist

In their intoxication, they didn't respect your boundaries, you mean?

Patient

Yes, that's it.

Therapist

We know that often happens in families affected by addiction. Children's personal space can often become something they don't control.

Patient

The night of the party, for instance, after all their drinking buddies—I mean, guests—had gone, they were making out on the sofa, falling all over each other. My mother told me to come over to where they were … They started punching me while they were making out with each other. They would make out, and then they'd shove me around roughly and punch me.

Ghost

We were just having some fun! Stop blowing it out of proportion!

Therapist

How are you feeling right now?

Patient

Scared.

Ghost

Quiet!

Therapist

Ok. Let's zoom back for a moment and have you look around this office here today. Would you please name five objects in the room?

Patient

Chair, clock, vase, table, lamp.

Therapist

Great! Now, please describe the lamp for me.

Patient

It's got a glass base at the bottom and a light tan shade.

Therapist

Excellent! You'll note that I sort of interrupted you so you could come back to the present day rather than dwell for right now on what happened years ago. Would you be willing to let me make an appointment for you to talk with a colleague of mine who specializes in helping people resolve painful memories? She's very gentle, and I'm sure you'll like her.

Patient

You think what I'm talking about is why I developed a drinking problem?

Ghost

Sure, Ms./Mr. Smarty Pants! Here we go again with the blaming! It's all. our. fault!

Therapist

That could well be a part of it, for sure. We do know that many people with problems with alcohol and other drugs have a history of having been abused as children or adolescents, and the need to drink and use to escape those traumatic memories and emotions is very common. When you drink, did you find that it helped you not think and feel, so you felt better? Or, at least, you didn't feel as bad?

Ghost

That therapist doesn't know what s/he's talking about!

Patient

Yes, that's certainly possible.

Therapist

Well, I know this: I'm feeling very good right now about the progress you've already made just today!

Ghost

They *have* to say that! You're *paying* them to say that!

Patient

How so? It doesn't seem like I've done much.

Ghost

Oh, you've done a *lot*, all right. You've managed to make a fool of yourself—again, and you sullied the good name of the parents who took care of you!

Therapist

You've made a tremendous breakthrough today in even being willing to address these memories. I assure you that, with the right kind of help, you can get a remarkable degree of freedom from the effects of these painful memories! Here's my idea: While you and I work together to show you how to get into addiction recovery, the other therapist will help you get free of the effects of those painful memories.

Ghost

If you blab any more, they're going to take you away from us … Forever…! Forever…! Forever …! (Ghost continues saying "forever" more and more quietly as s/he gradually disappears behind the screen.)

Therapist

After we get through with this assessment today, we can develop a treatment plan you can start putting into effect today to guide you in staying off alcohol or other drugs of abuse. How does that plan sound to you?

Patient

Sounds good. One thing: I know there's a statute of limitations on child beating, but where's the statute of limitations on wanting to get revenge against dead people?

Therapist

Don't worry. Helping you get past wanting revenge will be one of the things we focus on in your treatment.

CADA
COUNCIL ON ALCOHOLISM & DRUG ABUSE
of Northwest Louisiana

School of Addiction
and Behavioral Health
ADRA AEPE017

Into Action:
How People Change–
A Playlet for Re-Enactment

CADA
COUNCIL ON ALCOHOLISM & DRUG ABUSE
of Northwest Louisiana

School of Addiction and Behavioral Health

Educational Activity:
Into Action: How People Change
A Playlet for Re-Enactment

Performance Notes

This piece for narrator and several other performers is intended to provide a detailed exposition of the cognitive and emotional processes involved in making changes; the so-called "transtheoretical" or "stages of change" model as described by James O. Prochaska, Carlo DiClemente, and Wayne Velicer in the latter 20th Century. Although the material is designed for non-actors and non-clinicians, every effort has been made to avoid oversimplification on the one hand and bewildering complexity on the other.

Blocking (See Graphic)

In a staged version of this playlet, the characters are, from left to right:

Amygdala 1, Hippocampus 1, Narrator, Front Brain, Driver, Anterior Cingulate Cortex, Amygdala 2, Hippocampus 2. Visual Cortex is situated at the rear of the room.

