Schizophrenia6

Schizophrenia, an often-misunderstood disease, is usually interpreted by those not familiar with it as a Multiple Personality
Disorder. But this is not true. While a person who is afflicted with schizophrenia, may also suffer from multiple personality disorder, it is not the rule of thumb. Unfortunately, due to the lack of support from family or friends, many schizophrenics go without proper treatment and may wind up homeless.

There is nothing that can be measured to diagnose schizophrenia. Other diseases share many of its symptoms. What schizophrenia is or is not, cannot be decided on. However, German psychiatrist, Kurt Schneider, developed a list of symptoms, which occur very rarely in diseases other than schizophrenia. These symptoms include auditory hallucinations in which voices speak the schizophrenic's thoughts aloud. There are also two other forms of auditory hallucinations, in one the victim will hear two voices arguing, and the other a voice will be heard commenting the actions of the person. " Schizophrenics may also suffer from the felling that an external force, or the dilution that certain commonplace remarks have a secret meaning for themselves is controlling their actions", (Torrey, 1983).

" From these symptoms, schizophrenia is divided into four sub-types determined by which symptoms are most prevalent", Strauss, 1987). The four sub-types are paranoid, hebephrenic, catatonic, and finally simple. Paranoid schizophrenics often suffer from either delusions, hallucinations, or both of a persecutory content. Hebephrenic schizophrenia is characterized by inappropriate emotions, disorganized thinking, and extreme social impairment. Catatonic schizophrenics often suffer from rigidity, stupor, and hallucinations or delusions. It is however accompanied by an overwhelming

loss of interest and initiative. “ The sufferer of simple schizophrenia will also usually suffer from withdrawal and will blunt their emotions” (Torrey, 1983). The part of the brain is thought to be affected by schizophrenia is the limbic system. It was realized that the limbic system might be the source of the malfunction when it was discovered that all the information and incoming stimuli must pass through the limbic system before being sorted out. Previously thee limbic system was disregarded, and considered simply a remnant of our primitive past.” At that time the outer areas, the gray matter of the brain, was studied”(Torrey, 1983).

Occasionally schizophrenia runs in the family, although it is not well understood how. “ It is known that close relatives (parents, siblings) of those with schizophrenia, have a 10 % chance of developing symptoms, compared to the 1% chance of the general population” (Torrey, 1983).
Not much is known about what exactly causes schizophrenia, or which parts of the brain are affected. One guess to the cause of schizophrenia is that neurotransmitter dopamine is involved. “ Some of the supporting evidence behind this theory is the fact that amphetamines, when given in large doses, causes the brain’s dopamine levels to rise, this can cause the subject to show schizophrenia like symptoms” (Torrey, 1983). There are three different fields of thought as to how something is affecting the dopamine and causing schizophrenia. One is that there is excess of the neurotransmitter in the brain. The final thought is that
The dopamine is somehow being turned into a poison (Torrey, 1983).

A chemical imbalance of dopamine could very well be the cause of schizophrenia. If the levels are too high, there could be excess dopamine left

in the synaptic gap. If the levels of were too low, signals needing dopamine to be transferred would not be received.

Even though the causes of schizophrenia are not confirmed, it is important to properly diagnose it so proper medical treatment can be sought. When diagnosing schizophrenia doctors first rely on symptoms such as hallucinations and delusions.” Because these symptoms may be generated by another disease, doctors are often reluctant to diagnose a patient with schizophrenia unless the symptoms have been present for at least six months” (Torrey, 1983).

However, with MRI it may be possible to get a clue to as to if the person might be suffering from schizophrenia. This might be feasible because research has shown that some specific brain structures, the hippocampus regions especially, have been diminished. Also it has been found that there are some functional abnormalities between the normal brain and that of schizophrenic. One such abnormality is reduced blood to the frontal cerebrum. It also has been found through post mortem studies of schizophrenics that they have an abnormal amount of brain cells as well as unusual neural organization, especially in the temporal lobe (Gershon and Reider, 1992).

Other evidence that that supports this is that when solving problems such as categorizing a card by color based on recent instructions, the frontal lobes of the schizophrenics do not become as active as that of a normal person. These differences in brain activity can be picked up on MRI devices. (Marquis, 1996). Once schizophrenia has been diagnosed, it is important to

seek the proper treatment. It may be necessary to have the schizophrenic hospitalized for a period of time, or they may be able to go through treatment at home. But treatment is all that can be given, as there is no cure for schizophrenia.

The most commonly used, and most effective, treatment is through the use of anti-psychotropic drugs. Anti-psychotropic drugs, or neoroleptics, as they are sometimes called, reduce delusions, hallucinations, and act to diminish aggressive or odd behavior. Anti- psychotics are most commonly given in liquid or tablet form. They work by blocking the neurons' dopamine receptors. Unfortunately, as with most drugs, there are certain side effects. These side effects range in severity and occurrence. Common side effects are dry mouth, stiffness, restlessness, or slight slurring of the speech. Some uncommon side effects are, loss of appetite, menstrual changes in women, and on the more serious side, liver damage, damage to blood forming organs, convulsions, abnormal heart functions, or unexplained fever could occur.

The most feared side effect is a disease known called TardiveDyskinsia. Tardive dyskinesia occurs mostly with patients who have been taking anti-psychotics for a prolonged period of time over many years. Its symptoms include involuntary movements of the tongue and mouth. Purposeless movements of the arms or legs may also occur. As of yet there has not been an effective treatment found for tardive dyskinsia.

Even with these side effects taken into consideration, drugs remain the safest, and most effective way to control schizophrenia. The only other real

alternative to drugs, which isn’t used often, is shock therapy. The reason it hasn’t been used is because more harm often comes to the patient than good. This is because the shock therapy may lead to damage of neurons.

There are many legal and ethical concerned for those with schizophrenia and there families. One of these is involuntary hospitalization. Should a person with schizophrenia be put in the hospital against their will? Or one the other hand is refused treatment if they pose no threat to themselves or others. The following is a good example of the dilemma faced by involuntary hospitalization:

A young woman is observed to be living in a train station for several days. She asks passers-by for money but other wise do not bother them. She is often seen taking to herself or to imaginary people.

A news reporter talks with her and discovers that the woman is a college graduate. She has recently been released from a psychiatric hospital. The woman’s conversation does not make sense. A policeman takes her to a local hospital, but the psychiatrists there refuse to admit her because they say she has done nothing to suggest she is a danger to herself or others. She also indicates unwillingness to go back into the hospital voluntarily. She returns to the train station. A few days later she is found raped and murdered nearby. (Torrey, 1983, pp. 182-183)

The most disturbing ethical problem concerns experimentation and research of those confined in mental hospitals. There are three types of experimentation and research, which could be applied to them. One is the use of procedures or drugs, which have little, or no bearing on the illness. For example: testing a hepatitis vaccine on schizophrenics. Another form is the

use of procedures or drugs, which may be directly beneficial, such as a drug to control the symptoms of schizophrenia. The final type of research is that which is trying to find a better treatment, or the cause of the disease, but most likely won’t be a benefit to the patient. An example of this would be performing tests on a schizophrenic to help develop a cure for schizophrenia. That would not benefit the individual because most likely by the time the drug is ready to be prescribed the patient would be dead.

In conclusion, schizophrenia is a disease that is not well under stood. As more is learned about the disease and how it affects the brain of those who suffer from it better treatments will be discovered. Even with the best treatment, support from family and friends are crucial in maintaining normality to the life of those with schizophrenia.

Bibliography: