

Schizophrenia and Emergency Medicine



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KEYWORDS

- Schizophrenia • Schizoaffective disorder • Psychosis • Hallucinations • Delusions
- Agitation • Antipsychotic medication • Medical comorbidity

KEY POINTS

- Schizophrenia is a syndrome that can include a variety of symptoms, especially positive symptoms (hallucinations, delusions), negative symptoms (avolition, anhedonia, reduced social engagement), and disorganized thoughts and behaviors.
- Persons with schizophrenia may present to emergency departments for reasons directly related to schizophrenia as well as because of other mental health or medical problems.
- Antipsychotic medication (antagonists of the D2 dopamine receptor) has been a mainstay of treatment for decades, but persons also benefit from psychotherapy and supportive services.
- Persons with schizophrenia should be assessed for risk of suicide, risk of violence, risk of being unable to care for themselves, and risk of being the victims of violence as well as for other mental health and medical problems.

INTRODUCTION: EPIDEMIOLOGY

Schizophrenia and other psychotic disorders are commonly encountered around the world, with an estimated lifetime prevalence of 0.7%.¹ This number may seem small on a percentage basis, but it translates into an extremely large number of affected persons.

Persons with schizophrenia are also commonly encountered in emergency department (ED) settings. In part, this is because EDs have become important locations for persons with mental health problems to access care, likely due to many factors including being open 24 hours per day, providing evaluation and treatment regardless of an individual's ability to pay, and because community resources can be difficult to access.²

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Data from the United States National Center for Health Statistics indicate that adults with schizophrenia (operationalized in the study as persons with a diagnosis code 295 according to the International Classification of Diseases, Ninth Revision, Clinical Modification listed as a first, second, or third diagnosis) generate more than 380,000 ED visits per year, corresponding to an overall visit rate of 20.1 per 10,000 adults.³ For a slight majority of these patients (58.8%), schizophrenia itself was the primary diagnosis and reason for the visit (eg, exacerbation of psychotic symptoms, agitation, disorganization, delusions, poor self-care). However, many persons with schizophrenia presented because of another mental health problem (15.4% had another mental disorder as the primary diagnosis), which might include depression, anxiety, or substance use. Persons also presented for reasons unrelated to their mental health (a nonmental health disorder was the primary diagnosis in 25.7% of visits), with complaints that included pain, acute injury, infectious processes, and a host of other medical concerns. Persons with schizophrenia presenting to EDs were especially likely to require medical hospitalization (32.7%) or psychiatric hospitalization (16.7%) in the study.

SCHIZOPHRENIA AS A DIAGNOSIS

Diagnostic Criteria

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR),⁴ there are several core features seen across all psychotic disorders to varying degrees. These include delusions, hallucinations while fully awake, disorganized thinking, or speech that is severe enough to impair communication, disorganized or nonsensical behavior, and negative symptoms (avolition, diminished emotional expression, decreased speech output, anhedonia, and decreased engagement in social interaction). Culture and language must always be taken into account, as these shape expectations of what is considered normal versus abnormal.

For a diagnosis of schizophrenia to be rendered, symptoms must align with a specific time course and must include multiple domains (**Table 1**).⁴ Importantly, as a heterogeneous clinical syndrome, there is no single symptom that is pathognomonic for the disorder.

Symptoms most commonly emerge in late adolescence or early adulthood, and the onset can be slow and gradual or abrupt and fulminant.⁴ A prodromal period with attenuated symptoms may precede the active phase when symptoms are most prominent. Following an active phase, residual symptoms may remain. The long-term course can be highly variable, with some individuals experiencing severe, chronic, and refractory symptoms, whereas others experience periods of remission and even sustained recovery.

Associated Features

Several features are commonly associated with schizophrenia, even though they are not necessarily part of the diagnostic criteria.⁴ Persons with schizophrenia may exhibit inappropriate affect, dysphoric or irritable mood (eg, depression, anxiety, anger), unusual sleep patterns (eg, day/night reversal), cognitive deficits (including problems with social cognition), reduced attention, and interpreting irrelevant events as somehow meaningful. Neurologic soft signs can be present, such as impaired motor coordination, left-right confusion, and disinhibition of associated movements. A lack of insight into one's symptoms is another commonly associated feature.

