

ADDICTION
THE DISEASE
PAWS
AND
RELAPSE
PREVENTION

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Safety, Connection and Problem-Solving

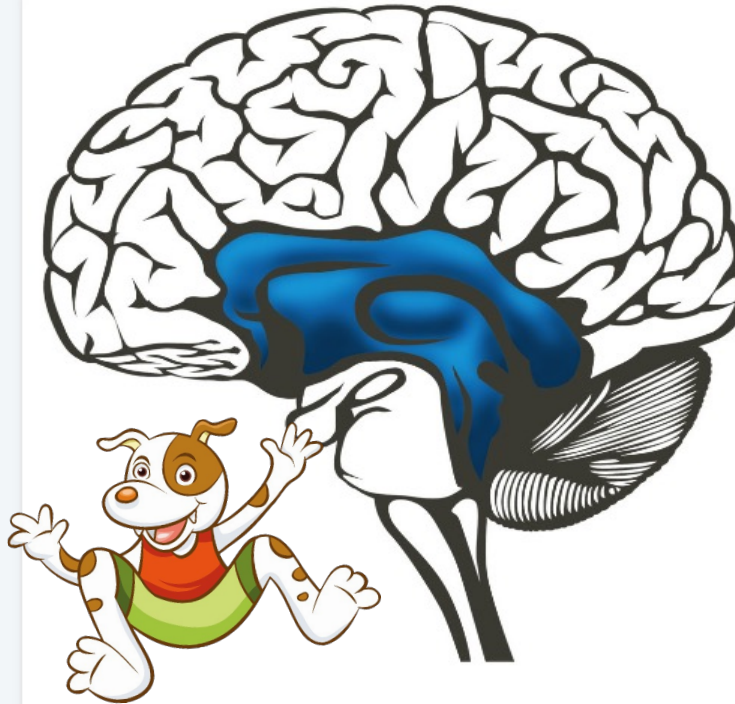


Survival State

BRAIN STEM

The Survival State represents the primal brain and asks the question, *"Am I safe?"* The only way to soothe the Survival State is through the creation of *Safety*.

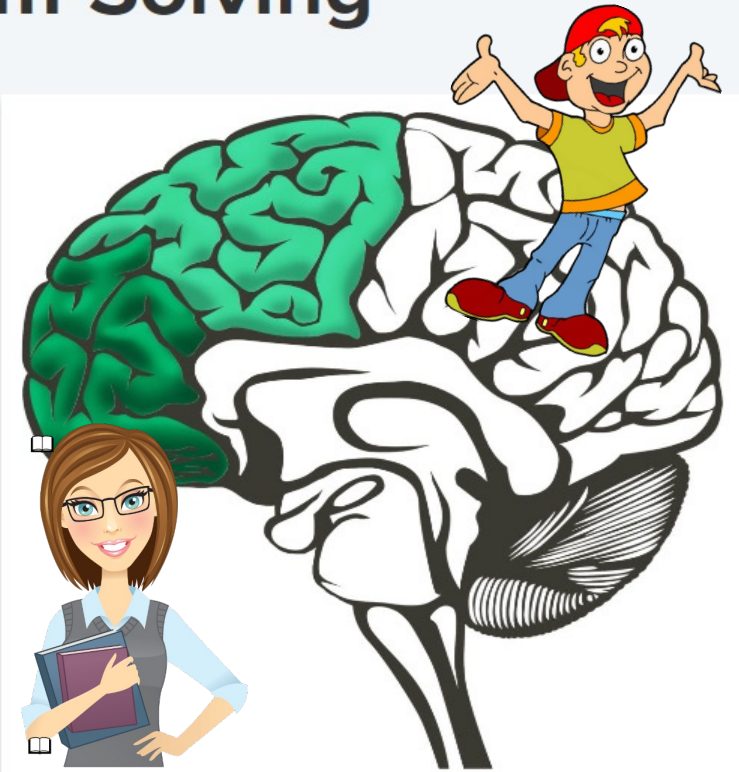
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Emotional State

