

# Schizophrenia

## What is schizophrenia?

Schizophrenia is a devastating brain disorder that affects approximately 2.2 million American adults, or 1.1 percent of the population age 18 and older. Schizophrenia interferes with a person's ability to think clearly, to distinguish reality from fantasy, to manage emotions, make decisions, and relate to others. The first signs of schizophrenia typically emerge in the teenage years or early twenties. Most people with schizophrenia suffer chronically or episodically throughout their lives, and are often stigmatized by lack of public understanding about the disease. Schizophrenia is not caused by bad parenting or personal weakness. A person with schizophrenia does not have a "split personality," and almost all people with schizophrenia are not dangerous or violent towards others when they are receiving treatment. The World Health Organization has identified schizophrenia as one of the ten most debilitating diseases affecting human beings.

## What are the symptoms of schizophrenia?

No one symptom positively identifies schizophrenia. All of the symptoms of this illness can also be found in other brain disorders. For example psychotic symptoms may be caused by the use of drugs, may be present in individuals with Alzheimer's Disease, or may be characteristics of a manic episode in bipolar disorder. However, when a doctor sees the symptoms of schizophrenia and carefully assesses the history and the course of the illness over six months, he or she can almost always make a correct diagnosis.

The symptoms of schizophrenia are generally divided into three categories, including positive, disorganized and negative symptoms.

- **Positive Symptoms**, or "psychotic" symptoms, include delusions and hallucinations because the patient has lost touch with reality in certain important ways. "Positive" as used here does not mean "good." Rather, it refers to having overt symptoms that should not be there. Delusions cause the patient to believe that people are reading their thoughts or plotting against them, that others are secretly monitoring and threatening them, or that they can control other people's minds. Hallucinations cause people to hear or see things that are not there.
- **Disorganized Symptoms** include confused thinking and speech, and behavior that does not make sense. For example, people with schizophrenia sometimes have trouble communicating in coherent sentences or carrying on conversations with others; move more slowly, repeat rhythmic gestures or make movements such as walking in circles or pacing; and have difficulty making sense of everyday sights, sounds and feelings.
- **Negative Symptoms** include emotional flatness or lack of expression, an inability to start and follow through with activities, speech that is brief and lacks content, and a lack of pleasure or interest in life. "Negative" does not, therefore, refer to a person's attitude, but to a lack of certain characteristics that should be there.

Schizophrenia is also associated with changes in cognition. These changes affect the ability to remember and to plan for achieving goals. Also, attention and motivation are diminished. The cognitive problems of schizophrenia may be important factors in long term outcome.

Schizophrenia also affects mood. Many individuals affected with schizophrenia become depressed, and some individuals also have apparent mood swings and even bipolar-like states. When mood instability is a major feature of the illness, it is called, schizoaffective disorder, meaning that elements of schizophrenia and mood disorders are prominently displayed by the same individual. It is not clear whether schizoaffective disorder is a distinct condition or simply a subtype of schizophrenia.

## What are the causes of schizophrenia?

Scientists still do not know the specific causes of schizophrenia, but research has shown that the brains of people with schizophrenia are different, as a group, from the brains of people without the illness. Like many other medical illnesses such as cancer or diabetes, schizophrenia seems to be caused by a combination of problems including genetic vulnerability and environmental factors that occur during a person's development. Recent research has identified the first genes that appear to increase risk for schizophrenia. Like cancer and diabetes, the genes only increase the chances of becoming ill, and do not cause the illness all by themselves.

## How is schizophrenia treated?

While there is no cure for schizophrenia, it is a highly treatable and manageable illness. However, people may stop treatment because of medication side effects, disorganized thinking, or because they feel the medication is no longer working. People with schizophrenia who stop taking prescribed medication are at a high risk of relapse into an acute psychotic episode.

- **Hospitalization.** People who experience acute symptoms of schizophrenia may require intensive treatment including hospitalization. Hospitalization is necessary to treat severe delusions or hallucinations, serious suicidal thoughts, an inability to care for oneself, or severe problems with drugs or alcohol. It also is important to protect people from hurting themselves or others.

