

Explore Chapter 2

This chapter highlights the key clinical aspects of schizophrenia and substance use disorders, with a focus on their co-occurrence and the challenges they present, and the importance of integrated therapies that address both illnesses.



2.1
The vicious circle, in which schizophrenia and substance use disorders exacerbate each other



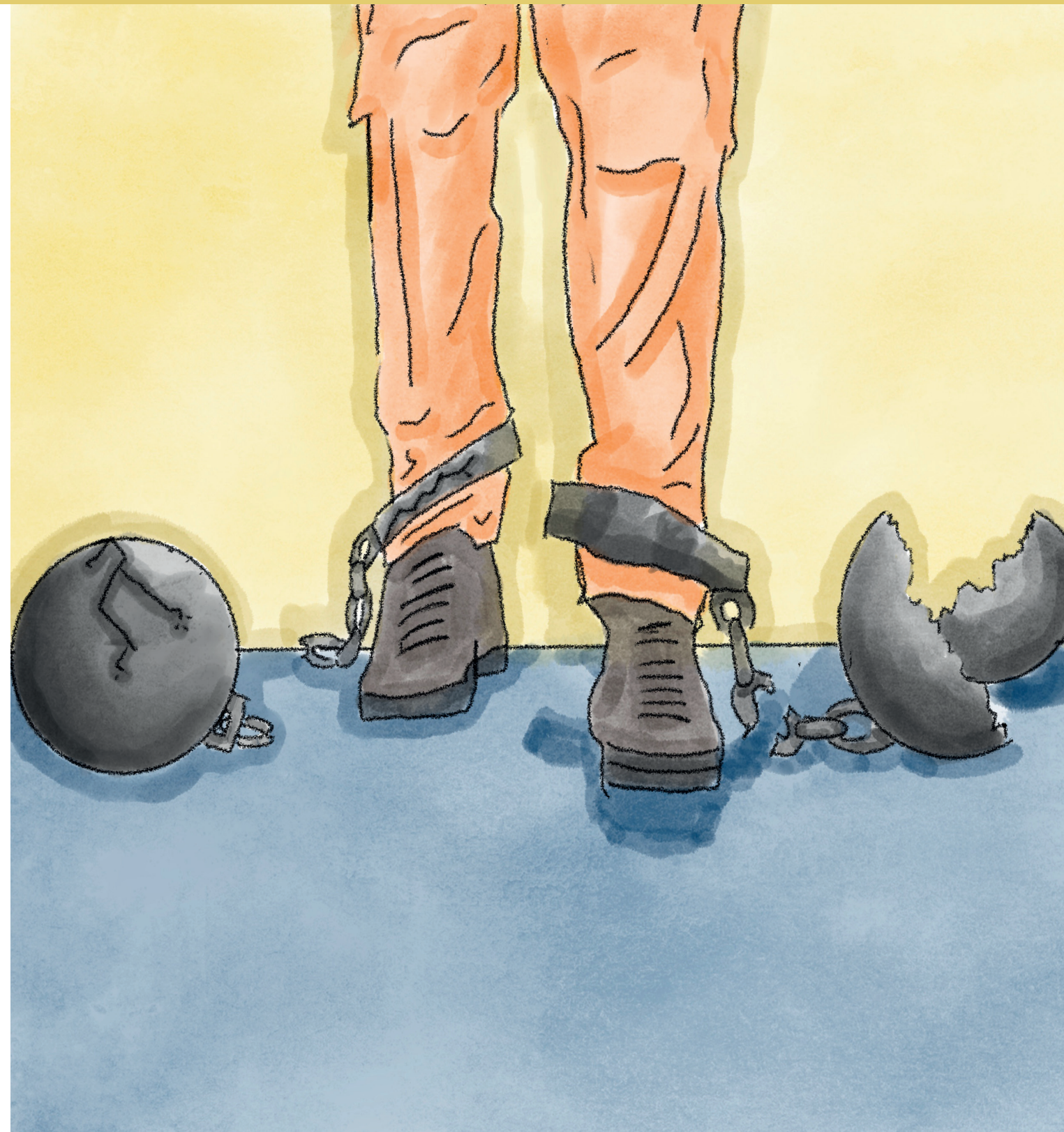
2.2
Early substance use in high-risk adolescents



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Dual schizophrenia impacts overall health



2.4
Does substance use impact the effectiveness of schizophrenia treatment?



Fast Facts

Early onset: People with schizophrenia and a history of substance use are in the attention of psychiatric services earlier than those without such a history.

