

# The Tangled Web

Mental Health, Substance Use, and Adolescent Development

## Jorian Gallucci LICSW

- I graduated from Emmanuel College with a Bachelors in Sociology and Minor in Psychology and went on to go to Simmon University where I got my Masters in Social Work. I started my work in the field at Concord High School working with New American students and family. I have worked at the Riverbend Children's Program for about 4 years, where I am a family support specialist, going into client's homes to provide hands on support. I am trained in Dialectical Behavior Therapy and Seven Challenges.



# A Complex Bidirectional Relationship

Understanding the powerful link between how teens feel, what they use,  
and how they grow.

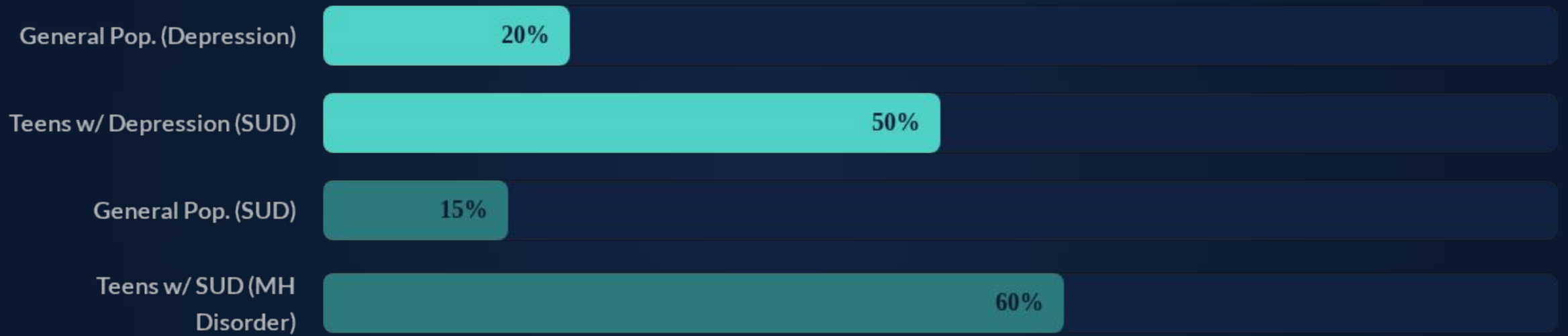
# Adolescent Brain: Critical Window

**90%**  
of SUDs start in the teen years.

## A Period of High Vulnerability

The adolescent brain is undergoing massive development, especially in the prefrontal cortex (decision-making) and limbic system (reward/emotion). This makes teens uniquely vulnerable to both mental health disorders and the effects of substances.

# High Comorbidity Rates



*Adolescents with a mental health disorder are >2x more likely to use substances. Over 60% of teens in SUD treatment also have a mental health disorder. This overlap is not a coincidence.*

---

# Path 1: How Mental Health Impacts Use

Examining the role of internal distress on substance initiation.

# The Emotional Drivers of Initiation



## Coping with Anxiety

Youth may use substances like alcohol or marijuana to quiet social anxiety, panic, or generalized worry.



## Lifting Depression

Stimulants or alcohol might be used to temporarily escape feelings of sadness, numbness, or hopelessness.



## Managing Trauma/ADHD

Substances can be a way to self-manage hyperactivity, intrusive thoughts, or the emotional pain of past trauma.

---

# Targeted Relief

Matching the symptom to the substance: Why specific disorders lead to specific drug choices.

# Targeting the symptom: Self-Medication Pathways

## Anxiety & Fear

Individuals seek **sedation** and **disinhibition** to quiet an overactive nervous system (GABA system).

- **Target:** Panic, social fear, and hypervigilance.
- **Substances:** Alcohol, Cannabis, and Benzodiazepines.
- **Cycle:** Temporary relief leads to rebound anxiety, making the person feel **worse** when sober.

## Depression & Anhedonia

Individuals seek **stimulation** and **euphoria** to overcome persistent fatigue and emotional numbness (Dopamine system).

- **Target:** Low mood, lack of motivation, and anhedonia.
- **Substances:** Nicotine, Caffeine (heavy use), and Stimulants.
- **Cycle:** Immediate pleasure, followed by a neurotransmitter crash that deepens the existing depressive episode.

## Trauma & Mood Instability

Individuals seek **dissociation** or **mood leveling** to manage overwhelming emotional volatility (Opioid/Serotonin systems).

- **Target:** Emotional flashbacks, mood swings, and emotional numbness.
- **Substances:** Opioids (to numb), and Poly-use (alternating uppers/downers).
- **Cycle:** Prevents the development of emotional regulation skills, leading to reliance on drugs for stability.

# Key Risk Factors: Social & Family



## Genetics & Family History

A family history of SUD significantly increases genetic vulnerability and normalizes use.



## Peer Influence

Perceived social norms and direct peer pressure to 'fit in' are powerful drivers.



## Home Environment

High family conflict, parental substance use, or low parental monitoring all increase risk.

# Key Risk Factors: Individual & Community



**Adverse Childhood Experiences (ACEs):** Experiencing trauma, neglect, or household dysfunction is one of the strongest predictors of early initiation.



