Schizophrenia

Chapter 14

Psychosis

- Psychosis is a state defined by a loss of contact with reality
  - The ability to perceive and respond to the environment is significantly disturbed; functioning is impaired
  - Symptoms may include hallucinations (false sensory perceptions) and/or delusions (false beliefs)
- Psychosis may be substance-induced or caused by brain injury, but most psychoses appear in the form of schizophrenia

Schizophrenia

- Schizophrenia affects approximately 1 in 100 people in the world
  - About 2.5 million Americans currently have the disorder
- The financial and emotional costs are enormous
  - Sufferers have an increased risk of suicide and physical – often fatal – illness
Schizophrenia appears in all socioeconomic groups, but is found more frequently in the lower levels—Leading theorists argue that the stress of poverty causes the disorder.

- Equal numbers of men are women are diagnosed.
- Rates of diagnosis differ by marital status.

**The Clinical Picture of Schizophrenia**

- Schizophrenia produces many "clinical pictures"—The symptoms, triggers, and course of schizophrenia vary greatly—Some clinicians have argued that schizophrenia is actually a group of distinct disorders that share common features.

**What Are the Symptoms of Schizophrenia?**

- Symptoms can be grouped into three categories:
  - Positive symptoms
  - Negative symptoms
  - Psychomotor symptoms
What Are the Symptoms of Schizophrenia?

• Positive symptoms
  – These “pathological excesses” are bizarre additions to a person’s behavior
  – Positive symptoms include:
    • Delusions – faulty interpretations of reality
      – Delusions may have a variety of bizarre content: being controlled by others; persecution; reference; grandeur; control
    • Disordered thinking and speech
      – May include loose associations, neologisms, perseverations, and clang

What Are the Symptoms of Schizophrenia?

• Positive symptoms include:
  – Loose associations (derailment):
    • “The problem is insects. My brother used to collect insects. He’s now a man 5 foot 10 inches. You know, 10 is my favorite number; I also like to dance, draw, and watch TV.”
  – Neologisms (made-up words):
    • “It is an amorition law”
  – Perseveration
    • Patients repeat their words and statements again and again
  – Clang (rhymes):
    • How are you? “Well, hell, it’s well to tell”
    • How’s the weather? “So hot, you know it runs on a cot”

What Are the Symptoms of Schizophrenia?

• Positive symptoms include:
  – Heightened perceptions
    • People may feel that their senses are being flooded by sights and sounds, making it impossible to attend to anything important
  – Hallucinations – sensory perceptions that occur in the absence of external stimuli
    • Most common are auditory
    • Can involve any of the other senses: tactile, somatic, visual, gustatory, or olfactory
  – Inappropriate affect – emotions that are unsuited to the situation
What Are the Symptoms of Schizophrenia?

• Negative symptoms
  – These “pathological deficits” are characteristics that are lacking in an individual
  – Negative symptoms include:
    • Poverty of speech (allogia)
      – Reduction of quantity of speech or speech content
      – May also say quite a bit but convey little meaning

What Are the Symptoms of Schizophrenia?

• Negative symptoms include:
  – Blunted and flat affect
    • Show less emotion than most people
    • Avoidance of eye contact
    • Immobile, expressionless face
    • Monotonous voice, low and difficult to hear
    • Anhedonia – general lack of pleasure or enjoyment

What Are the Symptoms of Schizophrenia?

• Negative symptoms include:
  – Loss of volition (motivation or directedness)
    • Feeling drained of energy and interest in normal goals
    • Inability to start or follow through on a course of action
    • Ambivalence – conflicted feelings about most things
  – Social withdrawal
    • May withdraw from social environment and attend only to their own ideas and fantasies
    • Seems to lead to a breakdown of social skills, including the ability to accurately recognize other people’s needs and emotions
### What Are the Symptoms of Schizophrenia?

- **Psychomotor symptoms**
  - People with schizophrenia sometimes experience psychomotor symptoms
    - Awkward movements, repeated grimaces, odd gestures
    - The movements seem to have a magical quality
  - These symptoms may take extreme forms, collectively called catatonia
    - Includes stupor, rigidity, posturing, and excitement

### What Is the Course of Schizophrenia?

- Schizophrenia usually first appears between the late teens and mid-30s
- Many sufferers experience three phases:
  - **Prodromal** – beginning of deterioration; mild symptoms
  - **Active** – symptoms become apparent
  - **Residual** – a return to prodromal-like levels
    - One-quarter of patients fully recover; three-quarters continue to have residual problems

