CHAPTER 12 OUTLINE

I. Schizophrenia

A. Introduction
1. A chronic psychotic disorder characterized by disturbed behavior, thinking, emotions and perceptions
2. Acute episodes of schizophrenia are characterized by delusions, hallucinations, illogical thinking, incoherent speech, and bizarre behavior
3. Schizophrenia often elicits fear, misunderstanding and condemnation rather than sympathy and concern

B. Course of Development
1. Typically develops during a person's late teens or early 20's when the brain is reaching full maturation
2. In some cases the onset is acute- occurring suddenly
3. Prodromal Phase: Pre- Schizophrenic period; odd behavior, isolation, little concern for personal hygiene, speech disturbances and strange emotions.
4. Residual Phase: returns to symptoms observed during the Prodromal Phase
5. Tables 12.2 is an overview of schizophrenia

C. Prevalence
1. 1% of the adult U.S. population is affected (2 million people)
2. 24 million people worldwide suffer from schizophrenia (WHO)
3. Men have a higher incidence and it develops earlier than in woman.
4. In western cultures auditory hallucinations are more common, while in Asian and African cultures visual hallucinations are more common.

D. Diagnostic Features
1. Introduction
   a. Affects a wide range of psychological processes involving cognition, affect and behavior
   b. Signs of the disorder must be present for at least 6 months
   c. Table 12.2 lists the major diagnostic criteria of schizophrenia
   d. People with the disorder show a marked decline in occupational and social functioning
      i. Have difficulty holding a conversation
      ii. Forming friendships
      iii. Holding a job
      iv. Taking care of personal hygiene
   e. People may experience delusions, problems with associative thinking and hallucinations at one time or another
   f. Men and women differ in several ways
      i. Men tend to have more cognitive impairment, behavioral deficits and a poorer response to drug therapy than women
      ii. These differences led researchers to believe that men and women develop different types of schizophrenia affecting different areas of the brain
   g. Positive Symptoms- flagrant symptoms of schizophrenia such as hallucinations, delusions and thought disorder
   h. Negative Symptoms- behavioral deficiencies associated with schizophrenia such as social skill deficits, social withdrawal, flattened affect, poverty of speech and thought, psycho motor retardation, and failure to experience pleasure

2. Disturbed Thought and Speech
   a. Delusions represent disturbed content of thought and make take many forms
      i. Delusion of Persecution
      ii. Delusions of Reference
      iii. Delusions of Control
      iv. Delusions of Grandeur
   b. Thought Broadcasting- believing one's thoughts are transmitted to the external world
   c. Thought Insertion- believing one's thoughts have been planted in one's mind by an external force
   d. Thought Withdrawal- believing thoughts have been removed from one's mind

3. Aberrant Forms of Thought
    a. Disorganized, illogical thoughts and speech
    b. Loose Associations
    c. Poverty of Speech- speech that is coherent but so slow, limited in production or vague that little information is conveyed
    d. Neologisms- made-up words that have little or no meaning
    e. Perseveration- repetition of the same words or speech
    f. Clanging- illogical rhymes
    g. Blocking- involuntary interruption of speech and thoughts.
    h. Disconnected Speech and Thoughts- more common and more severe among younger patients whereas poverty of speech is found more often and is more severe among older patients (Harvey et al, 1997)

4. Attentional Deficiencies- difficulty filtering out irrelevant stimuli
    a. Hypervigilance- acute sensitivity to extraneous sounds
    b. Eye movement dysfunction or eye tracking problems
    c. Deficiencies in ERP's (brain waves)
        i. Overly sensitive to environmental stimuli
        ii. Cannot filter out sensations – sensory overload
        iii. P300 waves occur too frequently over all stimuli

E. Perceptual Disturbances
1. Hallucinations: visual, auditory, tactile, olfactory, gustatory
    a. Can experience voices inside or outside their head, and even hear conversations in third person.
    b. Usually the voices are critical
    c. Visual is more rare, but a sign of increased severity of the illness
    d. Command Hallucinations: "voices" give orders to hurt themselves or others, or to perform certain acts
    e. Causes: abnormal dopamine levels; cannot prevent dream images due to some brain malfunction.
    f. Some speculate that the voices may be their inner voice that is misinterpreted. Broca's area is more active during hallucinations in a way similar to "self-talk". Therapists have attempted to teach schizophrenics to attribute the voices to them
    g. Schizophrenics may create their own inner reality (Freud called *pseudo community*) and the frontal lobe cannot perform the normal reality check
    h. Not all hallucinations are a sign of psychopathology
        i. Religious ceremonies
        ii. Hallucinogenic drugs
        iii. Side effects of neurological disorders