Dual challenge: When schizophrenia and substance use disorder coexist, they create a more challenging clinical picture and lead to poorer outcomes than either condition alone.

Many people with schizophrenia underreport their substance use, often out of fear of judgment or blame. Recognizing substance use disorder as a mental health condition, not a choice, is key to providing better support and care.

Integrated treatment: Effective care for dual schizophrenia must address both schizophrenia symptoms and symptoms related to substance use disorder to improve recovery and long-term outcomes.

2.1

The vicious circle, in which schizophrenia and substance use disorders exacerbate each other



When schizophrenia and substance use disorders go hand in hand, they create a more challenging clinical picture and lead to less favorable outcomes compared to when each condition occurs alone.

*People with schizophrenia who also use drugs or alcohol often experience a unique form of mental illness. These individuals, commonly referred to as having "**dual disorder**", generally face more severe symptoms and challenges than those who don't use substances.*

*Importantly, **this isn't a rare condition**. If including issues like smoking and other substance use problems, **most people with schizophrenia are dealing with a dual disorder**.*

Schizophrenia and substance use disorders very often have negative impacts on **emotions, thinking, and behavior**. The severity and duration of symptoms can vary based on the specific characteristics of each condition, as well as the **duration, and time interval when these disorders** overlap.

For many individuals, for whom these two serious disorders coexist, several **clinical aspects are amplified** compared to the situations in which these disorders exist separately. Among the critical clinical implications are:

- **The onset of psychotic symptoms at earlier ages and the high risk of aggravating into more severe forms.**
- **The increased likelihood of self-harm and/or aggressiveness toward others.**
- **The reduced treatment efficacy and increased risk for relapses.**
- **The significant negative impact on the patient's overall well-being, both emotional and physical.**

It's crucial for mental health professionals, caregivers, and society to fully understand these issues and to address substance use disorders and schizophrenia symptoms

jointly. Their combined efforts are essential for providing comprehensive support and improving outcomes for those affected.

DECODING PSYCHOSIS:
KEY TERMS AND THEIR
SIGNIFICANCE

Schizophrenia is a long-term condition that can last for many years, often needing ongoing care. During the life-long course of the disease, individuals with schizophrenia may go through **psychotic episodes**, which **are intense flare-ups of symptoms**.

These episodes resemble a hypertensive crisis in chronic high blood pressure patients or a diabetic coma in those suffering from diabetes, **requiring prompt specialized medical attention**.

What is a psychotic episode?

“The word **“psychosis”** is used to describe conditions that affect the brain and mind, where there has been some loss of contact with reality. When someone becomes ill in this way, it is called a **“psychotic episode”**.

During a psychotic episode, individuals experience significant disturbances in their thoughts and perceptions, blurring the line between what is real and what is not.

Spotting the symptoms of psychosis

Psychosis can impact emotions, physical sensations, thinking patterns, and behavior.

THOUGHTS: Disorganised or **jumbled thoughts**

DELUSIONS: Having **false beliefs** often involving misinterpretations of experiences or perceptions (e.g., believing someone is after you, thinking you have special powers, or interpreting newspaper passages as having special meanings directed at you)

HALLUCINATIONS: Being able to **see, hear, smell, sense, or taste** things that others would not. In the case of schizophrenia or chronic psychosis, the most relevant hallucinations are auditory hallucinations.

FEELINGS: Experiencing **confusion, agitation, fear**, reduced interest in activities.

BEHAVIORS: Experiencing changes in behaviour, such as: having difficulties maintaining or tracking conversations, difficulty with upkeeping personal hygiene and daily activities, struggling to remember things, behaving inappropriately (being silly or laughing with no context), getting upset or angry without a clear reason, becoming very lethargic or generally inactive, becoming entirely not aware of the surrounding environment.



What sparks psychosis?

There is **no one specific cause of psychosis**. Psychosis **may be a symptom** of a mental illness, such as schizophrenia or bipolar disorder. However, a person may experience psychotic symptoms and never be diagnosed with schizophrenia or any other mental disorder.

