

Schizophrenia is a chronic and disabling brain disorder affecting one out of a hundred people (about one percent of the population) all over the world, including 3.2 million Americans. Ranking among the top ten causes of disability worldwide, schizophrenia takes a heavy toll on patients and their families, however, ongoing research has led to new, more effective treatments and supports that improve the lives of many patients.

What is Schizophrenia?

People with the disorder often have hallucinations, both aural and visual, and suffer from delusions, or thoughts not based in reality. Because their cognitive processes are often confused, they may have difficulty managing routine tasks of daily life, including social relationships. All of these symptoms have a devastating and debilitating effect on the lives of those with the disorder, and their families.

Available treatments can relieve many of the disorder's symptoms, but most people who have schizophrenia must cope with some residual symptoms as long as they live. Nevertheless, this is a time of hope for people with schizophrenia and their families. Many people with the disorder now 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 to find ways to prevent and treat it.

When Does It Start and Who Gets It?

Psychotic symptoms (such as hallucinations and delusions) usually emerge 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. In adolescents, the first signs can include a change of friends, a drop in grades, sleep problems, and irritability. Since many normal adolescents exhibit these behaviors as well, a diagnosis can

be difficult to make at this stage. 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, negative and cognitive.

Positive symptoms—Positive symptoms are easy-to-spot behaviors not seen in healthy people and usually involve a loss of contact with reality. Sometimes they are severe and at other times hardly noticeable, depending on whether or not the individual is receiving treatment.

- **Hallucinations**—A hallucination is something a person sees, hears, smells, or feels that no one else can see, hear, smell, or feel. “Voices” are the most common type of hallucination in schizophrenia. Many people with the disorder hear voices that may comment on their behavior, order them to do things, warn them of impending danger, or talk to each other.
- **Delusions**—Delusions are false personal beliefs that are not part of the person's culture and do not change, even when other people present proof that the beliefs are not true or logical.
- **Thought Disorder**—People with schizophrenia often have unusual thought processes. One dramatic form is disorganized thinking where the person may have difficulty organizing his thoughts or connecting them logically. Speech may be garbled or hard to understand.
- **Disorders of Movement**—People with schizophrenia can be clumsy and uncoordinated. They may also show involuntary movements and may show grimacing or unusual mannerisms. They may repeat certain motions over and over or, in

extreme cases, may become catatonic—a state of immobility and unresponsiveness.

Negative symptoms—Negative symptoms refer to reductions in normal emotional and behavioral states and include:

- Flat affect (immobile facial expression, monotonous voice)
- Lack of pleasure in everyday life
- Diminished ability to initiate and sustain planned activity
- Speaking infrequently, even when forced to interact

Cognitive symptoms—Cognitive symptoms are subtle and often interfere with the patient's ability to lead a normal life and earn a living, and can cause great emotional distress. They include:

- Poor executive functioning (the ability to absorb and interpret information and make decisions based on that information)
- Inability to sustain attention
- Problems with working memory (the ability to keep recently learned information in mind and use it right away)

What Causes Schizophrenia?

Genes and Environment—Schizophrenia is believed to result from a combination of environmental and genetic factors.

Scientists have long known that schizophrenia runs in families. It occurs in one percent of the general population, but is seen in 10 percent of people with a first degree relative (a parent, brother, or sister) with the disorder. People who have second degree relatives (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 percent chance of developing the problem.

Interactions between genes and the environment are thought to be necessary for schizophrenia to develop. 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, like stressful environmental conditions.

Brain chemistry—It is likely 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.

Brain physiology—The brains of people with schizophrenia look slightly different than the brains of healthy people. Sometimes the fluid-filled cavities at the center of the brain, called ventricles, are larger in people with schizophrenia, overall grey matter volume is lower, and some areas of the brain have less or more metabolic activity. One theory suggests that problems during prenatal brain development lead to faulty connections that lie dormant until puberty.

How is Schizophrenia Treated?

Medication—Antipsychotic medications effectively alleviate the positive symptoms of schizophrenia. It is not curable; however, the rate of recurrent psychotic episodes can be decreased significantly by staying on medication. Most people with schizophrenia need to take some type of medication for the rest of their lives.

Psychosocial Treatments—Numerous studies have found that psychosocial treatments can help patients who are already stabilized 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 people with schizophrenia to attend school, work, and socialize. Patients who receive regular psychosocial treatment also adhere better to their medication schedule and have fewer relapses and hospitalizations.

Illness Management Skills—People with schizophrenia can take an active role in managing their own illness by learning about the disease and the principles of treatment.

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.

Rehabilitation—Rehabilitation emphasizes social and vocational training to help people with schizophrenia function more effectively in the community.

Family Education—It is important that family members know as much as possible about the disease to support the patient and themselves.

Cognitive Behavioral Therapy—Cognitive behavioral therapy is useful for patients with symptoms that persist even when they take medication.

Self-Help Groups—Self-help groups for people with schizophrenia and their families are a continuing source of mutual support and information.

Schizophrenia

John D. Archbold Memorial Hospital

**Archbold Northside Center
for Behavioral and Psychiatric Care
401 Old Albany Road
Thomasville, Georgia 31792**

(229) 228-8208

24-Hour HELpline (800) 238-8661

www.archbold.org/northside



ARCHBOLD