Concurrent Disorders

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Objectives

- What are Concurrent Disorders?
- Impact of Concurrent Disorders
- Signs and Symptoms
  - Anxiety Disorders
  - Mood Disorders
  - Psychosis
  - Personality Disorders
- Treatment

Concurrent Disorders

- Any combination of mental health and substance use disorders (SUD)
- Diagnosing is more difficult because one disorder can mimic another
- Relapse rates for substance use are higher for people with a concurrent mental disorder
- Worsening of mental health symptoms for those with a concurrent substance use problem.

Concurrent Disorders

- Having either a substance use or a mental health problem significantly increases the likelihood of having the other
- mental health disorder = 3 times more likely to have a substance use disorder
- substance use disorder = 4.5 times more likely to have a mental health disorder

Prevalence

- >50% of those seeking help for an addiction also have a mental illness
- ~20% of those seeking help from mental health services also have an addiction

Impact of Concurrent Disorders

- More severe psychiatric symptoms
- More dramatic effects after using substances (blackouts)
- Increased noncompliance with treatment plans
- Physical health problems
- Increased experiences of stigma
- Financial problems
- Homelessness
- Serious relationship problems
- More verbal hostility & aggression
- Violence or crises that may end up involving the police
- A greater likelihood of ending up in jail
- Increased suicidal feelings and behaviours

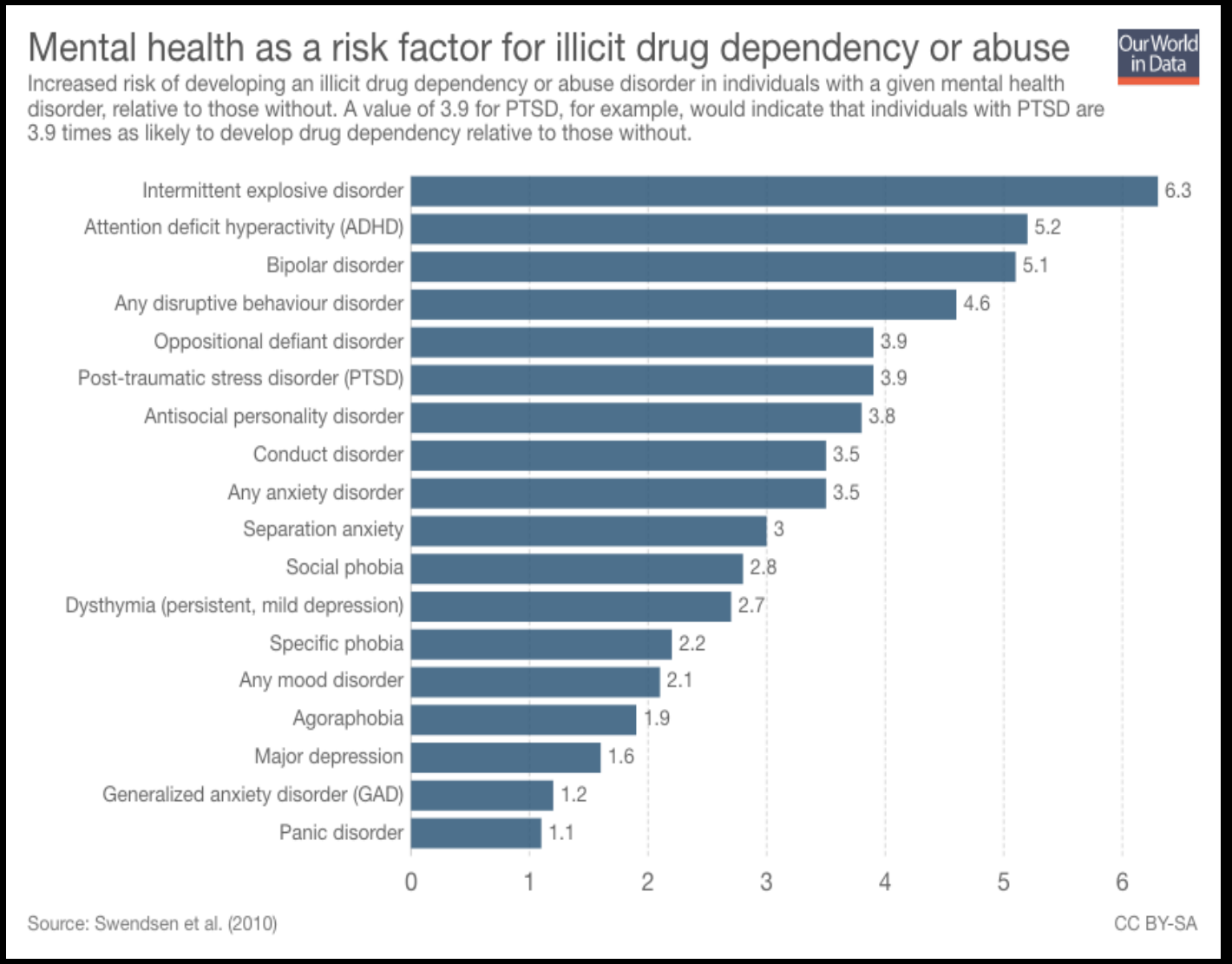
Association with Mental Health

- Substance use can make mental health problems worse
- Substance use can mimic or hide the symptoms of mental health problems
- “Self medication”
- Some substances can make mental health medications less effective
- Medication non-compliance
- When a person relapses with one problem, it can trigger the symptoms of the other problem.