LIMBIC SYSTEM

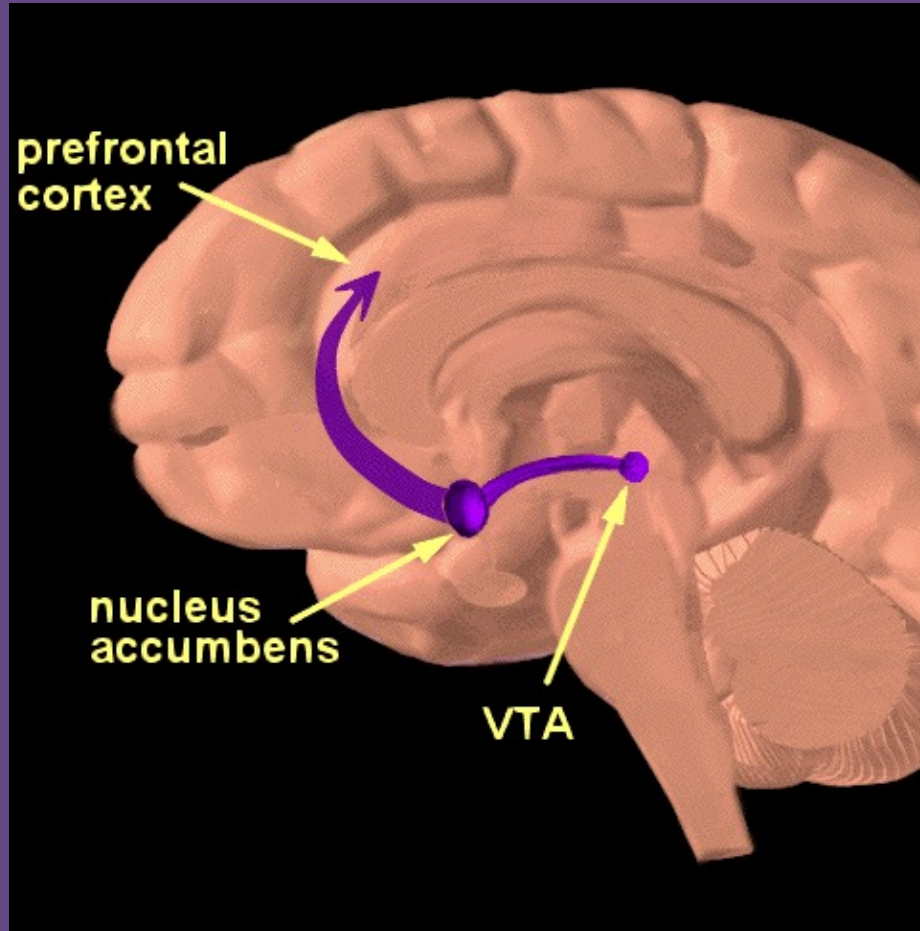
This Brain State represents mid-level functionality and asks the question, *"Am I loved?"* The only way to soothe an upset emotional state is through *Connection*.



Executive State

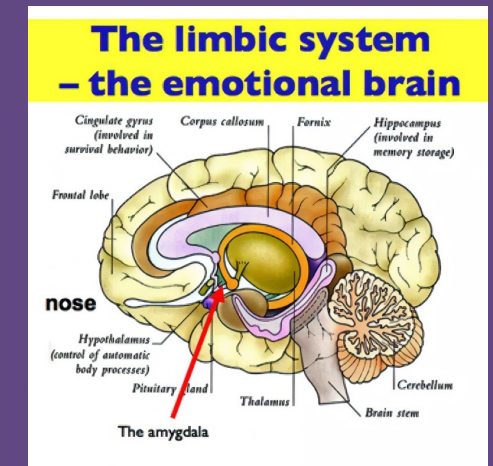
PREFRONTAL LOBES

The Executive State represents the optimal state for problem-solving and learning. This Brain State asks the question, *"What can I learn from this?"*



Addiction part of the brain
more powerful than any other part
of the brain!

Addiction is a
communication
deficit of the
reward
pleasure system!



EARLY RECOVERY

- Keeping the addiction part of the part calm and toned down and quiet
- We try to keep triggers at a minimum
- Changing Places, People and Things
- Eliminating Substance of choice:
- Also: caffeine, nicotine and sugar



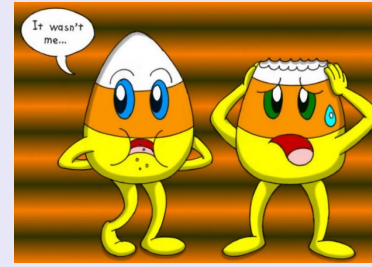
WITHDRAWAL

PAWS: (POST ACUTE WITHDRAWAL SYNDROME)

- Depends on
- Which Substance
- Length of use
- Numbers of substances
- Numbers of past withdrawals (they seem to get worse over time)
- How much has been used
- Last use
- Pre-existing coping skills
- Other preexisting medical, mental and spiritual issues
- PAWS can occur and reoccur for months after last use but seems to be the worst 1-2 weeks after initial detox



PAWS



- You feel crazy because your brain communication is trying to reconnect with itself but not making progress
- Your thinking brain and emotional brain and survivor brain are not talking to each other yet
- One minute you feel rational, the next you are sobbing or screaming and the next minute you want to fight, run and just survive like you did with you your substance
- Relapse occurs most frequently here (highest rate of ACA from recovery program is from day 8-14 due to PAWSs.
- The brain is screaming for the substance that gave the most normal level of homeostasis feeling pre sobriety