### What Is the Course of Schizophrenia?

- Each phase of the disorder may last for days or years
- A fuller recovery from the disorder is more likely in people:
  - With good premorbid functioning
  - Whose disorder was triggered by stress
  - With abrupt onset
  - With later onset (during middle age)
  - Who receive early treatment

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*Comer, Abnormal Psychology, 8e*
Diagnosing Schizophrenia

• The DSM-IV-TR calls for a diagnosis only after signs of the disorder continue for six months or more
• People must also show a deterioration in their work, social relations, and ability to care for themselves

Diagnosing Schizophrenia

• The DSM-IV-TR distinguishes five subtypes:
  – Disorganized – characterized by confusion, incoherence, and flat or inappropriate affect
  – Catatonic – characterized by psychomotor disturbance of some sort
  – Paranoid – characterized by an organized system of delusions and auditory hallucinations
  – Undifferentiated – characterized by symptoms which fit no subtype; vague category
  – Residual – characterized by symptoms which have lessened in strength and number; person may continue to display blunted or inappropriate emotions, as well as social withdrawal, eccentric behavior, and some illogical thinking

How Do Theorists Explain Schizophrenia?

• As with many other disorders, biological, psychological, and sociocultural theorists have proposed explanations
  – Biological explanations have received the most research support
• A diathesis-stress relationship may be at work
  – People with a biological predisposition will develop schizophrenia only if certain kinds of stressors or events are also present
Biological Views

• Genetic and biological studies of schizophrenia have dominated clinical research in the last several decades
  – These studies have revealed the key roles of inheritance and brain activity and have opened the door to important changes in treatment

Biological Views

• Genetic factors
  – Following the principles of a diathesis-stress approach, genetic researchers believe that some people inherit a biological predisposition to schizophrenia
    • This disposition (and disorder) are triggered by later exposure to extreme stress
    • This theory has been supported by studies of relatives, twins, and adoptees, and by genetic linkage studies and molecular biology

Biological Views

• Genetic factors
  – Family pedigree studies have repeatedly found that schizophrenia is more common among relatives of people with the disorder
    • The more closely related they are to the person with schizophrenia, the greater their likelihood for developing the disorder
      – General population: 1%
      – Second-degree relatives: 3%
      – First-degree relatives: 10%
    • Factors other than genetics may explain these findings
Biological Views

• Genetic factors
  - Studies of identical twins have found that if one twin develops the disorder, there is a 48% chance that the other twin will do so as well
  - If the twins are fraternal, the second twin has a 17% chance of developing the disorder
  - Again, factors other than genetics may explain these findings

Biological Views

• Genetic factors
  - Twins have received particular research study
    - Adoption studies have compared adults with schizophrenia, who were adopted as infants, with both their biological and adoptive relatives
      - Because they were reared apart from their biological relatives, similar symptoms in those relatives would indicate genetic influences; similarities to their adoptive relatives would suggest environmental influences

Biological Views

• Genetic factors
  - Genetic linkage and molecular biology studies indicate that possible gene defects on numerous chromosomes may predispose individuals to develop schizophrenia
  - Genetic factors may lead to the development of schizophrenia through two kinds of (potentially inherited) biological abnormalities:
    - Biochemical abnormalities
    - Abnormal brain structure
Biological Views

- Biochemical abnormalities
  - Over the past four decades, researchers have developed a dopamine hypothesis to explain their findings on schizophrenia:
    - Certain neurons using dopamine fire too often, producing symptoms of schizophrenia
  - This theory is based on the effectiveness of antipsychotic medications

- Biochemical abnormalities
  - Originally developed for treatment of allergies, antipsychotic drugs were found to cause a Parkinson’s disease-like tremor response in patients
  - Scientists knew that Parkinson’s patients had abnormally low levels of dopamine, which caused their shaking
  - This relationship between symptoms suggested that symptoms of schizophrenia were related to excess dopamine

Psychological Views

- When schizophrenia investigators began to identify genetic and biological factors linked to schizophrenia, clinicians largely abandoned psychological theories
  - During the past few decades, however, psychological factors are again being considered important
    - Leading psychological explanations come from the psychodynamic, behavioral, and cognitive perspectives
Psychological Views

• The psychodynamic explanation
  – Freud believed that schizophrenia develops from two processes:
    • Regression to a pre-ego stage
    • Efforts to re-establish ego control
  – He proposed that when their world is extremely harsh, people who develop schizophrenia regress to the earliest points in their development (primary narcissism), in which they recognize and meet only their own needs
    • This regression leads to self-centered symptoms such as neologisms, loose associations, and delusions of grandeur