There are other causes of psychosis: some medical conditions, such as hypoglycemia, Alzheimer's disease, lupus, Parkinson's disease, etc, sleep deprivation, and the use of substances such as hallucinogens.

A mental illness, for instance schizophrenia, is typically diagnosed by excluding all the other causes of psychosis.

The development of psychosis or psychotic disorders is generally influenced by multiple factors, such as:

-  **Genetic predisposition**, where having a family history of psychosis or severe mental disorders plays a role.
-  **Neurobiological factors** involving brain dysfunction in terms of circuits and neurotransmitters.
-  **Intense life experiences**, like stressful events or illness, which can trigger vulnerability in some individuals.
-  **Use of substances**, such as cannabis or stimulants, that can exacerbate psychosis in susceptible individuals.

These factors, whether individually or in combination, contribute to the complex nature of psychotic disorders.

What are the telltale signs of psychosis?

Typically, there are noticeable **shifts in behavior preceding psychosis onset**.

These behavioral “red flags” include:

- Sudden declines in school or work performance
- New struggles with clear thinking or concentration
- Heightened suspiciousness, paranoia, or discomfort in social settings

- Increased social withdrawal, spending more time alone
- Unusual, intense, or absent emotions, along with peculiar new ideas
- Neglect of personal hygiene and self-care
- Difficulty differentiating between reality and fantasy
- Confusion in speech or communication challenges.

Anyone experiencing such symptoms is advised to consult a mental health professional!

Psychotic disorders explained: what you need to know

Psychotic disorders include various conditions characterized by the type and duration of symptoms experienced. Some individuals have brief episodes of psychosis lasting a few days or weeks, while others, like those with schizophrenia, endure longer episodes.

Psychotic symptoms can also occur in individuals with major depressive disorder, bipolar disorder, or substance use, however, the following are classified as psychotic disorders:

Brief psychotic disorder. This disorder involves an individual experiencing psychotic symptoms for less than one month, usually triggered by a highly stressful event (e.g., a loved one passing away).

Schizoaffective disorder. This disorder involves experiencing symptoms of schizophrenia alongside symptoms of a mood disorder, like depression or mania.

Schizophrenia. Schizophrenia is diagnosed when an individual has experienced psychotic symptoms for a minimum of six months. Key symptoms include delusions, hallucinations, and disorganized thoughts. Additionally, individuals may struggle with concentration and memory, lose motivation for everyday activities, experience a significant reduction in emotional expression, and withdraw from social interactions and personal relationships.

What is substance-induced psychosis?

Substance-induced psychosis is a type of psychosis triggered by and experienced while under the effects of certain substances. Depending on the substance involved, these episodes could occur **during substance usage** (such as with cannabis) or **withdrawal** (like with alcohol).

Drugs can change how our brain cells, called neurons, communicate with each other. Normally, brain cells send, receive, and process signals using chemicals known as neurotransmitters. But when drugs enter the brain, they can mess with this process in different ways.

For instance, drugs like **marijuana and heroin** have structural similarities to natural neurotransmitters in the brain. This similarity lets them attach to neurons and activate them. However, even though they **mimic natural chemicals**, they don't activate neurons in the same way, **leading to mixed-up messages in the brain's communication system**.

On the other hand, drugs such as **amphetamines and cocaine** cause neurons to release too much of their natural neurotransmitters or stop these chemicals from being recycled properly. This **overloads or disrupts the usual**

flow of information between neurons, **causing further confusion in the brain's messaging network**.

Can drug-induced psychosis turn into a psychotic disorder?

Substances can impact people differently. Considering that some individuals are at **"ultra-high risk (UHR) for psychosis"** adolescents who consume certain substances may experience sudden psychotic episodes.

Symptoms typically appear rapidly and disappear within a few days to weeks, though another psychotic episode may occur if the substance is used again.

Although **substance-induced psychosis is usually short-lived, drug use can lead to longer-lasting psychotic disorders** in individuals predisposed to them.

There is strong evidence suggesting that individuals who initially present with substance-induced psychotic disorders in mental health services are at significant risk of later transitioning to schizophrenia or another chronic psychotic disorder.

Among those who experienced **cannabis-induced psychosis**, a substantial number **later developed either schizophrenia or bipolar disorder**.