DON'T LEAVE: IT PASSES





TIME



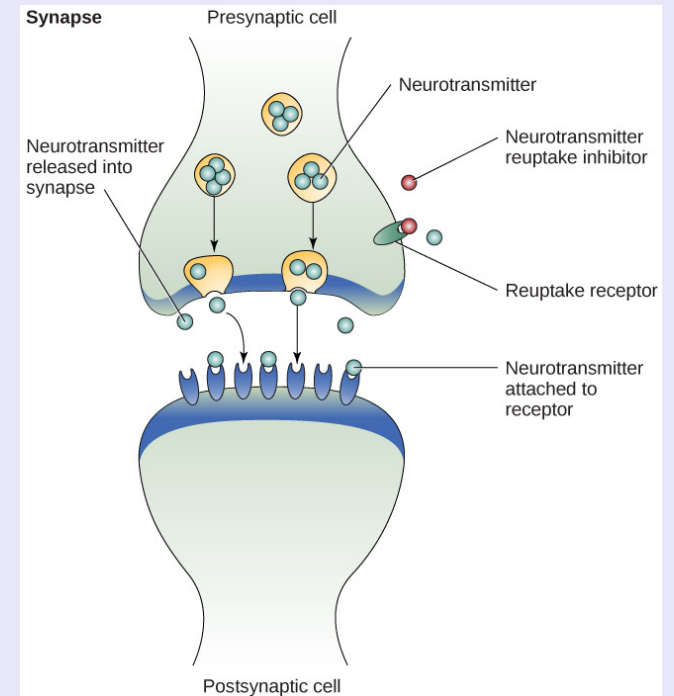
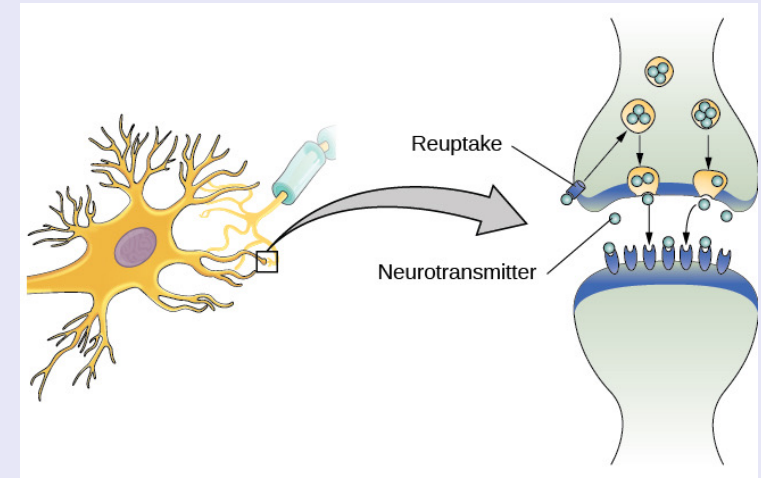
- Brain needs time to settle down and reestablish
- The newly sober brain is often at emotional age of person when they started using
- Often undiagnosed psychiatric disorders show up in early recovery
- Often, substances are used to medicate undiagnosed psychiatric disorders
- High percentages of trauma survivors also have addiction issues
- High percentage of addiction diagnosed people have history of trauma

TIME IS HARD FOR PEOPLE WITH SUD BECAUSE OF AN INHERENT NEED FOR IMMEDIATE NEED GRATIFICATION

- Time without Dopamine spikes allows brain to heal (It is why we recommend Sober living and long-term treatment options)
- Hypofrontality resolves – regains control over behavior and choice
- Hedonic set point returns to baseline – normal pleasures become pleasurable again
- Mood, energy and sleep improve

NEUROTRANSMITTERS

- Neurotransmitters in psychiatry and addiction are interrelated
- Serotonin, Dopamine, Norepinephrine, Gaba and Glutamate
- Most common diagnosis related to addiction
- Depression
- Anxiety
- Mood disorders like
- Bipolar one and two
- PTSD



TREATMENT: MUST BE MULTI-DIMENSIONAL

- **Mind**
- Medications help but are not the total solution!
- Self Awareness , CBT (cognitive Behavioral Therapy)
- Self Care, nutrition, sleep, exercise, hydration
- Connection, (to self, to people and higher power)
- Stress Management
- Avoidance of triggers (people, places and things)
- Purpose: (short term and long term)
- Positivity, Resilience,
- Service
- Forgiveness, Healing
- Boundaries

Body

Spirit



BUCKET OF MARBLES AND POSITIVITY



REPROGRAMMING THE BRAIN

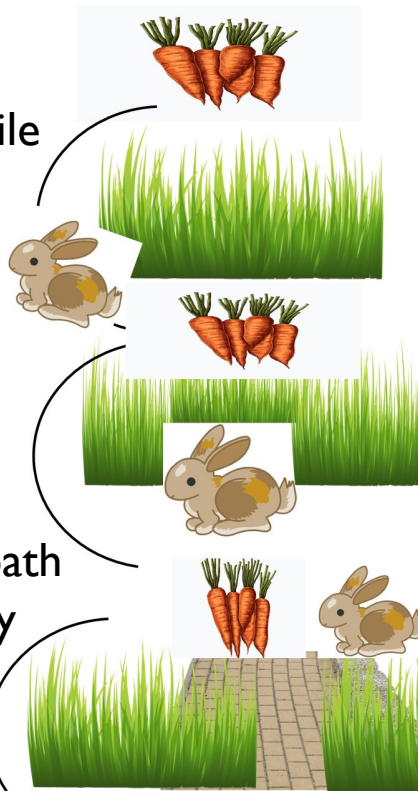
From rabbit

To carrots

Easy solid

Pathway

About one mile



Old mile long path
never goes away

Actual distance from
Rabbit to carrots
Is one block

But getting through the grass
is too scary: Too Hard

Over time though
Path becomes easier
and solid

1. Nurse practitioner
2. Physician
3. Therapist
4. Nurse
5. RA
6. Transportation
7. Business office
8. Housekeeping

The Law of “eights”:

They say it takes the adult learner hearing something 8 times before its learned...