2. Emotional Disturbances
    a. Flat affect
    b. Inappropriate emotions
    c. Loss of ego boundaries- loss of one's personal identity
    d. Cannot take the other person's perspective
    e. Disturbances in volition- loss of goal directed behavior, apathy.
    f. Excitability and stupor states

F. Subtypes of Schizophrenia
1. Disorganized type
    a. Characterized by disorganized behavior, bizarre delusions and vivid hallucinations
    b. Often display silliness or giddiness of mood- giggling and talking nonsensically
    c. Often neglect their appearance and hygiene- lost control of bladder and bowels

2. Catatonic type
    a. Characterized by gross disturbances in motor activity such as catatonic stupor
    b. May show unusual mannerisms of grimacing or maintain bizarre apparently strenuous postures for hours
    c. Waxy flexibility
    d. Not unique to schizophrenia

3. Paranoid type
    a. Characterized by hallucinations and systemized delusions commonly involving themes of persecution
    b. Frequent auditory hallucinations
    c. Patients may become highly agitated, confused and fearful

4. Type I versus Type II
    a. Type I- more "positive symptoms". May be caused by a excess of dopamine and the frontal lobe cannot regulate emotions and behaviors properly; they over respond.
    b. Type II- more "negative symptoms". More chronic, long term symptoms (premorbid functioning). May be caused by actual structural damage to the brain.

G. Theoretical Perspectives
1. Psychodynamic Perspective
    a. Ego is overwhelmed by the sexual and aggressive impulses of the ID
    b. The schizophrenic regresses to an earlier stage of development usually the oral stage called primary narcissism.
    c. Ego breaks down and is unable to cope with reality. Fantasies from the ID are mistaken as reality and result in hallucinations and delusions.
    d. Sullivan's View- Unhealthy mother-child dyad causes the child to withdraw into a fantasy world to escape negative relationships. As the demand for social contact increase the young adult further retreats into a world of fantasy.

2. Learning Perspective
    a. People with schizophrenia learn to exhibit certain bizarre behaviors when these are more likely to be reinforced than normal behaviors (Haughton & Allyon broom experiment)
    b. Social-cognitive theorists suggest that modeling of schizophrenic behavior can occur within the mental hospital where patients may begin to model themselves after fellow patients

3. Biological Perspective
    a. Genetic Factors
        i. Cross cultural studies show an increased of Schizophrenia in people who have biological relatives with the disorder (Gottesman, 2011)
        ii. Immediate family has a 10 times greater chance of developing Schizophrenia
        iii. Twin studies show 98% concordance rate with MZ twins and 17% with DZ twins
        iv. Adoption studies provide the strongest evidence (Denmark study)
        v. Cross-fostering study showed HR children were almost twice as likely to develop schizophrenia regardless of whether they were raised by a parent with schizophrenia
        vi. People who have a high genetic risk for schizophrenia do not always develop the disorder which implies an interplay between the environment and genes

    b. Biochemical Factors
        i. Dopamine Hypothesis- the prediction that schizophrenia involves overactivity of dopamine receptors in the brain. Major source of evidence comes from neuroleptics (Thorazine, Mellaril and Prolixil).
        ii. Amphetamines can mimic schizophrenic symptoms
        iii. Norepinephrin, serotonin and GABA also appear to be involved

    c. Viral Infections
        i. Exposure to influenza virus during pregnancy caused sevenfold greater risk of schizophrenia
        ii. Still being tested

    d. Brain Abnormalities
        i. Have been detected in schizophrenics, but no one area of the brain has been implicated.
        ii. Schizophrenics show a 5% loss of brain tissue (gray matter) in the cortex. Prefronal portion shows the highest tissue loss. Also shows less brain wave activity.
        iii. Enlarged brain ventricles indicate loss of brain tissue in 75% of schizophrenic patients; may be caused by pre-natal factors.
        iv. Not all Schizophrenics show loss of brain tissue; seems to more prevalent in those with negative symptoms.