Table 1
Summary of diagnostic criteria for schizophrenia in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision⁴

Criteria	Description
A	Symptoms in at least two areas must be present for a significant amount of time during a 1-mo period (can be shorter if a person is treated) <ol style="list-style-type: none"> 1. Delusional beliefs 2. Hallucinations 3. Disorganized thought process or speech 4. Significantly disorganized or catatonic behavior 5. Negative symptoms
B	Functioning has significantly declined since the onset of symptoms (eg, work, relationships, grooming, self-care)
C	Symptoms must be present for at least 6 mo, with at least 1 mo of active-phase symptoms (from Criterion A)
D&E	Other disorders have been ruled out (eg, schizoaffective disorder, bipolar disorder, depression with psychotic features, substance or medication-induced psychosis, psychosis due to another medical condition)
F	When autism spectrum disorder or a childhood onset communication disorder is present, schizophrenia is diagnosed only if delusions or hallucinations are prominent and all other diagnostic criteria for schizophrenia are present for at least 1 mo.

Differential Diagnosis

Schizophrenia is just one of many psychotic disorders. When an individual presents with psychotic symptoms, a broad differential diagnosis should be considered.⁴ The timing of symptoms, their relative severity across different domains, and the identification of contributing factors (eg, substance use) are important for the diagnosis. A family history may also be informative. Making a precise diagnosis is important for shaping treatment plans and advising on the prognosis. **Table 2** summarizes some important features of other psychotic disorders that should be considered when evaluating a person for possible schizophrenia.

Recommendations for Medical Evaluation

Schizophrenia is presently a clinical diagnosis, meaning that there are no definitive imaging, laboratory, or psychological tests that generate or confirm the diagnosis. Nevertheless, a thorough medical evaluation remains essential for navigating the differential diagnosis and excluding other causes of psychotic symptoms. **Box 1** describes a variety of tests that should be considered, depending on the information obtained during the history and physical.

PATHOPHYSIOLOGY

Although much studied, the pathophysiology underlying schizophrenia remains incompletely understood. Evidence has long suggested that there are multiple contributing factors and perhaps more than one pathophysiological process resulting in a final common pathway. However, because the mid-twentieth century discovery that blockade of the D2 dopamine receptors is associated with reduced psychotic symptoms (namely hallucinations, delusions, and disorganization) dopamine has been a primary focus of research.

Table 2	
Differential diagnosis: other psychotic disorders that should be considered when evaluating a person for schizophrenia	
Diagnosis	Distinguishing Features
Major depression or bipolar disorder with psychotic features	Delusions or hallucinations occur exclusively during a major depressive or manic episode. Although mood symptoms are common among persons with schizophrenia, mood episodes should be present for a minority of the time during active and residual phases.
Schizotypal personality disorder	Pervasive social and interpersonal deficits beginning by early adulthood, with odd beliefs that are below the threshold for diagnosing a psychotic disorder
Delusional disorder	A delusion lasting at least 1 mo with no other psychotic symptoms and well-preserved functioning
Brief psychotic disorder	Psychosis lasting more than 1 d but remitting by 1 mo
Schizophreniform disorder	Symptoms resemble schizophrenia but the duration is <6 mo and overall functioning is preserved
Schizoaffective disorder	A mood episode and active-phase symptoms of schizophrenia co-occur and were preceded or followed by at least 2 wk of delusions or hallucinations without prominent mood symptoms; mood symptoms must be present for >50% of the total duration of the active periods
Obsessive-compulsive disorder and body dysmorphic disorder	Preoccupations can be severe enough to be considered delusional but are distinguished from schizophrenia by prominent obsessions, compulsions, or body-focused repetitive behaviors
Post-traumatic stress disorder	Flashbacks and hypervigilance may resemble psychosis, but a traumatic event and reexperiencing symptoms must also be present
Postpartum psychosis	Psychotic symptoms in the context of recent childbirth
Substance-induced psychotic disorder	Recent substance use with symptoms lasting longer than would be expected from acute intoxication
Psychosis due to a medical condition	A general medical condition is identified as the primary cause of psychotic symptoms (eg, epilepsy, systemic lupus erythematosus, other autoimmune diseases, tumor, dementia, endocrine disorders)
Psychosis from toxic exposure	Recent exposure to a medication or other toxin that causes psychosis