Which could look like this:

The NP could tell patient: “you can do this” but they don’t believe it.

The MD could tell patient: “you can do this” but they don’t believe it.

The Therapist could tell patient: “you can do this” but they don’t believe it.

The nurse’s aide could tell patient: “you can do this” but they don’t believe it.

The Dietary Person could tell patient: “you can do this” but they don’t believe it.

The Volunteer could tell patient: “you can do this” but they don’t believe it.

The Housekeeping could tell patient: “you can do this” but they don’t believe it.

Then the maintenance guys says it: and they not only believe it.... but says: “that’s the first time I have ever heard that.

The NP, MD, Therapist, NA, Dietary, Volunteer, and Housekeeping are just as important the maintenance person who gets credit for this.

Some days you are a 1, a 2, a 3, a 4, a 5, a 6, or a 7, and some days you are an 8. The eight person’s success can never happen if the first 7 haven’t laid the groundwork.

Purpose is about being satisficed with being a”1” or being the 8th person who gets the credit)

SAME CONCEPT APPLIES TO NOT GIVING UP EVER



- Does not matter how many times you fall down!!
- Only matters how many times you get up!!
- And if you can't do it yourself: ask for help!

TABLE 2.

DSM-5 Criteria for Substance Use Disorder

Criterion	Severity
Use in larger amounts or for longer periods of time than intended	Severity is designated according to the number of symptoms endorsed: 0-1: No diagnosis 2-3: Mild SUD 4-5: Moderate SUD 6 or more: Severe SUD
Unsuccessful efforts to cut down or quit	
Excessive time spent using the drug	
Intense desire/urge for drug (craving)	
Failure to fulfill major obligations	
Continued use despite social/interpersonal problems	
Activities/hobbies reduced given use	
Recurrent use in physically hazardous situations	
Recurrent use despite physical or psychological problem caused by or worsened by use	
Tolerance	
Withdrawal	

SUD, substance use disorder

Adapted from Diagnostic and Statistical Manual of Mental Disorders, fifth edition.²³

Take Home Message

Addiction is a PRIMARY Neurologic Disease

PRIMARY means not due to something else (anxiety, depression, ADD/ADHD, Bipolar Disorder)

Sometimes difficult to differentiate Primary vs. Substance induced (secondary) Psychiatric disorder

How Common are Substance Disorders?

- 85-90% of adult US population uses alcohol or other mood-altering chemicals at any one time
- What percent have a substance use disorder?
10-12%
- What makes these 10-12% different (why me)?

Genetics – adoption studies

- Biological children of alcoholics have a much higher risk of alcoholism REGARDLESS of WHO PARENTS THEM
- YOU CAN'T “OUTPARENT” A GENETIC ALCOHOLIC
- Bad parenting does not cause alcoholism/addiction and good/great parenting can't fix it.
- Genetics accounts for 50-60% of vulnerability for addiction; (a Higher vulnerability than other family related illnesses Such as: DM II, Hypertension, Breast cancer etc)

