

Chapter 14 Handouts

Schizophrenia

Psychosis

- Psychosis is a state defined _____
 - 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 appears to have been present in humans throughout history
- The disorder has a severe impact on people's functioning and on the health care system

Schizophrenia

- Schizophrenia affects approximately ____ in ____ people in the world
 - About 2.5 million Americans currently have the disorder
- The financial and emotional costs are enormous
 - One estimate is greater than \$100 billion per year
 - Sufferers have an increased risk of suicide and illness

Schizophrenia

- Schizophrenia appears in all socioeconomic groups, but is found more frequently in the lower levels
 - Leading theorists argue that the _____
 - Other theorists argue that the disorder causes victims from higher social levels to fall to lower social levels and remain at lower levels
 - This is called the “_____” theory

Schizophrenia

- Equal numbers of men and women are diagnosed
 - In men, symptoms begin earlier and are more severe
- Rates of diagnosis differ by marital status
 - 3% of divorced or separated people
 - 2% of single people
 - 1% of married people
 - It is unclear whether marital problems are a cause or a result

Schizophrenia

- Rates of the disorder differ by ethnicity and race
 - About 2% of African Americans are diagnosed, compared with 1.4% of Caucasians
 - According to the census, however, African Americans are also more likely to be poor and to experience marital separation
 - _____
- Rates also differ between countries, as do the course and outcome of the disorder

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

What Are the Symptoms of Schizophrenia?

■ Examples of positive symptoms

- Loose associations:
 - “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:
 - “This desk is a cramstile”; “He’s an easterhorned head”
- Clang:
 - 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?

■ Examples of positive symptoms

- _____
 - People may feel that their senses are being flooded by sights and sounds, making it impossible to attend to anything important
- _____ – faulty sensory perceptions
 - Most common are auditory
 - Generally involve a running commentary and/or accusations
 - Spoken directly to or overheard by the hallucinator
 - Hallucinations can involve any of the other senses: tactile, somatic, visual, gustatory, or olfactory
- _____

What Are the Symptoms of Schizophrenia?

■ Negative symptoms

■ These “_____” are characteristics that are lacking in an individual

■ Negative symptoms include:

- _____
 - Long lapses before responding to questions, or failure to answer
 - Reduction of quantity of speech
 - Slow speech
- _____

What Are the Symptoms of Schizophrenia?

■ Examples of negative symptoms

■ Blunted and flat affect

- Avoidance of eye contact
- Immobile, expressionless face
- Lack of emotion when discussing emotional material
- Apathetic and uninterested
- Monotonous voice, low and difficult to hear

What Are the Symptoms of Schizophrenia?

■ Examples of negative symptoms

■ 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

■ Social withdrawal

- Withdrawal from social environment
- 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:
 - _____ – beginning of deterioration; mild symptoms
 - _____ – symptoms become increasingly apparent
 - _____ – a return to prodromal 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:
 - _____
 - Whose disorder was triggered by stress
 - With rapid onset
 - _____

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:
 - _____ – characterized by confusion, incoherence, and flat or inappropriate affect
 - _____ – characterized by psychomotor disturbance of some sort
 - _____ – characterized by an organized system of delusions and auditory hallucinations
 - _____ – characterized by symptoms which fit no subtype; vague category
 - _____ – characterized by symptoms which have lessened in strength and number; person may continue to display blunted or inappropriate emotions

How Do Theorists Explain Schizophrenia?

