



Schizophrenia

Other psychotic disorders and causes

Name that Psychotic Disorder!

- ◆ Chris has started spending large amounts of time guarding his home. "They" have bugged his phone and are sending cars past his house. He believes that the CIA, FBI and mafia are "after him" for witnessing a drug deal. People everywhere are in on the plot and kill him. Paranoid Type
- ◆ Sally appears statue-like, often staying in the same unusual position for hours. When asked, "how are you Sally?", she replies, "how are you, Sally?" Catatonic Type
- ◆ Carrie had an episode of schizophrenia in the past, but she no longer displays delusions or hallucinations. She has flat affect and still discusses her unusual ideas with others. Residual Type
- ◆ At Grandma's funeral, John walks up to the casket and begins to laugh hysterically. When he is asked why he is laughing, he replies "the lemon is the way! When it fell on the ship of the Yoda night owl." Disorganized Type

Can someone be psychotic without having schizophrenia?

Yes. There are several types of psychotic disorders that are not schizophrenia.

Delusional disorders are characterized by a persistent belief that is contrary to reality.

- ◆ There are several subtypes recognized by the DSM IV:
 - Erotomaniac
 - Grandiose
 - Jealous
 - Persecutory
 - Somatic

Why do people stalk?

- ✿ An erotomantic delusion is the irrational belief that the individual is loved by another person, usually of a higher status.
- ✿ Often seen in stalkers, especially those who stalk celebrities.
- ✿ This behavior is also displayed in a jealous delusion, when a person believes their partner is unfaithful.



How common is this?

- ✿ Delusional disorder seems to be relatively rare, affecting 24-30 people per 100,000 in the general population.
 - Researchers cannot be sure about the percentages because many of these individuals do not have contact with mental health services.
- ✿ The age of onset is relatively late with the average age of first admission between 40-49 yrs.

True or False?

- ✿ Women are more affected this disorder than men.
TRUE! More females than men are afflicted- (55% versus 45%)
- ✿ This disorder is caused by environmental factors.
FALSE! Research suggests that characteristics of the disorder are found more in families, suggesting inheritance
- ✿ This disorder can be influenced other factors.
TRUE! Abuse of cocaine, amphetamines, alcohol, also brain tumors, Huntington's and Alzheimer's disease

How Prevalent is Schizophrenia?

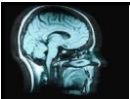
- What causes this disorder?
- Is there a genetic link?

Statistics on Schizophrenia

- ✿ Schizophrenia is a chronic and disabling brain disease that effects approximately 1% of the general population
 - about 2 million Americans each year (Ho et al., 2003).
- ✿ There is NO cure and even with treatment people with schizophrenia are likely to experience life-long difficulties.
- ✿ People with schizophrenia have a shorter life expectancy due to the higher rate of suicide and accidents (Ho et al., 2003).

When does this develop?

- ✿ **Can children be diagnosed with this disorder?**
- ✿ Technically a child over the age of 5 CAN be diagnosed with schizophrenia, but it is rare.
- ✿ This disorder effects men and women equally, but the disorder seems to appear at different times:
 - Earlier in men (usually in teens or twenties)
 - Later in women (usually in twenties and thirties)



Is my brain to blame??

- ✿ Brain damage during early developmental periods may lead to schizophrenia later in life.
- ✿ This damage lays dormant until later in development, when signs of schizophrenia first appear.
- ✿ Research shows that these people with early signs of abnormality tend to do better because the brain has more time to compensate for the damage, resulting in milder symptoms (Torrey, 1994).

Does it ever go away, for good?

- ✿ Unfortunately, even after people improve after an episode of schizophrenia later experience the symptoms again.
- ✿ Most people with schizophrenia fluctuate between severe and moderate levels of impairment throughout their lives (Harrow et al., 1997).

It's all in the family...

- ✦ Family studies which began by Kallmann (1938) discovered a strong genetic link
- ✦ Research has found all forms of schizophrenia within families (catatonic, paranoid, etc...).
- The more severe the parent's schizophrenia, the more likely the child was to develop it.