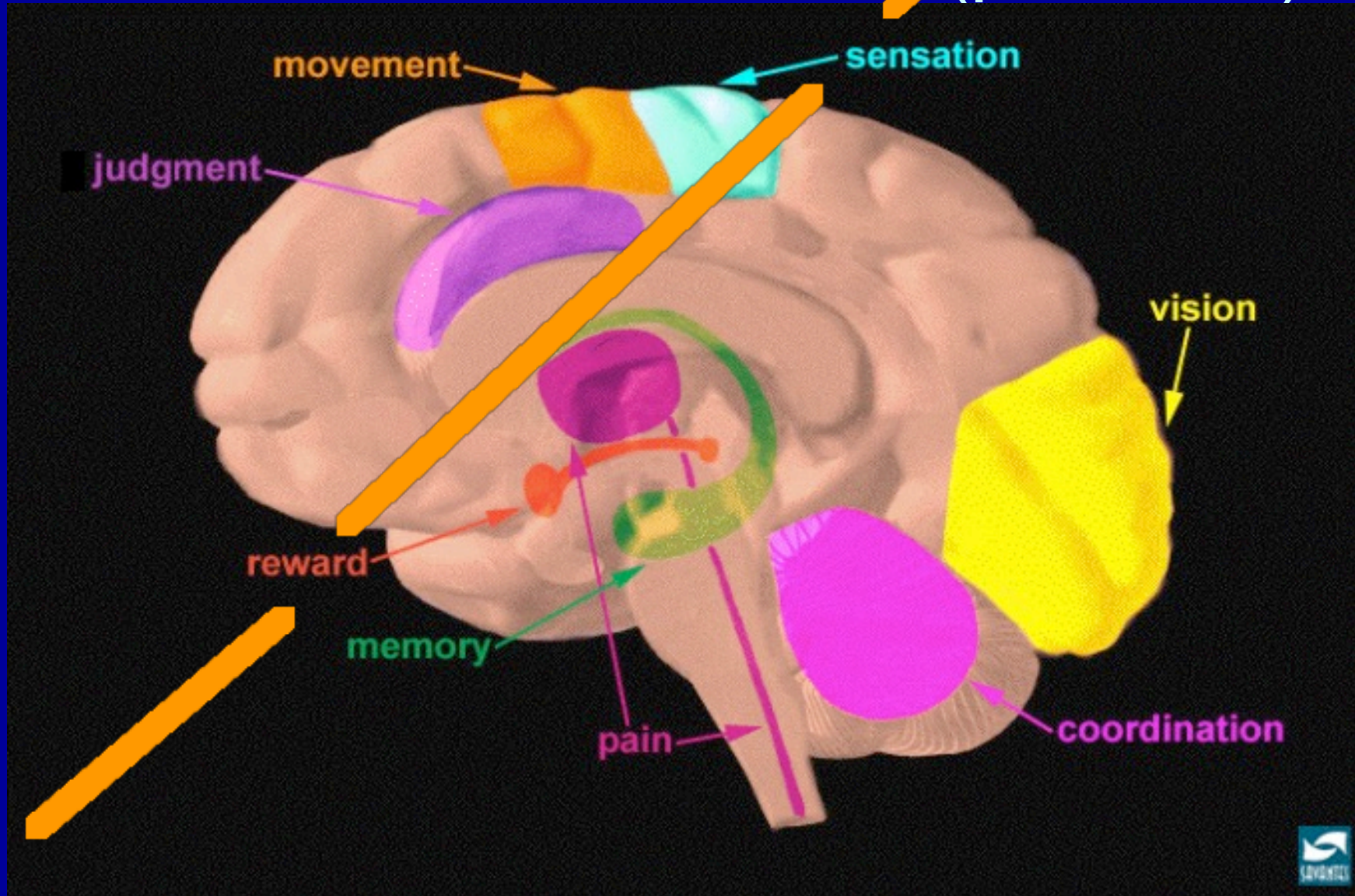
More Pre-Morbid Differences

- First time drinkers report of negative effects of acute alcohol exposure
- FHP report less negative effects than FHN
 - less body sway
 - less nausea
 - less disorientation
 - better cognitive abilities and physical performance such as driving tests
 - WEAKER WARNING SYSTEM

