NATIONAL CENTER FOR PRIMARY CARE | MOREHOUSE SCHOOL OF MEDICINE

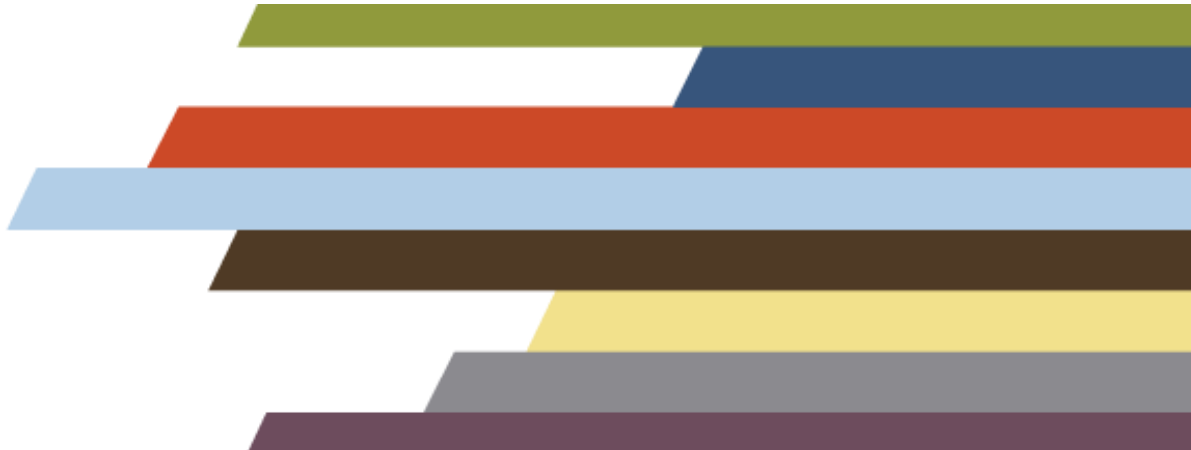
Southeast (HHS Region 4)
ATTC Addiction Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

25 YEARS innovation.impact | ATTC

Survivors, Stress, and Substance Use:

Examining the Connection between Trauma and Substance Use Disorders

Presenter: Tiffany Cooke MD, MPH, FAPA



About ATTC

The 2017-2022 ATTC Network is comprised of:

1 Network Coordinating Office

10 Domestic Regional Centers

6 International HIV Centers (PEPFAR funded)

Established in 1993 by SAMHSA, the domestic ATTCs:

Accelerate the adoption and implementation of evidence-based and promising addiction treatment and recovery-oriented practices and services;

Heighten the awareness, knowledge, and skills of the workforce that addresses the needs of people with substance use and/or other behavioral health disorders; and

Foster regional and national alliances among culturally diverse practitioners, researchers, policy makers, funders, and the recovery community.

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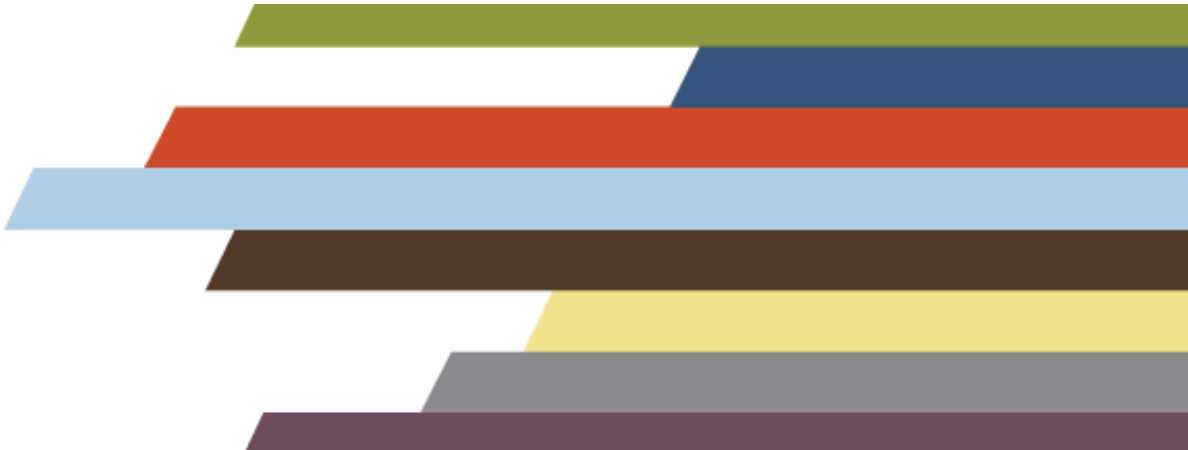


Tiffany Cooke MD, MPH, FAPA

Tiffany Cooke MD, MPH, FAPA, is a board certified adult psychiatrist. She received her medical training at Meharry Medical College, and completed her psychiatric residency at the University of Miami/Jackson Memorial Hospital. Dr. Cooke earned a master's in public health policy & management while completing a fellowship in community psychiatry at Emory University.