Signs and Symptoms

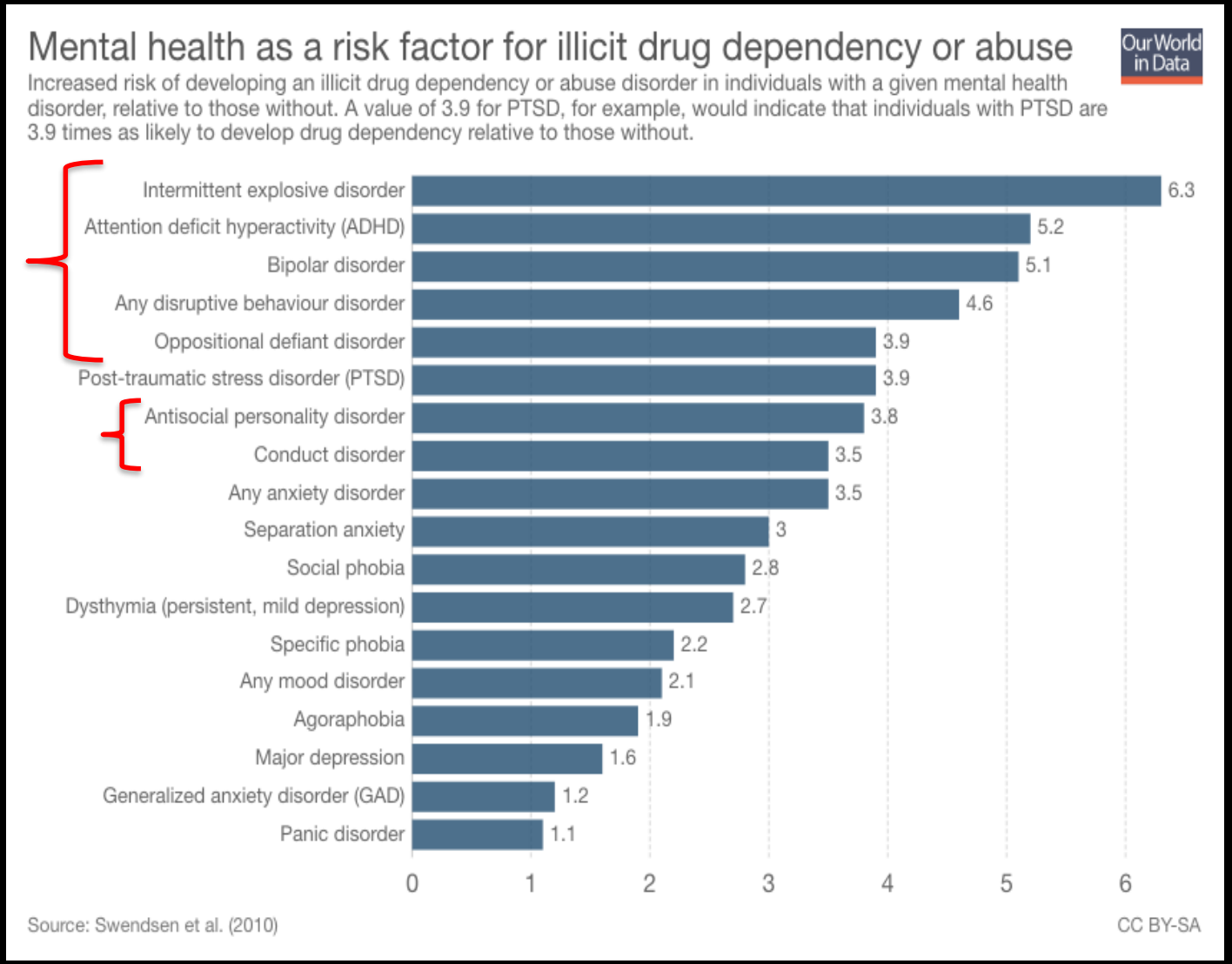
- There is no one symptom or group of symptoms common to all combinations.
- The combinations of concurrent disorders can be divided into five main groups:
  - SUD + mood and anxiety disorders
  - SUD + severe and persistent mental health disorders
  - SUD + personality disorders
  - SUD + eating disorders
  - other SUD + mental health disorders (gambling and sexual disorders)