The Narrator is situated at the front left of the performance area in a close-knit group with (but in front of) the other performers. As the Narrator reads her/his introduction, at the words, "The advent of the art and science of promoting those changes," the characters walk smoothly to array themselves in the following order, creating a 180º semi-circle in front of the audience, and the person playing the Visual Cortex moves to the rear of the room. When everyone has migrated to their positions, the left-right order around the room will appear as:

Amygdala 1, Hippocampus 1, Narrator, Front Brain, Driver (at center-left stage), Anterior Cingulate Cortex, Amygdala 2, Hippocampus 2, and, at the rear of the room behind the audience, Visual Cortex. (Note: the whisper of the amygdalae is a "stage whisper": rather loud, but breathier than normal speech.)

Beginning on page 4, the Amygdala 1 will cue the audience to speak by raising a sign saying, "Danger. There's a problem. Danger" at the appropriate times.

Near the end, as the Narrator says, "Recovery is an entire process of being well," the entire group quietly re-forms side by side at the front of the room (order is not important) close to the Narrator in time to say the words, "No relapses. No fatalities," and the word, "Safe" is said by everyone in the room.

Narrator

Front Brain

Driver

Anterior Cingulate Cortex

Amygdala 1

Hippocampus 1

AUDIENCE

Amygdala 2

Hippocampus 2

Visual Cortex

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Educational Activity:
Into Action: How People Change–
A Playlet for Re-Enactment

DRIVER

[As **DRIVER** begins, the other characters disperse to assigned places; see Graphic]

Recovery in any chronic mental illness is an ongoing, lifetime process, one that is more than merely "getting over" an episode of the illness. Like every other mature adult, people in recovery are always changing, in the process of becoming more mature versions of themselves.

NARRATOR

The advent of the art and science of promoting those changes was one of the most remarkable innovations in the field of behavioral health of the 20th Century, answering some very basic questions about how people envision and implement change.

DRIVER

Recovery itself begins with admitting there's a problem. The person must give up the thinking that there's nothing wrong (denial) and begin taking stock of how the disease has affected their lives and their loved ones' lives and to become educated on the nature of the disease and its daily management.

NARRATOR

This courageous step of admission often depends on the help of a professional therapist and a support group. The discipline of recovery can be taught easily enough; the difficulty lies in the acceptance of the need for ongoing, lifetime recovery.

DRIVER

To illustrate how people make changes in their lives, let me tell you an anecdote about something that happened to me several years ago. One beautiful afternoon, I was driving on an interstate to go to a conference. I remember entering the highway noting that the weather is what pilots call “severe clear,” the visibility stretching all the way to the horizon. As the song says, on *this* clear day, you really *can* see forever. I drive on for several miles with not a care in the world, marveling at the beautiful weather.

NARRATOR

At some point, it seems to the **DRIVER** that there begins to be something just a little, how to say it … different … “off” … about the horizon. It’s the same as it has been, and yet, it’s *not* the same as it seemed just a few moments ago. Something is different somehow.

DRIVER

I think to myself, “If I stop here, turn around, and go in the opposite direction, I might even believe that what I think I’m seeing is just an optical illusion, maybe heat waves bending the light as they rise off the road on a hot day.” Except that it isn’t a hot day; the temperature’s in the low 40s. “So much for that theory,” I remember thinking.

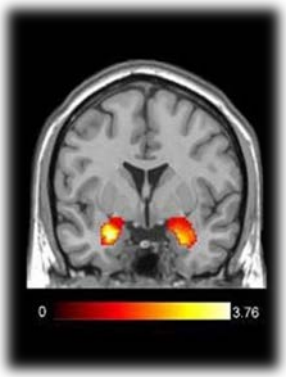
NARRATOR

We’re going on about all this at such length because we’re trying to impart to you the acuity with which the brain clues us in as to the situation at hand. Since the **DRIVER** doesn’t turn around and is still moving in the same direction, she comes to see that, in fact, there *is* something different about the horizon she’s seeing now. Let’s watch:

DRIVER

I hadn’t expected to see anything out of the ordinary when I started out this morning, so, for a long time, it’s hard to come to believe that something *is actually amiss*. Now, it’s undeniable: I’m having an “uh oh” moment about this “thing” on the horizon, and I’m now about to embark on a sort of “neurological teleconference” that will ultimately save my life. “What is going on here?” part of my brain is signaling to another part, in the back of my consciousness. (Literally behind my conscious awareness: this preliminary communication is happening between my amygdala, hippocampus, and some other players, all in my brain.)