4. Family Theories
    a. Schizophrenogenic Mother: cold aloof, controlling mother, unwilling to give affection. She strips her children of self esteem. If the father fails to intervene then the risk increases. This has been discredited.
    b. Double-bind communications may have an influence on those with genetic disposition for schizophrenia.
    c. *Communication Deviance*- vague disruptive communication patterns which are hard to follow and difficult to extract and shared meaning. Found in high levels among schizophrenics and their parents.
        i. Verbal attacks and insults; constant interruptions and negative comments
        ii. Tell children how they think and feel.
        iii. May increase schizophrenia in those with the predisposition
    d. *Expressed Emotion*- hostile, critical, and unsupportive ways of responding and communicating
        i. Increased the risk and risk of relapsing
        ii. Show less empathy and tolerance for children and their condition
        iii. Low EE families decrease the incidence and severity of the disorder
        iv. More prevalent in industrialized societies; extended families tend to buffer those prone to schizophrenia from stress.
    e. Family Factors in Schizophrenia
        i. Disturbed emotional interaction and communication can present the type of stress that can lead to triggering the disorder in those who have the predisposition
        ii. Importance of family intervention
        iii. How families conceptualize the disorder may help or hinder the problem.

5. Diathesis Stress Model
    a. Psychosocial stress during the teenage years can trigger the disorder.
    b. Sociocultural factors: poverty, poor diet, impoverished living condition and poor health care.

H. Treatment Approaches
1. Antipsychotic drugs
    a. Phenothiazines (Thorazine, Melloril, Stelazine and Prolixin)
    b. Block dopamine receptors: D2 neurons
    c. Side effects include Tardive Dyskinesia- disorder characterized by involuntary movements of the face, mouth, neck, trunk or extremities and caused by long-term use
    d. Some have no luck with medication

2. Sociocultural Factors in Treatment
    a. Asians and Hispanics need less medication and have less side-effects
    b. African Americans are less likely to receive the newer drugs
    c. European-American families are less likely to be supportive than Asian or Hispanic families
    d. In China and Africa, families tend to be very supportive, thus patients need less medication and integrate better into society
    e. Having patients live with families in European or European-American families seems to worsen the condition

3. Psychodynamic Therapy
    a. Freud did not think that Psychoanalysis was suited for schizophrenic patients
    b. Sullivan made adaptations to suite schizophrenics
    c. Personal therapy help patients deal with interpersonal situations - particularly in families

4. Learning-Based Therapies
    a. Mostly used to modify the behavior of schizophrenics
    b. Types of therapy
        i. Selective reinforcement
        ii. Token economy
        iii. Social skills training
        iv. Cognitive Behavioral Therapy (CBT) has helped to improve hallucinations and delusions

5. Psychosocial Rehabilitation
    a. Self-help clubs and rehabilitation centers help those find educational opportunities and paid employment
    b. Teaches basic cognitive skills and memory

6. Family Intervention Programs
    a. Therapist works with families on how to deal with patients and be supportive
    b. Provide conflict resolution
    c. Improve family communication

II. Other Forms of Psychosis

A. Brief Psychotic Disorder
    1. A psychotic disorder lasting from a day to a month that often follows exposure to a major stressor
    2. Features delusions, hallucinations, disorganized speech or disorganized or catatonic behavior
    3. Full return to individual's level of functioning

B. Schizophreniform Disorder- a psychotic disorder lasting less than 6 months in duration with features that resemble schizophrenia

C. Delusional Disorder
    1. Type of psychosis characterized by persistent delusions, often of a paranoid nature, that do not have the bizarre quality of the type found in schizophrenia
    2. Uncommon affecting 5 to 10 people in 10,000 during their lifetimes (APA, 2000)
    3. Erotomania- delusional disorder characterized by the belief that one is loved by someone of high social status

D. Schizoaffective Disorder
    1. Type of psychotic disorder in which individual experience both severe mood disturbance and features associated with schizophrenia
    2. Has a chronic course
    3. Responds to antipsychotic medications
    4. Genetic link shared with schizophrenia