Dr. Cooke is well versed in both psychiatry and integrated care, having worked in community settings in the areas of HIV/AIDS psychiatry, and psycho-oncology, along with providing clinical service and didactics in integrated primary care settings. She has also worked in private practice providing both patient care and consultation services. She served as the psychiatrist for the DeKalb County Mental Health, Drugs, and Veterans Treatment Courts. Dr. Cooke has also held faculty appointments at Morehouse & Emory Schools of Medicine as an Assistant Professor of Clinical Psychiatry through which she worked at Grady Hospital's Infectious Disease Program, adult psychiatry clinic, and the Southeast Addiction Technology Transfer Center (SATTC). As an assistant professor, she was active in teaching, directing clerkships, and supervising residents & fellows.

Dr. Cooke has also provided services at Tanner Health System, Georgia State University Counseling & Testing Center, and a host of metro Atlanta community mental health centers. She has also worked in the fields of trauma and HIV/AIDS prevention & treatment in Grand Bois, Haiti. Currently, Dr. Cooke is providing inpatient psychiatry services in metro Atlanta.

She is a public speaker and behavioral health advocate, with a long standing interest in decreasing behavioral health stigma and health disparities, particularly in racial and ethnic minorities. Dr. Cooke has authored publications on various mental health topics: implicit bias, depression, bipolar disorder, and safe sex practices in women. She is a currently active in several professional societies.

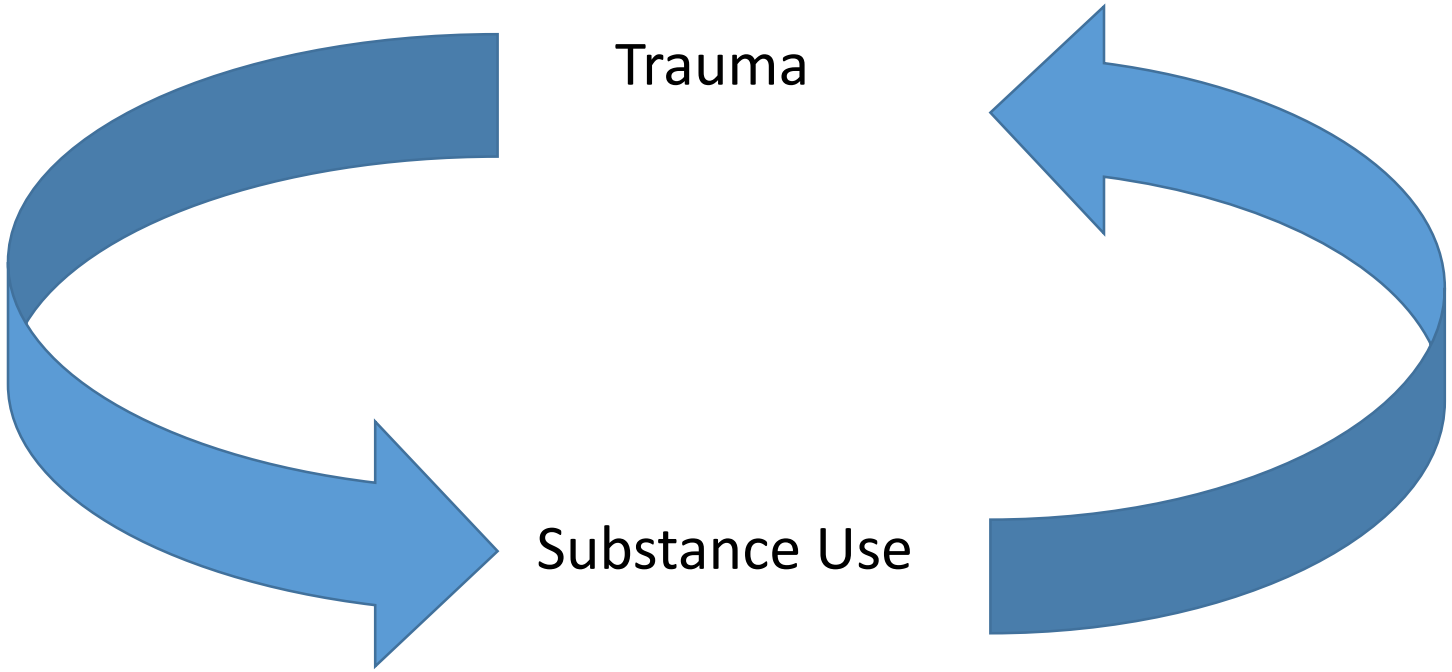
About: Survivors, Stress, and Substance Use Webinar

Purpose:

This webinar will examine the bidirectional relationship between trauma and substance use disorders (SUDs). Environmental, biological, and psychological factors that predispose survivors to co-occurring PTSD and SUDs will be highlighted. The webinar will also discuss the various treatment options for trauma related disorders and substance use disorders.

