

Understanding schizophrenia



Schizophrenia is a severe and complex disorder that has devastating effects on those affected and their family members. It is caused by a genetic or physiological predisposition triggered by stressful events. Although there is no cure, treatment can help.

What is schizophrenia?

Schizophrenia is a chronic, severe, and disabling brain disorder. It affects about 1 per cent of people all over the world and has been recognised throughout recorded history. People with schizophrenia may hear voices other people don't hear or believe others are reading their minds, controlling their thoughts or plotting to harm them. These experiences are terrifying and can cause fearfulness, withdrawal or extreme agitation.

People with schizophrenia may not make sense when they talk, may sit for hours without moving or talking much, or can seem perfectly fine until they talk about what they're really thinking. Since many people with schizophrenia have difficulty holding a job or caring for themselves, the burden on their families and society is significant. Available treatments can relieve many of the disorder's symptoms, but most people who have schizophrenia must cope with some residual symptoms for as long as they live.

Nevertheless, this is an era of hope for people with this illness and their families, as many lead rewarding and meaningful lives in the community. Researchers are developing more effective medications and using new research tools to understand the causes of schizophrenia and find ways to prevent and treat it.

When does it start and who gets it?

Psychotic symptoms (such as hallucinations and delusions) usually start in men in their late teens and early twenties and in women in their mid-twenties to early thirties. They seldom occur after age 45 and only rarely before puberty, although cases of schizophrenia in children as young as five have been reported.

In adolescents, the first signs can include a change of friends, a drop in grades, sleep problems and irritability. Since many normal adolescents also behave in this way, a diagnosis can be difficult to make at this stage. In young people who go on to develop the disease, this is called the "prodromal" period.

Research has shown that schizophrenia affects men and women equally and occurs at similar rates in all ethnic groups around the world.

What are the symptoms of schizophrenia?

The symptoms of schizophrenia fall into three broad categories:

- **Positive symptoms** are unusual thoughts or perceptions that include hallucinations (the experience of sensory events without any input from the environment), delusions (false personal beliefs) and thought disorder.
- **Negative symptoms** represent a loss or a decrease in the ability to initiate plans, speak, express emotion, or find pleasure in everyday life. These symptoms are harder to recognise as part of the disorder and can be mistaken for laziness or depression.
- **Cognitive symptoms** include problems with attention, certain types of memory and the executive functions that allow us to process information and make decisions based on the information, plan and organise. These symptoms can also be difficult to recognise as part of the disorder, but are the most disabling in terms of leading a normal life.



Although there still is no cure, developments in science and technology have helped scientists to better understand the causes and improve treatments. Many people with schizophrenia can now improve enough to live independent, fulfilling lives.

Are people with schizophrenia violent?

Despite what you may have seen in the movies or in the media, people with schizophrenia are not especially prone to violence and often prefer to be left alone. Studies show that if people have no record of criminal violence before they develop schizophrenia and are not substance abusers, they are unlikely to commit crimes after they become ill. Most violent crimes are not committed by people with schizophrenia and most people with schizophrenia do not commit violent crimes.

Substance abuse always increases violent behaviour, whether or not the person has schizophrenia. If someone with paranoid schizophrenia becomes violent, their violence is most often directed at family members and takes place at home.

What causes schizophrenia?

As is the case for many other illnesses, schizophrenia is believed to be caused by a combination of environmental and genetic factors. Researchers have long known that schizophrenia runs in families. It occurs in 1 per cent of the general population, but is seen in 10 per cent of people with a close relative (a parent, brother, or sister) with the disorder.

People who have extended family (aunts, uncles, grandparents, or cousins) with the disease also develop schizophrenia more often than the general population.

The identical twin of a person with schizophrenia is most at risk, with a 40-65 per cent chance of developing the problem.

It also appears that an imbalance in the complex, interrelated chemical reactions of the brain involving the neurotransmitters dopamine and glutamate (and possibly others) plays a role in schizophrenia. Neurotransmitters are substances that allow brain cells to communicate with one another.

Although all these findings suggest a physiological vulnerability for the development of schizophrenia, biology alone is not sufficient to cause the disorder. Many environmental factors have been suggested as risk factors, such as exposure to viruses or malnutrition in the womb, problems during birth and psychosocial factors, such as stressful environmental conditions.

How is schizophrenia treated?

Since the causes of schizophrenia are still unknown, current treatments focus on eliminating the symptoms of the disease. Treatments usually include:

- **Anti-psychotic medications.**

Anti-psychotic medications effectively reduce the positive symptoms of schizophrenia. While these drugs have greatly improved the lives of many patients, they do not cure schizophrenia.

Unfortunately people with schizophrenia often forget to take their medication or just stop, because they believe they are not ill or can't stand the side-effects, or because of their delusional thinking (they may believe, for example, that someone is trying to poison them).

Self-help groups for people with schizophrenia and their families are becoming increasingly common. Although professional therapists are not involved, the group members are a continuing source of mutual support and comfort for each other, which is also therapeutic. People in self-help groups know that others are facing the same problems they face and no longer feel isolated by their illness or the illness of their loved one.



- ***Psychosocial treatment.***

Numerous studies have found that psychosocial treatments can help patients already stabilised on antipsychotic medication deal with certain aspects of schizophrenia, such as difficulty with communication, motivation, self-care, work, and establishing and maintaining relationships with others. Learning and using coping mechanisms to address these problems allows these people to attend school work, and socialise. Patients who receive regular psychosocial treatment also adhere better to their medication schedule and have fewer relapses and hospitalisations.

- ***Illness management skills.***

People with schizophrenia can take an active role in managing their own illness. Once they learn basic facts about schizophrenia and the principles of schizophrenia treatment, they can make informed decisions about their care. If they are taught how to monitor the early warning signs of relapse and make a plan to respond to these signs, they can learn to prevent relapses. Patients can also be taught more effective coping skills to deal with persistent symptoms.

- ***Integrated treatment for co-occurring substance abuse.***

Substance abuse is the most common co-occurring disorder in people with schizophrenia, but ordinary substance abuse treatment programs usually do not address this population's special needs. When schizophrenia treatment programs and drug treatment programs are integrated, better outcomes result.

- ***Rehabilitation.***

Rehabilitation emphasises social and vocational training to help people with schizophrenia function more effectively in the community. Rehabilitation programs can include vocational counselling, job training, money management, learning to use public transportation, and practicing social and workplace communication skills.

- ***Family education.***

Patients with schizophrenia are often discharged from the hospital into the care of their families, so it's important that family members know as much as possible about the disease in order to prevent relapses. Family members should be able to use different kinds of treatment adherence programs and have an arsenal of coping strategies and problem-solving skills to manage their ill relative effectively. Knowing where to find outpatient and family services that support people with schizophrenia and their caregivers is also valuable.

- ***Cognitive-behavioural therapy.***

Cognitive-behavioural therapy is useful for patients with symptoms that persist even when they take medication. The cognitive therapist teaches people with schizophrenia how to test the reality of their thoughts and perceptions, how to "not listen" to their voices, and how to shake off the apathy that often immobilises them. This treatment appears to be effective in reducing the severity of symptoms and decreasing the risk of relapse.