Risk of Substance Use Disorder



Risk of Substance Use Disorder

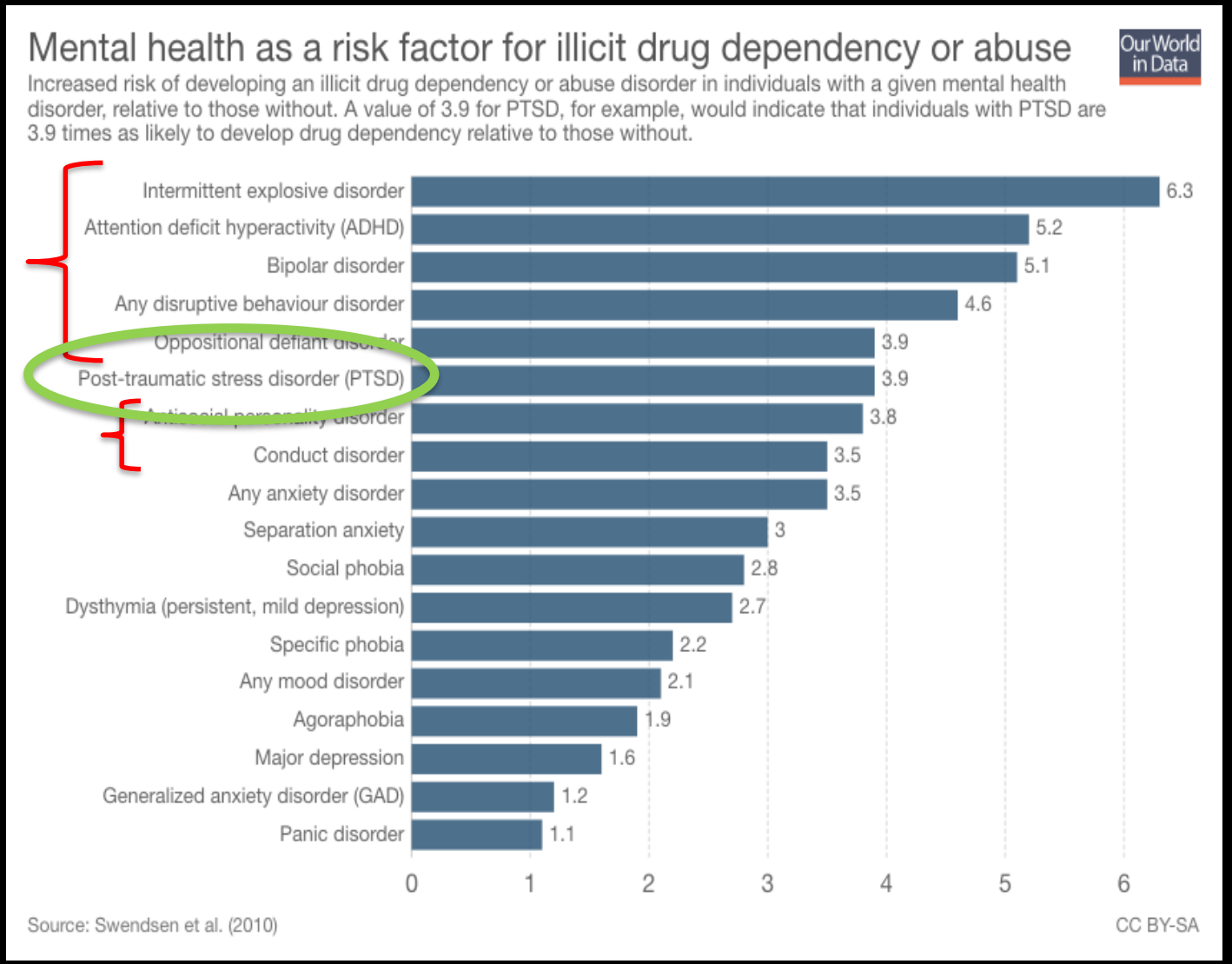
POOR IMPULSE CONTROL



Risk of Substance Use Disorder

POOR IMPULSE CONTROL

TRAUMA

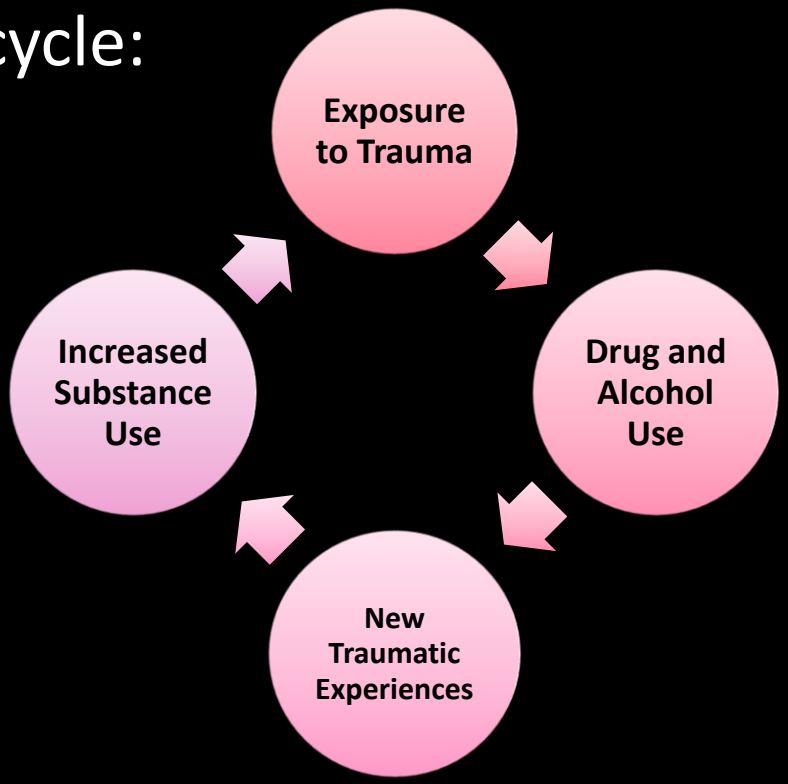


Impulsivity

- ***Problems with impulse control are the single strongest predictor of substance abuse***.
- Impulsive behaviour is a core problem in several personality and major psychiatric disorders
- ADHD —an impulsivity-related disorder— are at elevated risk for substance abuse and addiction.

Trauma

- Stressful experiences lead to a number of changes in brain chemicals → SUD
- Stress-substance use cycle:



Concurrent Disorders

ANXIETY

Anxiety Disorders

- Social Anxiety Disorder: an unrelenting fear of being evaluated negatively by other people.
- Panic disorder: repeated intense episodes of anxiety, 'panic attacks'
- Generalized anxiety disorder: chronic pattern of anxiety, body tension, irritability and constant worry
- PTSD: trauma with re-experiencing, avoidance, anxiety or emotional numbing, hypervigilance/arousal
- OCD: recurrent intrusive thoughts or urges (obsessions) that cause distress, and repetitive mental or behavioral acts (compulsions) that the individual feels driven to perform

Anxiety

- The risk SUD is 2-5X greater in people with anxiety disorders
- In at least 75% of people with both an anxiety disorder and a SUD, the anxiety disorder developed first
  - self-medication of anxiety symptoms, shared neurobiological connections, or genetic predispositions.
- Need to be addressed at the same time
- Both are chronic, relapsing conditions

Clinical Manifestations

- More severe clinical profile as compared to individuals with either disorder alone
- Substance use, physiologic dependence, and withdrawal can mimic or exacerbate symptoms of anxiety.
  - Stimulants → heart palpitations, shaking, sweating, dizziness, depersonalization, paresthesias, nausea, and hot flushes
  - Withdrawal
    - Opiate withdrawal → anxiety, muscle aches, insomnia, nausea, and diarrhea
    - Alcohol and benzodiazepine withdrawal → anxiety, insomnia, psychomotor agitation, tachycardia, perspiration, nausea, and tremor.

Assessment and Diagnosis

- Consider illicit drugs + caffeine, nicotine, and OTC medications (pseudoephedrine and diet pills)
- Clinical observation during a period of abstinence
- Timing of symptoms
  - Were the anxiety symptoms present before substance use commenced?
  - Were anxiety symptoms present during periods of sobriety greater than one to three months?
- Family history of anxiety disorders

Concurrent Disorders

MOOD DISORDERS

Mood Disorders

- Major Depressive Disorder: Episodic periods of intense depressive symptoms
- Persistent Depressive Disorder: Persistent mild depression
- Bipolar I Disorder: episodes of depression and mania (extremely elevated mood, ↑energy, ↓need for sleep, reckless behaviour)
- Bipolar II Disorder: episodes of depression and hypomania (less severe or ‘mild’ mania)

Mood Disorders

- Substance use is highest in those with Bipolar Disorder, but the risk of a SUD is still at least double for those with Major Depressive Disorder
- Having both affects the clinical course of both disorders
  - treatment engagement
  - thoughts of suicide
  - Homelessness
  - increased risk of victimization
- and their clinical outcomes
  - life expectancy
  - Suicide
  - treatment outcome

Substance Induced Mood Disorder

DSM 5

- A persistent disturbance in mood characterized by depressed mood or markedly diminished interest in activities.
- There is evidence of both (1) and (2):
  1)The symptoms developed during or soon after substance intoxication or withdrawal
  2)The involved substance is capable of producing such symptoms
- The disturbance is not better explained by a depressive disorder that is not substance-induced.
  - The symptoms preceded the onset of the substance use
  - the symptoms persist for a substantial period of time after the cessation

Concurrent Disorders

PSYCHOSIS

Psychosis

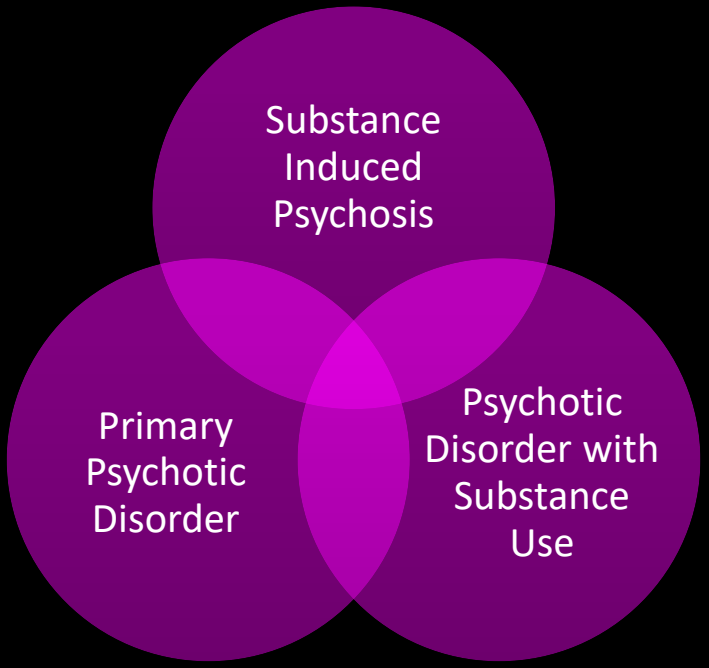
- Psychotic Disorders: contact with reality is highly distorted (ex: schizophrenia)
  - Positive Symptoms: delusions, hallucinations and disorganized thoughts
  - Negative Symptoms: lack of motivation, withdrawal and social isolation
  - Cognitive Deficits: problems with memory, attention and decision making

Psychosis

- People with schizophrenia are almost five times more likely to have SUD than people without mental disorders
- Substance abuse can speed up the onset of psychotic disorders, worsen the symptoms and course of illness, and lead to higher rates of psychiatric hospitalization
- The risk of schizophrenia in heavy cannabis users is **six times higher** than in non-users, even when taking into account things such as other psychiatric illnesses and social background
- ***Substance misuse makes diagnosing the type of psychotic disorder MUCH more difficult***

Schizophrenia and SUD

- Distinguishing between substance-induced psychosis, primary psychotic disorders and psychotic disorders with comorbid substance use is extremely challenging.