Objectives:

- At the conclusion of this activity, participants will be able to:
- List the diagnostic criteria for Post-Traumatic Stress disorder (PTSD)
- Name at least two ***psychological*** factors leading to the co-occurrence of PTSD and substance use disorders (SUDs)
- Name at least two ***physiological*** factors leading to the co-occurrence of PTSD and substance use disorders (SUDs)
- Identify at least 2 treatment modalities for persons with co-occurring trauma related disorders and SUDs


Trauma
Substance Use

Diagnoses & Risk Factors

Trauma &Stressor Related Disorders: Posttraumatic Stress Disorder (PTSD)

- **Exposure:** actual/threatened death, serious injury, or sexual violence
- **Intrusion:** symptoms after trauma occurrence
- **Avoidance** of stimuli assoc. w/event

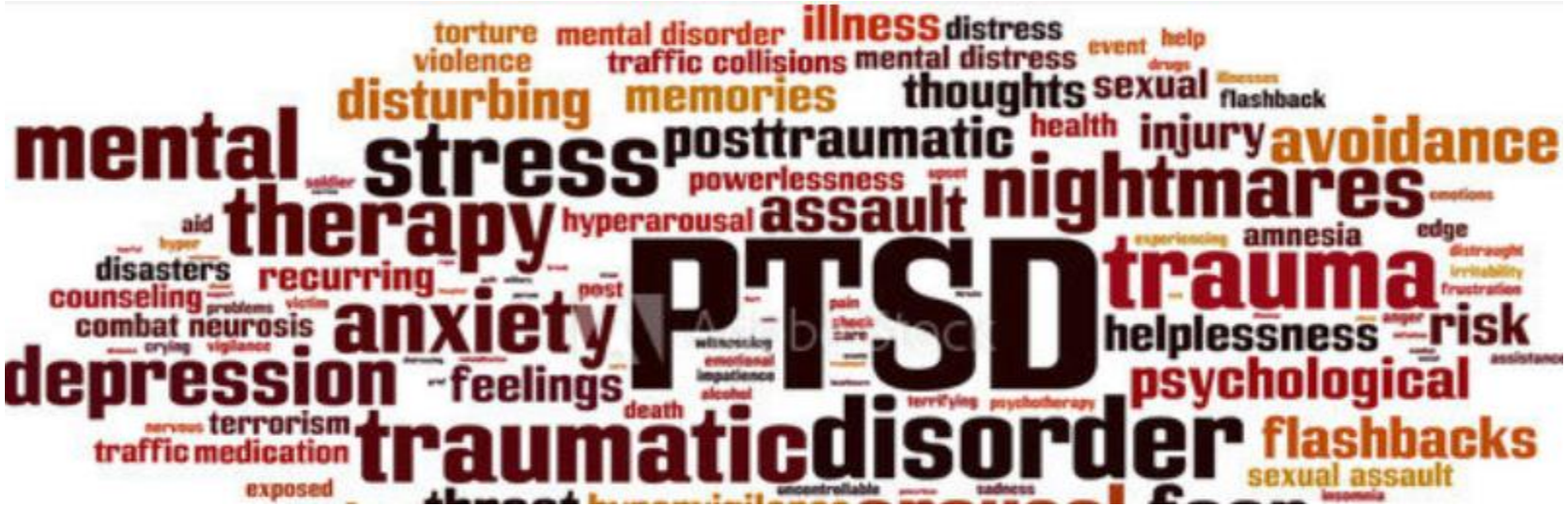
Trauma &Stressor Related Disorders: PTSD cont.

- Negative Alterations in **cognitions & mood**
- Marked Alterations in **arousal & reactivity**
- Duration **> 1 mo.**

Trauma &Stressor Related Disorders: PTSD cont.

- Clinically significant **impairment in functioning**

- Not due to substance or other condition



Genetic/Physiological Risk Factors: PTSD

Pretrauma:

- Women
- Younger age at time of trauma

Environmental Risk Factors: PTSD

	Pretraumatic	Peritraumatic	Posttraumatic
Environmental	↓SES,↓ed, childhood adversity, minority racial/ethnic status, family psych hx	Severity of trauma. Perceived threat , perpetrating (military), dissociation	Repeated reminders, adverse life events, trauma related loss

Temperamental Risk Factors: PTSD

	Pretraumatic Factors	Post traumatic Factors
Temperamental	Childhood emotional problems, prior mental disorders	Negative appraisals, inappropriate coping strategies, development of acute stress disorder

Substance Use Disorders (SUDs): Diagnostic Criteria

Impairment or distress : 2 of the following in 12 mo. period

Impaired Control

- Larger amounts, longer period than intended
- Unsuccessful at cutting down
- Significant time spent using, obtaining , recovering
- Cravings

SUDs Diagnostic Criteria cont.

