



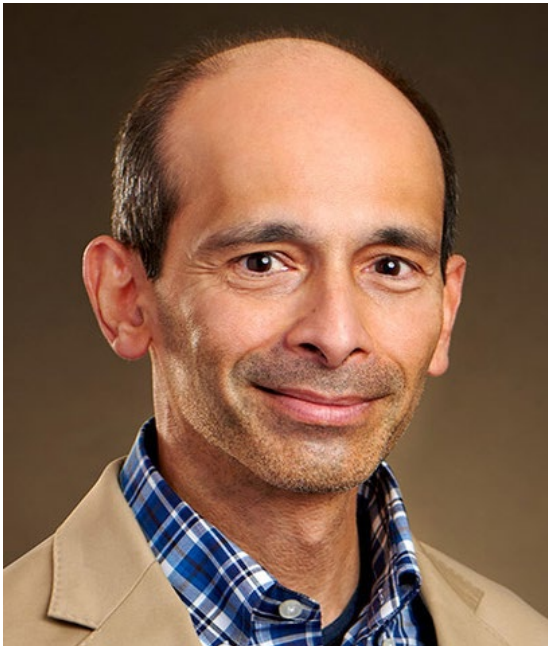
CENTER OF
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Not Just Schizophrenia: Exploring Psychosis Tied to Substance Use in Nursing Facilities

July 22, 2025



Presenter



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Dr. Desai is a board-certified geriatric psychiatrist, medical director of Idaho Memory & Aging Center, P.L.L.C., and an adjunct associate professor in the Department of Psychiatry at University of Washington School of Medicine.

He is the co-author (along with his mentor Dr. George Grossberg, a national and international leader in Geriatric Psychiatry) of the book *Psychiatric Consultation in Long-term Care: A guide for healthcare professionals*, 2nd Edition published by Cambridge University Press in 2017.

His practice focuses on helping individuals with serious mental illness and their family members live the best life possible in all care settings – home, long-term care, hospital and hospice. He has been in practice for 24 years.

Presenter



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Primary Care Physician and Physician Educator, UW Medicine Primary Care Clinics

Jenn Azen is a board-certified internal medicine and addiction medicine physician. She practices in the primary care and post-acute care with University of Washington Medicine (UW). Her post-acute care work includes working in facilities who care for socially complex residents including substance use disorders.

She is also the medical director of the UW Medical Center Addiction Consult Service. Her addiction medicine service focuses on transplant, heart disease, and oncology patients.

Her primary care panel includes home visits in adult family homes, assisted living, supportive living.

Financial Disclosures

- Dr. Desai receives royalties from Cambridge University Press for my book (co-author George Grossberg MD) titled Psychiatric Consultation in Long-Term Care: A Guide for Healthcare Professionals. 2nd Edition. 2017.
- Dr. Azen is a CVS stockholder (husband participates in employee stock plan).

Learning Objectives

1. Identify at least three substances that commonly cause psychotic disorders in nursing home residents
2. Discuss workup and treatment options for substance-induced psychotic disorder

DSM 5 TR Criteria for Schizophrenia

- Total duration of illness six months or more
- Two or more of the following for at least one month with at least one of them being (1) or (2) or (3):
 - (1) Delusions
 - (2) Hallucinations
 - (3) Disorganized speech
 - (4) Grossly disorganized or catatonic behavior
 - (5) Negative symptoms

Negative Symptoms of Schizophrenia

- **Affect** – flat (diminished expressiveness)
- **Alogia** – spontaneous talk is minimal, one-word or short answers
- **Apathy** – decreased motivation
- **Avolition** – minimal or low physical activity

Marder and Cannon. Schizophrenia. NEJM 2019.

Schizophrenia Spectrum Disorders

Schizophrenia (chronic, more than six months)

Schizoaffective disorder (chronic, more than six months)

Schizophreniform disorder (subacute, one to six months)

Brief psychotic disorder (acute, less than one month)

Delusional disorder (chronic)

Other specified schizophrenia spectrum and other psychotic disorder

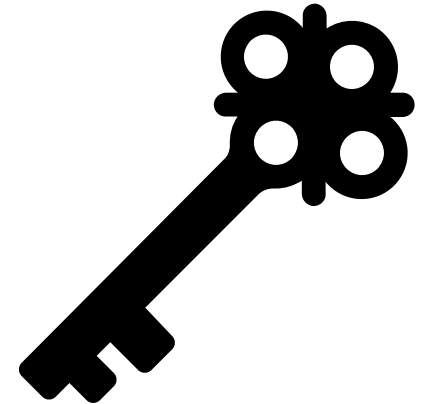
Unspecified schizophrenia spectrum and other psychotic disorder