Are psychotic symptoms a red flag for immediate medical attention?

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Psychotic symptoms are a signal of alarm and urgent need for treatment, regardless of the cause and conditions in which they appeared.

EARLY INTERVENTION CAN PREVENT the symptoms from getting worse and stop the development of more serious mental health issues.

IF LEFT UNTREATED, PSYCHOSIS CAN LEAD TO DANGEROUS BEHAVIORS due to the distorted perceptions and delusional thoughts that come with it. This can include self-harm or harm to others. Starting treatment early helps stabilize the person's mental state and creates a safer environment for recovery.

Moreover, **GETTING TREATMENT AS SOON AS POSSIBLE CAN SIGNIFICANTLY IMPROVE LONG-TERM OUTCOMES.**

Studies show that early treatment reduces the severity and frequency of psychotic episodes, helping people stay engaged in their social lives, education, and work. This not only prevents long-term disability but also supports a better overall recovery.



In short, acting quickly to treat psychotic symptoms is essential for ensuring safety, improving quality of life, and achieving the best long-term health outcomes.

2.2

Early substance use in high-risk adolescents

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Adolescents identified as ultra-high risk (UHR) for psychosis often start using tobacco, cannabis, and other substances earlier than their peers.

The effects of these substances on their developing brains can differ significantly. Research has found that UHR adolescents typically show more severe use of cannabis and tobacco. This highlights the **unique challenges** they face and the importance of understanding these differences for effective support and treatment.

Among individuals considered at ultra-high risk (UHR) for psychosis, only around

1/3 WILL DEVELOP A LONG-TERM PSYCHOTIC DISORDER.

However, a significant number of UHR individuals who do not transition to full psychosis **may still experience persistent mild psychotic symptoms and develop other lasting mental health issues.**

These individuals need to receive ongoing treatment and support from mental health services to manage their symptoms effectively and maintain their well-being over time.

The concept of “ultra-high risk’ for psychosis”: who is more vulnerable?

Identifying **people at high risk of developing a psychotic disorder** has been a priority for clinicians. **Early treatment** for this group is believed to potentially **prevent the disorder from developing.**

To be classified as **ULTRA-HIGH RISK (UHR) FOR PSYCHOSIS**, individuals typically fall within the age range where the risk of developing psychosis is highest (**late adolescence to early adulthood**), and **they must meet one or more of the following criteria:**

- 1. **ATTENUATED PSYCHOTIC SYMPTOMS (APS):** they have experienced mild psychotic symptoms that are not severe enough to be considered full-blown psychosis over the past year.
- 2. **BRIEF LIMITED INTERMITTENT PSYCHOTIC SYMPTOMS (BLIPS):** they have had a brief episode of psychosis lasting less than a week, which resolved on its own without ongoing treatment.
- 3. **GENETIC VULNERABILITY (TRAIT):** they either meet the criteria themselves or have a first-degree relative (like a parent or sibling) with a psychotic disorder.

Each of these criteria must also be associated with a noticeable decline in their ability to function normally or a history of chronic low functioning.

Identifying and providing support to individuals meeting these criteria is essential during this critical stage of their lives.

What age faces the highest risk for addiction?

Adolescents are highly prone to addiction and mental disorders, with drug use typically starting during this critical period.

“The highest usage occurs among 18-25-year-olds.

Adolescence is characterized by experimentation, curiosity, susceptibility to peer pressure, rebellion, and low self-worth, making **teens especially vulnerable to substance abuse.**

This stage of life involves changing relationships and environmental influences, which can be either **risk factors or protective factors.**

Protective factors are crucial in helping young people achieve good health and reach their full potential as they grow into adults.

However, drug abuse can seriously disrupt this important stage of development, making it harder for teens to think critically and build essential cognitive skills.

Those who use drugs often face more physical and mental health issues, leading to overall poorer well-being.

Early substance use triggers long-term challenges

Starting substance use at a young age is strongly linked to long-term health and social challenges. Substances like **tobacco, alcohol, cannabis, stimulants, and opioids can increase the risk of developing substance use disorders (SUDs).**

Vulnerable individuals often **begin using substances 2–3 years earlier than their peers**, making them more likely to struggle with addiction and significant social and psychological difficulties.

