

Fact Sheet

Schizophrenia

Schizophrenia is a chronic and disabling brain disorder that affects 2.4 million Americans. People with schizophrenia may hear voices other people don't hear or have a false belief that others are plotting to harm them. As with most illnesses, schizophrenia symptoms can range from mild to severe and can cause fearfulness, withdrawal, or extreme agitation. People with schizophrenia may not make sense when they talk, may not move or talk much, or can seem perfectly fine until they say what they are really thinking. It's often hard for people with schizophrenia to hold a job or take care of themselves, so the impact on their families and society is significant.

Thirty Years Ago

- Doctors, patients, and families viewed schizophrenia, one of the most devastating mental illnesses, as the result of bad parenting rather than as a developmental brain disease.
- There were no consistent guidelines for the diagnosis of this disorder.
- The medical treatments used to reduce hallucinations and delusions were complicated by neurologic side effects, including a severe movement disorder.
- In 1971, an estimated 433,000 people with mental disorders were institutionalized.

Today

- Schizophrenia is understood as a developmental brain disorder, involving specific pathways in the prefrontal cortex.
- There are not only reliable tools for the diagnosis of schizophrenia, but also specific genes have been associated with susceptibility to this disorder.
- Medical therapies were developed that are effective for reducing hallucinations and delusions, yet are largely free of neurologic side effects. For the first time, strategies to personalize treatment are available based on a large, NIH-funded, comprehensive study of available medications.
- In 2000 only 170,000 people with mental illness lived in institutions due to the development of new medications and new psychosocial treatments that allow people to live in their communities.

Tomorrow

- Even with the best treatments available, most patients with schizophrenia do not recover fully; they have basic problems in the way their brains manage attention and planning, which none of today's treatments target. A priority for NIH in the next three years is to work in partnership with private industry to develop effective treatments that target these cognitive deficits.
- Early intervention may be essential in pre-empting the most disabling aspects of this chronic illness. In addition to new treatments, NIH has developed a network for conducting research on prevention -- for example, diagnosing schizophrenia before the first psychotic episode
- Medications currently available to treat schizophrenia can cause unpleasant and sometimes dangerous side effects that make people decide to stop taking them — although research shows that patients who consistently receive treatment do much better than those who stop taking their medications. NIH is currently developing studies to improve the understanding of what causes these side effects, who is most likely to get them, and ways to counteract or prevent them.
- The recent discovery of several vulnerability genes for schizophrenia offers an unprecedented opportunity for progress in understanding the risk factors and development of this disease. Over the next decade, NIH research will expand on these findings to reveal how inheriting such vulnerability genes affects the growth and function of the brain and ultimately leads to impaired cognition and psychosis.