And now I get a clear, conscious message from my threat center, my two amygdalae. They whisper to me:



AMYGDALA 1 AND 2

We have a problem. Danger.

DRIVER

[To **AMYGDALAE**] What's wrong?

AMYGDALA 1 AND 2

[To **DRIVER**, whispered] *We have a problem. Danger. We don't know what's wrong, but there's a problem. Danger.*

DRIVER

[To **AMYGDALAE**] If you don't know what the problem is, why should I believe you that there is one?

AMAGDALA 1 AND 2

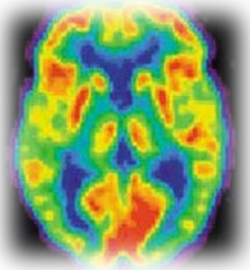
[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

DRIVER

[To **AMYGDALAE**] Fine. Ok. There's a problem, and you don't know what it is, right?

AMYGDALA 1 AND 2

[To **DRIVER**, whispered] *Danger. There's a problem. Correct. We don't know what's wrong, but there's a problem. Danger.*



DRIVER

[To **AMYGDALAE**] Well, what am I supposed to *do* about it?

AMYGDALA 1

[To **DRIVER**, at normal volume] *Danger. There's a problem. We don't know; that's not our job.*

AMYGDALA 2

[To **DRIVER**] *Danger. There's a problem. We're forwarding this message to your front brain. Danger. There's a problem. Danger.*

DRIVER

[To **AMYGDALAE**] Why do you keep telling me there's a problem?

AMYGDALA 1

[To **DRIVER**, slightly more intense] *Danger. There's a problem.*

AMYGDALA 2

[To **DRIVER**, slightly more intense] *Because it keeps being true. There's a problem. Danger.*

DRIVER

[To **AMYGDALAE**] Oh! Well, thanks for letting me know!

AMAGDALA 1 AND 2

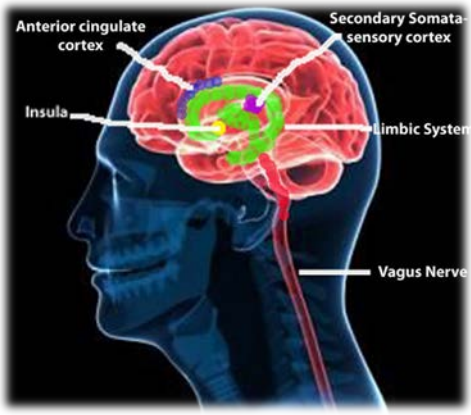
[To **DRIVER**, slightly quieter] *Danger. There's a problem. Danger.*

NARRATOR

They will reiterate this single message repeatedly until *after* the **DRIVER** is out of danger.

DRIVER

I tune into my front brain, a center of reasoning and judgment, and my anterior cingulate cortex, which, among other functions, helps me decipher contradictory situations.



[To **FB** and **ACC**] How about you two? Either one of you have any ideas about what I should do about this 'thing' on the horizon?

FRONT BRAIN

[To **DRIVER**] Might … want … to ease up off the gas a little.

AMAGDALA 1 AND 2 AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

DRIVER

A problem?

ANTERIOR CINGULATE CORTEX

[To **DRIVER**] I can't tell yet if it's safe or dangerous. Better assume the worst until we know better.

DRIVER

[To **FB**] Why ease up off the gas?

FRONT BRAIN

[To **DRIVER**] Well, let's think this through. You're traveling 70 miles an hour in a 3500-pound vehicle, and your visual cortex is sending me information that the … 'thing' on the horizon seems to have gotten a little bit bigger in the last couple of minutes.

ANTERIOR CINGULATE CORTEX

And remember, although *you're* going 70, it's not certain that *it's* moving at all.