Substance Induced Psychosis
DSM 5

- "delusions and/or hallucinations related to the physiological effects of a substance or medication, based on evidence from the history, physical examination, or laboratory findings"
- Primary Psychotic Disorder
  - "The disturbance is *not* caused by the effects of a substance or another medical condition"

Substance Induced Psychosis
DSM 5

- Presence of delusions and/or hallucinations
- Evidence that psychotic symptoms developed during substance use, or ***within one month*** of withdrawal from a substance known to cause psychotic symptoms.
- The symptoms are not better explained by a psychotic disorder that is ***not*** medication induced.

Differential Diagnosis

- Schizophrenia
- Schizophreniform
- Schizoaffective
- Delusional Disorder
- Brief Psychotic Disorder
- Schizotypal Personality Disorder
- Major Depressive Disorder with Psychosis
- Bipolar Disorder with Psychosis
- Delirium
- Psychosis Secondary to a General Medical Condition

Assessment

- Interview
  - Timeline of symptoms
  - Psychiatric and substance use history
  - Family and medical history

    ** seek corroborative sources of information, whenever possible*
- Mental Status Exam
  - Appearance, general behaviors
  - mood and affect
  - thought processes, unusual thought content
  - evidence for perceptual disturbances (responding to internal stimuli)
- Medical Workup – Urine Drug Screen
  - infection, metabolic causes such as liver disease, and electrolyte abnormalities

What's the difference between SIP and PPD with substance use?

- ~400 patients in ER with psychosis and alcohol/drug use
  - 44% were diagnosed with SIP (vs PPD)
- Key differentiating factors were:
  - SIP group
    - More parental substance abuse
    - More severe drug use
    - Visual hallucinations

Caton et al. 2005

Conversion to Schizophrenia following SIP

- SIP → Schizophrenia/Bipolar Disorder (20 years)
- ~7000 people initially diagnosed with SIP → 26% later converted to schizophrenia
- Half of those who converted to schizophrenia did so within 3 years
- Conversion rates over 20 years:
  - Cannabis 47%
  - Amphetamines 32.3%
  - alcohol, hallucinogens, cocaine, opioids, and sedatives 20%-28%

Starzer et al. 2018

What drugs can cause SIP?

- Cannabis
- Amphetamines
- Cocaine
- Hallucinogens
- Alcohol

Cannabis

Cannabis Intoxication

- 2005 to 2011 - dramatic rise in cannabis-related ER visits
- *Acute* adverse effects:
  - Panic and paranoia
  - Depersonalization, derealization
  - Loss of control and fear of dying

Cannabis

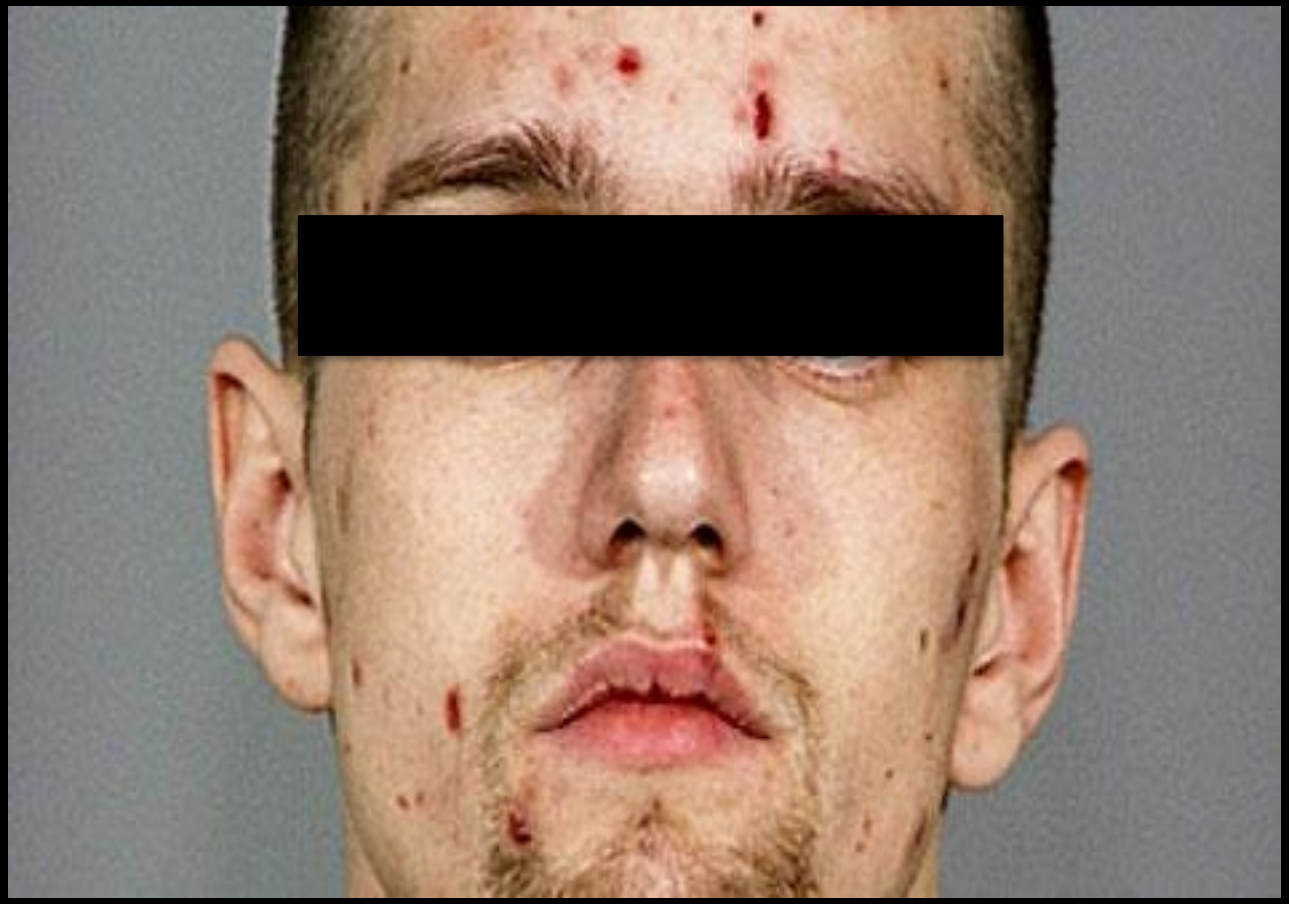
- Lifetime cannabis use increases risk of psychosis by 40%
- Risk Factors:
  - Use in Adolescence
  - Frequent Use - Individuals who use cannabis ***daily*** are 2-3X more likely to develop psychotic disorders
  - High THC potency
  - Genetic Predisposition to Psychotic Disorders