Conditions that may present with schizophrenia-like symptoms

- **Medical / Neurological** – Psychotic disorder due to medical condition
- **Psychiatric** – Mood disorders with psychotic symptoms
- **Substance-induced psychotic disorder**
 - Intoxication related psychosis (with or without delirium)
 - Withdrawal related psychosis (with or without delirium)

Four key steps in clarifying diagnosis of schizophrenia vs. substance-induced psychosis

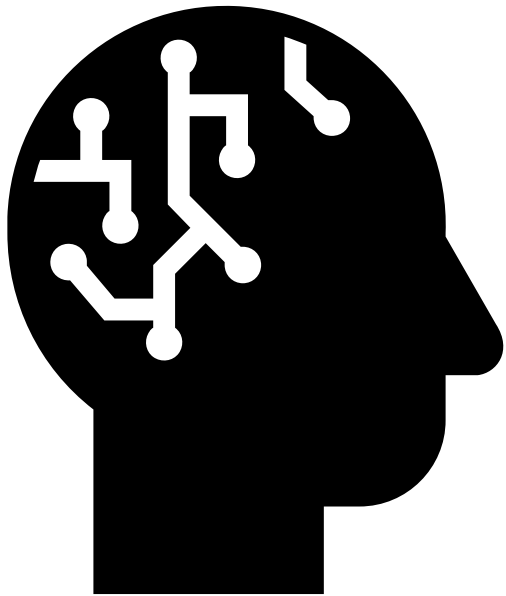
- Detailed history including from knowledgeable family / informants
- Comprehensive physical and mental status exam
- Review of previous records of psychiatric assessment and treatment
- Workup



Psychotic symptoms: Schizophrenia vs. Substance-induced

Schizophrenia	Substance-Induced
Systemic, well formed, well organized, consistent, complex, long-term	Decrease in severity and intensity over time after abstaining from substance
Throughout the day	More often in the evening and night
Normal vital signs	Vitals often abnormal (tachycardic, hypertensive)
Auditory hallucinations, complex, persistent, paranoid, commanding	Visual hallucinations
Paranoid, bizarre, grandiose themes	Paranoid or grandiose themes

Differentiating Between Psychotic Disorders



- If psychotic symptoms persist beyond one month after last exposure to implicated substance (per DSM 5 TR), then they are not due to the implicated substance (methamphetamine may be an exception).
- One month is somewhat arbitrary.

Tandon and Shariff. Substance-Induced Psychotic Disorders and Schizophrenia: Pathophysiological Insights and Clinical Implications. Am J Psychiatry 2019.

Alcohol-Related Psychotic Disorder

- **Alcohol intoxication-related psychosis (with or without delirium)**
 - Typical to have other symptoms of intoxication
 - Mood swings common, may be aggressive
- **Alcohol withdrawal-related psychosis (with or without delirium)**
 - Most common cause of substance-induced psychosis
 - High risk symptom of alcohol withdrawal, requires hospitalization due to risk of seizures, delirium tremens
 - Typical to have other signs of alcohol withdrawal (vital signs often abnormal)
 - Tactile, visual, and auditory disturbances all possible (but visible most common)

Alcohol Withdrawal

- Develops after patients stop drinking (can take up to three (3) days to develop, but often stops 12-24 hours afterwards).
- History of alcohol withdrawal puts individuals at higher risk of withdrawal in the future (even with relatively low alcohol use).
- Mild withdrawal can be treated in facility.
- **Significant withdrawal (including psychosis) is best managed in hospital due to risk of mortality.**
- Recommend thiamine supplementation with patients with heavy alcohol use.

Alcohol Withdrawal Management

- Nursing tool: CIWA-Ar can be used:
 - Mild withdrawal: Scores of 0–9.
 - Moderate withdrawal: Scores of 10–19.
 - Severe withdrawal: Scores of 20 or higher
- Symptoms can be reduced with scheduled gabapentin 600mg q6h
- When in moderate withdrawal, sweating, tremor, anxiety, patient can take **2mg lorazepam** every 4 hours as needed, max dose 6mg per 24h. Should not need this for more than 5 days.
- If the lorazepam does not improve symptoms after an hour, hospital transfer.
- If patient needs more than 6mg in a day, hospital transfer.
- If having severe withdrawal, hospital evaluation is needed. This would include the following symptoms:
 - Fever
 - Disorientation
 - Drenching sweats
 - Severe tachycardia (heart rate >120)
 - Persistent withdrawal despite meds.