Sources: DSM-5-TR,⁴ Lieberman & First 2018.⁵

Brain imaging studies have found robust evidence for dysfunction of the dopamine system in schizophrenia.⁶ For example, radioligand displacement studies have found that persons with schizophrenia show increased dopamine release in response to low-dose amphetamine, which correlates with transient worsening of psychotic

Box 1**Suggested medical and neurologic tests when evaluating for schizophrenia**

Complete blood count
 Comprehensive metabolic panel
 Thyroid-stimulating hormone level
 Drug screen
 Ethanol level
 Inflammatory markers
 Syphilis testing
 Medication levels
 Electroencephalogram (EEG)^a
 Brain imaging^a

^aEEG and brain imaging are not necessarily performed on all patients but are indicated if there is clinical suspicion for a neurologic event or process that these tests could evaluate.

Source: Lieberman & First, 2018.⁵

symptoms. Persons with schizophrenia show increased baseline levels of synaptic dopamine in the striatum. Elevated striatal dopamine synthesis capacity has also been observed and may correlate with the severity of psychotic symptoms. Elevations in striatal dopamine seem to be limited to striatal projections, whereas mesocortical projections (especially to the dorsolateral prefrontal cortex) have reduced dopamine release compared with healthy controls. Although there is little controversy about dysregulation of dopamine pathways being a core feature of psychotic symptoms in schizophrenia, dysregulation of other neurotransmitters (especially glutamate and gamma-aminobutyric acid) has also been implicated in the disorder.⁷

Genetic studies have provided several insights into the origins of schizophrenia.⁷ Schizophrenia's heritability is high, approximately 80%, but in most cases, it seems not to be associated with any one gene. Linkage studies have identified several genes with important roles in neurodevelopment to be implicated in schizophrenia (erb-B2 receptor tyrosine kinase 4 [ERBB4], dystrobrevin binding protein 1 [DTNBP1], neuregulin 1 [NGR-1], disrupted in schizophrenia 1 [DISC1], AKT serine/threonine kinase 1 [AKT1], regulator of G-protein signaling 4 [RGS-4], catechol-O-methyltransferase [COMT], vesicular monoamine transporter 2 [VMAT2], and cardiomyopathy associated 5 [CMYA5]). Structural variations or copy number variants have been identified as well, often disrupting genes involved in neurodevelopmental pathways related to synaptic development and function (neurexin 1 [NRXN1], amyloid beta precursor protein binding family A member 2 [APBA2], neureglin 1 [NRG1], contactin associated protein 2 [CNTNAP2]). These variations tend to be unique and rare in the general population but can confer significant risk of schizophrenia to the affected individuals. Genome-wide association studies have also found well over 100 single-nucleotide polymorphisms that are associated with schizophrenia (eg, major histocompatibility complex [MHC] region of chromosome 6, neurogranin [NRGN], transcription factor 4 [TCF4]). Many of these single-nucleotide polymorphisms are associated with central immune functions, the D2 dopamine receptor, glutamatergic neurotransmission, and synaptic plasticity. These various discoveries suggest that schizophrenia is a disorder with a multifactorial etiology, likely involving multiple genetic risk factors which can interact with environmental factors to cause a symptomatic state.

Some important environmental factors have been identified that confer increased the risk of developing schizophrenia. Examples include maternal malnutrition during gestation, low maternal folate levels during pregnancy, maternal exposure to infection during gestation, obstetric complications, advanced paternal age, and living in an urban environment.⁸

A particular environmental exposure that has been associated with schizophrenia and other psychotic disorders is the use of cannabis and related products.⁹ Both observational and experimental studies have identified an association between cannabis use and the onset and persistence of psychotic disorders. The risk of psychosis increases with more cannabis exposure, use at an earlier age, and use of higher potency and synthetic products containing high levels of tetrahydrocannabinol relative to cannabidiol (cannabidiol may lessen the psychotogenic effects of tetrahydrocannabinol). Because this is a potentially modifiable risk factor, it presents a rare opportunity to alter the schizophrenia burden in the population through public health education.