"Crystal Meth"
Methamphetamine-Induced Psychosis

- Differentiating between methamphetamine-induced psychosis (MIP) and a primary psychotic disorder is *extremely* difficult
- Symptoms can persist for weeks to months
- Symptoms can reappear in the absence of recent methamphetamine use

Methamphetamine Psychosis

- The time it takes to develop psychotic symptoms can vary from a few months up to >20 years after starting to use methamphetamine
- Symptoms:
  - Persecutory delusions (most common symptom) – firmly believe people or groups, intend to harm them
  - Delusions of reference – A neutral event is believed to have a special, personal meaning
  - Auditory, visual, tactile hallucinations - ants/bug crawling under their skin (ex. formication, “meth mites”)



Cocaine

Cocaine-Induced Psychosis

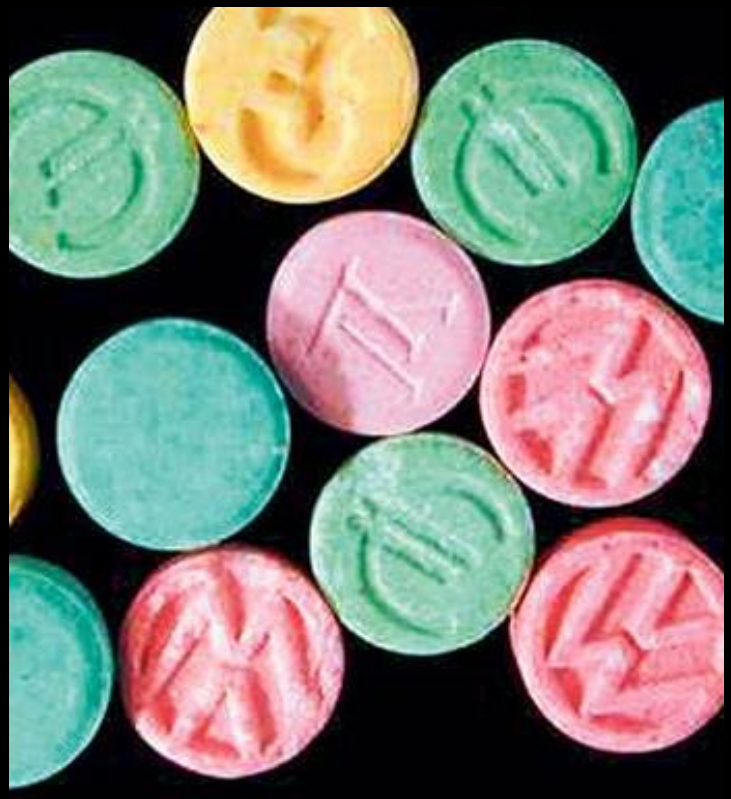
- >50% of cocaine users have experienced psychosis
- Higher risk of psychosis:
  - Greater use (dose-related)
  - Younger age
  - IV use
- Sensitization: psychosis becomes more severe and occurs more rapidly with continued cocaine use

Cocaine-Induced Psychosis

- Intense suspiciousness and paranoia related to a fear of being discovered or harmed while using cocaine
- Significant psychomotor agitation
- Symptoms regress upon cessation of use (only very rare reports of persisting symptoms)

Hallucinogens

- Types of hallucinogens: LSD, mescaline, psilocybin, PCP, cannabis, ecstasy, ketamine, salvia
- “Psychedelic” drugs



Hallucinogen-Induced Psychosis

- Hallucinogens can, of course, cause visual, auditory, and tactile hallucinations
  - but this is not the same as psychosis.
- An adverse reaction or taking too much can also cause delusions and paranoia
- Once the individual is no longer aware that the hallucinations are not real → break from reality → Psychosis

Effects of Hallucinogens

- LSD → kaleidoscope of visual patterns and changes perception space/time
- Ecstasy → enhances mood and produces feelings of empathy and intimacy
- Ketamine → out-of-body feeling, which may be pleasant or terrifying
- Salvia → intense, short-lived hallucinogenic effects, such as smelling sounds or hearing colours

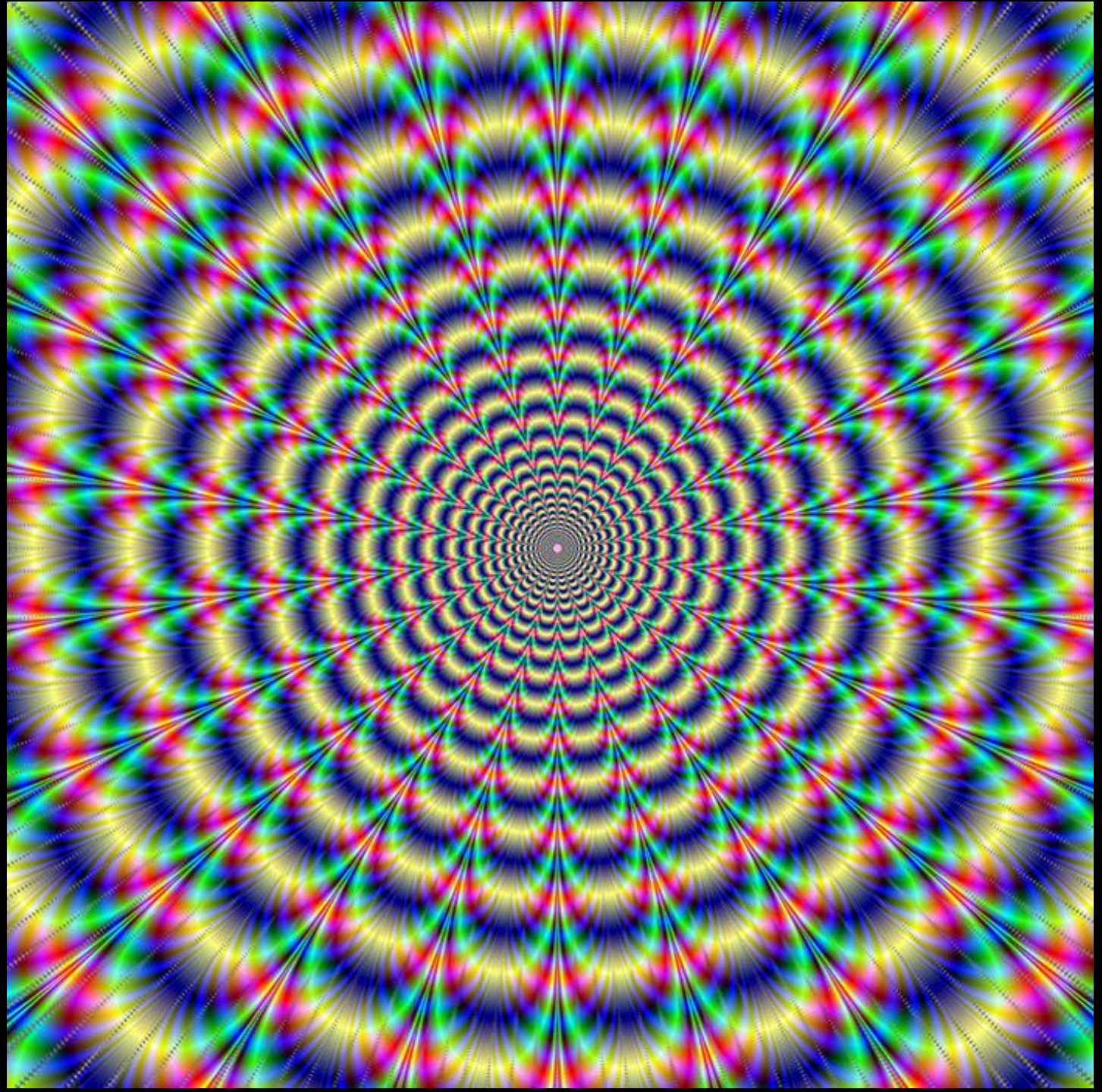
Risks of Hallucinogen Use

- Can have "flashbacks" days, weeks or even years after the drug was taken.
- "bad trip" → anxiety, fear/panic, dysphoria, paranoia, can lead to erratic and aggression behaviour
- Can provoke the onset of prolonged psychosis, lasting days or even months

