Schizophrenia is the most severe form of mental illness. It is characterized by impairments in many domains and affects approximately one percent of the population.

Most cases of schizophrenia begin in late adolescence or early adulthood. The disorder begins earlier in men than it does in women. Overall, the clinical symptoms of schizophrenia tend to be more severe in men than women. Women also have a better long-term outcome. Genetic factors are clearly implicated in schizophrenia.

Characteristic symptoms of schizophrenia include:

- **Hallucinations** - A sensory experience that seems real but occurs in the absence of any external perceptual stimulus
- **Delusions** - An erroneous belief that is fixed and firmly held despite clear contradictory evidence
- **Disorganized speech** - Failure to make sense despite conforming to semantic and syntactic rules of speech
- **Disorganized and catatonic behavior** - Impairment of goal-directed activity; Catatonia involves almost no movement at all, sometimes in an unusual posture, and then the negative symptoms - reflect an absence or deficit of behaviors that are normally present.

Having a relative with the disorder significantly raises a person’s risk of developing schizophrenia. Other factors that have been implicated in the development of schizophrenia include prenatal exposure to the influenza virus, early nutritional deficiencies, and perinatal birth complications.

Current thinking about schizophrenia emphasizes the interplay between genetic and environmental factors. Schizophrenia is genetically influenced but not genetically determined.

Even though schizophrenia begins in early adulthood, researchers believe that it is a neurodevelopmental disorder. A “silent lesion” in the brain is thought to lie dormant until normal developmental changes occur and expose the problems that result from this brain abnormality.

Many brain areas are abnormal in schizophrenia, although abnormalities are not found in all patients. Brain abnormalities that have been found include decreased brain volume, enlarged ventricles, frontal lobe dysfunction, reduced volume of the thalamus, and abnormalities in temporal lobe areas such as the hippocampus.

The most important neurotransmitters implicated in schizophrenia are dopamine and glutamate. Patients with schizophrenia have many problems in aspects of neurocognitive functioning. They show a variety of attentional deficits (e.g., poor P50 suppression and deficits on the Continuous Performance Test). They also show eye-tracking dysfunctions.
Patients with schizophrenia are more likely to relapse if their relatives are high in expressed emotion (EE). High EE environments may be stressful to patients and may trigger biological changes that cause dysregulations in the dopamine and glutamate systems. This could lead to a return of symptoms.

Interestingly, both being reared in an urban environment and immigration have been shown to increase the risk of schizophrenia perhaps through the effect of stress.

For many patients, schizophrenia is a chronic disorder requiring long-term treatment or institutionalization. However, with therapy and medications, about 38% of patients show a reasonable recovery. Only about 16% of patients recover to the extent that they no longer need treatment.

Patients with schizophrenia are usually treated with antipsychotic (neuroleptic) medications. Second generation antipsychotics cause fewer extrapyramidal (motor abnormality) side effects. Antipsychotic drugs work by blocking dopamine receptors.

Overall, patients taking second-generation antipsychotics do better than patients taking conventional antipsychotic drugs.

Psychological treatments for patients with schizophrenia include cognitive behavioral therapy, social skills training, and other forms of individual treatment as well as case management. In addition, family therapy is also beneficial.