Schizophrenia

A mental illness characterized by disordered thinking, delusions, hallucinations, emotional disturbance, and withdrawal from reality.

Some experts view schizophrenia as a group of related illnesses with similar characteristics. The condition affects between one-half and one percent of the world’s population, occurring with equal frequency in males and females (although the onset of symptoms is usually earlier in males). Between 1 and 2% of Americans are thought to be afflicted with schizophrenia—at least 2.5 million at any given time, with an estimated 100,000 to 200,000 new cases every year. Although the name “schizophrenia,” coined in 1911 by Swiss psychologist Eugen Bleuler (1857-1939), is associated with the idea of a “split” mind, the disorder is different from a “split personality” (dissociative identity disorder), with which it is frequently confused. Schizophrenia is commonly thought to disproportionately affect people in the lowest socioeconomic groups, although some claim that socially disadvantaged persons with schizophrenia are only more visible than their more privileged counterparts, not more numerous. In the United States, schizophrenics occupy more hospital beds than patients suffering from cancer, heart disease, or diabetes. At any given time, they account for up to half the beds in long-term care facilities. With the aid of antipsychotic medication to control delusions and hallucinations, about 70% of schizophrenics are able to function adequately in society.

Causes of schizophrenia

While the exact cause of schizophrenia is not known, it is believed to be caused by a combination of physiological and environmental factors. Studies have shown that there is clearly a hereditary component to the disorder. Family members of schizophrenics are ten times more prone to schizophrenia than the general population, and identical twins of schizophrenics have a 46% likelihood of having the illness themselves. Relatives of schizophrenics also tend to have milder psychological disorders with some of the same symptoms as schizophrenia, such as suspicion, communication problems, and eccentric behavior.

In the years following World War II, many doctors blamed schizophrenia on bad parenting. In recent years, however, advanced neurological research has strengthened the case for a physiological basis for the disease. It has been discovered that the brains of schizophrenics have certain features in common, including smaller volume, reduced blood flow to certain areas, and enlargement of the ventricles (cavities filled with fluid that are found at the brain’s center). Over the past decade much attention has focused on the connection between schizophrenia and neurotransmitters, the chemicals that transmit nerve impulses within the brain. One such chemical—dopamine—has been found to play an especially important role in the disease. Additional research has concentrated on how and when the brain abnormalities that characterize the disorder develop. Some are believed to originate prenatally for a variety of reasons, including trauma, viral infections, malnutrition during pregnancy, or a difference in Rh blood factor between the fetus and the mother. Environmental factors associated with schizophrenia include birth complications, viral infections during infancy, and head injuries in childhood. While the notion of child rearing practices causing schizophrenia has been largely discredited, there is evidence that certain family dynamics do contribute to the likelihood of relapse in persons who already have shown symptoms of the disease.

Types of schizophrenia

Schizophrenia is generally divided into four types. The most prevalent, found in some 40% of affected persons, is paranoid schizophrenia, characterized by delusions and hallucinations centering on persecution, and by feelings of jealousy and grandiosity. Other possible symptoms include argumentativeness, anger, and violence. Catatonic schizophrenia is known primarily for its catatonic state, in which persons retain fixed and sometimes bizarre positions for extended periods of time without moving or speaking. However, catatonic schizophrenics may also experience periods of restless move-
ment. In disorganized, or hebephrenic, schizophrenia, the patient is incoherent, with flat or inappropriate emotions, disorganized behavior, and bizarre, stereotyped movements and grimaces. Catatonic and disorganized schizophrenia affect far fewer people than paranoid schizophrenia. Most schizophrenics not diagnosed as paranoid schizophrenics fall into the large category of undifferentiated schizophrenia (the fourth type), which consists of variations of the disorder that do not correspond to the criteria of the other three types. Generally, symptoms of any type of schizophrenia must be present for at least six months before a diagnosis can be made. Over the long term, about one-third of patients experience recovery or remission.

The initial symptoms of schizophrenia usually occur between the ages of 16 and 30, with some variation depending on the type. (The average age of hospital admission for the disease is between 28 and 34.) Disorganized schizophrenia tends to begin early, usually in adolescence or young adulthood, while paranoid schizophrenia tends to start later, usually after the age of 25 or 30. The onset of acute symptoms is referred to as the first psychotic break, or break from reality. In general, the earlier the onset of symptoms, the more severe the illness will be. Before the disease becomes full-blown, schizophrenics may go through a period called the prodromal stage, lasting about a year, when they experience behavioral changes that precede and are less dramatic than those of the acute stage. These may include social withdrawal, trouble concentrating or sleeping, neglect of personal grooming and hygiene, and eccentric behavior.

The prodromal stage is followed by the acute phase of the disease, which is characterized by “positive” symptoms and requires medical intervention. During this stage, three-fourths of schizophrenics experience delusions—illogical and bizarre beliefs that are held despite objections. A typical delusion might be a belief that the afflicted person is under the control of a sinister force located in the sewer system that dictates his every move and thought. Hallucinations are another common symptom of acute schizophrenia. These may be auditory (hearing voices) or tactile (feeling as though worms are crawling over one’s skin). The acute phase of schizophrenia is also characterized by incoherent thinking, rambling or discontinuous speech, use of nonsense words, and odd physical behavior, including grimacing, pacing, and unusual postures. Persons in the grip of acute schizophrenia may also become violent, although often this violence is directed at themselves—it is estimated that 15-20% of schizophrenics commit suicide out of despair over their condition or because the voices they hear “tell” them to do so, and up to 35% attempt to take their own lives or seriously consider doing so. In addition, between 25 and 50% of people with schizophrenia abuse drugs or alcohol. As the positive symptoms of the acute phase subside, they may give way to the negative symptoms of what is called residual schizophrenia. These include flat or inappropriate emotions, an inability to experience pleasure (anhedonia), lack of motivation; reduced attention span, lack of interest in one’s surroundings, and social withdrawal.

Researchers have found correlations between childhood behavior and the onset of schizophrenia in adulthood. A 30-year longitudinal research project studied over 4,000 people born within a single week in 1946 in order to document any unusual developmental patterns observed in those children who later became schizophrenic. It was found that a disproportionate number of them learned to sit, stand, and walk late. They were also twice as likely as their peers to have speech disorders at the age of six and to have played alone when they were young. Home movies have enabled other researchers to collect information about the childhood characteristics of adult schizophrenics. One study found that the routine physical movements of these children tended to be slightly abnormal in ways that most parents wouldn’t suspect were associated with a major mental illness and that the children also tended to show fear and anger to an unusual degree.

**Treatment**

Schizophrenia has historically been very difficult to treat, usually requiring hospitalization during its acute stage. In recent decades, antipsychotic drugs have become the most important component of treatment. They can control delusions and hallucinations, improve thought coherence, and, if taken on a long-term maintenance basis, prevent relapses. However, antipsychotic drugs do not work for all schizophrenics, and their use has been complicated by side effects, such as akathisia (motor restlessness), dystonia (rigidity of the neck muscles), and tardive dyskinesia (uncontrollable repeated movements of the tongue and the muscles of the face and neck). In addition, many schizophrenics resist taking medication, some because of the side effects, others because they may feel better and mistakenly decide they don’t need the drugs anymore, or because being dependent on medication to function makes them feel bad about themselves. The tendency of schizophrenics to discontinue medication is very harmful. Each time a schizophrenic goes off medication, the symptoms of the disease return with greater severity, and the effectiveness of the drugs is reduced.

Until recently, the drugs most often prescribed for schizophrenia have been neuroleptics such as Haldol,