AMAGDALAE AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

DRIVER

Well, now I'm *literally alarmed*, so I do what my **FRONT BRAIN** tells me to: I slow down just enough not to be a hazard to the cars behind me. I still don't know exactly *why* I'm slowing down, except that I believe and feel that I need to. I have the sense of being in potential danger because my brain is alerting me that I am. In my newly-alerted state, I continue to travel toward this ever-so-slowly-growing "thing" on the horizon.

[To **FB**] So then what do I do, **FRONT BRAIN**; can you come up with a plan?

FRONT BRAIN

[To **DRIVER**] Yes, but I need more information. **Let's get your hippocampi—**

NARRATOR

—a center of learning and memory—

FRONT BRAIN

—to pull some information about what you did last time you were in a situation like this. HC, what do you have for us? … Ok, got it. Thanks! Your hippocampi are telling me that the last time you were in a situation like this, an 18-wheeler had blown a tire. That time, you slowed down and carefully went around the tire debris in your lane.

AMAGDALA 1 AND 2 AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

DRIVER

[To **FB**] Ok, but I can't really make out just what's in the lane just yet. What do I do?

FRONT BRAIN

[To **DRIVER**] I can't know just yet. We need to consult your visual cortex.

DRIVER

My visual cortex is a vision-processing sheath of neurons in my occipital lobe at the back of my brain.

FRONT BRAIN

[To **VC**] Hey, VC, what do you see?

VISUAL CORTEX

[To **DRIVER**] Scan the scene with your eyes for me.

ANTERIOR CINGULATE CORTEX

[To **DRIVER** AND **VC**] Look for anything out of the ordinary.

VISUAL CORTEX

[To **DRIVER**] Ok, I have it. I see a … some sort of cage-like structure, but I can't make out what it is … but I'm beginning to be able to see enough to tell me that it's really big!

AMAGDALA 1 AND 2 AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

FRONT BRAIN

[To **VC**] Not good. How big is it, VC?

VISUAL CORTEX

[To **FB**] It seems to be enormous, like it takes up the entire lane we're in!

ANTERIOR CUNGULATE CORTEX

[To **DRIVER**] Um … you *are* slowing down, aren't you?

DRIVER

[To **FB**] Yes, FB.

AMAGDALA 1 AND 2 AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

FRONT BRAIN

[To **VC**] Good! Thanks, VC! [To **HIPPOCAMPI**] Hey, HC! Quick! Do you have anything on evading a cage-like structure taking up a whole lane of an interstate highway?

HIPPOCAMPUS 1

[To **FB**] Hang on … Looking … No … just a lot of 'blown-tire' and 'disabled vehicle' stuff.

HIPPOCAMPUS 2

And some police traffic management at an accident where somebody ran off the road. Sorry, that's all I have to send you at the moment.

FRONT BRAIN

[To **DRIVER**] Thanks for trying, HC! We're going to have to extrapolate a bit from that time you evaded a blown truck-tire. [To **HIPPOCAMPI**] Remind him of that incident, please HC.

DRIVER

My hippocampi comply, so I recall navigating through an accident a few years back where someone had skidded off the highway.

AMAGDALA 1 AND 2 AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

DRIVER

My front brain continues:

FRONT BRAIN

[To **VC**] What do you see now, VC?

VISUAL CORTEX

[To **FB**] Wow! It's pretty clear now that our whole lane is blocked by this "thing."

FRONT BRAIN

[To **DRIVER**] Ok. From past experience, I know that we came through safely when you slowed down, got out of the lane you're in, and—hey, VC, see any police?

AMAGDALA 1 AND 2 AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

VISUAL CORTEX

[To **FB**] Yeah. They're everywhere, and they're moving their arms and pointing.

FRONT BRAIN

[To **DRIVER**] Educated guess, they're probably directing traffic. Here's the plan. We know what's in your best interests. If you can do it safely, get into the other lane *now.*

ANTERIOR CINGULATE CORTEX

[To **DRIVER**] When you get to that 'thing' in the highway, follow the directions of the police on the scene *really carefully*. *Do whatever they tell you to.* They'll get us through this ok. Got that?