TREATING SCHIZOPHRENIA

The American Psychiatric Association (APA) issued new practice guidelines in 2021 that provide evidence-based recommendations for both pharmacologic and non-pharmacological treatments for schizophrenia.¹⁰

Pharmacologic Treatments

The APA recommends treating patients with schizophrenia with antipsychotic medication (D2 antagonists), with ongoing monitoring of treatment effectiveness and adverse effects.¹⁰ If symptoms improve, the same antipsychotic medication should be continued. No algorithm exists to determine which antipsychotic should be selected; rather the choice is guided by the patient's preferences, treatment history, recovery goals, and an element of trial and error. **Table 3** describes the side effect profiles of some commonly used antipsychotic medications and illustrates the diversity of side effects that patients and prescribers must weigh when selecting an antipsychotic medication.

Many of these adverse effects have effective treatments.¹⁰ Acute dystonia should be treated with anticholinergic medication (eg, benztropine or diphenhydramine). Common practice is to change the antipsychotic medication if acute dystonia occurs. Parkinsonism can be treated by reducing the dose of the antipsychotic medication,

Medication	Level of Risk for Each Adverse Effect				Weight Gain
	Akathisia	Parkinsonism	Sedation	Dystonia	
Chlorpromazine	Moderate	Moderate	High	Moderate	Moderate
Haloperidol	High	High	Low	High	Low
Aripiprazole	Moderate	Low	Low	Low	Low
Clozapine	Low	Low	High	Low	High
Olanzapine	Moderate	Moderate	High	Low	High
Risperidone	Moderate	Moderate	Moderate	Moderate	Moderate

Adapted from APA 2021.¹⁰

changing to a different antipsychotic medication (eg, quetiapine), or treating with anticholinergic medication. If akathisia occurs (uncomfortable restlessness and urge to move), the antipsychotic medication dose can be lowered, the patient can switch to a different antipsychotic medication, a benzodiazepine can be added to the treatment regimen, or a beta-adrenergic blocking agent can be added. For patients who develop moderate to severe tardive dyskinesia (frequently taking the form of involuntary movements of facial muscles), a trial of a reversible inhibitor of the VMAT2 is indicated.

Among the antipsychotic medication options, clozapine is specifically recommended in a few circumstances: when patients have treatment-resistant symptoms, when there is a substantial risk of suicide, or when there is high risk for violence or agitation.¹⁰ Unlike other antipsychotic medications, where the dose can be escalated rapidly once tolerability is established, clozapine requires a slow titration to minimize risks of seizure, excessive sedation, and orthostatic hypotension. In the United States, patients who receive clozapine must be registered with the Risk Evaluation and Mitigation Strategy program, which tracks the patient's absolute neutrophil count to avoid potentially life-threatening neutropenia.

Long-acting injectables exist for some antipsychotic medications and can be used for patients with poor or uncertain adherence or for patients who prefer this route of administration.¹⁰ Commonly, an oral formulation is used first, in order to establish tolerability and effectiveness, and then the patient transitions to the long-acting injectable.

A rare but potentially fatal medical emergency that can occur in the context of antipsychotic treatment is neuroleptic malignant syndrome, which is identified by the triad of rigidity, hyperthermia, and sympathetic nervous system lability (including hypertension and tachycardia).¹⁰ Additional features often include elevated serum creatine kinase, tachypnea, and altered mental status without any other clear etiology. Treatment involves stopping the antipsychotic medication and providing supportive care (to maintain hydration, treat fevers, and support cardiovascular, renal, and other organ functions).

Non-pharmacological Treatments

A large number of non-pharmacological treatments have been developed for schizophrenia and should be incorporated into a comprehensive treatment plan.¹⁰ Individuals experiencing a first-episode of psychosis should be treated by a coordinated specialty care program (a clinic or treatment team specializing in first-episode interventions). Additional interventions should include cognitive behavioral therapy for psychosis, supportive psychotherapy, psychoeducation, cognitive remediation, social skills training, and supported employment services. For individuals who have poor engagement with services and thus experience frequent relapses or social disruption (eg, housing instability or legal problems), Assertive Community Treatment should be used (a multidisciplinary team that can engage patients in their homes or other community settings). Family interventions are indicated for individuals who have ongoing contact with family members. The amount and sequence of these interventions will depend on the individual's recovery goals.