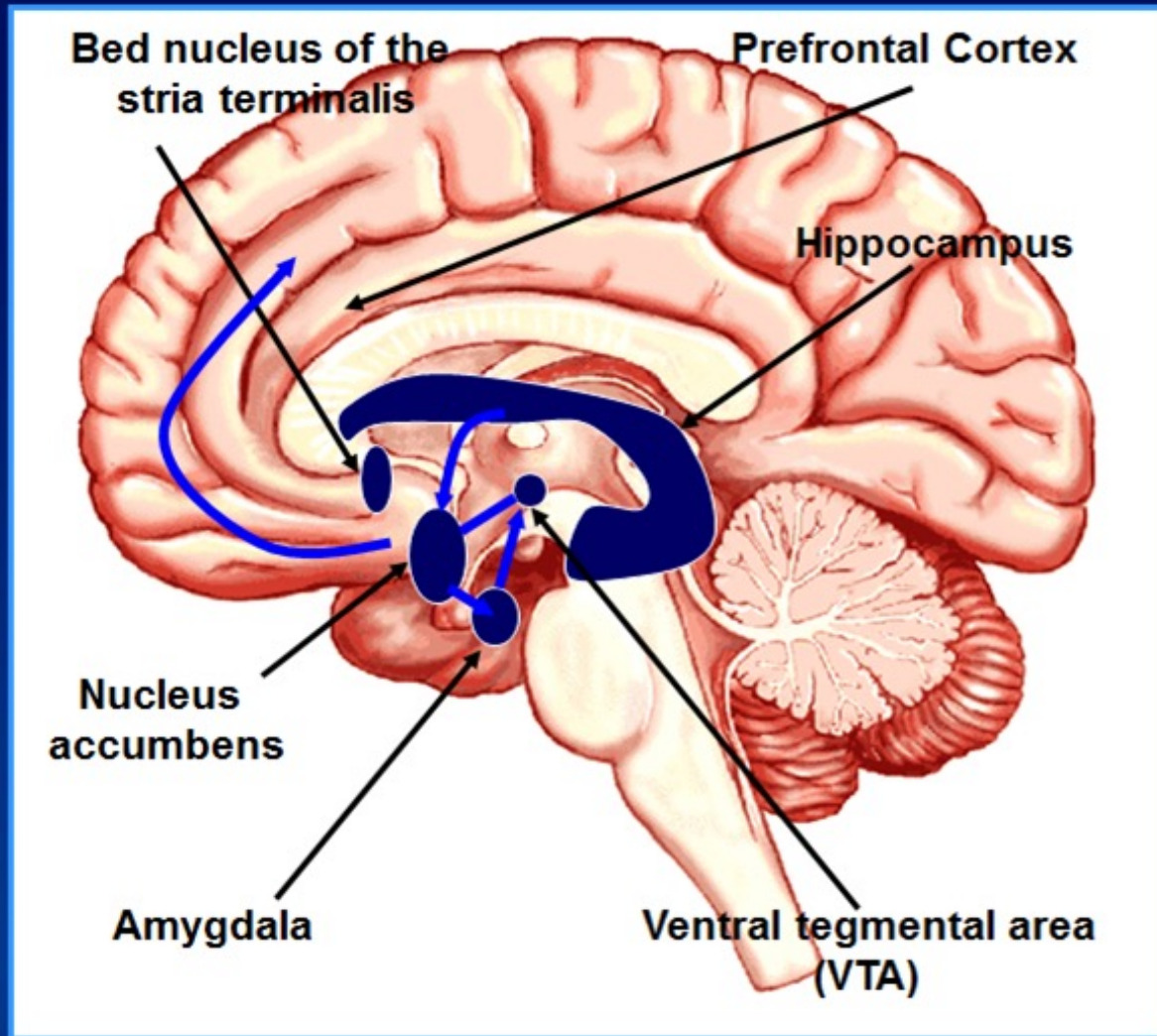
Addiction = Reward Deficiency Syndrome

- A decrease in endogenous neurotransmitters leads to a sense of incompleteness, decreased pain tolerance, uneasiness, and anxiety.
- Since 85-90% of the US population is exposed to alcohol or drugs during their lifetime, the person genetically predisposed to addiction is very likely to find what replaces or “fixes” their ‘reward deficiency’.

New Brain Old Brain (primitive)



Relapse and Conditioning

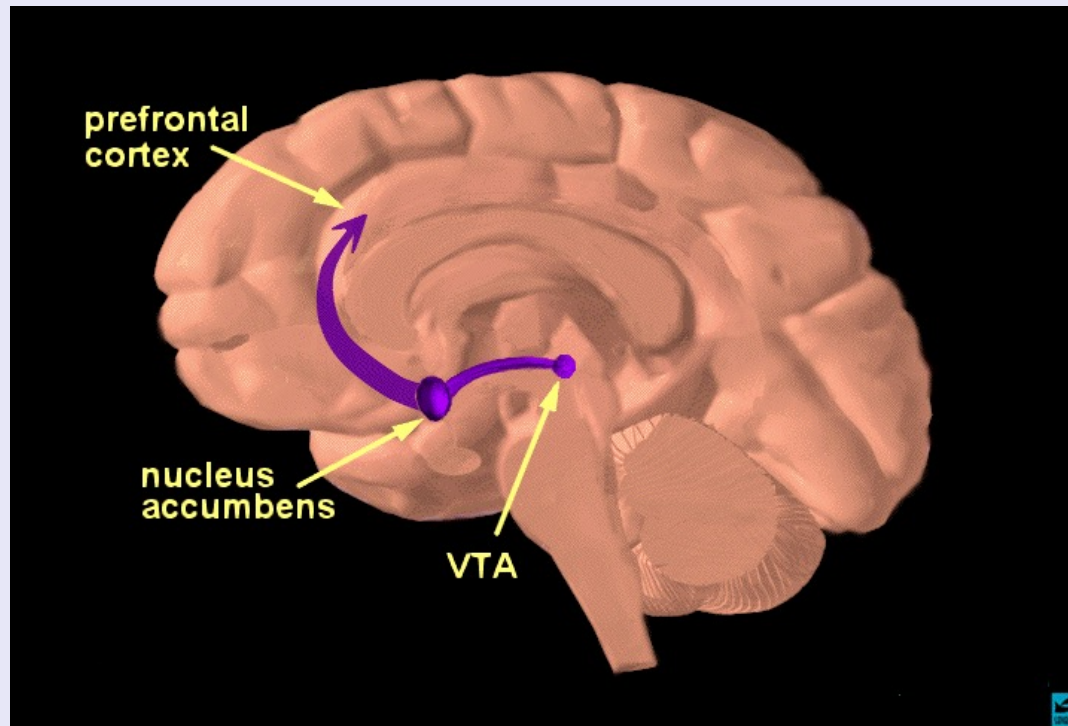


- Repeated alcohol use has caused “conditioning” to occur in related circuits

- Now “cues” associated with alcohol use can activate the reward and withdrawal circuit

- This can evoke anticipation of alcohol or feelings similar to withdrawal that can precipitate relapse in an abstinent patient

