Schizophrenia and Other Psychotic Disorders

Nature of Schizophrenia and Psychosis: An Overview

Schizophrenia vs. Psychosis
- Psychosis – Broad term (e.g., hallucinations, delusions)
- Schizophrenia – A type of psychosis
- Psychosis and Schizophrenia are heterogeneous
- Disturbed thought, emotion, behavior

Schizophrenia: Some Facts and Statistics
- Onset and Prevalence of Schizophrenia worldwide
  - About 0.2% to 1.5% (or about 1% population)
  - Often develops in early adulthood
  - Can emerge at any time
  - Schizophrenia Is Generally Chronic
  - Most suffer with moderate-to-severe lifetime impairment
  - Life expectancy is slightly less than average
  - Schizophrenia Affects Males and Females About Equally
  - Females tend to have a better long-term prognosis
  - Onset differs between males and females
  - Schizophrenia has a Strong Genetic Component

Classification Systems and Their Relation to Schizophrenia
- Process vs. Reactive Distinction
  - Process – Insidious onset, biologically based, negative symptoms, poor prognosis
  - Reactive – Acute onset (extreme stress), notable behavioral activity, best prognosis
- Good vs. Poor Premorbid Functioning in Schizophrenia
  - Focus on functioning prior to developing schizophrenia
  - No longer widely used
- Type I vs. Type II Distinction
  - Type I – Positive symptoms, good response to medication, optimistic prognosis, and absence of intellectual impairment
  - Type II – Negative symptoms, poor response to medication, pessimistic prognosis, and intellectual impairments

Symptoms of Schizophrenia:

The “Positive” Symptom Cluster
- The Positive Symptoms
- Active manifestations of abnormal behavior
- Distortions of normal behavior
- Delusions: The Basic Feature of Madness
- Gross misrepresentations of reality
- Include delusions of grandeur or persecution
- Hallucinations: Auditory and/or Visual
- Experience of sensory events without environmental input
- Can involve all senses

The “Negative” Symptom Cluster
- The Negative Symptoms
- Absence or insufficiency of normal behavior
- Spectrum of Negative Symptoms
- Avolition (or apathy) – Lack of initiation and persistence
- Alogia – Relative absence of speech
- Anhedonia – Lack of pleasure, or indifference
- Affective flattening – Little expressed emotion

The “Disorganized” Symptom Cluster
- The Disorganized Symptoms
- Include severe and excess disruptions
- Speech, behavior, and emotion
- Nature of Disorganized Speech
- Cognitive slippage – Illogical and incoherent speech
- Tangentiality – “Going off on a tangent”
- Loose associations – Conversation in unrelated directions
- Nature of Disorganized Affect
- Inappropriate emotional behavior
- Nature of Disorganized Behavior
- Includes a variety of unusual behaviors
- Catatonia – Spectrum
- Wild agitation, waxy flexibility, immobility

Subtypes of Schizophrenia:
- Paranoid Type
  - Intact cognitive skills and affect
  - Do not show disorganized behavior
  - Hallucinations and delusions – Grandeur or persecution
  - The best prognosis of all types of schizophrenia
- Disorganized Type
  - Marked disruptions in speech and behavior
  - Flat or inappropriate affect
  - Hallucinations and delusions – Tend to be fragmented
  - Develops early, tends to be chronic, lacks remissions
- Catatonic Type
  - Show unusual motor responses and odd mannerisms
  - Examples include echolalia and echopraxia
  - Tends to be severe and quite rare
- Undifferentiated Type
  - Wastebasket category
  - Major symptoms of schizophrenia
  - Fail to meet criteria for another type

- Residual Type
  - One past episode of schizophrenia
  - Continue to display less extreme residual symptoms

**Causes of Schizophrenia:**

**Findings From Genetic Research**

- Family Studies
  - Inherit a tendency for schizophrenia
  - Do not inherit specific forms of schizophrenia
  - Risk increases with genetic relatedness

- Twin Studies
  - Monozygotic twins – Risk for schizophrenia is 48%
  - Fraternal (dizygotic) twins – Risk drops to 17%
  - Adoption Studies -- Risk for schizophrenia remains high
    - Cases where a biological parent has schizophrenia

- Summary of Genetic Research
  - Risk for schizophrenia increases with genetic relatedness
  - Risk is transmitted independently of diagnosis
  - Strong genetic component does not explain everything

**Neurotransmitter Influences**

- The Dopamine Hypothesis
- Drugs that increase dopamine (agonists)
- Result in schizophrenic-like behavior
- Drugs that decrease dopamine (antagonists)
- Reduce schizophrenic-like behavior
- Examples – Neuroleptics, L-Dopa for Parkinson’s disease
- Dopamine hypothesis is problematic and overly simplistic
- Current theories – Emphasize many neurotransmitters

**Neurobiological Influences**

- Structural and Functional Abnormalities in the Brain
- Enlarged ventricles and reduced tissue volume
- Hypofrontality – Less active frontal lobes
- A major dopamine pathway
- Viral Infections During Early Prenatal Development
- Findings are inconclusive
- Conclusions About Neurobiology and Schizophrenia
- Schizophrenia – Diffuse neurobiological dysregulation
- Structural and functional brain abnormalities
- Not unique to schizophrenia
Psychological and Social Influences

- The Role of Stress
  - May activate underlying vulnerability
  - May also increase risk of relapse
- Family Interactions
  - Families – Show ineffective communication patterns
  - High expressed emotion – Associated with relapse
- The Role of Psychological Factors
  - Exert only a minimal effect in producing schizophrenia

Treatment of Schizophrenia:

- Medical Treatment of Schizophrenia
- Historical Precursors
- Development of Antipsychotic (Neuroleptic) Medications
  - Often the first line treatment for schizophrenia
  - Began in the 1950s
  - Most reduce or eliminate positive symptoms
  - Acute and permanent side effects are common
    - Extrapyramidal and Parkinson-like side effects
    - Tardive dyskinesia
  - Compliance with medication is often a problem
- Transcranial Magnetic Stimulation
- Relatively untested procedure for hallucinations

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Psychosocial Treatment of Schizophrenia

- Historical Precursors
- Psychosocial Approaches: Overview and Goals
- Behavioral (i.e., token economies) on inpatient units
- Community care programs
- Social and living skills training
- Behavioral family therapy
- Vocational rehabilitation
- Psychosocial Approaches
- A necessary part of medication therapy

Other Disorders with Psychotic Features

- Schizophreniform Disorder
  - Schizophrenic symptoms for a few months
  - Associated with good premorbid functioning
  - Most resume normal lives

- Schizoaffective Disorder
  - Symptoms of schizophrenia and a mood disorder
  - Both disorders are independent of one another
  - Prognosis is similar for people with schizophrenia
  - Such persons do not tend to get better on their own

- Delusional Disorder
  - Delusions that are contrary to reality
  - Lack other positive and negative symptoms
  - Types of delusions include
    - Erotomanic
    - Grandiose
    - Jealous
    - Persecutory
    - Somatic
  - Extremely rare
  - Better prognosis than schizophrenia

Additional Disorders with Psychotic Features

- Brief Psychotic Disorder
  - One or more positive symptoms of schizophrenia
  - Usually precipitated by extreme stress or trauma
  - Tends to remit on its own

- Shared Psychotic Disorder
  - Delusions from one person manifest in another person
  - Little is known about this condition

- Schizotypal Personality Disorder
  - May reflect a less severe form of schizophrenia