Schizophrenia
Other psychotic disorders and causes

Module 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:
- Erotomanic
- Grandiose
- Jealous
- Persecutory
- Somatic

Why do people stalk?

An erotomanic 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.

**Statistics on Schizophrenia**

- Schizophrenia is a chronic and disabling brain disease that affects 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

- Monozygotic twins
- Offspring of two parents with schizophrenia
- Dizygotic twins
- Siblings with 1 schizophrenic parent
- Children
- Parents
- Half siblings
- Grandchildren
- NEP (nieces/nephews, grandchildren, etc.)
- Uncles/aunts
- First cousins (first degree)
- Spouses of patients
- General population

- 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.

What’s Next?

- You have completed your last module for this course. I hope you have enjoyed learning about Abnormal Psychology. Please complete the student survey.

Good Bye!