SCHIZOPHRENIA AND SAFETY CONSIDERATIONS

Suicide Risk

Suicide risk is increased among patients with schizophrenia. Although statistics vary, it is estimated that approximately 5% to 13% of patients with schizophrenia die by suicide.¹¹ Risk factors include being male, identifying as Caucasian, having higher

intelligence scores, living alone or not with family, experiencing recent loss events, having prior suicide attempts, and reporting a family history of depression.¹² Suicide is less associated with psychotic symptoms and more closely correlated with affective symptoms, psychomotor agitation, and awareness of one's illness.¹¹ Previous suicidal behavior is such a significant predictor among patients with schizophrenia who ultimately completed suicide that Pompili found 93% of that cohort had engaged in prior suicidal behavior.¹¹ Command auditory hallucinations are of particular concern to clinicians as the patients are assumed to be at a higher risk for obeying the hallucinatory commands. However, the presence of such command auditory hallucinations was not demonstrated to confer a significantly higher risk for suicide versus patients with schizophrenia without such commanding perceptual disturbances.¹³ Age is also a risk factor, with the suicide risk for young adults with schizophrenia being three times higher than the risk for adults with schizophrenia.¹¹

Evidence supports screening patients for suicide risk routinely. In one study, an estimated 49% of psychiatric patients (with mixed diagnoses) who completed suicide received care within the 4 weeks leading up to the suicide.¹⁴ Standardized tools such as the Columbia-Suicide Severity Rating Scale can facilitate screening and assessment of suicide risk.¹⁵

As mentioned previously, clozapine should be considered for patients at high risk of suicide. This medication has a United States Food and Drug Administration-approved indication for reducing the risk of suicide, largely after the InterSePT study found clozapine was associated with a 24% decrease in the hazard ratio for time to a suicide attempt or hospitalization to prevent suicide.¹⁶

Risk for Violence

Violence risk associated with schizophrenia has been a topic of much research and public attention, yet interpretations are complicated by the wide variety of symptoms and co-occurring disorders that may accompany schizophrenia. A 2012 study from the National Epidemiologic Survey on Alcohol and Related Conditions reported that 2.9% of patients with serious mental illness (schizophrenia included) committed violent acts between years 2 and 4 following the baseline assessment, compared with 0.8% of people with no serious mental illness or substance use disorder. In the same sample, 10% of people committed violent acts if both serious mental illness and substance use were co-occurring.¹⁷ Another landmark study, the MacArthur Violence Risk Assessment Study demonstrated that only two clinical symptoms were associated with violent acts in psychiatric patients after discharge: command auditory hallucinations and psychopathy. Although these two highly cited studies offer some evidence describing violence risk, predicting violence risk for an individual patient with schizophrenia remains a difficult task. Although there is some evidence for the validity and reliability of violence risk assessment instruments in the psychiatric population, little evidence exists for the use of such instruments in patients with schizophrenia.¹⁸

Studies have suggested that medication adherence can reduce the risk of violence. Maintaining a positive therapeutic alliance with the patients—in addition to being valuable in and of itself—can perhaps lessen the likelihood of medication nonadherence, or at least facilitate early identification and close monitoring when patients discontinue medication.¹⁹

Risk for Being the Victim of a Crime

A growing body of evidence has also noted that persons with schizophrenia are at risk of being the victims of both violent and nonviolent crimes.^{20–22} According to a 2005

study, 25.32% of patients with a diagnosis of severe mental illness had been victims of a crime in the 1-year period that was studied: a rate that is 11.8 times higher than the general population. Patients with severe mental illness were 140 times more likely to be a victim of personal theft compared with the general population.²³ Further study is needed to understand the pathways to victimization and what interventions can reduce vulnerability among this population.²⁴

Inability to Care for Self

Persons with schizophrenia are sometimes hospitalized due to inability to care for self, a notion with a complicated history that is subject to various interpretations. In the 1975 Supreme Court case of *O'Connor v Donaldson*, the Court established the constitutionality of civil commitment for three reasons (danger to self, danger to others, and inability to care for self) and described the term “inability to care for self” as a state of being “hopeless to avoid the hazards of liberty” (*O'Connor v Donaldson*, 422 US 563 (1975)). Since this federal clarification, state policymakers and clinicians have continued to wrestle with the definition and application of inability to care for self. For example, North Carolina defines the phrase as “reasonable probability of his suffering serious physical debilitation within the near future unless adequate treatment is given...” and explains, “A showing of behavior that is grossly inappropriate to the situation, or of other evidence of severely impaired insight and judgment shall create a prima facie inference that the individual is unable to care for himself...” (N.C. Gen. Stat. § 122C-3(11)). Alternatively, Connecticut describes the phrase as “inability or failure to provide for his or her own basic human needs such as essential food, clothing, shelter or safety” (Conn. Gen. Stat. Ann. § 17a.495(a)). Idaho state law uses the language “inability to provide for any of his own basic personal needs such as nourishment, or essential clothing, medical care, shelter or safety” (Idaho Code § 66–317(13)). As the definition and terms of civil commitment differ by region, every clinician should be well-versed in the legal definitions and boundaries of civil commitment in the states or territories where they practice.