**School & Social Disengagement:** Poor academic performance and a weak bond to school or positive social clubs.



**Community Availability:** Living in a community where substances are cheap, accessible, and perceived as low-risk.

---

# Path 2: How Substance Use Impacts Health

The consequences of use on a young person's mental wellness.

# Consequences for the Brain

## Neurotoxicity

Alcohol and other drugs can be toxic to developing brain cells, interfering with crucial development.

## Disrupted Development

Substance use can interfere with the pruning and strengthening of neural pathways, impacting future learning and executive function.

## Reward System

Chronic use hijacks the brain's reward system, making it harder to feel pleasure from natural rewards and deepening anhedonia.

# The Vicious Cycle: From Relief to Dependence




## Neurotransmitter Depletion

Substances create an artificial "high" by forcing the release of vast amounts of mood chemicals (dopamine, serotonin). The inevitable "crash" depletes these vital chemicals, leaving the adolescent feeling **\*\*worse\*\*** than before they used, reinforcing the need to use again.

## Masking vs. Healing

Substance use prevents the adolescent from developing **\*\*healthy coping skills\*\***. By masking symptoms instead of solving problems, the underlying anxiety or depression goes untreated and often grows more severe over time, creating a dependence on the drug to simply feel "normal."

# A Downward Spiral: Mental Health

-  **Psychosis Risk:** Heavy cannabis use in adolescence is linked to an increased risk of developing psychosis or schizophrenia, especially in those with a genetic predisposition.
-  **Depressive Symptoms:** Alcohol, a depressant, can worsen or induce feelings of depression and anxiety after the initial effects wear off.
-  **Anxiety & Panic:** Stimulant use (cocaine, amphetamines, high-caffeine) can trigger panic attacks, paranoia, and severe anxiety.

# Consequences: Academic & Social

## Academic Decline

- Impaired memory and attention makes learning difficult.
- Leads to lower grades, increased absenteeism, and higher dropout rates.
- Reduced motivation and engagement in school activities.

## Social & Relational Harm

- Increased conflict with family and friends.
- Isolation from positive peer groups.
- Association with peers who also engage in high-risk behaviors.
- Potential legal issues and involvement with the justice system.

# Consequences: Physical Health



**Respiratory Issues:** Vaping and smoking can damage lungs and lead to chronic breathing problems.



**Cardiovascular Strain:** Stimulants and other drugs can cause high blood pressure, irregular heartbeat, and long-term heart damage.



Also, **Risk of Injury:** Impaired judgment leads to higher rates of accidents, impaired driving, injuries, and overdose.

**Organ Damage:** Chronic alcohol use can lead to liver damage, while other substances can strain kidneys and other critical organs.

---

# Breaking the Cycle: A Path Forward

Strategies for intervention, prevention, and building resilience.

# The Power of Connection: Neuroscience and Safety

## Social Connection as a Natural Reward

Human connection activates the brain's mesolimbic **dopamine pathway** (the reward system)—the same area targeted by addictive substances.

- **Natural Dopamine:** Meaningful relationships provide a sustainable, non-toxic source of pleasure and motivation.
- **Civility Force:** Strong bonds can displace the need for artificial, drug-induced highs.

## Safety, Co-Regulation, and Stress Reduction

Safe, predictable relationships help a young person regulate their nervous system and reduce the stress that drives self-medication.

- **Cortisol Buffer:** Supportive adults reduce the release of stress hormones (cortisol), calming the overactive anxiety response.
- **Secure Base:** Feeling seen and accepted reduces the deep-seated emotional pain that often leads to substance use.

# School-Based Support and Intervention

## Intervention & Services

- **Universal Screening:** Implement brief mental health and substance use screening for early identification.
- **Integrated Care:** Embed school-based mental health counselors and liaise with community resources.
- **Tiered Support (MTSS):** Use a multi-tiered system to provide targeted groups and individual counseling for students at risk.
- **"Instead of Suspension":** Implement restorative practices and brief interventions rather than punitive measures for first-time substance use offenses.

## Prevention & Culture

- **SEL Curriculum:** Implement social-emotional learning (SEL) across all grades to build coping and
- **Restorative Skills Informed Culture:** Train all staff to understand how trauma affects behavior and learning, promoting emotional safety.
- **Staff Connection:** Encourage staff to build genuine, positive relationships with students to foster connection and trust.
- **Harm Reduction Education:** Provide honest, evidence-based education on the risks of substance use without relying on fear tactics.

# Building Resilience: Key Protective Factors

## Individual & Family Resilience

- **Strong Attachment:** Consistent, supportive parent-child relationship.
- **Clear Boundaries:** Family rules and consistent monitoring of behavior.
- **Skill Building:** Developing emotional regulation and problem-solving skills.
- **Positive Identity:** Fostering self-esteem and a belief in one's own self-efficacy.

## Community & Social Support

- **School Engagement:** Feeling a strong connection and belonging at school.
- **Pro-Social Activities:** Opportunities for involvement in positive clubs, sports, or volunteering.
- **Access to Care:** Availability of affordable and accessible mental health services and mentoring
- **Peer Selection:** Association with peers who model positive, low-risk behaviors.

# Questions?

Thank you for your attention.

For resources, visit:

National Institute on Drug Abuse (NIDA)

Substance Abuse and Mental Health Services Administration (SAMHSA)