Early cannabis use, in particular, has been connected to a **higher risk of severe mental disorders, as well as increased suicidal thoughts and attempts.**

Young people who start using substances early often **experience longer periods of untreated mental health issues, leading to poorer overall well-being.**

“Ultimately, early substance use greatly increases the risk of developing severe mental health disorders and long-term struggles.

2.3

Dual schizophrenia impacts overall health

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Mental health issues are a growing global concern, significantly affecting quality of life and life expectancy.

People with mental health conditions often develop **additional physical health problems** like diabetes, heart disease, and respiratory issues. At the same time, they face **barriers to accessing the proper healthcare** they need. This combination of mental and physical health issues can lead to worse health outcomes, longer hospital stays, and higher medical costs.

For individuals with dual schizophrenia, these risks are even more severe. They have an increased likelihood of metabolic disorders, cardiovascular and endocrine diseases, and infectious conditions like viral hepatitis and subcutaneous infections.

Their physical health requires close monitoring, yet they **often receive inadequate care**. Research suggests they are typically diagnosed later than individuals with substance use disorders, potentially delaying critical interventions.

Socioeconomic factors play a major role in the link between dual schizophrenia and physical health conditions. Limited access to healthcare, poor living conditions, and inadequate social support contribute to poorer outcomes.

Addressing these challenges through improved healthcare access, better living conditions, and integrated mental health support can help reduce the burden of illness and improve overall well-being.

Just like anyone else

“When it comes to seeking care for physical health issues, patients with dual schizophrenia are just like anyone else.”

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However, for these patient groups who are often hard to reach and follow up with, **a more proactive approach is essential**. These patients might find it difficult to stick to scheduled appointments and may feel anxious in waiting rooms.

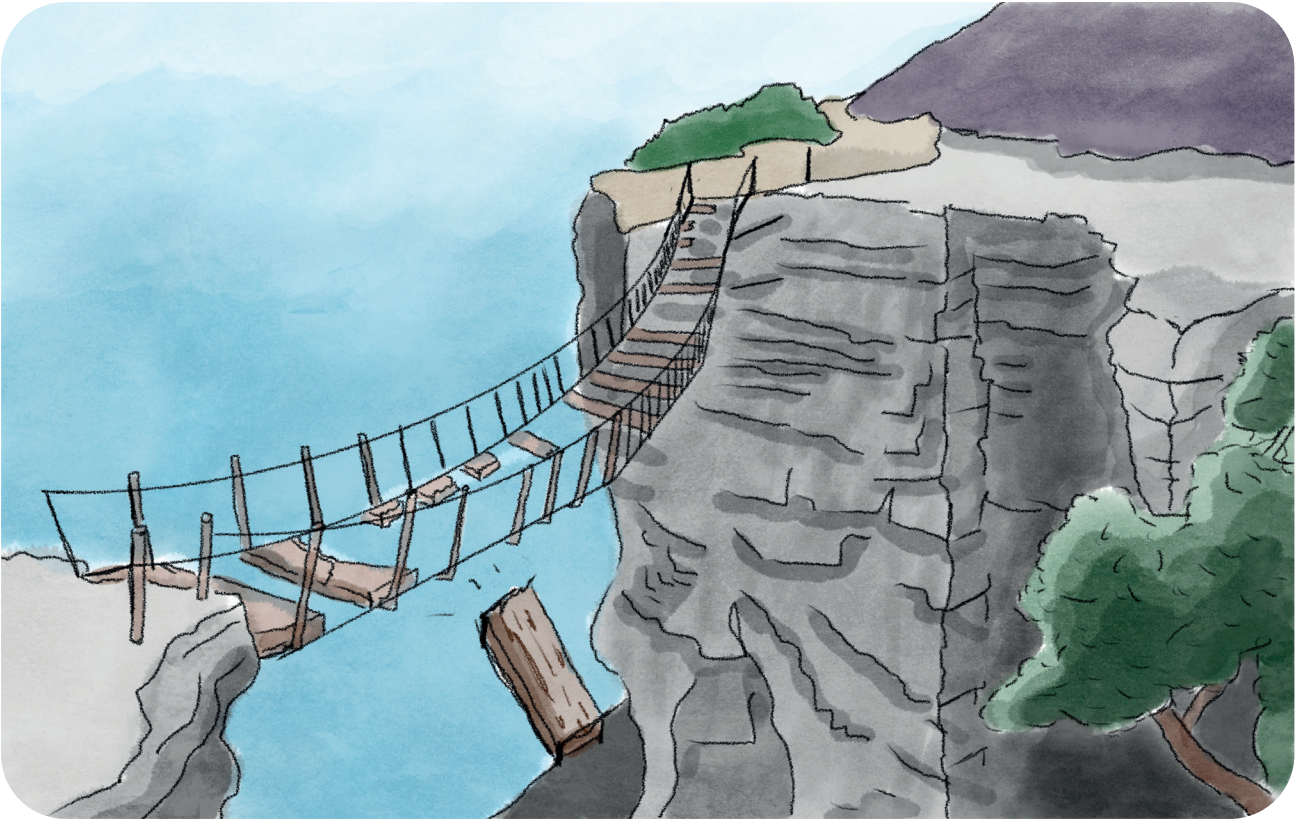
People with dual schizophrenia, who deal with both schizophrenia and substance use, require a treatment plan that covers all aspects of their condition.