- **Medication.** The primary medications for schizophrenia are called antipsychotics. Antipsychotics help relieve the positive symptoms of schizophrenia by helping to correct an imbalance in the chemicals that enable brain cells to communicate with each other. As with drug treatments for other physical illnesses, many patients with severe mental illnesses may need to try several different antipsychotic medications before they find the one, or the combination of medications, that works best for them.
- **Conventional Antipsychotics** were introduced in the 1950's and all had similar ability to relieve the positive symptoms of schizophrenia. Most of these older "conventional" antipsychotics differed in the side effects they produced. These conventional antipsychotics include chlorpromazine (Thorazine), fluphenazine (Prolixin), haloperidol (Haldol), thiothixene (Navane), trifluoperazine (Stelazine), perphenazine (Trilafon), and thioridazine (Mellaril).
- **New "Atypical" Antipsychotics.** In the last decade new "atypical" antipsychotics have been introduced. Compared to the older "conventional" antipsychotics these medications appear to be at least equally effective for helping reduce the positive symptoms like hallucinations and delusions - but may be better than the older medications at relieving the negative symptoms of the illness, such as withdrawal, thinking problems, and lack of energy. The atypical antipsychotics include risperidone (Risperdal), clozapine (Clozaril), olanzapine (Zyprexa), quetiapine (Seroquel), and ziprasidone (Geodon).
- **Current treatment guidelines** recommend using one of the atypical antipsychotics other than clozapine as a first line treatment option for newly diagnosed patients. However, for people already taking a conventional antipsychotic medication that is working well, a change to an atypical may not be the best option. People thinking of changing their medication should always consult with their doctor and work together to develop the most safe and effective treatment plan possible.
- **Psychosocial Rehabilitation.** Research shows that people with schizophrenia who attend structured psychosocial rehabilitation programs and continue with their medical treatment manage their illness best. One of the most effective psychosocial approaches for the most severely ill or those with both mental illness and substance abuse, is the Program for Assertive Community Treatment (PACT), an intensive team effort in local communities to help people stay out of the hospital and live independently. Available 24-hours a day, seven-days a week, PACT professionals meet their clients where they live, providing at-home support at whatever level is needed. Professionals work with clients to address problems effectively, to make sure medications are being properly taken, and to meet the routine daily challenges of life, such as grocery shopping and managing money.
- PACT programs are statewide in four states and growing in another 20 states. PACT is significantly reducing hospital admissions, and improving functioning and the quality of life for people with schizophrenia.

### **What are the side effects of the medications used to treat schizophrenia?**

All medications have side effects. Different medications produce different side effects, and people differ in the amount and severity of side effects they experience. Side effects can often be treated by changing the dose of the medication, switching to a different medication, or treating the side effect directly with an additional medication. Common inconvenient side effects of all antipsychotic drugs used to treat schizophrenia include dry mouth, constipation, blurred vision, and drowsiness. Some people experience sexual dysfunction or decreased sexual desire, menstrual changes, and significant weight gain. Other common side effects relate to muscles and movement problems. These side effects include: restlessness, stiffness, tremors, muscle spasms, and one of the most unpleasant and serious side effects, a condition called tardive dyskinesia.

- Tardive dyskinesia is a movement disorder where there are uncontrolled facial movements and sometimes jerking or twisting movements of other body parts. This condition usually develops after several years of taking antipsychotic medications and more predominantly in older adults. Tardive dyskinesia affects 15 to 20 percent of people taking conventional antipsychotic medications. The risk of developing tardive dyskinesia is lower for people taking the newer antipsychotics. Tardive dyskinesia can be treated with additional medications or by lowering the dosage of the antipsychotic if possible.
- Clozapine was the first atypical antipsychotic in the United States and seems to be one of the most effective medications, particularly for people who have not responded well to other medications. However, in some people it has a serious side effect of lowering the number of white blood cells produced. People taking clozapine must have their blood monitored every one or two weeks to count the number of white blood cells in the bloodstream. For this reason clozapine is usually the last atypical antipsychotic prescribed, and is usually used as a last line treatment for people that do not respond well to other medications or have frequent relapses.