DRIVER

Got it. Thanks, everyone!

AMAGDALA 1 AND 2 AND AUDIENCE

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.*

NARRATOR

So that's what the **DRIVER** does. She slows down, gets into the other lane, which is open to traffic, and we're all guided through this obstruction by the police.

DRIVER

What is blocking the lane is, indeed, a 15-foot-tall, metal, cage-like structure, the purpose of which I cannot begin to fathom. What *is* very clear to me is that, had I not listened to and heeded this inner conversation, and had I hit this "thing" at cruising speed, I'd've have been killed instantly.

NARRATOR

She received the right kind of help at the right time—from the brain as well as the State Police—*and she was open to accepting and using it.* Why was she open to accepting help? *Because she saw doing so as being in her best interests.* Before she knew it, we were all on our way again, heading down the highway without incident. It *could* have been a disaster, but it wasn't!

AMAGDALA 1

[To **DRIVER**, whispered] *Danger.*

AMYGDALA 2

[To **DRIVER**] *There's a problem.*

AMYGDALA 1

[To **DRIVER**] *Danger.*

NARRATOR AND DRIVER IN UNISON

No injuries. No fatalities. Safe!

AMAGDALA 1

[To **DRIVER**, whispered] *Danger. There's a problem. Danger.* [2 second pause]

AMYGDALA 2

Danger. There's a problem. Danger. [2 second pause]

AMYGDALA 1

Danger is passing for now. [2 second pause]

AMYGDALA 2

Danger is passing for now. [2 second pause]

AMYGDALA 1

Danger is past for now. [2 second pause]

AMYGDALA 2

Danger is past … for now.

NARRATOR

So. Let's tie this experience in with how people change. In the late 1970s, two psychologists, James O. Prochaska and Carlo DiClemente (and, later, Wayne Velicer), formulated a progression of awarenesses and behaviors that they called the "Transtheoretical" or "Stages of Change" model. The Stages are: Precontemplation, Contemplation, Preparation, Action, Maintenance, Termination, and, possibly, Relapse, which is no longer considered a specific Stage.

AMYGDALA 1

Here's a description of each of the Stages, paraphrasing the authors, along with the tie-in to the **DRIVER**'s experience on the interstate:

AMYGDALA 2

Stage 1, Precontemplation: Not intending to take action in the foreseeable future. When the **DRIVER** started out that morning, she was unaware there would be an obstruction on the highway. (The vehicle didn't have navigation.)

FRONT BRAIN

Stage 2, Contemplation: Beginning to recognize that current behavior is problematic, and starting to look at the pros and cons of continued actions. As the **DRIVER** traveled on, she begin perceiving something different—a little "off"—about the horizon, and it began to dawn on her that she needed to consider doing something different than planned.

ANTERIOR CINGULATE CORTEX

Stage 3, Preparation: Intending to take action in the immediate future, and (maybe) beginning to take small steps toward behavior change. The **DRIVER** noted that a sense of threat, or alarm, was forming in her mind, and she marshalled her mental resources, her front brain, hippocampi and amygdalae, and her vision sense, to guide her through the impending danger.

HIPPOCAMPUS 1

Stage 4, Action: Making specific, overt modifications in modifying behavior or in acquiring new healthy behaviors. The **DRIVER** heeded what her mind was telling her, and she took specific actions—slowing down, moving into the unobstructed lane, and obeying the State Police—to move safely through the potential danger.

HIPPOCAMPUS 2

As for Stage 5, Maintenance, she does her best to practice defensive driving skills, including attention to road conditions and looking ahead to possibly dangerous situations further down the road.

NARRATOR

[As **NARRATOR** says the following, the other characters return to the front of the room]

Recovery is an entire process of being well, a lifetime collaboration with the illness rather than conflict with it. The threat isn't typically a metal cage in the highway; it's being unexpectedly confronted with a trigger to use or drink or gamble. Cultivating this model of change can guide people with addiction through dangerous situations so they come out the other side.

ALL CHARACTERS IN UNISON

No relapses. No fatalities.

[Beat]

ALL CHARACTERS AND AUDIENCE IN UNISON

Safe!

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