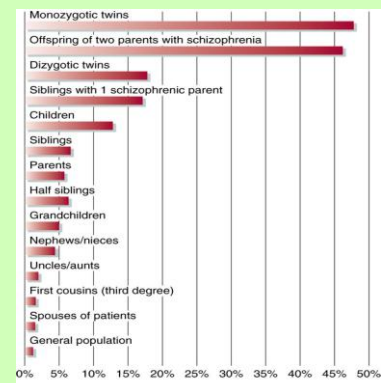
Family studies

- ✦ This suggests that people do not inherit a predisposition for one type of schizophrenia, but rather a general predisposition for schizophrenia that manifests in a particular form of schizophrenia.

How many genes?

- ✦ The more genes you share, the more likely you will develop schizophrenia.
- You have the greatest chance (48%) of having schizophrenia if your identical twin does.
- If both of your parents have schizophrenia you have a 46% chance of developing the disorder

The Risk of Developing Schizophrenia



Other causes

- ✦ Another (controversial) theory suggests that there is some relationship between high levels of the neurotransmitter Dopamine and schizophrenia (Carlsson, 1995).
- ✦ The success of antipsychotic medications, which are Dopamine antagonists, support this theory.
- ✦ When drugs are administered that are known to increase dopamine there is an increase in schizophrenic behavior and vice versa.

But wait, there's more...

- ✦ However, there is evidence that contradicts the dopamine theory. A significant number of people with schizophrenia are not helped by dopamine antagonists.
 - In fact, many people are helped by the drug Clozapine, which ironically is considered to be a weak dopamine antagonist
- ✦ The consensus is that dopamine is involved, but the relationship is more complicated than once believed.

Can Schizophrenia be Treated?

Some early treatments for schizophrenia included:

- Insulin coma therapy
- Prefrontal lobotomy
- Electroconvulsive therapy (ECT)

These treatments were abandoned because they were found to be ineffective for patients with schizophrenia

How about a pill?

- ✦ Neuroleptics (anti-psychotics) were help people with schizophrenia think more clearly and reduce or eliminate hallucinations and delusions.
 - Reduce the *positive symptoms* but are less effective in controlling the negative and disorganized symptoms (Potkin et al., 1993).

Antipsychotic Medications

- ✦ These are the most commonly prescribed for people with schizophrenia, as well as anti-depressants or mood stabilizers.
- Approximately 50-70% of patients will show improvement to some degree.



Non-compliance with meds

- ✦ Despite the effectiveness of antipsychotic medications, many patients are not compliant with taking the medication.
 - Approximately 7% of patients prescribed antipsychotic medication refuse to take it (Hoge et al., 1990).
- ✦ Research shows that 3 out of 4 patients stop taking their medication from time to time (Weiden et al., 1991).

WHY do patients refuse medication?

- ✦ There are a number of factors that influence non-compliance:
 - Negative side effects that produce unwanted physical symptoms
 - Negative patient-doctor relationships
 - Costs of medication
 - Poor social support
- ✦ Hopefully compliance rates will improve with the introduction of injectable medications, rather than taking oral medication.

What are the risks?

- ✦ These drugs impact neurotransmitter systems, which produce more serious, extrapyramidal symptoms.
 - These symptoms include motor difficulties similar to those experienced by patients with Parkinson's disease (Parkinsonian symptoms)

Extrapyramidal Symptoms

- ✦ Tardive Dyskinesia produces involuntary movements of the tongue, face and mouth.
 - These present as protrusions of the tongue, puffing of the cheeks, puckering of the mouth and chewing movements.
 - This results from long-term use of antipsychotics and is irreversible



New medications

- ✦ Since the 1990's new medications help those who did not respond to earlier antipsychotic medications and they tend to have fewer side effects (Davis, et al., 2003).
- ✦ Most commonly prescribed:
 - Clozapine
 - Risperdone
 - Olanzapine

What are the alternatives?

- ✦ Patients often fail to return to clinics and hospitals for follow-up, which make psychosocial interventions a necessity in treatment.
 - Traditional therapy
 - Behavioral family therapy
 - Vocational rehabilitation
 - Self-advocacy
 - Psychosocial clubs

Wrap it up...

- ✦ There are many treatments for this disorder, but because it is such a complex one treatment must be carried out at all levels.
- ✦ One approach alone is not sufficient to address the many needs of people with schizophrenia

Next Class...

- * What are Personality Disorders?