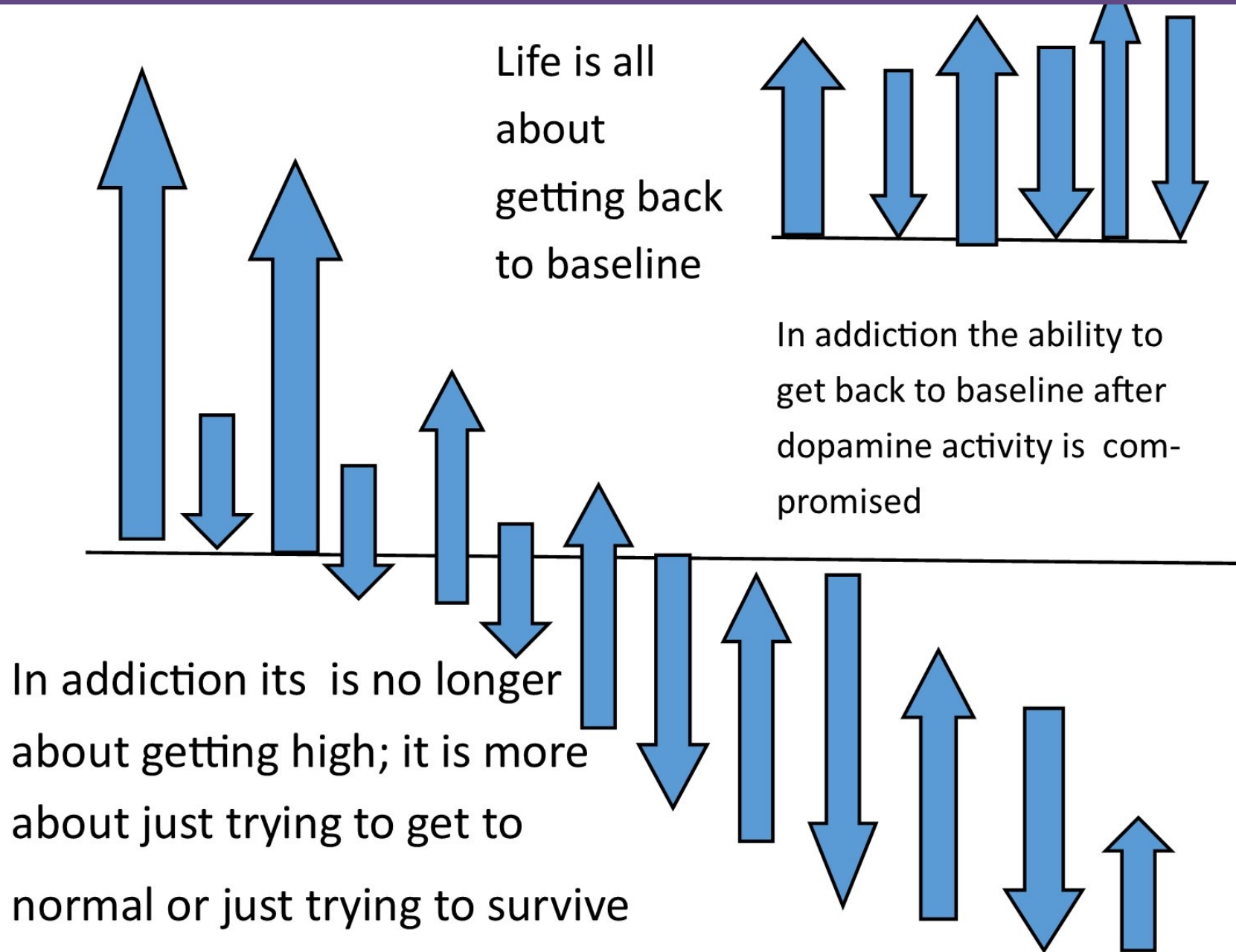
Why Do We Use Drugs?