Social impairment

- Use results in failure to fulfill obligations
- Use despite social/interpersonal problems
- Other activities reduced due use

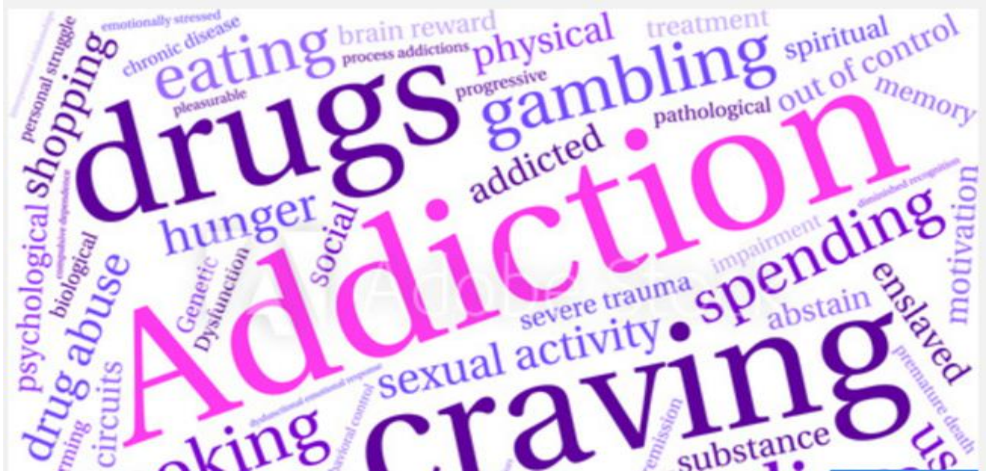
SUDs Diagnostic criteria cont.

Risky use

- Recurrent use when physically hazardous
- Continued despite knowledge of problem

Pharmacological

- Tolerance
- Withdrawal



Genetic & Physiological Risk Factors: SUDs

- Family history
- Presence of other psychiatric disorders

Environmental risk factors: SUD's

- Cultural attitudes towards use
- Availability
- Acquired personal experiences
- Stress levels
- Peer use
- Exaggerated personal expectation of effect
- Suboptimal coping with stress
- Academic failure
- Tobacco smoking
- Low SES