• The psychodynamic explanation
  – Freud’s theory posits that attempts to reestablish ego control from such a state fail and lead to further schizophrenic symptoms
  – Years later, another psychodynamic theorist elaborated on Freud’s idea of harsh parents
    • The theory of schizophrenogenic mothers proposed that mothers of people with schizophrenia were cold, domineering, and uninterested in their children’s needs
  – Both of these theories have received little research support and have been rejected by most psychodynamic theorists

Psychological Views

• The behavioral view
  – Behaviorists cite operant conditioning and principles of reinforcement as the cause of schizophrenia
  – They propose that some people are not reinforced for their attention to social cues and, as a result, they stop attending to those cues and focus instead on irrelevant cues (e.g., room lighting)
    • Their responses become increasingly bizarre yet are rewarded with attention and, thus, are likely to be repeated
  – Support for this model has been circumstantial and the view is considered (at best) a partial explanation
Psychological Views

• The cognitive view
  – Leading cognitive theorists agree that biological factors produce symptoms
  – They argue that further features of the disorder emerge because of faulty interpretation and a misunderstanding of symptoms
    • Example: a man experiences auditory hallucinations and approaches his friends for help; they deny the reality of his sensations; he concludes that they are trying to hide the truth from him; he begins to reject all feedback and starts feeling persecuted
  – There is little direct research support for this view

Sociocultural Views

• Sociocultural theorists believe that three main social forces contribute to schizophrenia:
  – Multicultural factors
  – Social labeling
  – Family dysfunction
• Although these forces are considered important in the development of schizophrenia, research has not yet clarified what their precise causal relationships might be

Sociocultural Views

• Multicultural Factors
  – Rates of the disorder differ between racial and ethnic groups
    • As many as 2.1% of African Americans are diagnosed, compared with 1.4% of Caucasians
      – One possibility to explain this finding is that African Americans are more prone to develop the disorder
      – Yet another explanation may lie in the economic sphere
        – African Americans are more likely to be poor and, when economic differences are controlled for, rates of schizophrenia become closer
        – Consistent with the economic explanation, Hispanic Americans who also are, on average, economically disadvantaged, appear to have a much higher likelihood of being diagnosed than White Americans
Sociocultural Factors

• Multicultural Factors
  – Rates also differ between countries, as do the course and outcome of the disorder
    • Some theorists believe the differences partly reflect genetic differences from population to population
    • Others argue that the psychosocial environments of developing countries tend to be more supportive than developed countries, leading to more favorable outcomes for people with schizophrenia

Sociocultural Views

• Social labeling
  – Many sociocultural theorists believe that the features of schizophrenia are influenced by the diagnosis itself
    • Society labels people who fail to conform to certain norms of behavior
    • Once assigned, the label becomes a self-fulfilling prophecy
  – The dangers of social labeling have been well demonstrated
    • Example: Rosenhan “pseudo-patient” study

Sociocultural Views

• Family dysfunctioning
  – One of the best-known family theories of schizophrenia focuses on double-bind communication:
    • Some parents repeatedly communicate pairs of mutually contradictory messages that place the child in so-called double-bind situations; the child cannot avoid displeasing the parents because nothing the child does is right
      • In theory, the symptoms of schizophrenia represent the child's attempt to deal with the double binds
Sociocultural Views

• Family dysfunctioning
  – Double-bind messages typically consist of a “primary” verbal communication and an accompanying contradictory nonverbal “metacommunication”
  – According to the double-bind theory, a child repeatedly exposed to these communications will adopt a special strategy for coping with them and may progress toward paranoid schizophrenia
  – This theory is closely related to the psychodynamic notion of a schizophrenogenic mother
    • It has been similarly unsupported by research, but is popular in clinical practice

Sociocultural Views

• Family dysfunctioning
  – A number of studies suggest that schizophrenia is often linked to family stress:
    • Parents of people with the disorder often:
      – Display more conflict
      – Have greater difficulty communicating
      – Are more critical of and overinvolved with their children than other parents
    • Family theorists have long recognized that some families are high in “expressed emotion” – family members frequently express criticism and hostility and intrude on each other’s privacy

Sociocultural Views

• RD Laing’s view
  – Most controversial explanation of schizophrenia
  – Argues that the disorder is actually a constructive process in which people try to cure themselves of the confusion and unhappiness caused by their social environment
  – Most theorists reject this notion; research has largely ignored it