TEAMING UP WITH FAMILY MEMBERS IN THEIR SUPPORT NETWORK BECOMES CRUCIAL.

2.4

Does substance use impact the effectiveness of schizophrenia treatment?

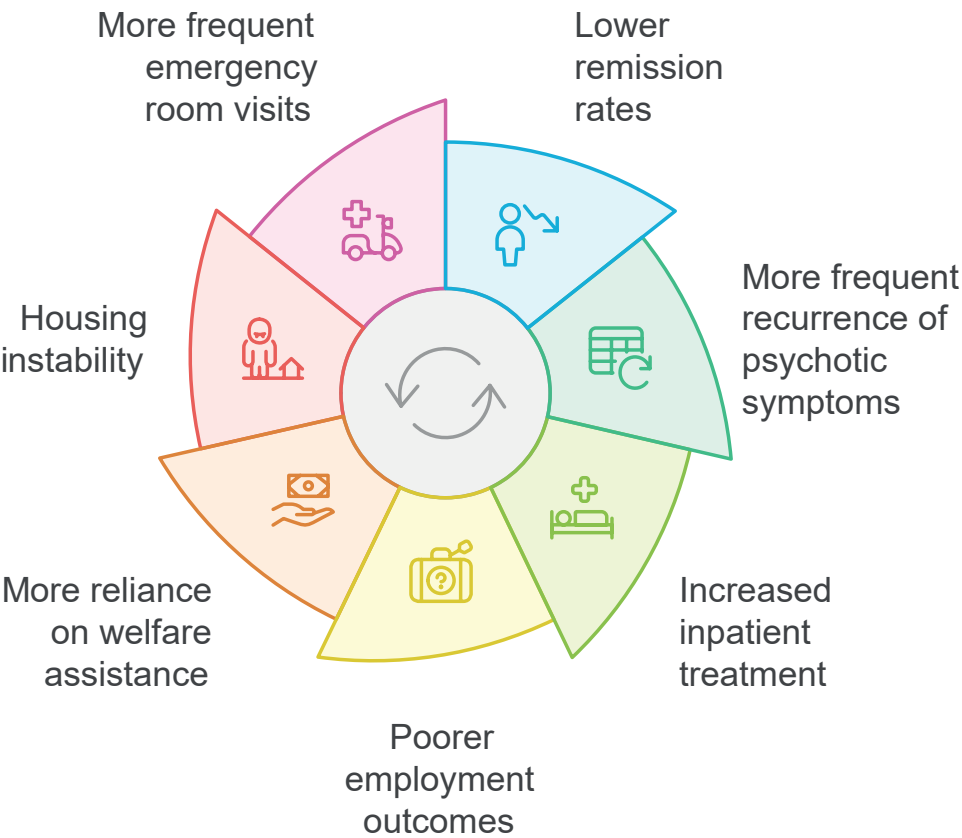
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Substance use can turn the already complex task of treating schizophrenia into an even more complicated puzzle. Evidence suggests that individuals with dual schizophrenia do not experience the same benefits from treatment as those who do not use substances.