SPECIAL TOPICS IN SCHIZOPHRENIA

Schizophrenia and Substance Use

Repeated large-scale studies have shown that nearly 50% of patients with schizophrenia have a co-occurring substance use disorder.²⁵ The most commonly used substances among patients with schizophrenia are cigarettes, alcohol, cannabis, and cocaine.²⁶ There is strong evidence for the effectiveness of integrated treatment that combines the treatment of a patient’s psychotic illness with their substance use disorder, preferably performed in a single program or by a single practitioner.^{27,28} Dual-diagnosis Motivational Interviewing may enhance treatment engagement among persons with schizophrenia and substance use disorders.²⁹

Schizophrenia and Decision-Making Capacity

Emergency clinicians are likely to encounter individuals with schizophrenia who refuse recommended medical or psychiatric interventions, which raises questions about decision-making capacity among this patient population. It is important to keep in mind that schizophrenia affects each individual differently, so broad conclusions are problematic. Nevertheless, some key principles apply.

Medical decision-making ability (capacity) is related to one specific medical decision at one discrete time during which the evaluation is taking place. During a capacity

assessment, the totality of the person's understanding of the issue and the person's cognitive abilities should be fully examined. For a person to demonstrate capacity (whether or not a mental illness is present), the person must meet four key measures: the ability to communicate a choice, the ability to understand the relevant information involved in the decision, the ability to appreciate the situation and its consequences, and the ability to reason about treatment options.³⁰ A review by Jeste and colleagues demonstrated that 10% to 52% of people with schizophrenia, compared with 0% to 18% of nonpsychiatric controls were classified as not having capacity.³¹ The large percentage range, in addition to the overlapping rates, illustrates that a diagnosis of schizophrenia alone does not by itself indicate whether the patient has decision-making capacity.

SUMMARY

Although there remains much work to be done to elucidate further the causes of schizophrenia and other psychotic disorders and to develop preventive and disease-modifying interventions, it is also undeniably true that considerable progress has been made in recent decades that has advanced the scientific understanding of these disorders and created evidence-based treatments that are measurably beneficial for persons with these disorders.

Emergency physicians may be vulnerable to feeling frustrated or intimidated by schizophrenia and other chronic psychotic disorders if they only encounter affected patients during moments of acute crisis or primarily see the most chronic and refractory cases. Emergency physicians should keep in mind that there are countless others whose illness is well-managed, who are living full and productive lives in the community, and who will hardly ever visit the ED.

Although the patient with an acute exacerbation of schizophrenia or another psychotic disorder is likely to have different immediate needs than the patient with an acute coronary syndrome, a cerebral vascular accident, or a major trauma, it is no less of a health care emergency. ED teams that provide a safe place and rapid access to psychiatric evaluation and care provide a critically important service to patients, their families, and the community.

CLINICS CARE POINTS

- Schizophrenia is a clinical syndrome that often includes positive symptoms (eg, hallucinations, delusions), negative symptoms (eg, avolition), and disorganization (illogical thoughts or speech).
- Schizophrenia is differentiated from other psychotic disorders by its time course, associated features, and symptom severity.
- Treatment involves D2 antagonists (antipsychotic medication) accompanied by clinical monitoring for treatment effectiveness and adverse effects. Non-pharmacological therapies (psychotherapy, social skills training, family therapy) are of great value.
- When selecting an antipsychotic medication, clinicians should be guided by patient preference, treatment history, and recovery goals.
- Clinicians should remain alert for suicide risk factors, because persons with schizophrenia are at markedly increased risk of suicide compared with the general population.
- Having a diagnosis of schizophrenia may or may not affect medical decision-making capacity. A thorough capacity assessment should always be performed when patients refuse recommended treatment.

DISCLOSURES

The authors have no conflicts of interest to report.

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