Benzodiazepine Related Psychotic Disorder

- Similar to alcohol withdrawal regarding risk and management
- More common to have paresthesia, photophobia, phonophobia
- CIWA-B should be used over CIWA-A for management
- If developing psychosis, likely best managed in hospital as patient is at high risk for seizures.
- If significant withdrawal from benzodiazepines in the past, at risk for withdrawal in the future.

Strategies for Management of Benzodiazepine Taper

- Slow taper recommended with long-acting benzodiazepines
- Gabapentin high dose (600mg q6h) can be beneficial

Methamphetamine Related Psychotic Disorder

- Psychosis is a common side effect of methamphetamine intoxication
 - 40% of users can develop psychosis
 - Cumulative use over time can increase psychosis risk.
 - Genetic vulnerability of psychosis and pre-existing psych disorder puts patients at risk
- Acute psychosis can linger for up to a week after acute intoxication
- Current methamphetamine supply is more potent and lower cost, cumulative amounts of methamphetamine are higher, which puts people at higher risk for psychosis.

Symptoms of Methamphetamine Induced Psychosis

- Paranoid delusions (most common)
- Ideas of reference
- Auditory and tactile hallucinations
- Paranoia can lead to violence

Glasner-Edwards, Mooney, Methamphetamine Psychosis: Epidemiology and Management, CNS Drugs. 2014 Dec; 28(12):1115-1126.

Diagnosis of Substance-Induced Psychotic Disorder

- Presence of prominent hallucinations or delusions
- Hallucinations or delusions develop during or soon after intoxication or withdrawal from substance known to cause psychosis
- Psychotic symptoms are not actually part of a psychotic disorder
- Psychotic symptoms do not only occur during a delirium

Treatment of Acute Methamphetamine Psychosis

- Reduce stimuli for patients
- Extra food and rest
- Benzodiazepines may be beneficial
- Antipsychotics (olanzapine most commonly used)
- Most medications for acute psychosis can be discontinued within a week

Glasner-Edwards, Mooney, Methamphetamine Psychosis: Epidemiology and Management, CNS Drugs. 2014 Dec; 28(12):1115-1126.

Long-Term Methamphetamine-Induced Psychosis

- 200 people studied with methamphetamine induced psychosis
- Years of lifetime use (5+ years) puts some people at risk for persistent subtype of methamphetamine psychosis lasting greater than a month
- Some experts argue that if symptoms persist greater than a month, a primary psychotic disorder may have been induced with the substance and they meet criteria for schizophrenia

Acute vs. Long-Term Methamphetamine Induced Psychosis

Acute Methamphetamine-Induced Psychosis	Long-Term Methamphetamine-Induced Psychosis
Last less than 7 days	Persists greater than 4 weeks
Typically responds to behavioral therapies	May not respond to behavioral therapies
Typically responds to meds (antipsychotics/benzos)	Benzos not recommended Antipsychotics may not be effective (GDR recommended)
Can occur after acute intoxication	Usually develops after 5+ years of use
More common with underlying psychiatric disorder	May be related to underlying genetic vulnerability
Agitated by symptoms	Not typically agitated by symptoms

Cocaine Related Psychotic Disorder

- Similar to methamphetamine induced psychosis, but shorter time-frame
- Mood instability
- Irritability
- Paranoia can lead to aggression
- Auditory and tactile hallucinations
 - Bugs burrowing under the skin

Cocaine vs. Schizophrenia related psychosis

Cocaine related psychosis	Schizophrenia related psychosis
Fear of organized groups causing harm	Fear of organized groups causing harm
More “plausible” delusions	More bizarre delusions (see below)
More likely to have parasitosis (“cocaine bugs”)	Less likely to have parasitosis
Command hallucinations less likely to be violent	Command hallucinations more likely to related to harming themselves or others
Visual hallucinations more common (lights, bugs, shadows)	Decreased visual hallucinations
	Delusions more likely to be identity delusions, possession delusions, belief that families were imposters

Mitchell, Vierkant, Delusions and hallucinations of cocaine abusers and paranoid schizophrenics: a comparative study. J Psychol 1991 May; 125 (3): 301-10

Cannabis Related Psychotic Disorder

- More common with potency of THC in cannabis products
- May unmask underlying genetic vulnerability (particularly in young people) of schizophrenia or mania
- Paranoia common
- Hallucinations
- Increased anxiety
- Psychotic symptoms resolve after acute intoxication but lingering anxiety disorders may persist.