- While there is no known cause, research has focused on:
 - Biological factors (most promising)
 - Psychological factors
 - Sociocultural factors
- A _____ 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 for changes in treatment

Biological Views

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

Biological Views

- Genetic factors
 - Family pedigree studies have repeatedly shown 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

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

Biological Views

■ Genetic factors

- 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
- Researchers have repeatedly found that the biological relatives of adoptees with schizophrenia are more likely to display schizophrenic symptoms than are their adoptive relatives

Biological Views

■ Genetic factors

- Genetic linkage and molecular biology studies indicate that possible gene defects on numerous chromosomes may predispose individuals to develop schizophrenia
 - These varied findings may indicate:
 - A case of "mistaken identity" -- that is, some of these gene sites do not contribute to the disorder;
 - Various types of schizophrenia are linked to different genes; or
 - Schizophrenia, like many disorders, is a polygenic disorder, caused by a combination of gene defects

Biological Views

■ Genetic factors

■ 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

■ One promising theory is the _____:

■ Neurons using dopamine fire too often, producing symptoms of schizophrenia

■ This theory is based on the effectiveness of antipsychotic medications (_____)

Biological Views

■ 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

Biological Views

■ Biochemical abnormalities

■ Research since the 1960s has supported and clarified this hypothesis

■ Example: patients with Parkinson's develop schizophrenic symptoms if they take too much L-dopa, a medication that raises dopamine levels

■ Example: people who take high doses of amphetamines, which increase dopamine activity in the brain, may develop amphetamine psychosis – a syndrome similar to schizophrenia

Biological Views

■ Biochemical abnormalities

■ Investigators have also located the dopamine receptors to which antipsychotic drugs bind

■ The drugs are apparently dopamine antagonists which bind to the receptors, preventing further dopamine binding and neuron firing

■ These findings suggest that, in schizophrenia, messages traveling from dopamine-sending neurons to dopamine-receptors (particularly D-2) may be transmitted too easily or too often

■ An appealing theory because certain dopamine receptors are known to play a role in guiding attention

Biological Views

■ Biochemical abnormalities

■ Dopamine may be overactive in people with schizophrenia because of a larger-than-usual number of dopamine receptors (particularly D-2)

■ Autopsy findings have found an unusually large number of dopamine receptors in people with schizophrenia

Biological Views

■ Biochemical abnormalities

- Though enlightening, the dopamine hypothesis has limitations
 - It has been challenged by the discovery of a new type of antipsychotic drug ("atypical" antipsychotics) that are more effective than traditional antipsychotics and also bind to serotonin receptors
 - It has also been challenged by theorists who claim that excessive dopamine activity contributes primarily to the positive symptoms of schizophrenia
 - These symptoms respond particularly well to conventional antipsychotic drugs

Biological Views

■ Abnormal brain structure

- During the past decade, researchers have also linked schizophrenia (particularly cases dominated by negative symptoms) to abnormalities in brain structure
 - For example, brain scans have found that many people with schizophrenia have enlarged ventricles
 - This enlargement may be a sign of poor development in related brain regions
 - People with schizophrenia have also been found to have smaller temporal and frontal lobes, and abnormal blood flow to certain brain areas

Biological Views

■ Viral problems

- A growing number of researchers suggest that the brain abnormalities seen in schizophrenia result from exposure to viruses before birth
 - _____
 - _____
- More direct evidence comes from studies showing that mothers of children with schizophrenia were more often exposed to the influenza virus during pregnancy than mothers of children without schizophrenia
- Other studies have found a link between schizophrenia and a particular group of viruses found in animals

Biological Views

■ While the biochemical, brain structure, and viral findings are beginning to shed much light on the mysteries of schizophrenia, they offer only a partial explanation

■ Some people who have these biological problems never develop schizophrenia

■ May be because _____

Psychological Views

■ As schizophrenia investigators began to identify genetic and biological factors of schizophrenia, clinicians largely abandoned psychological theories

■ In the past decade, 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 developed 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

Psychological Views

■ 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

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
- 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 theorize that further features of the disorder develop 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 people with mental disorders are victims of two main social forces:
 - Social labeling
 - Family dysfunction
- Although social and family forces are considered important in the development of schizophrenia, research has not yet clarified what their precise relationships might be

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 _____
 - 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 is the double-bind hypothesis:
 - 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
 - Individuals who are trying to recover from schizophrenia are almost four times more likely to relapse if they live with such a family

Sociocultural Views

- A sociocultural-existential 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