Hallucinogen Persisting Perception Disorder

DSM-5

- The re-experiencing, following cessation of use of a hallucinogen, of one or more of the perceptual symptoms that were experienced while intoxicated with the hallucinogen
  - (e.g., geometric hallucinations, false perceptions of movement in the peripheral visual fields, flashes of color, intensified colors, trails of images of moving objects, positive afterimages, halos around objects, macropsia, and micropsia)



Alcohol

- Alcohol Related Psychosis
- Psychosis associated with alcohol can occur
  - acute intoxication
  - alcohol withdrawal
- Alcohol-Induced Psychosis: symptoms of psychosis present during or shortly after heavy alcohol intake

Alcohol-Induced Psychosis

- Symptoms occur either during or after a period of heavy alcohol consumption
- Also called "Alcoholic Hallucinosis"
- Different from Delirium Tremens
- Usually presents with auditory hallucinations, delusions and mood disturbances arising in clear consciousness
- Abstinence from alcohol usually leads to remission - however, hallucinations persist in some patients despite abstinence

Summary of Substance Induced Psychosis

- Cannabis
  - Acute paranoia and panic
  - Significantly increases the risk of psychosis
- Crystal Meth
  - Persecutory delusions and tactile hallucinations
  - Persistent psychosis resembles schizophrenia
- Cocaine
  - Intense suspiciousness and paranoia – rarely persists
- Hallucinogens
  - Flash backs, bad trips, prolonged psychosis
- Alcohol
  - Alcoholic hallucinosis

Personality Disorders

- Overall prevalence of PD ranges from 10%-15% in the normal population and from 35%-73% in patients treated for addictions
- The prevalence of any PD is higher among patients with drug use disorder than alcohol use disorder
- Borderline PD and Antisocial PD are particularly found to be associated with SUDs

Borderline Personality Disorder

A pervasive pattern of instability of interpersonal relationships, self image and affects, and marked impulsivity beginning by early adulthood ** and present in a variety of contexts, as indicated by five (or more) of the following:

1. Fear of abandonment.
2. Unstable sense of self.
3. Impulsivity (spending, sex, substance abuse, reckless driving, binge eating).
4. Recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior
5. Intense moods that change quickly (“Mood swings”)
6. Chronic feelings of emptiness.
7. Difficulty controlling anger
8. Transient, stress-related paranoid ideation or severe dissociative symptoms.

Antisocial Personality Disorder

A persistent disregard for the rights of others,

≥ 3 of the following:

- Disregarding the law
- Being deceitful, lying, conning others
- Acting impulsively
- Easily provoked or aggressive
- Reckless disregard for safety of self or others
- Consistently acting irresponsibly
- Lack of remorse

Treatment

- Comorbid PD among patients with SUDs is a predictor of poor prognosis
  - poorer treatment response and outcome
- Psychotherapy is the mainstay of treatment
  - dialectical behavioral therapy (DBT)

