

Schizophrenia

Other psychotic disorders and causes

Class Objectives

- What are Delusional Disorders?
- What causes Schizophrenia?
- How can Schizophrenia be treated?

Can someone be psychotic without having schizophrenia?

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

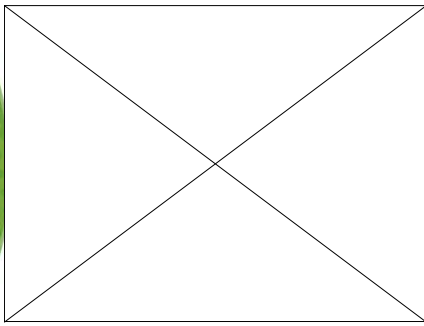
Delusional disorders are characterized by a persistent belief that is contrary to reality.

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

Why do people stalk?

- * An *erotomaniac 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.

Why do people stalk?



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.

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?

- ✿ 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)

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.

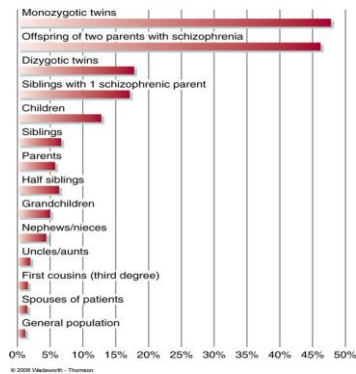
Family studies

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 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

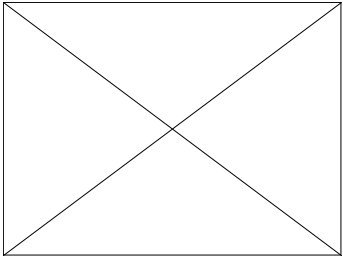
- The consensus is that dopamine is involved, but the relationship is more complicated than once believed.

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).

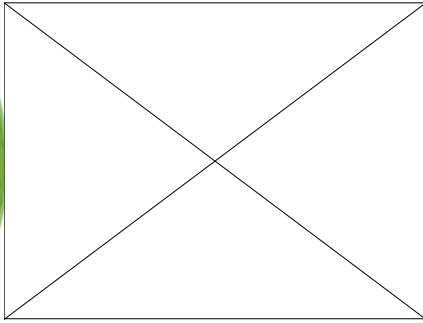
Antipsychotic Medications

- 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.



Antipsychotic Drug Treatment



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).

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

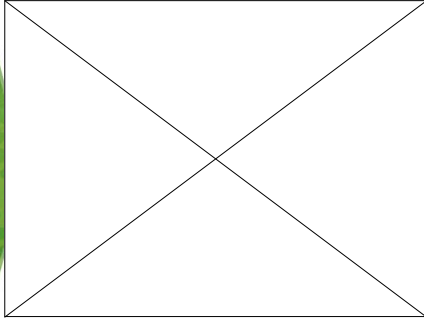
What are the risks?

- ✱ 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

Undesired Effects of Antipsychotic Meds



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

We are DONE!



Good Bye!