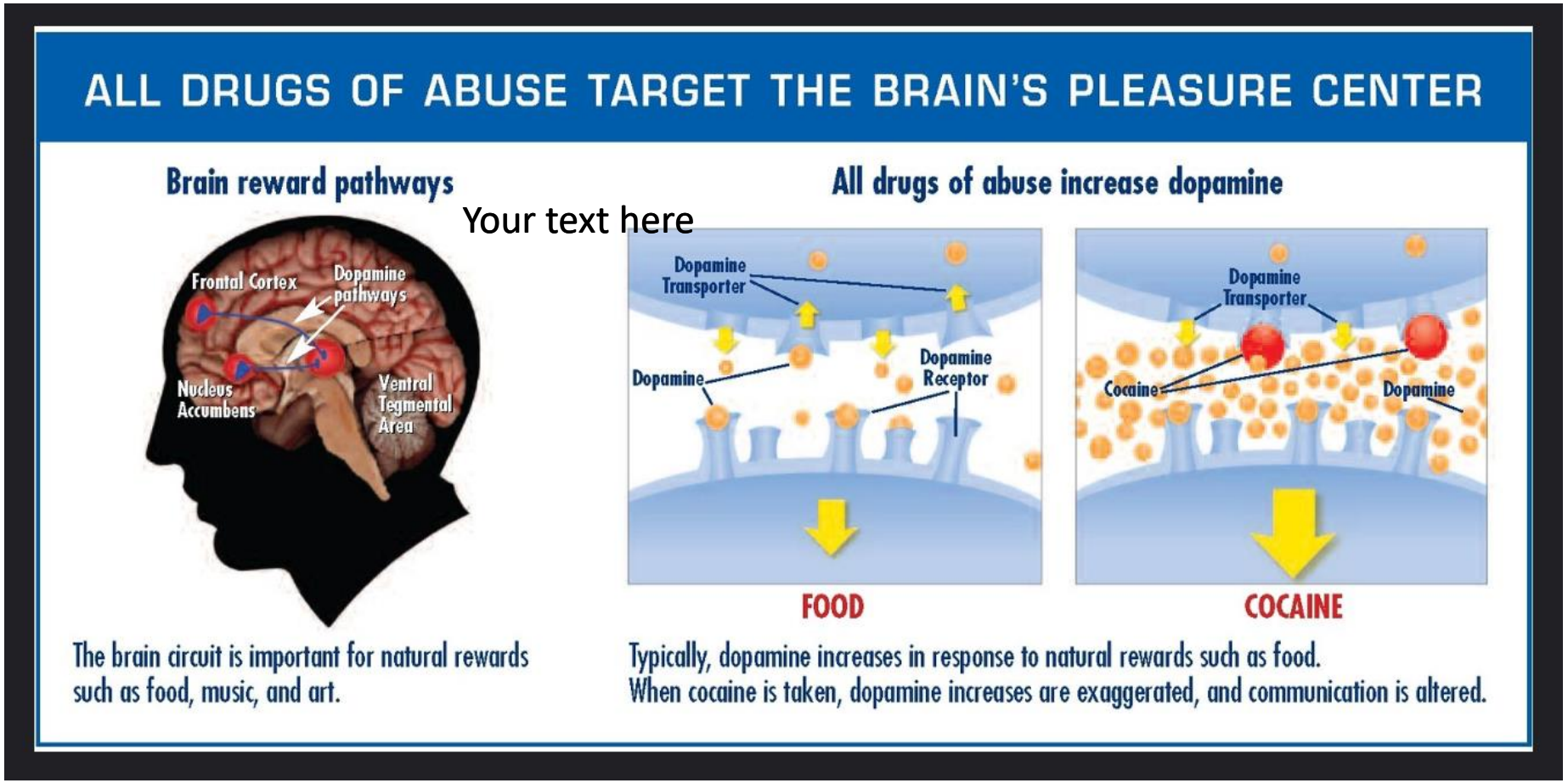
Temperamental Risk Factors: SUDs

- Hx of conduct, antisocial disorders
- Hx bipolar impulsivity, novelty seeking
- Hx of schizophrenia, substance use disorders

“What’s the Science Behind It?”

Dopamine

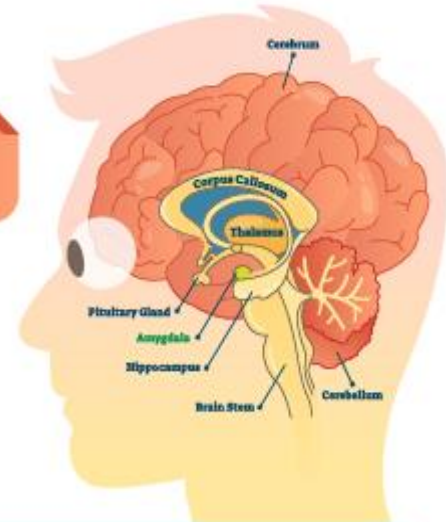
Pleasure
Reward
Reinforcement



National Institute of Drug Abuse, National Institutes of Health

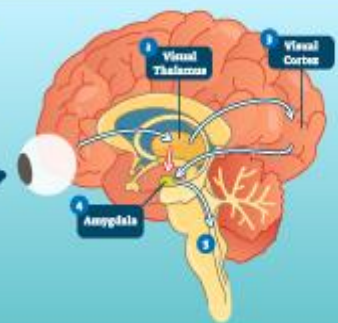
AMYGDALA

Responsible for the response and memory of emotions, especially fear.