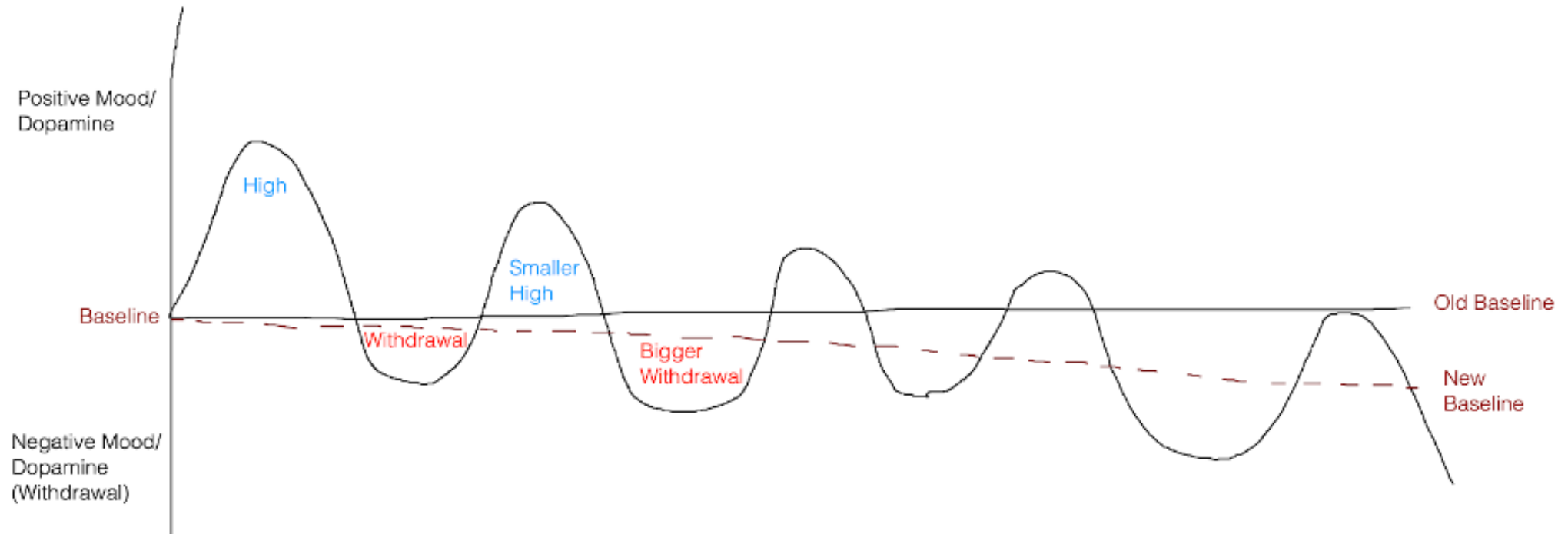


BRAIN REWARD PATHWAY

- Food
- Water
- Sex
- Other pleasure
- **PRIMARY DRUG**

D O P A M I N E



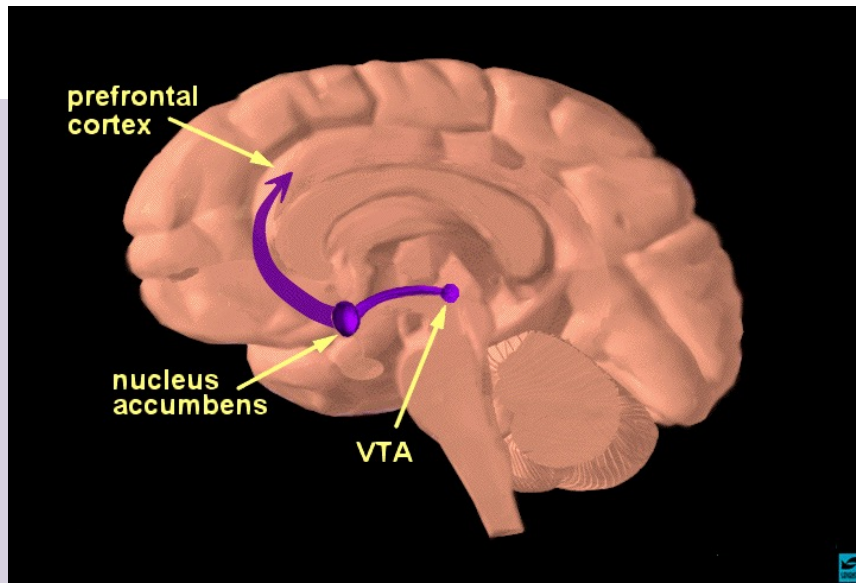


AVOID SPIKES IN DA

- Avoid situations that cause spikes in DA
- Relapse Prevention Therapy – avoid triggers and cues – people, places and things
- External Cues: cash, Friday night, using buddy
- Internal Cues: loneliness, celebration, anger
- Smoking Cessation- we look at Nicotine as getting “tobacco sober” and we have tobacco sobriety groups: *Committing to Nicotine sobriety Doubles Success*

STRESS: THE ANTI-REWARD SYSTEM

- Stress increases Corticotrophin Releasing Factor (CRF)
- CRF causes increase in DA and glutamate in the addict's limbic region
- Elevated CRF increases craving and relapse
- CRF interaction with DA resets hedonic set point
- CRF is activated for *several months* after withdrawal (PAWS)
- Early Childhood Trauma changes brain's response to stress and increases vulnerability for addiction later in life



DENIAL

- DENIAL -reengineers the conscious interpretation of reality to ensure addiction runs in stealth mode.
- Insight deficient: not communicating to thinking brain
- Happens in the addiction brain: VTA (ventral tegmental area) & Nac (Nucleus Accumbens), Prefrontal Cortex, and the Hippocampus (part of the memory communication system)
- Brain is hardwired for denial – Addiction hijacks denial system
- Interferes with seeking treatment and leads to relapse

PHARMACOLOGICAL TREATMENTS

- Naltrexone (Vivitrol shot)
- Campral (acamprosate)
- Baclofen
- Topamax (topiramate)
- Neurontin
- Depakote
- NAC (N-Acetyl Cysteine)
- Suboxone/methadone – harm reduction/ pain
- Antabuse (disulfiram)
- Chantix/ Wellbutrin/ Nicotine

12 STEP PROGRAMS

HAVE SOME OF THE BEST LONG-TERM OUTCOMES

- Addresses denial, powerlessness, surrender
- Avoidance of DA Spikes- environment, character defects, making amends, daily inventory, daily meditation /prayer
- Spiritual Awakening – life of serenity and peace: much happier than before onset of addiction
- Service

Other support programs are available like
Celebrate recovery,
Smart Recovery,
Dharma recovery

MOST COMMON REASON FOR RELAPSE:

- 1. Being sober for someone else beside yourself
- 2. Not working the program
- 3. Stop taking medications
- 4. Unresolved angry and resentment
- 5. Unresolved medical issues like pain

Summary

- Addiction is a primary chronic brain disorder
- Addiction affects the brain's reward circuitry (RDS)
- Addiction affects brain circuits involving memory, impulse control, and judgment resulting in nonsensical pursuit of “rewards”
- Addiction is NOT a choice
- Addiction must be treated as a chronic disease similar to HTN, diabetes, asthma, CAD, OCD
- Understanding of the disease and with good support systems improve outcomes
- Compliance with treatment recommendations improve outcomes

NEVER EVER GIVE UP

- Hope - is best neurotransmitter there is!!



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PSYCHIATRIC NURSE
PRACTITIONER

MEDICAL TEAM
BLACK BEAR LODGE

**BELIEVE IN
YOURSELF**

**BELIEVE IN
YOURSELF**

We believe in **you!**