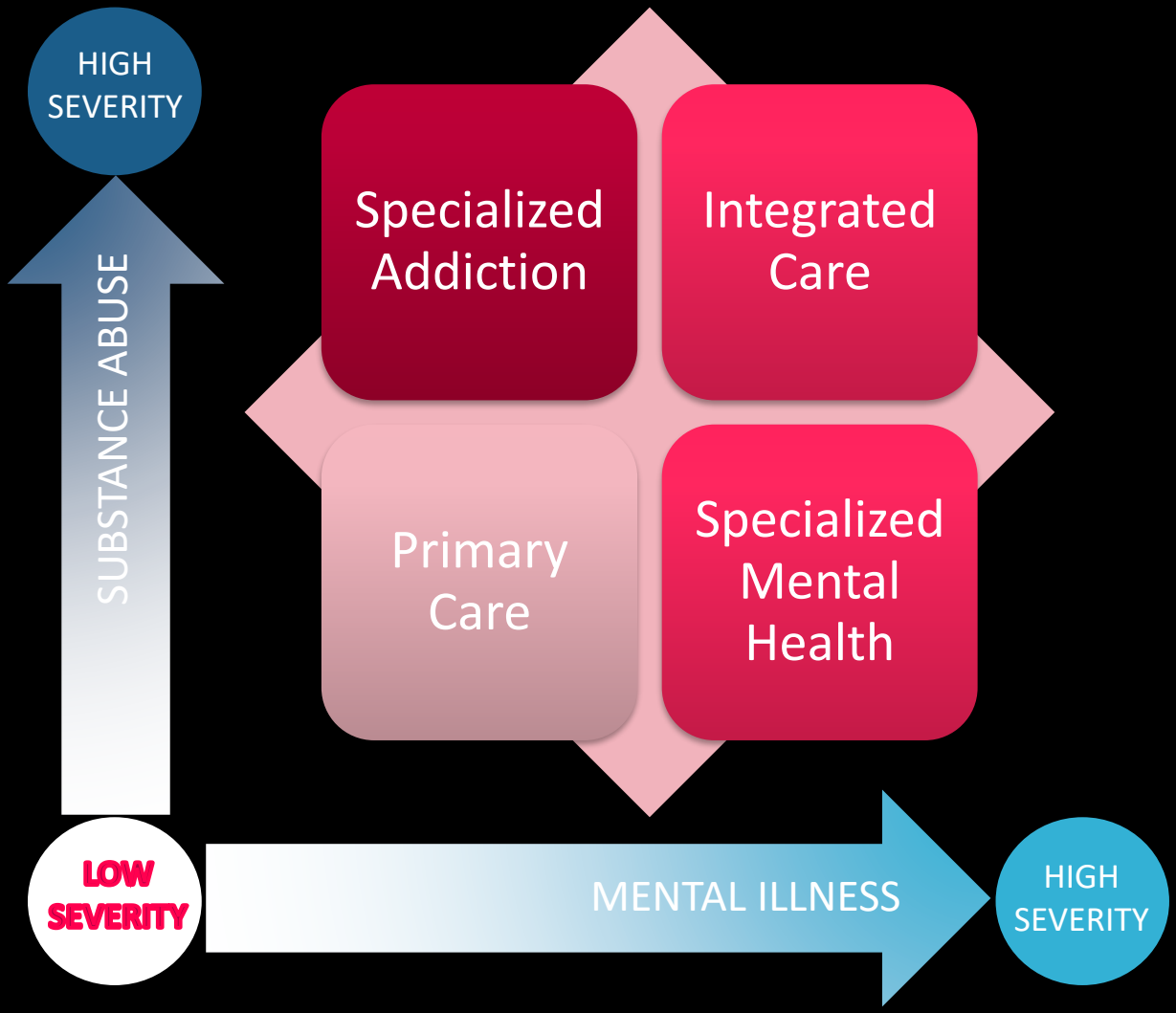
Concurrent Disorders

TREATMENT

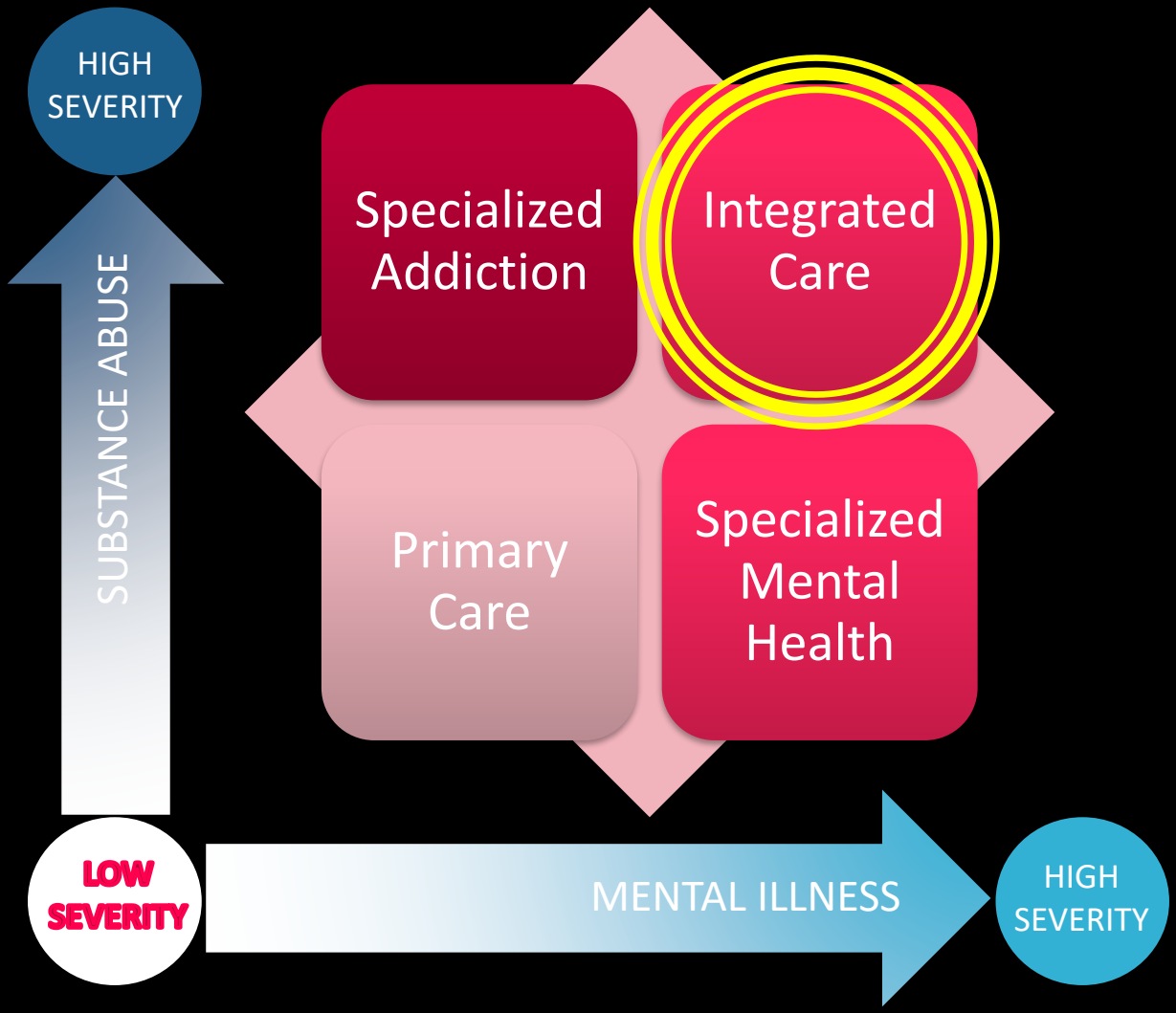
Treatment

- Because of the overlap of symptoms between mental health and substance use disorders, it is often very difficult to make a firm diagnosis in the early stages of treatment.
- Choice of treatment modality is related largely to the severity of the substance use vs mental health concern.