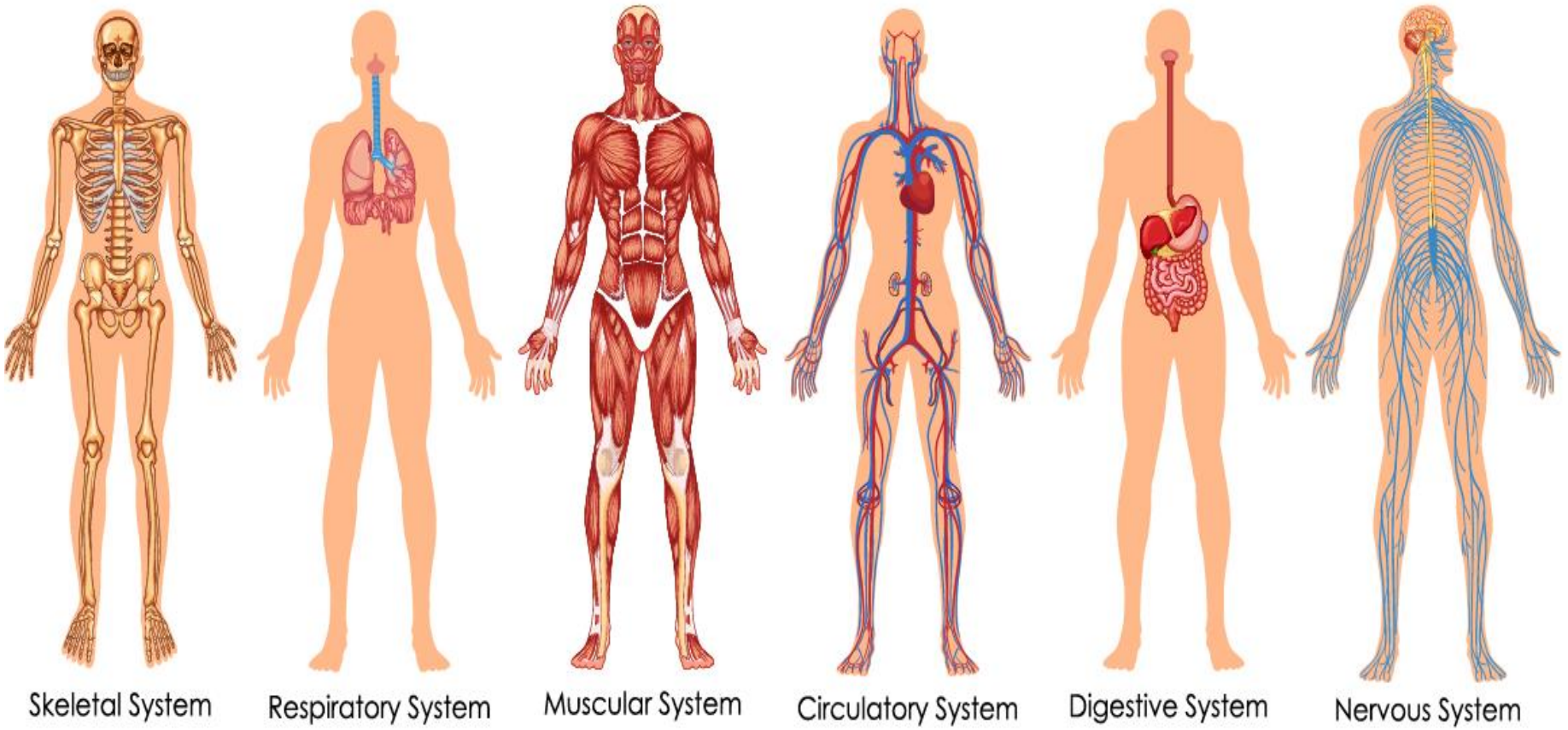


RESPONSE TO THREAT

THREAT



Adrenaline Effects/Noradrenaline (NE)