This situation is aggravated by lower adherence to treatment programs, as they are more likely to miss clinic appointments and day program sessions and are less compliant with prescribed pharmacotherapy.

Having both schizophrenia and substance use issues creates a **challenging landscape** for effective management, often leading to:



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Why is treatment adherence so vital?

Effective treatment for dual schizophrenia must address biological, psychological, and social factors, with antipsychotic medication playing a central role.

Staying on track with medication - taking the right dose at the right time - is essential for managing symptoms, preventing relapses, and improving life expectancy. On the contrary, poor adherence, such as missing doses, taking incorrect amounts, or stopping medication without medical guidance, can weaken treatment effectiveness and increase the risk of relapse.

Relapse is a major concern, especially since experiencing one makes future relapses more likely. **Medication non-adherence is a key predictor of relapse**, particularly the first one.

Other factors, such as coexisting medical or psychiatric conditions and substance use disorders, can also contribute to relapse by either disrupting medication routines or worsening symptoms.

The type of care provided plays a critical role in long-term stability.

“**For individuals with dual schizophrenia, treatment must target both schizophrenia symptoms and those related to substance use disorder.**

Tailoring **therapy to each patient’s unique needs** increases the likelihood of adherence, leading to better outcomes and improved overall well-being.

Do addictive substances relieve symptoms of schizophrenia?

Some addictive substances interact with the brain in ways similar to psychoactive medications, temporarily easing certain schizophrenia symptoms.

For example, nicotine and cannabidiol (CBD) may provide some symptom relief in schizophrenia. However, we must take into

account that nicotine is usually consumed with tobacco in cigarettes, and CBD is usually consumed in “joints” with high Tetrahydrocannabinol (THC) levels. These other substances, as well as the act of smoking, can lead to very negative effects.

Research suggests that opiates may reduce some psychotic symptoms, while stimulants could help with negative symptoms of schizophrenia. However, both **SUBSTANCES COME WITH SERIOUS RISKS AND POTENTIAL HARM.**

Alcohol use is also common among people with schizophrenia, often as a way to cope with anxiety or psychotic symptoms rather than experiencing these symptoms as a result of drinking. Still, alcohol can worsen overall health and stability.

This perspective **does not aim to encourage substance use**, but rather promote understanding and avoid blaming patients, suggesting the **need to adopt "substitution therapy" or "replacement therapy"** in many cases.

Why do patients with schizophrenia often hide their drug use?

A study by the National Institute of Mental Health (NIMH) in the USA looked into this issue. Over a thousand participants with schizophrenia completed self-assessment

questionnaires about their use of cannabis, cocaine, and amphetamines. They were also given lab tests to confirm their answers.

The results were eye-opening: **38% of patients tested positive for these drugs, and more than half of them had not admitted to using them.**

Imagine how much higher the numbers might be if the study had also included tobacco and alcohol!

This is likely because patients living with schizophrenia fear judgment and blame for having a substance use disorder (SUD).

It's crucial to understand that **SUD is a mental disorder, not a choice.**

We need to **emphasize compassion and understanding in treating** these individuals, recognizing that they are dealing with complex and overlapping mental health challenges.

Effective TRIO for managing dual schizophrenia

The combined impact of schizophrenia and substance use disorders must be addressed with care and expertise.

To prevent negative outcomes, it is crucial to implement **EFFECTIVE PREVENTION, INDIVIDUALIZED TREATMENT, and TARGETED REHABILITATION STRATEGIES.**

Unfortunately, people with dual schizophrenia often **face stigma** and **discrimination**.

They are frequently told to “just stop using substances” without being offered real support - an approach as unrealistic as expecting someone to simply stop experiencing psychosis.

In treating substance use disorders, adopting **"harm reduction"** strategies is essential. However, it's even better to use less stigmatizing terms like **"substitution therapy"** or **"replacement therapy"** to create a more **supportive environment**.

Another downside is the **"wrong door syndrome,"** where patients might get shuffled between different treatments for schizophrenia and substance use disorders, rather than receiving coordinated therapy. This can lead to **fragmented care and less effective treatment**.

People with dual schizophrenia and their families deserve treatment rooted in modern neuroscience and precision psychiatry. We must move away from outdated, moralistic views and embrace a comprehensive approach focused on true recovery and support.

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