Quadrants of Care



Quadrants of Care

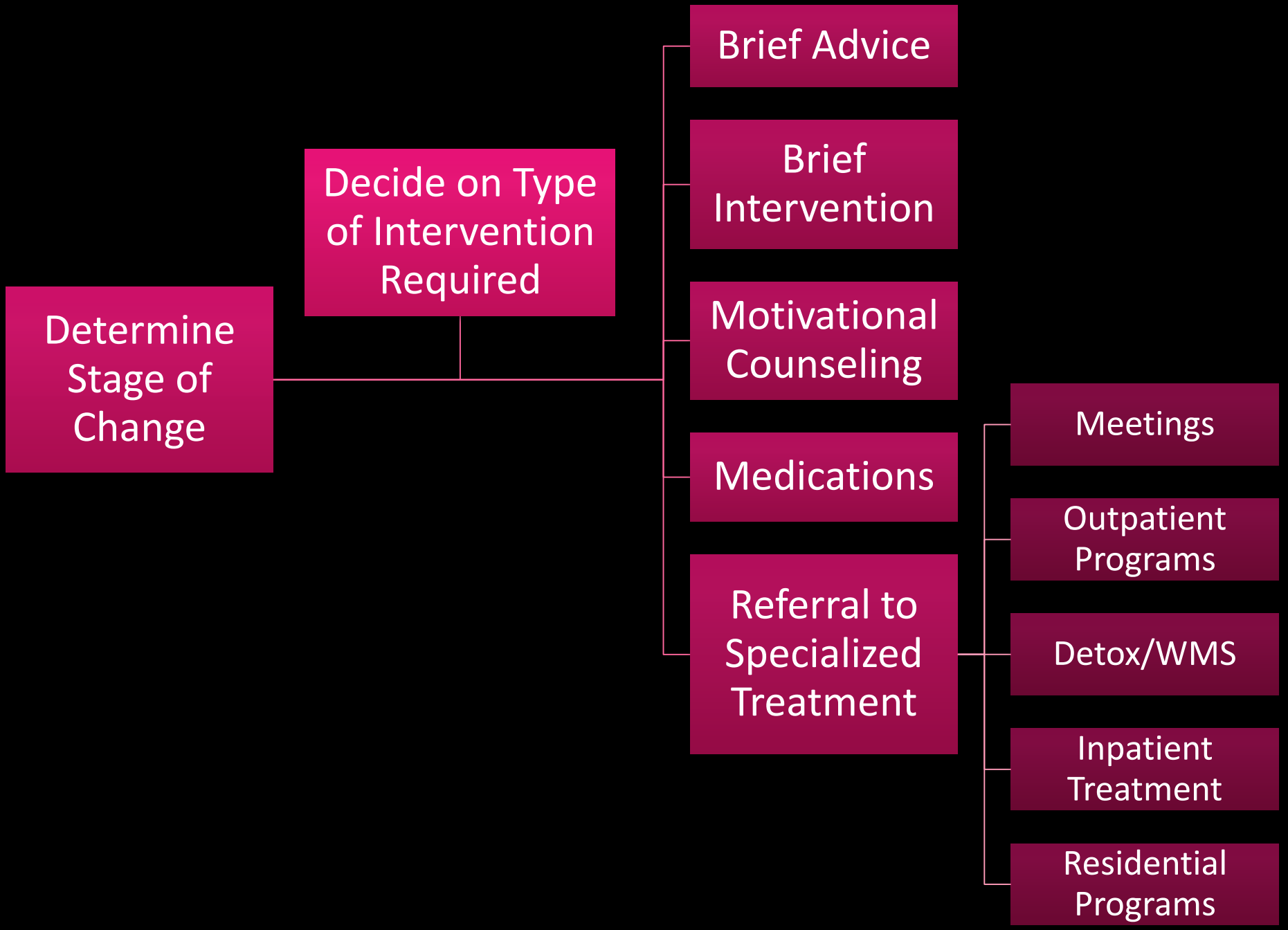


Treatment

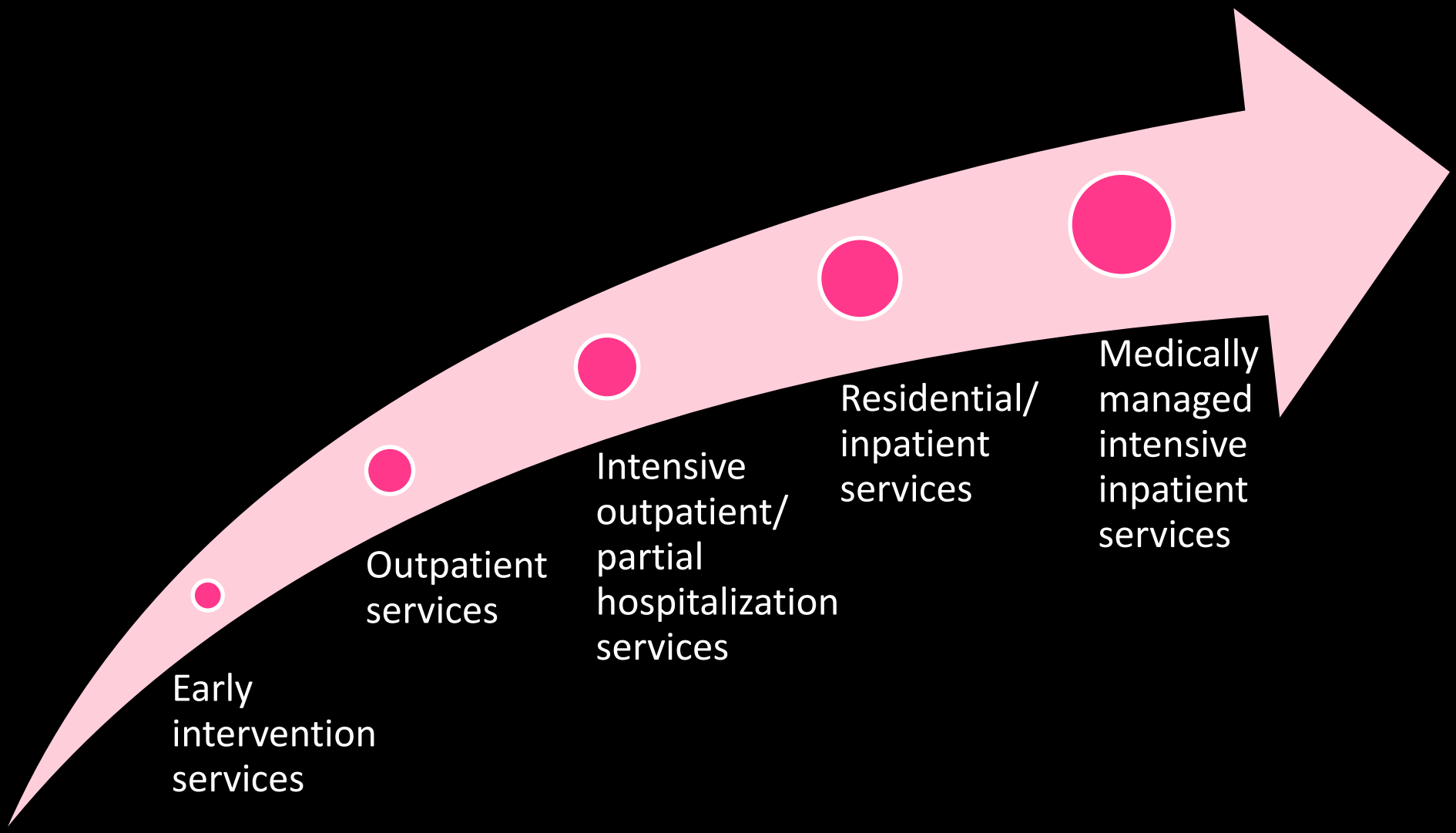
- ***Integration*** of care for SUD, mental disorders, and medical conditions is recommended rather than parallel treatment.

Goals of Treatment

- Abstinence
- Harm reduction
- Improve physical and/or mental health
- Family, social, occupational, educational, legal…
- Stages of Change
  - Goals change over time
  - Goals may be different for each substance


Determine Stage of Change
Decide on Type of Intervention Required
Brief Advice
Brief Intervention
Motivational Counseling
Medications
Referral to Specialized Treatment
Meetings
Outpatient Programs
Detox/WMS
Inpatient Treatment
Residential Programs

Levels of Care



Inpatient Rehab	• Frail, suicidal, or medically unstable patients • Very little availability of this level of care • May have to arrange on a medical/psychiatric unit of an acute care hospital
Residential Rehab	• Avoid continuous access to substances • Patients who lack resources or have no social network
Outpatient Services	• Ranges from day programs to weekly/monthly sessions • Generally includes psychiatric consultation and individualized or group psychotherapy
Meetings	• Self help groups, 12 step/AA • Increased social network and spirituality shown to improve treatment outcomes

Medications

- Antidepressants
- Antipsychotics
- Anti-Craving
- Replacement therapy
- “Multipurpose”
  - Ex/ Gabapentin

Summary

- Any combination of mental health and substance use disorders (SUD)
- Diagnosing is ***extremely*** difficult because one disorder can mimic another
- Must rule out a Substance-Induced Disorder
- ***Integration*** of care for SUD, mental disorders, and medical conditions is recommended rather than parallel treatment.

THANK YOU!

QUESTIONS

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