Sweating
Tremor
Altered immune response

osteoporosis

Rapid respirations

Muscle tension

↑ HR
↑ BP

Digestion inhibited

Dilated pupil

Prefrontal Cortex

Attention

Awareness

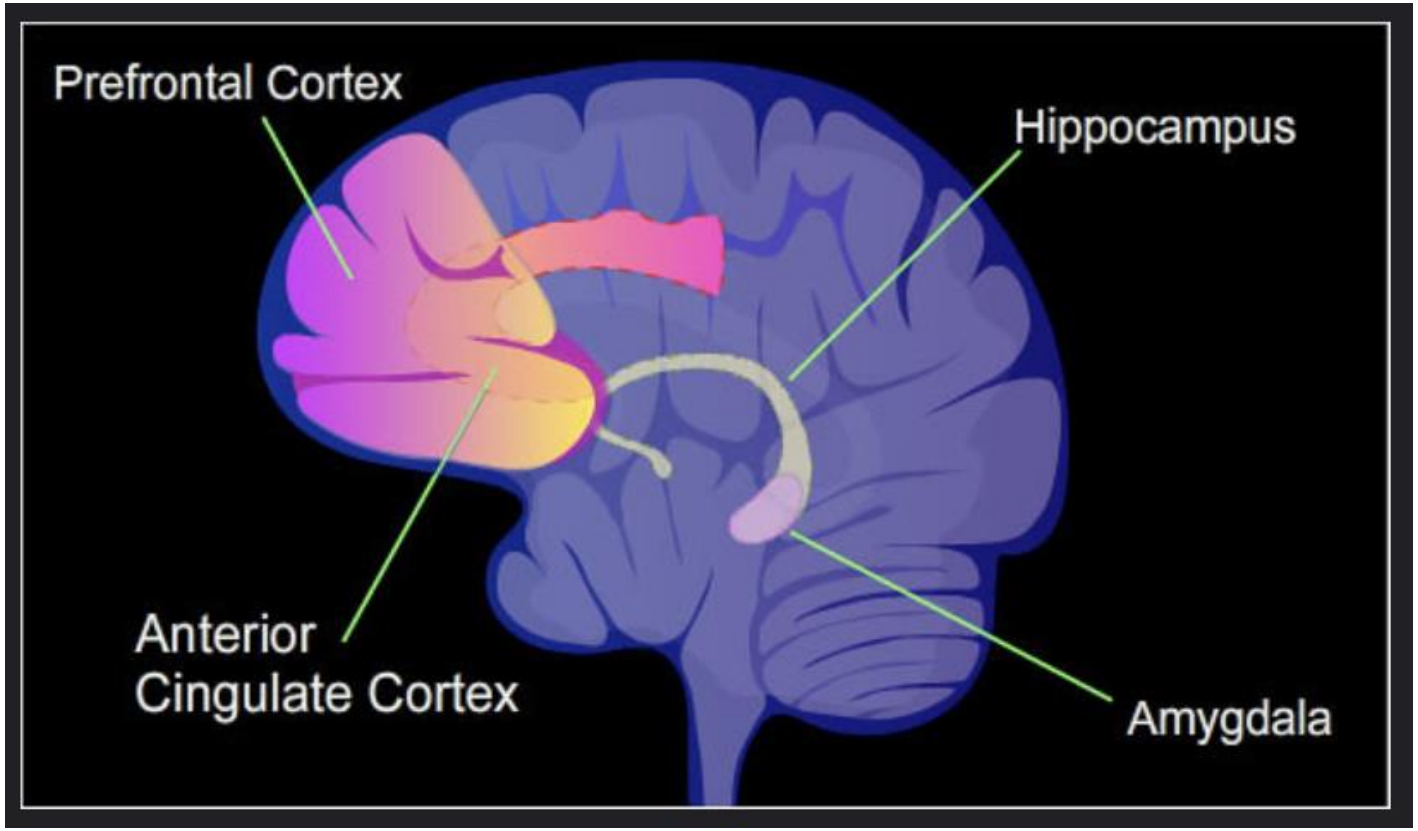
Decisions

Conscious Behavior

Assigns emotional significance to events

Modulates emotions

Correct dysfunctional reactions



National Institute of Mental Health, National Institutes of Health

GABA

↓ Anxiety

↑ Levels of GH

Improves Sleep

Improves Focus: ADHD

↓ Inflammation

PMS relief

↓Depression

Summary :PTSD

- ↑↑↑adrenaline (NE)→Fight or Flight
  - Hyperarousal, Hypervigilance, Sleep disruption
- ↓ GABA → ↓ “natural tranquility”
  - Depression, anxiety, insomnia
- Hyperactive amygdala &Hyporeactive PFC
  - Prolonged activation of fight or flight
  - Reactive anger, impulsiveness, motor activity
  - Increased negative emotions

Summary: SUDs

- Chronic use makes brain regulation of GABA, DA, adrenaline difficult:
- Withdrawal, anxiety, depression, irritability, dependence
- Potentiates trauma, and use, cycle continues,
- PTSD heightens withdrawal sx

Cyclical Relationship

- Substances: temporary respite, worse PTSD sx when withdrawing, complicates cessation
- Substance use alters decision making, ↑risk of subsequent trauma
- Substance use delays treatment progress, PTSD sx remission

Psychological distress, shame, trauma

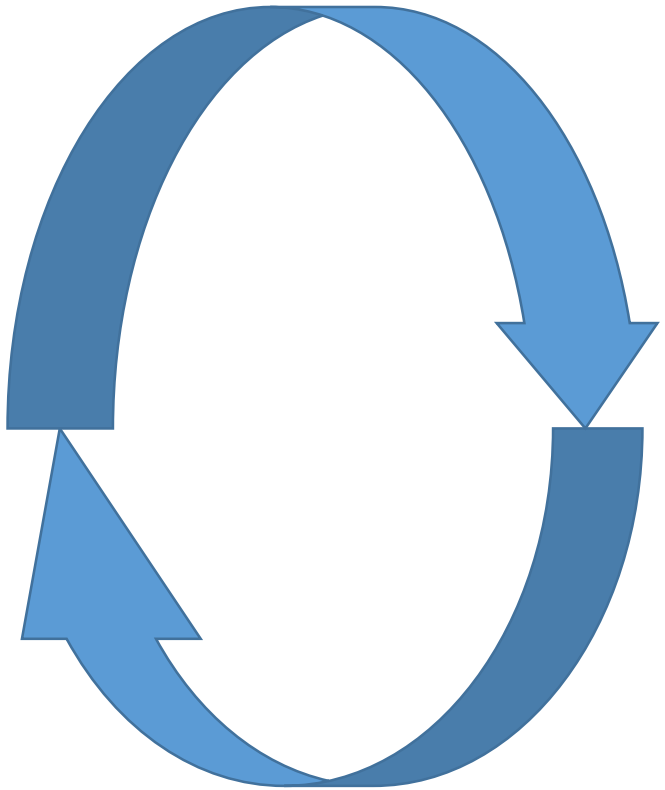
Self –medicating w/ drugs; substance use for curiosity, stress, etc.

