

Understanding Schizophrenia

Schizophrenia is a chronic, serious, and often severely disabling brain disorder that affects 24 million people worldwide¹ and over 2 million people in the U.S.²

The social and economic burden of schizophrenia is tremendous, not only for people living with schizophrenia but also for their families, caregivers, and society. On average, life expectancy is about 15 years shorter for a person living with schizophrenia compared with someone without the disease.²

People living with serious mental health disorders, like schizophrenia, are often the targets of negative attitudes and social labels that lead to stigma. Stigma associated with schizophrenia can precipitate initial episodes of psychosis, trigger relapses, and promote a more severe disease course.³



Symptoms of schizophrenia⁴⁻⁸

Schizophrenia includes positive symptoms (abnormal thoughts and behaviors), negative symptoms (lessening or absence of certain behaviors), and cognitive impairment.

Positive symptoms

- Psychosis
- Delusions: fixed, false beliefs
- Hallucinations: auditory, visual, olfactory, tactile
- Disorganized thinking

Negative symptoms

- Blunted affect, diminished vocal and facial expression
- Avoidance of communication
- Emotional withdrawal
- Social isolation
- Difficulty feeling pleasure
- Lack of interest or motivation

Cognitive impairment

- Attention/vigilance
- Working memory
- Verbal and visual learning
- Reasoning and problem solving
- Social cognition

Schizophrenia onset

Schizophrenia symptoms typically present in the early to mid-20s, but early-onset schizophrenia can appear before the age of 18.^{9,10}

Early-onset schizophrenia is rare, but an area of high unmet need; available antipsychotic treatments offer limited efficacy, leaving frequent residual symptoms, and a high burden of side-effects.¹⁰

Comorbidities in people living with schizophrenia

56% of people with schizophrenia live with another mental or behavioral condition, including substance abuse disorders, anxiety disorders, and depression.¹¹

Schizophrenia is additionally associated with numerous comorbidities:^{11,12}



More than
1 in 3
have high blood pressure¹³



Nearly
1 in 2
have measured obesity¹³



1 in 3
have metabolic syndrome¹³



At least
2 in 5
have dyslipidemia (unhealthy cholesterol levels)¹³

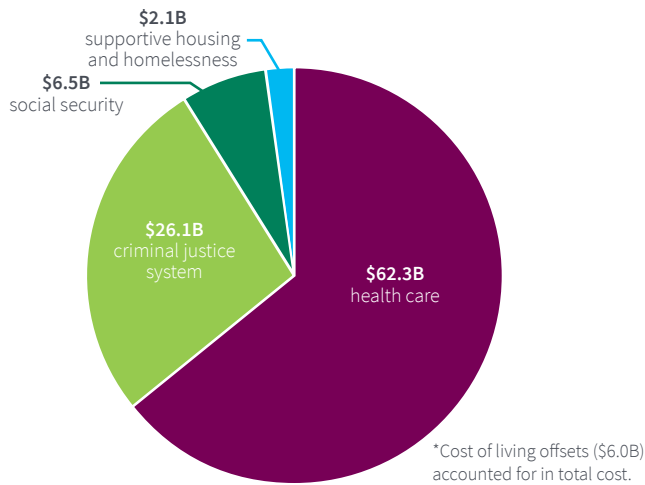


There is
1.4-1.8x
higher risk of type II diabetes^{14,15}

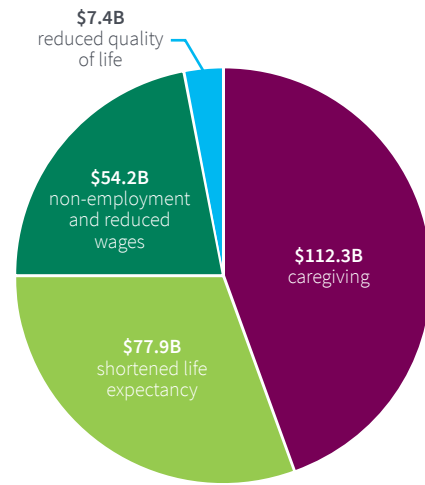
The cost of schizophrenia

The total societal cost of schizophrenia in the United States was estimated to be \$343.2 billion in 2019.¹⁶

\$97.3 billion in direct costs*



\$251.9 billion in indirect costs



Current schizophrenia treatment landscape



Treatment of schizophrenia involves psychosocial and pharmacologic interventions to prevent progression or relapse of symptoms and to reduce stress that can precipitate psychotic episodes.^{17,18}



Evidence suggests that treating first-episode psychosis over the first three years of illness with pharmaceutical, social, and psychological interventions improves outcomes.¹⁸



New mechanisms to treat schizophrenia are needed. For nearly 70 years, pharmacological schizophrenia treatment has primarily focused on blocking dopamine 2 (D2) receptors with typical and atypical antipsychotics.¹⁹

Unmet needs in schizophrenia treatment



Historically, negative and cognitive impairment symptoms of schizophrenia are much less responsive to pharmacotherapy in both the first episode of psychosis and in schizophrenia.²⁰



Antipsychotic medications often used to treat schizophrenia can cause serious side effects, such as uncontrollable movements in the face and limbs.²¹ These movement problems can persist after medications are stopped and may become irreversible.²²



Approximately one-third of those living with schizophrenia are treatment-resistant or have been unable to find treatments to adequately address their symptoms.^{23,24}



Adherence to schizophrenia treatments is low, with reports of over a quarter of people not taking their medication due to the associated side effects.²⁵



The relapse rate within the first years after schizophrenia onset has been estimated to be about 34% to 37%, while the lifetime risk of relapse was up to 70%.^{26,27}

Drugs with novel mechanisms of action that are both efficacious and have a differentiated side effect profile from currently available medicines must be explored to help address these unmet needs.

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