NAMI

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Schizophrenia
Schizophrenia

- A devastating brain disorder affecting nearly 2.2 million American adults, or 1.1% of the population age 18 and older.

- Interferes with a person's ability to think clearly, manage emotions, make decisions, and relate to others. The first signs of it typically emerge in the teenage years or twenties. Most people with it suffer chronically or episodically throughout their lives, and are often stigmatized by lack of public understanding about the disease.

- It is not caused by bad parenting or personal weakness. Not "split personality," and almost all people with it are not dangerous or violent towards others when they are receiving treatment.
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, or may be characteristics of a manic episode in bipolar disorder. However, when a doctor sees the symptoms of it and carefully assesses the course of the illness over six months, he or she can almost always make a correct diagnosis.

- Generally divided into three categories, including positive, disorganized and negative symptoms.
The symptoms of schizophrenia

- **Positive /“psychotic” symptoms** (正性症狀), 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.
The symptoms of schizophrenia

- **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.
The symptoms of schizophrenia

Negative Symptoms (負性症狀) 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.
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.
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, Medication, Psychosocial Rehabilitation (Program for Assertive Community Treatment---PACT)
How is schizophrenia treated

- 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.
How is schizophrenia treated

- Medication. The primary medications for it are called antipsychotics (抗精神病藥物). They help relieve the positive symptoms of it 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.
The Synapse
Neurotransmitters

- Re-uptake (回收) : 抗鬱劑對血清素 (serotonin) 的回收

- Hyperfunction (亢進) : 精神分裂症多巴胺亢進之結果
圖一

細胞核

軸突

神經末梢

樹突

腦神經元
图一

突触
神经末梢
神经传士素
圖三
神經末梢
多巴胺 (神經傳導素)
樹突
受體

圖四
抗精神病藥阻斷部分受體的接收
How is schizophrenia treated

- 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 好度), thiothixene (Navane), trifluoperazine (Stelazine 使得安靜), perphenazine (Trilafon), and thioridazine (Mellaril 美立廉).
New “Atypical” Antipsychotics. In the last decade new “atypical” antipsychotics have been introduced. Compared to the older “conventional” antipsychotics these medications appear to be 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).
How is schizophrenia treated

- 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.
How is schizophrenia treated

- 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)
The Program for Assertive Community Treatment (PACT)

- An intensive team effort in local communities to help people stay of the hospital and live independently. Available 24-hours, 7 days, 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 4 states and growing in another 20 states. It is significantly reducing hospital admissions, and improving functioning & the quality of life for people with schizo.
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.
Side effects of the medications

- 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, including restlessness, stiffness, tremors, muscle spasms, and one of the most unpleasant and serious side effects, a condition called tardive dyskinesia (TD).
Side effects of the medications

- 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.

- TD affects 15 to 20 percent of people taking conventional antipsychotic medications. The risk of developing it is lower for people taking the newer antipsychotics. It can be treated with additional medications or by lowering the dosage of the antipsychotic if possible.
Side effects of the medications

- Clozapine 可致律 was the first atypical antipsychotic in the 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.