Hallucinogen-Related Substance Psychosis

- Designed to change perception, mood, and cognition
- Psychotic symptoms should resolve after intoxication
- hallucinogens are rarely tested in standard urine drug screen (so anticipate a negative drug screen)
- Large variety of hallucinogenic drugs available legally and illegally
- Psilocybin and ketamine are becoming more commonly available.
- Benzos are likely most helpful for acute anxiety related to intoxication, but should not be needed for more than 24h.

Opioids

- Atypical to have opioid induced psychosis
- More typical that co-use of stimulants may be source of psychosis

Work-up of Substance-Induced Psychosis

- Detailed history from patient and collateral information from friends/family/other residents.
- Vital signs! Often abnormal with acute intoxication (hypertensive, tachycardic).
- Request urine drug screen (point of care may be most helpful but may not be accurate).
- Confirmatory testing recommended for any positive drug screen.
- Room and personal search may be not be safe during acute intoxication.

General Treatment Concepts

- Provide plenty of personal space
- Provide quite dark room with reduced stimuli
- Remove items that can do harm
- Allow for plenty of food and sleep
- Consider single room if possible to protect other residents and reduce stimuli
- If medications are used, should only need for acute intoxication and meds should be stopped after 3-5 days.
- Benzodiazepine and alcohol withdrawal have low threshold to transfer to higher level of care.

Case 1

Benzodiazepine withdrawal induced psychosis:

A 51-year-old male resident, no previous history of psychosis was having visual hallucinations (seeing people and animals running around), agitation and aggression. Nurse assessed him, found out from family that he was abusing alprazolam at home (12mg daily), he was having tachycardia and high blood pressure.

Dx: alprazolam withdrawal induced psychosis.

Case 2

Alcohol withdrawal induced catatonia:

A 68-year-old male resident after two days since admission to the nursing facilities started to not talk, not move much and stay in his room and stare into space. The nurse assessed him, found out that he had alcohol addiction, he stopped drinking just prior to admission. He was sweating, had tremors and tachycardia.

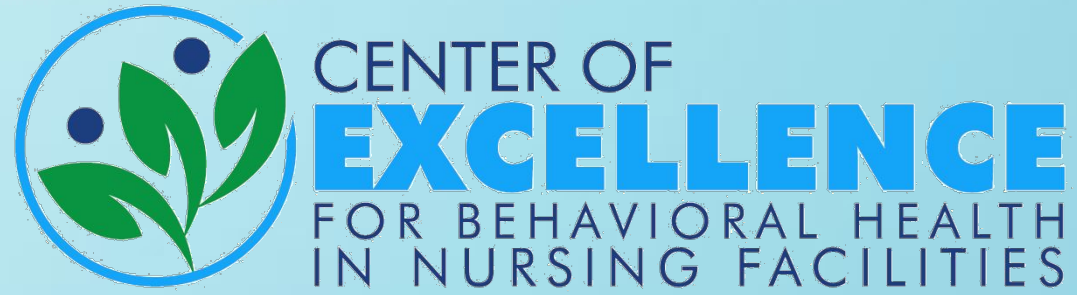
Dx: alcohol withdrawal induced catatonia.

Case 3

Alcohol withdrawal induced psychosis:

A 64-year-old female on the day of admission was stating that she is “terrified” and hearing voices that state that she is a terrible person. She was also seeing people coming to her room at night. The nurse assessed her, found out from family that she had a seizure the day before and that she had stopped drinking alcohol 3 days ago. The nurse also noted tremors, disorientation and tachycardia.

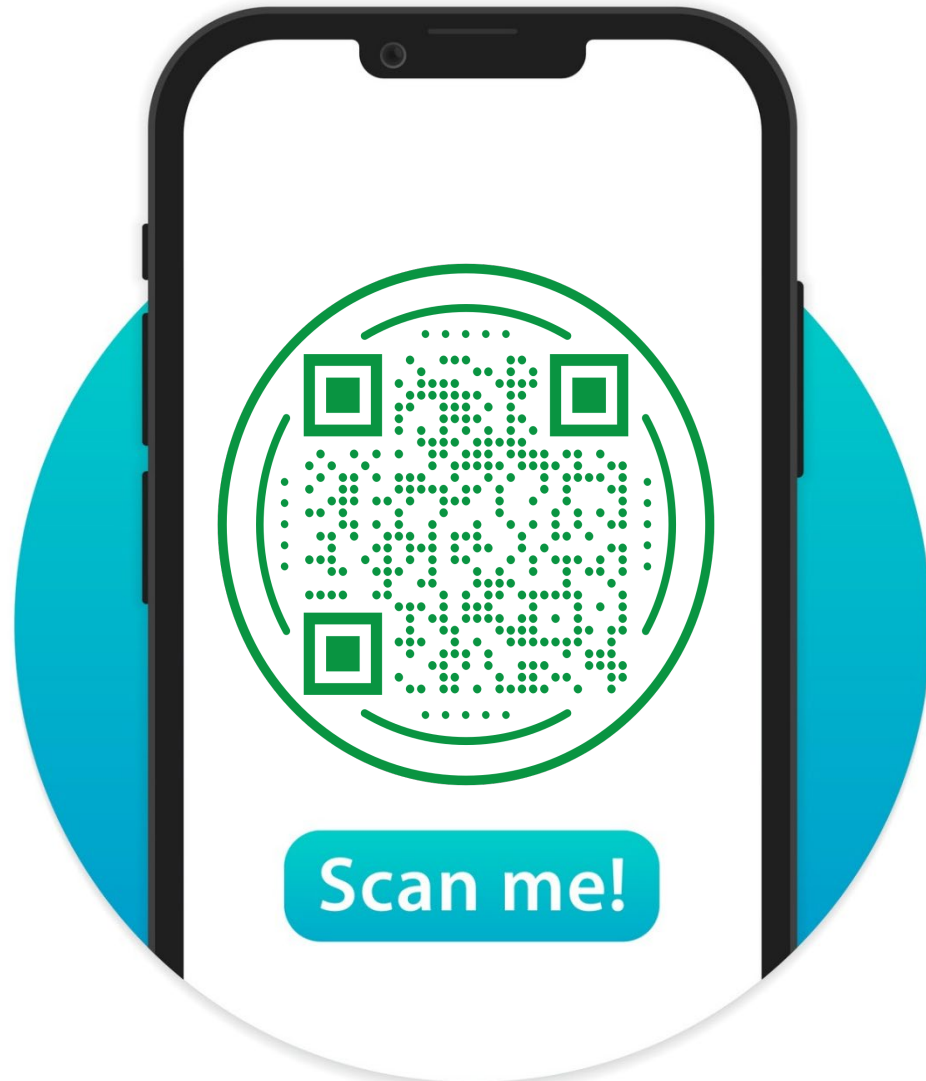
Dx: alcohol withdrawal psychosis.



Questions?



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To submit a request for assistance,
scan the QR code.

We look forward to assisting you!

Contact us:

For more information or to request assistance, we can be reached by phone at **1-844-314-1433** or by email at coeinfo@allianthealth.org.

Visit the website:

nursinghomebehavioralhealth.org

How to Submit a Request

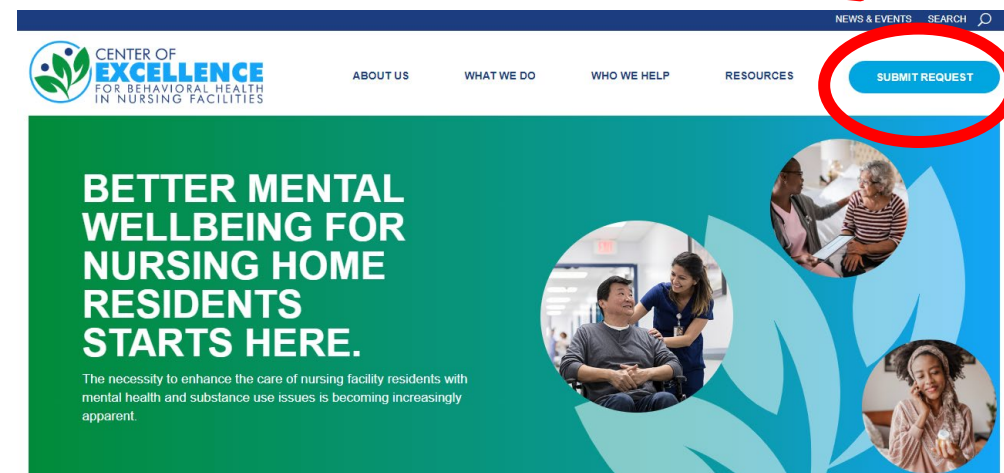
Dedicated Website

- Online form where nursing facilities can submit consultation requests
- Include CCN number and full facility name
- Online requests are responded to within **48 hours**
- <https://nursinghomebehavioralhealth.org/request-assistance>

COE-NF Voicemail Box: (844) 314-1433

- Messages will be responded to within **two (2) business days**

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Thank You!



This material was created by the Center of Excellence for Behavioral Health in Nursing Facilities. This work is made possible by grant number 1H79SM087155 from the Substance Abuse and Mental Health Services Administration (SAMHSA). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Substance Abuse and Mental Health Services Administration.