Consequences: loss of job, relationships, health, etc.,

↑Psychological distress, shame, trauma,↓ coping skills

↑ drug use, tolerance

Consequences worsen, harder to resolve



Treatment

Seeking Safety

- ~25 60-90 min sessions
- decreasing risky behaviors
- setting boundaries
- coping with substance triggers

Prolonged Exposure

- Typically 8-15 weekly sessions
- Gradual confrontation of fearful stimulus
- Imaginal: trauma described & recorded , emotion processed, recording replayed, emotions activated in safe context
- In vivo: repeated engagement in avoided situation or activity, proving it non-dangerous

Eye Movement Desensitization & Reprocessing (EMDR)

- 8 phases
- Desensitization: recall trauma, track therapist finger movements with eye
- Reformulation of negative beliefs
- ↓ hyperarousal
- Seek provider with certification

Transcend

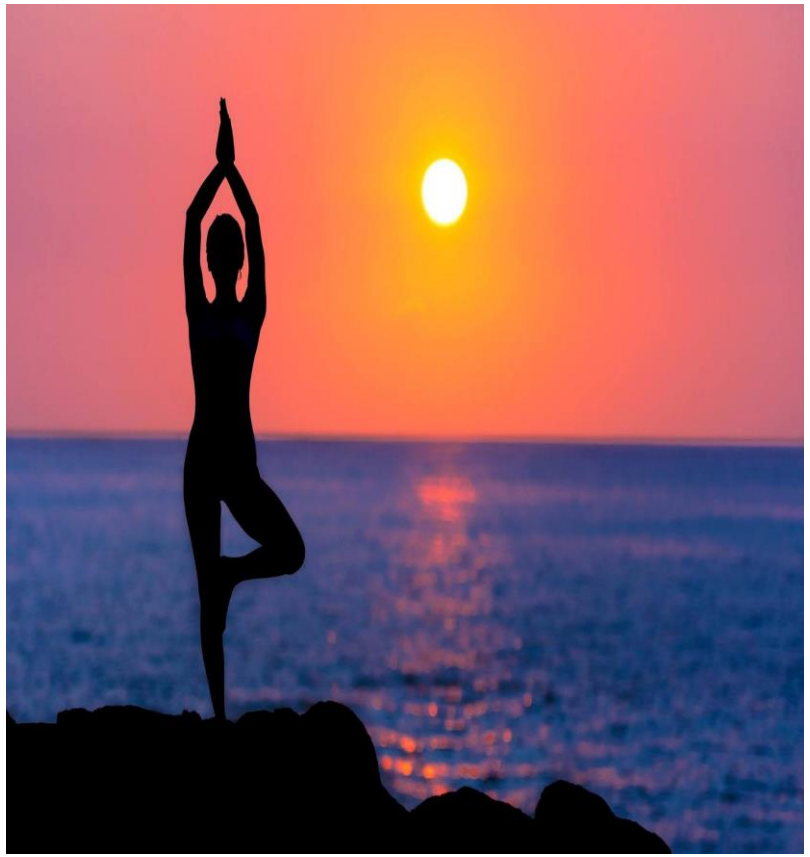
- Veterans
- Follows SUD treatment
- 12 week
- PHP
- Psychodynamic
- CBT
- 12 step

Other Therapeutic Treatments

- Rehab
- 12 step
- CBT
- Peer support

Lifestyle modifications

- Spirituality
- Meditation
- Exercise
- Diet
- Hobbies
- Accountability partner



Pharmacologic Treatment

- Detox

- Medication Assisted Treatment (MAT): cravings, use
  - Opioid: methadone, buprenorphine, naltrexone
  - Alcohol: disulfiram, acamprosate, naltrexone

Pharmacologic Treatment (cont.).

- Antidepressants: trauma, depression, anxiety
  - SSRIs (Sertraline*, Paroxetine, Fluoxetine, etc.)
- Anxiolytics: anxiety
  - non-benzodiazepine: hydroxyzine, buspirone
- Antipsychotics: nightmares, flashbacks, impulsivity
  - Risperidone, Quetiapine, Aripiprazole, Ziprasidone, etc.
- Prazosin
- Topirimate

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- American Psychiatric Association. (2013). Anxiety Disorders. In *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596.dsm05

- Berenz, E. C., & Coffey, S. F. (2012). Treatment of co-occurring posttraumatic stress disorder and substance use disorders. *Current psychiatry reports*, *14*(5), 469–477. doi:10.1007/s11920-012-0300-0


QUESTIONS
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Contact Info

Tiffany Cooke, MD, MPH, FAPA

Innovations Behavioral Health, LLC

227 Sandy Springs Pl, Suite D-405

Sandy Springs, GA 30328

(678) 744-7520

innovationsbhinfo@gmail.com

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Southeast ATTC

National Center for Primary Care

Morehouse School of Medicine

720 Westview Drive SW - Atlanta, Georgia 30310-1495

Phone: (404) 752-1016 - **Fax**: (404) 752-1026

Email: sattcinfo@msm.edu

SAMHSA

Substance Abuse and Mental Health Services Administration